

# HSBC Holdings plc

**Pillar 3 Disclosures at 31 December 2023**

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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 2023*, which has been published on our website at [www.hsbc.com/investors](http://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 2023* comprises both quantitative and qualitative information required under Pillar 3. These disclosures are made in accordance with Part Eight of CRR II and the Prudential Regulation Authority ('PRA') disclosure templates and instructions. 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.

While the frameworks may vary for some of our banking subsidiaries they do not impact 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](http://www.hsbc.com/investors).

#### Regulatory reporting processes and controls

The quality of regulatory reporting remains a key priority for management and regulators. We are progressing with a comprehensive programme to strengthen our global processes, improve consistency and enhance controls across regulatory reports.

The ongoing programme of work focuses on our material regulatory reports and is being phased over a number of years. This programme includes data enhancement, transformation of the reporting systems and an uplift to the control environment over the report production process.

While this programme continues, there may be further impacts on some of our regulatory ratios, such as the common equity tier ('CET1'), 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 2023, 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 asset ('RWA') by Article 92(1) of CRR II. Narratives are included to explain quantitative disclosures where necessary.

The regulatory numbers and ratios presented in this document were accurate as at the date of reporting. Small changes may exist between these numbers and ratios and those submitted in regulatory filings. Where differences are significant, we will restate comparatives.

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.

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 2023* of HSBC Holdings plc or to other documents.

The table below references where comparatives have been restated.

Page ref	Table Reference	Activity
15	Table 6 - UK CC1	
17	Table 7 - UK LR2	
18	Table 8 - UK LR1	
18	Table 9 - UK LR3	Adoption of IFRS17
27	Table 17 - Analysis of encumbered and unencumbered	
32	Table 21.i - KM2	
34	Table 22 - TLAC1	
44	Table 37 - CQ5	Revised basis of preparation
48	Table 40 - CR7	
48	Table 41 - CR7-A	Disclosure requirements
54	Table 44 - CR5	

#### Governance

The 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 2023* comply with the PRA Rulebook. They are approved by the HSBC Holdings Board of Directors ('HSBC Board') 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 21 February 2024 and signed on its behalf by

Georges Elhedery

Group Chief Financial Officer

## Highlights

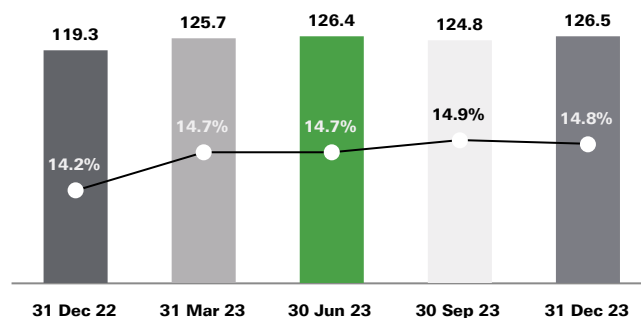
### CET1 Capital and ratio

**Our CET1 capital was \$126.5bn and our ratio was 14.8%** up 0.6 percentage points compared with 31 December 2022. This was mainly driven by capital generation net of dividends, share buy-backs announced in 2023 and regulatory adjustments, partially offset by an increase in RWAs.

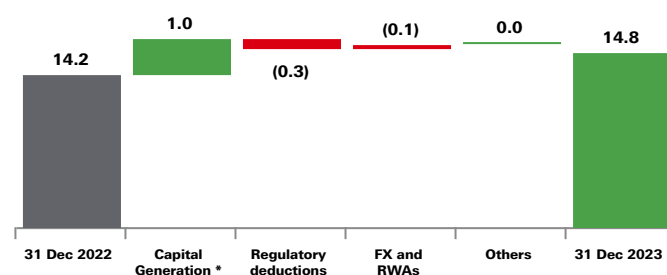
The ratio is higher than our target range of 14% to 14.5% and we intend to continue to manage the CET1 ratio to within this range. The total dividend per share in 2023 of \$0.61 resulted in a dividend payout ratio of 50% of earnings per share. For the purposes of computing our dividend payout ratio, we exclude material notable items and related impacts from earnings per share.

The Board has approved a fourth interim dividend of \$0.31 per share, resulting in a total for 2023 of \$0.61 per share. We also intend to initiate a share buy-back of up to \$2.0bn, which we expect to complete by our first quarter 2024 results announcement.

### CET1 capital and ratio



### CET1 ratio movement



\* Includes profits and movement in reserves, net of ordinary dividends, AT1 coupon payments and share buy-backs.

### RWAs

**Our RWAs are \$854.1bn, an increase of \$14.4bn in 2023**, mainly due to \$26.2bn growth in asset size, \$6.2bn increase from business acquisitions and disposals, and \$2.0bn due to foreign currency translation differences. These were partly offset by a \$19.9bn reduction due to methodology and policy changes.

### RWAs

	31 Dec 2023	31 Dec 2022
	\$bn	\$bn
<b>Risk-weighted assets</b>		
Credit risk	683.9	679.1
Counterparty credit risk	35.5	37.1
Market risk	37.5	37.6
Operational risk	97.2	85.9
<b>Total RWAs</b>	<b>854.1</b>	<b>839.7</b>

### Liquidity

The average **Group 'LCR' was 136%** or \$171bn above the regulatory requirement and the average high-quality liquid assets ('HQLA') was \$648bn. 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 \$147bn to LCR HQLA and \$7bn to LCR inflows on an average basis.

The average **Group 'NSFR' was 133%**. At 31 December 2023, all material operating entities were above regulatory minimum levels.

### Liquidity

	31 Dec 2023	31 Dec 2022
LCR (%)	136	132
NSFR (%)	133	136

## Pillar 3 Disclosures at 31 December 2023

### 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. 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)

Ref		At				
		31 Dec 2023	30 Sep 2023	30 Jun 2023	31 Mar 2023	31 Dec 2022
	<b>Available capital (\$bn)</b>					
1	Common equity tier 1 ('CET1') capital	126.5	124.8	126.4	125.7	119.3
	CET1 capital as if IFRS 9 transitional arrangements had not been applied	126.4	124.8	126.4	125.7	119.0
2	Tier 1 capital	144.2	142.5	145.8	145.1	139.1
	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	144.1	142.5	145.8	145.1	138.8
3	Total capital	171.2	165.5	170.0	169.6	162.4
	Total capital as if IFRS 9 transitional arrangements had not been applied	171.1	165.5	170.0	169.6	162.1
	<b>Risk-weighted assets (\$bn)</b>					
4	Total RWAs	854.1	840.0	859.5	854.4	839.7
	Total RWAs as if IFRS 9 transitional arrangements had not been applied	854.0	840.0	859.5	854.4	839.4
	<b>Capital ratios (%)</b>					
5	CET1 (%)	14.8	14.9	14.7	14.7	14.2
	CET1 as if IFRS 9 transitional arrangements had not been applied (%)	14.8	14.9	14.7	14.7	14.2
6	Tier 1 (%)	16.9	17.0	17.0	17.0	16.6
	Tier 1 as if IFRS 9 transitional arrangements had not been applied (%)	16.9	17.0	17.0	17.0	16.5
7	Total capital (%)	20.0	19.7	19.8	19.8	19.3
	Total capital as if IFRS 9 transitional arrangements had not been applied (%)	20.0	19.7	19.8	19.8	19.3
	<b>Additional own funds requirements based on Supervisory Review and Evaluation Process ('SREP') as a percentage of RWAs (%)</b>					
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
	<b>Combined buffer requirement as a percentage of RWAs (%)</b>					
8	Capital conservation buffer requirement (%)	2.5	2.5	2.5	2.5	2.5
9	Institution-specific countercyclical capital buffer (%)	0.7	0.7	0.5	0.4	0.4
10	Global systemically important institution buffer (%)	2.0	2.0	2.0	2.0	2.0
11	Combined buffer requirement (%)	5.2	5.2	5.0	4.9	4.9
UK-11a	Overall capital requirements (%)	15.8	15.8	15.6	15.5	15.5
12	CET1 available after meeting the total SREP own funds requirements (%)	8.8	8.9	8.7	8.7	8.2
	<b>Leverage ratio</b>					
13	Total exposure measure excluding claims on central banks (\$bn)	2,574.8	2,478.3	2,497.9	2,486.1	2,417.2
14	Leverage ratio excluding claims on central banks (%)	5.6	5.7	5.8	5.8	5.8
	Average exposure measure excluding claims on central banks (\$bn)	2,498.6	2,491.1	2,506.5	2,454.8	2,416.6
	<b>Additional leverage ratio disclosure requirements (%)</b>					
14a	Fully loaded expected credit losses ('ECL') accounting model leverage ratio excluding claims on central banks (%)	5.6	5.7	5.8	5.8	5.7
14b	Leverage ratio including claims on central banks (%)	4.8	4.9	5.0	5.0	4.9
14c	Average leverage ratio excluding claims on central banks (%)	5.7	5.8	5.8	5.7	5.6
14d	Average leverage ratio including claims on central banks (%)	4.9	5.0	5.0	4.9	4.8
14e	Countercyclical leverage ratio buffer (%)	0.2	0.2	0.2	0.2	0.1
EU-14d	Leverage ratio buffer requirement (%)	0.9	0.9	0.9	0.9	0.8
EU-14e	Overall leverage ratio requirements (%)	4.2	4.2	4.2	4.2	4.1
	<b>Liquidity coverage ratio ('LCR') (\$bn)</b>					
15	Total high-quality liquid assets	647.5	641.1	631.2	634.9	647.0
UK-16a	Cash outflows – total weighted value	672.3	673.8	672.2	670.4	668.1
UK-16b	Cash inflows – total weighted value	195.2	197.0	194.5	188.7	177.3
16	Total net cash outflow	477.1	476.8	477.7	481.7	490.8
17	LCR (%)	136	134	132	132	132
	<b>Net stable funding ratio ('NSFR') (\$bn)</b>					
18	Total available stable funding	1,601.9	1,599.2	1,575.2	1,557.4	1,552.0
19	Total required stable funding	1,202.4	1,196.6	1,171.8	1,148.4	1,138.4
20	NSFR (%)	133	134	134	136	136

For further details of the application of IFRS 9 transitional regulatory arrangements, see page 209 of the Annual Report and Accounts 2023.

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

- 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 in CRR II for IFRS 9 'Financial Instruments', 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.

## Regulatory developments

### Basel 3.1

In November 2022, the PRA published a consultation on the implementation of Basel III Reforms ('Basel 3.1') in the UK. While the PRA's proposals were generally consistent with Basel's final rules, there were some limited adjustments to the final rules, such as the treatment of unrated corporates under the standardised approach to credit risk and the removal of modelled approaches for sovereign exposures. It also proposed to remove certain EU concessions under the current framework, such as the small and medium-sized enterprise ('SME') and infrastructure supporting factors, in addition to amending the scope of the EU's exemptions from the credit valuation adjustment ('CVA') charges.

In the consultation, the PRA set out its intention to implement the package on 1 January 2025, however, in September 2023, the PRA confirmed that it intended to move the final implementation date by six months to 1 July 2025. To ensure full implementation occurs by 1 January 2030, the PRA also confirmed that it will reduce the output floor transitional period from five to four-and-a-half years.

In October 2023, the PRA published a discussion paper on the securitisation framework. This included policy options on the calibration of the standardised methodology for securitisation RWAs. Any changes will be implemented at the same time as the Basel 3.1 package.

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, together with information on the planned review of the Pillar 2 framework.

Near final rules on the remaining parts of the Basel 3.1 package, namely credit risk, the output floor and reporting and disclosure, are expected to be published by the PRA in the second quarter of 2024. A further consultation on the securitisation framework is expected in the second half of 2024.

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

- In December 2023, the Hong Kong Monetary Authority ('HKMA') published its final Basel 3.1 rules and delayed the implementation of the rules to 1 January 2025 with market risk and CVA reporting commencing 1 July 2024.
- In December 2023, the EU published a near-final draft of the amendments to the CRR to implement Basel 3.1. The majority of the provisions are expected to apply from 1 January 2025.

- In July 2023, US regulators published their proposals for the implementation of Basel 3.1 with a scheduled implementation date of 1 July 2025. The consultation closed in January 2024.

## Future regulatory framework

In December 2023, the PRA published a consultation paper on its approach to policymaking. While this broadly follows the proposals in its discussion paper issued in September 2022, a key addition is the PRA's proposal to be "largely compliant" with international standards in its policymaking.

## Environmental, Social and Governance risk

Globally, regulators and standard setters continue to publish multiple proposals and discussion papers on environmental, social and governance ('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 IFRS foundation 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 by Basel 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 published a consultation paper in November 2023 on a Pillar 3 disclosures framework for climate related financial risks with a proposed effective date of 1 January 2026.

## Climate risk

Our climate risk approach is aligned to the framework outlined by the Taskforce on Climate-related Financial Disclosures ('TCFD'), which identifies two primary drivers of climate risk:

- physical risk, which arises from the increased frequency and severity of extreme weather events, such as hurricanes and floods, or chronic gradual shifts in weather patterns or rises in sea level; and
- transition risk, which arises from the process of moving to a net zero economy, including changes in government policy and legislation, technology, market demand, and reputational implications triggered by a change in stakeholder expectations, action or inaction.

In addition to these primary drivers of climate risk, we have also identified the following thematic issues related to climate risk, which are most likely to materialise in the form of reputational, regulatory compliance and litigation risks:

- net zero alignment risk, which arises from the risk of HSBC failing to meet its net zero commitments or failing to meet external expectations related to net zero, because of inadequate ambition and/or plans, poor execution, or inability to adapt to changes in the external environment; and
- the risk of greenwashing, which arises from the act of knowingly or unknowingly making inaccurate, unclear, misleading or unsubstantiated claims regarding sustainability to our stakeholders.

*For further details of climate risk, see pages 64 and 221 of the Annual Report and Accounts 2023.*

### Key changes and regulatory assessments

In 2023 the below changes have impacted our capital and liquidity adequacy. We also continue to assess the impact of future regulatory changes expected through Basel 3.1.

#### IFRS 17 'Insurance Contracts'

We adopted IFRS 17 on 1 January 2023 and our comparative data previously published under IFRS 4 'Insurance Contracts', was restated for 2022. The adoption had a \$9.7bn negative impact on the shareholder's equity and it was CET1 capital ratio neutral at that time. Due to movements in capital threshold deductions the adverse impact of this change on our CET1 ratio as at 31 December 2023 is 0.1 percentage points. There was an immaterial movement in Leverage exposure and ratio.

*For further details on the effects of the adoption of IFRS 17, see Note 38 on page 422 of the Annual Report and Accounts 2023.*

#### Hong Kong residential mortgages

From 1 January 2023, HKMA reduced the risk-weight floor for Hong Kong residential mortgage loans under its internal ratings-based approach from 25% to 15%. Although the risk-weight floor change was implemented in Hong Kong, at a consolidated Group level this decreased RWAs by \$7.7bn and led to a 0.1 percentage point increase in CET1.

#### Non-performing Exposures

In 2023, the PRA revoked the requirement to deduct from CET1 capital the applicable amount of insufficient coverage for non-performing exposures. Reversing this deduction had a 0.1 percentage point impact to the CET1 ratio.

#### Silicon Valley Bank UK Limited (now HSBC Innovation Bank Limited)

In March 2023, HSBC UK Bank plc acquired Silicon Valley Bank UK Limited ('SVB UK'), and in June 2023 changed its legal entity name to HSBC Innovation Bank Limited ('HINV'). The gain on acquisition of \$1.6bn was partially offset by an increase in RWAs of \$9.6bn, resulting in a minimal impact on the Group CET1 ratio. The leverage exposure increased by \$9.6bn and the ratio declined by 0.02 percentage points.

#### Planned sale of our retail banking operations in France

During the fourth quarter of 2023, the planned sale of HSBC Continental Europe's retail banking operations in France, was reclassified as held for sale, following the receipt of regulatory approvals and the satisfaction of other relevant conditions. It was remeasured at the lower of the carrying amount and fair value, less the costs incurred to sell. The reinstatement of the impairment had an adverse impact of approximately 0.2 percentage points on our CET1 ratio and 0.08 percentage points on our Leverage ratio. On 1 January 2024, we completed the sale of this business with no material incremental impact on CET1.

*For further details of assets held for sale, liabilities of disposal groups held for sale and business acquisitions, see Note 23 on page 401 of the Annual Report and Accounts 2023.*

#### Liquidity coverage ratio

For the disclosure of the LCR, we follow Article 451a of CRR II. HSBC has implemented a Group consolidation methodology to reflect the requirements under the PRA Rulebook. This methodology is used to assess the limitations in the fungibility of entity liquidity around the Group and was enhanced in 2023 to consider more accurately, non-convertible currencies.

*For further details of our approach to managing Liquidity Risk, see Treasury Risk management section on page 14.*

#### BoCom

We have recognised a charge of \$3bn in 2023 relating to the impairment of the investment in Bank of Communications Co., Limited ('BoCom'). The impairment reflects a revision to the accounting value-in-use in line with recent market-wide developments in mainland China. The impairment of BoCom has an insignificant impact on HSBC's capital and CET1 ratio. This is because the impairment charge has a partially offsetting reduction in threshold deductions from regulatory capital. For regulatory capital purposes, our share of BoCom's profits are not capital accretive, whereas the dividends we receive from BoCom are capital accretive.

*For further details of significant accounting judgements, see page 106 of the Annual Report and Accounts 2023.*

#### Basel 3.1

In September 2023, the PRA announced changes to the UK implementation of Basel 3.1 with a new proposed implementation date of 1 July 2025. For further details related to the November 2022 consultation, see page 6 of our Pillar 3 Disclosures at 31 December 2022. We are currently assessing the impact of the consultation paper and the associated implementation challenges (including data provision) on our RWAs upon initial implementation.

The RWA output floor under Basel 3.1 is proposed to be subject to a four-and-a-half year transitional provision. Any impact from the output floor is expected to be towards the end of the transition period.



# Linkage to the Annual Report and Accounts 2023

This section demonstrates the links between the Group's audited financial balance sheet and its regulatory counterpart. In addition to the reconciliation presented here in Table 2, our *Pillar 3 Disclosures at 31 December 2023* also provide:

- an analysis of the regulatory reporting balance sheet by risk type; and
- a reconciliation between accounting valuation and the regulatory measure of exposure.

## 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 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.

- 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 8 to 11.*

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

<i>Ref<sup>1</sup></i>	Accounting balance sheet	Deconsolidation of insurance/ other entities	Consolidation of banking associates	Equity accounting of Insurance subsidiaries	Regulatory balance sheet
	\$m	\$m	\$m	\$m	\$m
<b>Assets</b>					
Cash and balances at central banks	285,868	(12)	400	–	286,256
Items in the course of collection from other banks	6,342	–	–	–	6,342
Hong Kong Government certificates of indebtedness	42,024	–	–	–	42,024
Trading assets	289,159	(8,016)	16	–	281,159
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	110,643	(101,133)	823	–	10,333
– of which: debt securities eligible as tier 2 issued by Group Financial Sector Entities ('FSEs') that are outside the regulatory scope of consolidation	<i>s</i> –	138	–	–	138
Derivatives	229,714	(14)	316	–	230,016
Loans and advances to banks	112,902	(1,597)	1,389	–	112,694
Loans and advances to customers	938,535	3	17,486	–	956,024
– of which: lending eligible as Tier 2 to Group FSEs outside the regulatory scope of consolidation	<i>s</i> –	333	–	–	333
– expected credit losses on IRB portfolios	<i>h</i> (8,277)	–	–	–	(8,277)
Reverse repurchase agreements – non-trading	252,217	1,351	51	–	253,619
Financial investments	442,763	(16,545)	7,278	–	433,496
– of which: lending eligible as Tier 2 to Group FSEs outside the regulatory scope of consolidation	<i>s</i> –	556	–	–	556
Assets held for sale	114,134	–	–	–	114,134
– of which: goodwill and intangible assets	<i>e</i> 232	–	–	–	232
– of which: expected credit losses on IRB portfolios	<i>h</i> (294)	–	–	–	(294)
Capital invested in insurance and other entities	–	3,756	–	4,054	7,810
– of which -positive goodwill on acquisition	<i>e</i> –	237	–	–	237
Prepayments, accrued income and other assets	165,255	(7,896)	640	–	157,999
– of which: retirement benefit assets	<i>j</i> 7,750	–	–	–	7,750
Current tax assets	1,536	14	–	–	1,550
Interests in associates and joint ventures	27,344	(454)	(5,672)	–	21,218
– of which: positive goodwill on acquisition	<i>e</i> 475	(11)	–	–	464
Goodwill and intangible assets	12,487	(423)	953	–	13,017
Deferred tax assets	<i>f, k</i> 7,754	(918)	67	–	6,903
<b>Total assets at 31 Dec 2023</b>	<b>3,038,677</b>	<b>(131,884)</b>	<b>23,747</b>	<b>4,054</b>	<b>2,934,594</b>
<b>Liabilities and equity</b>					
Hong Kong currency notes in circulation	42,024	–	–	–	42,024
Deposits by banks	73,163	(9)	2,476	–	75,630
Customer accounts	1,611,647	2,937	18,852	–	1,633,436
Repurchase agreements – non-trading	172,100	(127)	292	–	172,265
Items in course of transmission to other banks	7,295	–	–	–	7,295
Trading liabilities	73,150	–	–	–	73,150
Financial liabilities designated at fair value	141,426	(4,395)	–	–	137,031
– of which: included in tier 2	<i>o, q, i</i> 11,399	–	–	–	11,399

## Pillar 3 Disclosures at 31 December 2023

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

Ref <sup>t</sup>	Accounting balance sheet	Deconsolidation of insurance/ other entities	Consolidation of banking associates	Equity accounting of Insurance subsidiaries	Regulatory balance sheet
	\$m	\$m	\$m	\$m	\$m
Derivatives	234,772	(23)	272	—	235,021
– of which: debit valuation adjustment	54	—	—	—	54
Debt securities in issue	93,917	(863)	—	—	93,054
Liabilities of disposals group held for sale	108,406	—	—	—	108,406
– of which: credit-related contingent liabilities and contractual commitments on IRB portfolios	20	—	—	—	20
Accruals, deferred income and other liabilities	136,606	(4,339)	1,243	—	133,510
<b>Liabilities and equity</b>					
Current tax liabilities	2,777	(256)	140	—	2,661
Insurance contract liabilities	120,851	(120,851)	—	—	—
Provisions	1,741	(20)	89	—	1,810
– of which: credit-related contingent liabilities and contractual commitments on IRB portfolios	477	—	—	—	477
Deferred tax liabilities	1,238	(6)	3	—	1,235
Subordinated liabilities	24,954	—	420	—	25,374
– of which: included in tier 2	23,047	—	—	—	23,047
<b>Total liabilities at 31 Dec 2023</b>	<b>2,846,067</b>	<b>(127,952)</b>	<b>23,787</b>	<b>—</b>	<b>2,741,902</b>
<b>Equity</b>					
Called up share capital	9,631	—	—	—	9,631
Share premium account	14,738	—	—	—	14,738
Other equity instruments	17,719	—	—	—	17,719
Other reserves	(8,907)	2,198	(133)	6,531	(311)
Retained earnings	152,148	(5,950)	133	(2,477)	143,854
<b>Total shareholders' equity</b>	<b>185,329</b>	<b>(3,752)</b>	<b>—</b>	<b>4,054</b>	<b>185,631</b>
Non-controlling interests	7,281	(180)	(40)	—	7,061
<b>Total equity at 31 Dec 2023</b>	<b>192,610</b>	<b>(3,932)</b>	<b>(40)</b>	<b>4,054</b>	<b>192,692</b>
<b>Total liabilities and equity at 31 Dec 2023</b>	<b>3,038,677</b>	<b>(131,884)</b>	<b>23,747</b>	<b>4,054</b>	<b>2,934,594</b>

<sup>t</sup> The references (a)–(s) 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 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)

Principal activities	Method of accounting consolidation	At 31 Dec 2023			
		Method of regulatory consolidation			
		Proportional consolidation	Neither consolidated nor deducted	Equity method	Deducted from capital subject to thresholds
<b>Principal associates</b>					
Saudi Awwal Bank	Banking services	Equity	●		
<b>Principal insurance entities</b>					
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		●	●
<b>Principal SPEs</b>					
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 2023*.

The *Pillar 3 Disclosures at 31 December 2023* is prepared in accordance with regulatory capital and liquidity adequacy concepts and rules, while the *Annual Report and Accounts 2023* 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 (L11)**

	Carrying value of items						
	Carrying values as reported in published financial statements \$bn	Carrying values under scope of regulatory consolidation <sup>1</sup> \$bn	Subject to the credit risk framework \$bn	Subject to the counterparty credit risk framework <sup>2</sup> \$bn	Subject to the securitisation framework <sup>3</sup> \$bn	Subject to the market risk framework <sup>4</sup> \$bn	Not subject to own funds requirements or subject to deduction from own funds \$bn
<b>Assets</b>							
Cash and balances at central banks	285.9	286.3	286.3	—	—	—	—
Items in the course of collection from other banks	6.3	6.3	6.3	—	—	—	—
Hong Kong Government certificates of indebtedness	42.0	42.0	42.0	—	—	—	—
Trading assets	289.2	281.2	2.4	31.2	0.1	279.7	—
Financial assets designated and otherwise mandatorily measured at fair value	110.6	10.3	5.5	4.5	0.1	—	0.2
Derivatives	229.7	230.0	—	229.7	0.3	230.0	—
Loans and advances to banks	112.9	112.7	112.4	0.3	—	—	—
Loans and advances to customers	938.6	956.1	932.7	0.2	22.8	—	0.4
Reverse repurchase agreements – non-trading	252.2	253.6	—	253.6	—	—	—
Financial investments	442.8	433.5	431.8	—	1.2	—	0.5
Assets held for sale	114.1	114.1	109.9	3.3	—	3.0	(1.5)
Capital invested in insurance and other entities	—	7.8	3.8	—	—	—	4.1
Prepayments, accrued income and other assets	165.3	158.1	46.9	64.5	—	12.8	39.9
Current tax assets	1.5	1.5	1.5	—	—	—	—
Interests in associates and joint ventures <sup>5</sup>	27.3	21.2	10.3	—	—	—	10.9
Goodwill and intangible assets	12.5	13.0	—	—	—	—	12.4
Deferred tax assets	7.8	6.9	5.5	—	—	—	1.4
<b>Total assets at 31 Dec 2023</b>	<b>3,038.7</b>	<b>2,934.6</b>	<b>1,997.3</b>	<b>587.3</b>	<b>24.5</b>	<b>525.5</b>	<b>68.3</b>
<b>Liabilities</b>							
Hong Kong currency notes in circulation	42.0	42.0	—	—	—	—	42.0
Deposits by banks	73.2	75.6	—	—	—	—	75.6
Customer accounts	1,611.6	1,633.4	—	—	—	—	1,633.4
Repurchase agreements – non-trading	172.1	172.3	—	172.3	—	—	—
Items in course of transmission to other banks	7.3	7.3	—	—	—	—	7.3
Trading liabilities	73.2	73.2	—	15.5	—	73.2	—
Financial liabilities designated at FV	141.4	137.0	—	—	—	53.9	83.1
Derivatives	234.8	235.0	—	235.0	—	235.0	—
Debt securities in issue	93.9	93.1	—	—	—	—	93.1
Liabilities for disposal groups held for sale	108.4	108.4	—	3.5	—	—	104.9
Accruals, deferred income, and other liabilities	136.6	133.5	—	56.8	—	—	76.7
Current tax liabilities	2.8	2.7	—	—	—	—	2.7
Liabilities under insurance contract	120.9	—	—	—	—	—	—
Provisions	1.7	1.8	0.6	—	—	—	1.2
Deferred tax liabilities	1.2	1.2	0.9	—	—	—	2.9
Subordinated liabilities	25.0	25.4	—	—	—	—	25.4
<b>Total liabilities at 31 Dec 2023</b>	<b>2,846.1</b>	<b>2,741.9</b>	<b>1.5</b>	<b>483.1</b>	<b>—</b>	<b>362.1</b>	<b>2,148.3</b>

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.

2 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 2023, \$10.4bn was deducted from CET1 and \$25.7bn RWAs were reported for this investment, with a related exposure of \$10.3bn.

## Pillar 3 Disclosures at 31 December 2023

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 exposure.

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

	of which items subject to:				
	Total	Credit risk framework	Securitisation framework	CCR framework	Market risk framework <sup>2</sup>
	\$bn	\$bn	\$bn	\$bn	\$bn
1 Assets carrying value amount under the scope of regulatory consolidation (as per template LI1) <sup>1</sup>	2,866.3	1,997.3	24.5	587.3	525.5
2 Liabilities carrying value amount under the regulatory scope of consolidation (as per template LI1) <sup>1</sup>	593.6	1.5	—	483.1	362.1
3 Total net amount under the regulatory scope of consolidation	2,272.7	1,995.8	24.5	104.2	163.4
4 Off-balance-sheet amounts	1,019.5	927.0	21.6	70.9	—
6 Differences due to different netting rules, other than those already included in row 2	44.3	15.8	—	28.5	—
7 Differences due to consideration of provisions	9.2	9.2	—	—	—
8 Differences due to the use of credit risk mitigation techniques (CRMs)	(105.6)	(14.6)	(1.5)	(89.5)	—
9 Differences due to credit conversion factors	(644.4)	(644.4)	—	—	—
10 Differences due to Securitisation with risk transfer	(9.0)	—	(9.0)	—	—
11 Other differences	36.9	2.0	0.4	34.5	—
12 Exposure amounts considered for regulatory purposes at 31 Dec 2023	2,623.6	2,290.8	36.0	148.6	—

1 Excludes amounts subject to deduction from capital or not subject to regulatory capital requirements.

2 Exposure amounts considered for regulatory purposes 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.

### Explanations of differences between accounting and regulatory exposure amounts

#### Off-balance sheet amounts

Off-balance sheet amounts include undrawn portions of committed facilities, forward starting repos ('FSR'), various trade finance commitments and guarantees.

#### 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/STD') 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 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, bid-offer (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 69 presents further information on the prudent valuation adjustment.

For further details of level 3 exposures, see Note 12 on page 375 of the Financial Statements of the Annual Report and Accounts 2023.

# 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, including the key principles and practices that we employ in managing material risks, both financial and non-financial.

The framework fosters continuous monitoring of the risk environment, promotes risk awareness and a sound operational and strategic decision making and escalation process. It also ensures we have a consistent approach to monitoring, managing and mitigating the risks we accept and incur in our activities, with clear accountabilities.

*For further details of our risk management framework, see page 137 of the Annual Report and Accounts 2023.*

*For details of the management and mitigation of principal risks facing the Group, see page 140 of the Annual Report and Accounts 2023.*

*For details on our management of treasury risk, see page 14, and for commentary on hedging strategies, see pages 86 and 92.*

## 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 145 of the *Annual Report and Accounts 2023*. Please see the following sections for further details on:

- Credit risk (refer to page 147 of the *Annual Report and Accounts 2023*)
- Treasury risk (refer to page 203 of the *Annual Report and Accounts 2023*)
- Market risk (refer to page 218 of the *Annual Report and Accounts 2023*)
- Climate risk (refer to page 221 of the *Annual Report and Accounts 2023*)
- Resilience risk (refer to page 230 of the *Annual Report and Accounts 2023*)
- Regulatory compliance risk (refer to page 231 of the *Annual Report and Accounts 2023*)
- Financial crime risk (refer to page 231 of the *Annual Report and Accounts 2023*)
- Model risk (refer to page 232 of the *Annual Report and Accounts 2023*)
- Insurance manufacturing operations risk (refer to page 233 of the *Annual Report and Accounts 2023*)

*For further details on ESG and risk management, see 'Financial crime risk' on page 231 and 'Regulatory compliance risk' on page 225 of the Annual Report and Accounts 2023*

## 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 which are aligned to our risk appetite and global strategy.

*For further details of risk and remuneration, see page 294 of the Annual Report and Accounts 2023.*

## 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 2023*.

## 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 274 to 278 of the Annual Report and Accounts 2023.*

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 ('GRCO'). The GRCO is supported by the Group Risk Management Meeting ('GRMM') of the Group Executive Committee ('GEC').

*For further details of risk governance, see page 137 of the Annual Report and Accounts 2023.*

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 138 of the Annual Report and Accounts 2023.*

## 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 twice a year, 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 ensure consistency in risk management.

*For further details of our risk management tools and risk appetite, see page 136 of the Annual Report and Accounts 2023.*

## Global Risk and Compliance

We have a dedicated Global Risk and Compliance function, headed by the GRCO, which is responsible for the Group's risk management framework. This includes establishing global policy, monitoring risk profiles, and providing forward-looking risk identification and management capabilities. Global Risk and Compliance is composed of sub-functions covering both financial and non-financial risks. It is independent from the global businesses to provide challenge, appropriate oversight and balance in risk versus return decisions. The

## Pillar 3 Disclosures at 31 December 2023

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 138 of the Annual Report and Accounts 2023.*

### Stress testing

HSBC operates a wide-ranging stress testing programme that supports our risk management and capital planning. It includes execution of stress tests mandated by our regulators and those to meet our own internal requirements. Our stress testing is supported by dedicated teams and infrastructure.

Our stress testing programme assesses our capital and liquidity strength through a rigorous examination of our resilience to external shocks. Both the internal and regulatory driven stress tests help us to understand and mitigate risks, and informs our decisions about capital and liquidity levels. Stress testing provides management with key insights into the impact of severely adverse events on the Group and helps provide confidence in the Group's 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 138 of the Annual Report and Accounts 2023.*

### 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 was 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 274 of the Annual Report and Accounts 2023, 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 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.

The ongoing programme to strengthen our regulatory reporting also considers the efficacy of our systems. Potential enhancements identified through this programme will be assessed and, where appropriate, implemented under the governance framework.

We remain committed to investing in the reliability and resilience of our IT systems and critical services, including those provided by third parties, that support all parts of our business. We do so to help protect our customers, affiliates and counterparties, and to help ensure that we minimise any disruption to services that could result

in reputational and regulatory consequences. In our approach to defend against these threats, we invest in business and technical controls to help us detect, manage and recover from issues, including data loss, in a timely manner.

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 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 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 GRCO 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 teams within Global Risk. The team provides robust challenge to the modelling approaches used across the Group. It also ensures 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.

Global Risk Policy and Standards govern the development, validation, independent review, approval, implementation and performance monitoring of credit risk rating models. 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.

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

*For further details of model risk management, see page 232 of the Annual Report and Accounts 2023.*

# 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 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 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 co-owns pension risk with the Group Head of Performance, Reward and Employee Relations. 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 risk management meetings.

*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 203 of the Annual Report and Accounts 2023.*

## 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 2023, 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 in accordance with Annex VIII of CRR II is also published on our website at [www.hsbc.com](http://www.hsbc.com) with reference to our balance sheet on 31 December 2023. The full terms and conditions of our securities are also available at [www.hsbc.com](http://www.hsbc.com).

HSBC has no foreseen restrictions with regards to planned dividend payments from material subsidiaries. However, the ability of subsidiaries to pay dividends 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 have capital resources below their minimum regulatory requirement.

## 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 make sure 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 ('IRBB') 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 or in order to hedge positions held with trading intent. Interest rate risk that can be economically hedged may be transferred to Global Treasury. Hedging is generally executed through interest rate derivatives or fixed-rate government bonds. Any interest rate risk that Global Treasury cannot economically hedge is not transferred and will remain within the global business where the risks originate.

Global Treasury uses a number of measures to monitor and control interest rate risk in the banking book, including:

- net interest income sensitivity; and
- economic value of equity sensitivity.

*For further details of IRBB, see page 22.*

## Non-trading book foreign exchange exposures

Structural foreign exchange exposures arise from net assets or capital investments in foreign operations, together with any associated hedging. A foreign operation is defined as a subsidiary, associate, joint arrangement or branch where the activities are conducted in a currency other than that 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 ('FVOCI') 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 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 and tier 2 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 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)

		At	
		31 Dec 2023	31 Dec 2022
		\$m	\$m
	<b>Common equity tier 1 ('CET1') capital: instruments and reserves</b>		
1	Capital instruments and the related share premium accounts	22,964	23,406
	– ordinary shares	22,964	23,406
2,3	Retained earnings, accumulated other comprehensive income (and other reserves) <sup>1</sup>	128,419	121,609
5	Minority interests (amount allowed in consolidated CET1)	3,917	4,444
UK-5a	Independently reviewed interim net profits net of any foreseeable charge or dividend	10,568	8,633
6	<b>Common equity tier 1 capital before regulatory adjustments<sup>1</sup></b>	<b>165,868</b>	<b>158,092</b>
	<b>Common equity tier 1 capital: regulatory adjustments</b>		
7	Additional value adjustments (negative amount)	(1,238)	(1,171)
8	Intangible assets (net of related deferred tax liability) (negative amount)	(13,378)	(12,141)
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)	(4,308)	(4,233)
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	992	3,601
12	Negative amounts resulting from the calculation of expected loss amounts	(2,304)	(1,248)
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	932	(280)
15	Defined-benefit pension fund assets (negative amount)	(5,773)	(5,448)
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 where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) <sup>1</sup>	(14,309)	(16,372)
22	Amount exceeding the 17.65% threshold (negative amount) <sup>1</sup>	–	(1,137)
23	– direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities <sup>1</sup>	–	(581)
25	– of which: deferred tax assets arising from temporary differences	–	(556)
27a	Other regulatory adjustments to CET1 capital (including IFRS 9 transitional adjustments when relevant)	59	(332)
28	<b>Total regulatory adjustments to common equity tier1<sup>1</sup></b>	<b>(39,367)</b>	<b>(38,801)</b>
29	<b>Common equity tier 1 ('CET1') capital</b>	<b>126,501</b>	<b>119,291</b>
	<b>Additional tier 1 ('AT1') capital: instruments</b>		
30	Capital instruments and the related share premium accounts	17,719	19,746
31	– classified as equity under IFRSs	17,719	19,746
34	Qualifying tier 1 capital included in consolidated AT1 capital (including minority interests not included in CET1) issued by subsidiaries and held by third parties	13	90
36	<b>Additional tier 1 capital before regulatory adjustments</b>	<b>17,732</b>	<b>19,836</b>
	<b>Additional tier 1 capital: regulatory adjustments</b>		
37	Direct and indirect holdings of own AT1 instruments (negative amount)	(70)	(60)
43	<b>Total regulatory adjustments to additional tier 1 capital</b>	<b>(70)</b>	<b>(60)</b>
44	<b>Additional tier 1 capital</b>	<b>17,662</b>	<b>19,776</b>
45	<b>Tier 1 capital (T1 = CET1 + AT1)</b>	<b>144,163</b>	<b>139,067</b>
	<b>Tier 2 capital: instruments and provisions</b>		
46	Capital instruments and the related share premium accounts	22,848	18,287
UK-47b	Amount of qualifying items referred to in Article 494b (2) CRR II subject to phase out from T2	4,112	4,055
48	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	1,188	2,437
51	<b>Tier 2 capital before regulatory adjustments</b>	<b>28,148</b>	<b>24,779</b>
52	Direct, indirect and synthetic holdings by an institution of own T2 instruments and subordinated loans (negative amount) <sup>4</sup>	(80)	(40)
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)	(1,027)	(1,383)
57	<b>Total regulatory adjustments to tier 2 capital</b>	<b>(1,107)</b>	<b>(1,423)</b>
58	<b>Tier 2 capital</b>	<b>27,041</b>	<b>23,356</b>
59	<b>Total capital (TC = T1 + T2)</b>	<b>171,204</b>	<b>162,423</b>
60	<b>Total Risk exposure amount</b>	<b>854,114</b>	<b>839,720</b>



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

		At	
		31 Dec	31 Dec
		2023	2022
		\$m	\$m
<b>Capital ratios and buffers (%)</b>			
61	Common equity tier 1 (as a percentage of total risk exposure amount)	14.8	14.2
62	Tier 1 (as a percentage of total risk exposure amount)	16.9	16.6
63	Total capital (as a percentage of total risk exposure amount)	20.0	19.3
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)	11.2	10.9
65	– capital conservation buffer requirement	2.5	2.5
66	– countercyclical buffer requirement	0.7	0.4
67a	– Global systemically important institution ('G-SII') buffer	2.0	2.0
68	Common equity tier 1 available to meet buffers	8.8	8.2
<b>Amounts below the threshold for deduction (before risk weighting)</b>			
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)	3,965	2,532
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)	14,069	13,134
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)	4,694	4,711
<b>Applicable caps on the inclusion of provisions in tier 2</b>			
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	2,128	1,962
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	3,226	3,204

*† The references (a)–(s) 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.*

*1 On adoption of IFRS 17 'Insurance Contracts', comparative data previously published under IFRS 4 'Insurance Contracts' have been restated for 2022, with no impact on CET1 and total capital.*

At 31 December 2023, our CET1 capital ratio increased to 14.8% from 14.2% at 31 December 2022, reflecting an increase in CET1 capital of \$7.2bn, which was partially offset by an increase in RWAs of \$14.4bn. The key drivers of the overall rise in our CET1 ratio during the year were:

- a 1.0 percentage point increase from capital generation, mainly through profits less dividends, and share buy-backs;
- a 0.3 percentage point reduction due to an increase in regulatory deductions, primarily for expected excess loss and intangible assets; and

- a 0.1 percentage point decrease from the adverse impact of foreign exchange fluctuations and the increase in the underlying RWAs.

Our Pillar 2A requirement at 31 December 2023, 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 2023, we complied with the PRA's regulatory capital adequacy requirements.

## Leverage ratio

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 approach to risk appetite, see page 136 of the Annual Report and Accounts 2023.

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 leverage ratio framework.

Table 7: Leverage ratio common disclosure (UK LR2-LRCom)

		At	
		31 Dec 2023	31 Dec 2022
		\$m	\$m
<b>On-balance sheet exposures (excluding derivatives and securities financing transactions ('SFTs'))</b>			
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral) <sup>1</sup>	2,383,204	2,258,450
2	Gross-up for derivatives collateral provided, where deducted from the balance sheet assets pursuant to the applicable accounting framework	7,142	10,918
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(51,809)	(60,793)
6	(Asset amounts deducted in determining tier 1 capital (leverage)) <sup>1</sup>	(40,082)	(40,880)
7	<b>Total on-balance sheet exposures (excluding derivatives and SFTs)</b>	<b>2,298,455</b>	<b>2,167,695</b>
<b>Derivative exposures</b>			
8	Replacement cost associated with SA-CCR derivatives transactions (i.e. net of eligible cash variation margin)	44,436	57,876
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	119,122	113,147
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	(42,102)	(43,106)
11	Adjusted effective notional amount of written credit derivatives	61,514	91,927
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(58,144)	(86,771)
13	<b>Total derivative exposures</b>	<b>124,826</b>	<b>133,073</b>
<b>SFT exposures</b>			
14	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	495,337	434,410
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(182,197)	(139,502)
16	Counterparty credit risk exposure for SFT assets	12,056	12,021
18	<b>Total securities financing transaction exposures</b>	<b>325,196</b>	<b>306,929</b>
<b>Other off-balance sheet exposures</b>			
19	Off-balance sheet exposures at gross notional amount	952,086	912,473
20	(Adjustments for conversion to credit equivalent amounts)	(716,681)	(686,870)
22	<b>Total off-balance sheet exposures</b>	<b>235,405</b>	<b>225,603</b>
<b>Capital and total exposures measure</b>			
23	<b>Tier 1 capital (leverage)</b>	<b>144,163</b>	<b>139,067</b>
24	Total exposure measure including claims on central banks	2,983,882	2,833,300
UK-24a	(-) Claims on central banks excluded	(409,127)	(416,099)
UK-24b	<b>Total exposure measure excluding claims on central banks</b>	<b>2,574,755</b>	<b>2,417,201</b>
<b>Leverage ratios</b>			
25	<b>Leverage ratio excluding claims on central banks (%)</b>	<b>5.60</b>	<b>5.75</b>
UK-25a	Fully loaded ECL accounting model leverage ratio excluding claims on central banks (%)	5.59	5.74
UK-25b	Leverage ratio excluding central bank reserves as if the temporary treatment of unrealised gains and losses measured at fair value through other comprehensive income had not been applied (%)	5.60	5.75
UK-25c	Leverage ratio including claims on central banks (%)	4.83	4.91
26	Regulatory minimum leverage ratio requirement (%)	3.25	3.25
<b>Additional leverage ratio disclosure requirements – leverage ratio buffers</b>			
27	Leverage ratio buffer (%)	0.90	0.80
UK-27a	– of which: G-SII or O-SII additional leverage ratio buffer (%)	0.70	0.70
UK-27b	– of which: countercyclical leverage ratio buffer (%)	0.20	0.10
<b>Additional leverage ratio disclosure requirements – disclosure of mean values</b>			
28	Mean of daily values of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivable	292,203	287,021
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	313,140	294,908
UK-31	Average total exposure measure including claims on central banks	2,903,001	2,840,599
UK-32	Average total exposure measure excluding claims on central banks	2,498,618	2,416,643
UK-33	Average leverage ratio including claims on central banks (%)	4.89	4.76
UK-34	Average leverage ratio excluding claims on central banks (%)	5.69	5.59

1 On adoption of IFRS 17 'Insurance Contracts', comparative data previously published under IFRS 4 'Insurance Contracts' have been restated for 2022, with no impact on leverage exposure and ratio.

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

**Table 8: Summary reconciliation of accounting assets and leverage ratio exposures (UK LR1- LRSum)**

		At	
		31 Dec	31 Dec
		2023	2022
		\$m	\$m
1	Total assets as per published financial statements <sup>1</sup>	3,038,677	2,949,286
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation <sup>1</sup>	(104,083)	(95,341)
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	(1,246)	(828)
4	(Adjustment for exemption of exposures to central banks)	(409,127)	(416,099)
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	(22,762)	(12,283)
7	Adjustment for eligible cash pooling transactions	(7,140)	(5,818)
8	Adjustment for derivative financial instruments	(150,385)	(201,765)
9	Adjustment for securities financing transactions ('SFTs')	37,533	20,266
10	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	235,405	225,603
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced tier 1 capital (leverage)) <sup>1</sup>	(40,082)	(40,880)
12	Other adjustments	(2,035)	(4,940)
13	<b>Total leverage ratio exposure</b>	<b>2,574,755</b>	<b>2,417,201</b>

<sup>1</sup> On adoption of IFRS 17 'Insurance Contracts', comparative data previously published under IFRS 4 'Insurance Contracts' have been restated for 2022, with no impact on leverage exposure and ratio.

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

**Table 9: Leverage ratio – split of on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures) (UK LR3-LRSpI)**

		At	
		31 Dec	31 Dec
		2023	2022
		\$m	\$m
UK-1	Total on-balance sheet exposures (excluding derivatives, SFTs and exempted exposures), of which: <sup>1</sup>	1,922,268	1,781,558
UK-2	Trading book exposures	249,958	183,806
UK-3	Banking book exposures, – of which:	1,672,310	1,597,752
UK-4	Covered bonds	1,912	1,961
UK-5	Exposures treated as sovereigns	381,804	320,864
UK-6	Exposures to regional governments, multilateral development banks, international organisations and public sector entities not treated as sovereigns	3,415	8,529
UK-7	Institutions	73,556	71,593
UK-8	Secured by mortgages of immovable properties	408,834	387,404
UK-9	Retail exposures	69,368	76,349
UK-10	Corporates	532,056	522,553
UK-11	Exposures in default	12,632	15,046
UK-12	Other exposures (e.g. equity, securitisations and other non-credit obligation assets) <sup>1</sup>	188,733	193,453

<sup>1</sup> On adoption of IFRS 17 'Insurance Contracts', comparative data previously published under IFRS 4 'Insurance Contracts' have been restated for 2022, with no impact on leverage exposure and ratio.

Our leverage ratio was 5.6% at 31 December 2023, down from 5.8% at 31 December 2022. The increase in the leverage exposure was primarily due to growth in the balance sheet, which led to a fall of 0.4 percentage points in the leverage ratio. This was partly offset by a 0.2 percentage points rise due to an increase in the Tier 1 Capital.

At 31 December 2023, 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 5.7% at 31 December 2023, up from 5.6% at 31 December 2022. The increase in the average tier 1 capital, resulted in a rise of 0.3 percentage points in the ratio. This was partly offset by a fall of 0.2 percentage points due to an increase in the average leverage exposure, primarily due to growth in the average balance sheet.

## Capital buffers

Our geographical breakdown and institution-specific countercyclical capital buffer ('CCyB') disclosure is provided on page 100 of this document. The global systemically important bank ('G-SIB') indicators disclosure is published annually on our website, [www.hsbc.com/investors](http://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: <ul style="list-style-type: none"> <li>– pending the issuance of local regulations or model approval;</li> <li>– following supervisory prescription of a non-advanced approach; or</li> <li>– under exemptions from IRB treatment.</li> </ul> Details of the internal model method ('IMM') permission we have received from the PRA can be found in the Financial Services Register on the PRA's website.
Counterparty credit risk	CCR covers the risk of counterparty default and potential mark-to-market losses in derivatives and 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 Risk ('SA-CCR'), or by IMM. For SFTs either the simple or comprehensive approach 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 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 undertakings must be treated using the IRB equity simple risk-weight approach.	We calculate capital requirements for: <ul style="list-style-type: none"> <li>– non-trading book equity holdings using the standardised approach; and</li> <li>– underlying equity positions within collective investments undertakings using the IRB equity simple risk-weight approach.</li> </ul>
Securitisation	The framework prescribes the following approaches: <ul style="list-style-type: none"> <li>– internal ratings-based approach ('SEC-IRBA');</li> <li>– standardised approach ('SEC-SA');</li> <li>– external ratings-based approach ('SEC-ERBA'); and</li> <li>– internal assessment approach ('IAA').</li> </ul>	Under the framework: <ul style="list-style-type: none"> <li>– our originated positions are reported under SEC-IRBA;</li> <li>– our positions in the sponsored Solitaire programme and our investment in third-party positions are reported under SEC-SA and SEC-ERBA; and</li> <li>– 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.</li> </ul> For definitions of Solitaire and Regency securities, see page 85.
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, 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, stressed VaR 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, and represents the minimum capital charge set at 8% of RWAs by Article 92(1) of CRR II. Other counterparty credit risk includes securities financing transactions RWAs.

Table 10: Overview of risk-weighted exposure amounts (OV1)

		At		
		31 Dec 2023	30 Sep 2023	31 Dec 2023
		RWAs \$m	RWAs \$m	Capital requirement \$m
1	<b>Credit risk (excluding counterparty credit risk)</b>	<b>676,102</b>	668,133	<b>54,089</b>
2	– standardised approach	<b>167,096</b>	162,375	<b>13,368</b>
3	– foundation IRB approach	<b>77,544</b>	76,536	<b>6,204</b>
4	– slotting approach	<b>25,886</b>	26,703	<b>2,071</b>
UK 4a	– equities under the simple risk weighted approach <sup>1</sup>	<b>5,662</b>	5,329	<b>453</b>
5	– advanced IRB approach	<b>399,914</b>	397,190	<b>31,993</b>
6	<b>Counterparty credit risk</b>	<b>35,374</b>	36,770	<b>2,830</b>
7	– standardised approach	<b>10,017</b>	10,351	<b>801</b>
8	– internal model method	<b>11,208</b>	11,819	<b>897</b>
UK-8a	– exposures to a central counterparty	<b>1,675</b>	2,212	<b>134</b>
UK-8b	– credit valuation adjustment	<b>2,763</b>	2,798	<b>221</b>
9	– other counterparty credit risk	<b>9,711</b>	9,590	<b>777</b>
15	<b>Settlement risk</b>	<b>104</b>	140	<b>8</b>
16	<b>Securitisation exposures in the non-trading book (after the cap)</b>	<b>7,887</b>	6,822	<b>631</b>
17	– internal ratings-based approach ('SEC-IRBA')	<b>2,169</b>	1,452	<b>174</b>
18	– external ratings-based approach ('SEC-ERBA') (including internal assessment approach ('IAA'))	<b>2,410</b>	2,314	<b>193</b>
19	– standardised approach ('SEC-SA')	<b>3,142</b>	2,911	<b>251</b>
UK-19a	– 1250%/deduction	<b>166</b>	145	<b>13</b>
20	<b>Position, foreign exchange and commodities risks (market risk)</b>	<b>37,490</b>	42,716	<b>2,999</b>
21	– standardised approach	<b>15,172</b>	15,427	<b>1,214</b>
22	– internal models approach	<b>22,318</b>	27,289	<b>1,785</b>
23	<b>Operational risk</b>	<b>97,157</b>	85,468	<b>7,773</b>
UK-23b	– standardised approach	<b>97,157</b>	85,468	<b>7,773</b>
29	<b>Total</b>	<b>854,114</b>	840,049	<b>68,330</b>
24	– of which: Amounts below the thresholds for deduction (subject to 250% risk weight) <sup>2</sup>	<b>46,969</b>	46,863	<b>3,758</b>

1 This includes off-balance sheet collective investment undertakings ('CIU') equity exposures, calculated as per the PRA Rulebook Article 132(c).

2 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.

## Credit risk, including amounts below the thresholds for deduction

RWAs increased \$8.0bn, reflecting a \$8.2bn increase due to foreign currency movements, \$4.3bn in growth in corporate lending, increase in customer risk rating migrations and portfolio mix changes. These were partly offset by a decrease of \$4.3bn due to credit risk parameter refinements.

The increase of \$4.3bn is mainly due to a \$2.6bn increase in corporate lending in Saudi Awwal Bank and HINV, increased retail lending and higher sovereign exposures, and the \$1.7bn increase was primarily due to a rise in customer risk rating migrations and portfolio mix changes, notably in Asia.

The decrease of \$4.3bn due to credit risk parameter refinements primarily in Asia and UK.

## Counterparty credit risk, including settlement risk

Counterparty credit risk RWAs fell by \$1.4bn primarily due to mark-to-market movements and lower reverse repo exposures.

## Market risk

Market risk RWAs fell by \$5.2bn primarily due to a decrease in VaR and stressed value at risk ('SVaR') averages over the quarter, and the impact of a new model implementation for IRC.

## Securitisation

An increase of \$1.1bn in securitisation RWAs was mainly due to growth in the UK, the US and Asia.

## Operational risk

Operational risk RWAs increased by \$11.7bn, predominantly due to book size \$10.4bn as average revenue in 2023 was higher due to NII, given the rising interest rate environment in all major economies.

Further foreign currency translation differences were \$1.8bn, mainly due to strengthening of GBP. The impact from the acquisition of SVB UK was included in the first quarter of 2023.

## Pillar 3 Disclosures at 31 December 2023

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

	Quarter ended			
	31 Dec 2023	30 Sep 2023	30 Jun 2023	31 Mar 2023
	\$m	\$m	\$m	\$m
1 <b>RWAs at the opening period</b>	<b>486,371</b>	497,817	503,959	506,898
2 Asset size	(814)	919	(2,155)	4,019
3 Asset quality	1,779	1,409	1,077	(1,563)
4 Model updates	(120)	(902)	(660)	252
5 Methodology and policy	(4,208)	(3,058)	(4,711)	(7,152)
6 Acquisitions and disposals	(123)	(1,785)	—	—
7 Foreign exchange movements <sup>1</sup>	6,851	(8,029)	307	1,505
9 <b>RWAs at the closing period</b>	<b>489,736</b>	486,371	497,817	503,959

<sup>1</sup> Foreign exchange movements in this disclosure are computed by retranslating the RWAs into US dollars based on the underlying transactional currencies.

Excluding foreign currency translation differences, RWAs under the IRB approach decreased by \$3.5bn in the fourth quarter of the year, mostly driven by:

- a \$4.2bn decrease in methodology and policy, primarily due to credit risk parameter refinements in Asia and UK;
- a \$0.8bn decrease in asset size primarily due to a fall in corporate lending in Asia, partly offset by higher sovereign exposures and growth in retail lending; and
- a \$1.8bn increase in asset quality primarily due to a rise customer risk rating migrations and portfolio mix changes.

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

Table 12: RWA flow statements of CCR exposures under IMM (CCR7)

	Quarter ended			
	31 Dec 2023	30 Sep 2023	30 Jun 2023	31 Mar 2023
	\$m	\$m	\$m	\$m
1 <b>RWAs at the opening period</b>	<b>11,819</b>	12,029	11,080	11,758
2 Asset size	(589)	(266)	915	(614)
3 Asset quality	(22)	56	34	(64)
9 <b>RWAs at the closing period</b>	<b>11,208</b>	11,819	12,029	11,080

RWAs under the internal model method decreased by \$0.6bn in the fourth quarter of 2023, predominately due to mark-to-market movements in Asia and Europe.

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

	VaR	Stressed VaR	Incremental risk charge ('IRC')	Other	Total RWAs	Total capital requirements
	\$m	\$m	\$m	\$m	\$m	\$m
1 <b>RWAs at 1 Oct 2023</b>	<b>9,402</b>	<b>10,406</b>	<b>6,446</b>	<b>1,035</b>	<b>27,289</b>	<b>2,183</b>
2 Movement in risk levels	(2,238)	(2,109)	(403)	570	(4,180)	(335)
3 Model updates/changes	—	—	(880)	89	(791)	(63)
8 <b>RWAs at 31 Dec 2023</b>	<b>7,164</b>	<b>8,297</b>	<b>5,163</b>	<b>1,694</b>	<b>22,318</b>	<b>1,785</b>
1 RWAs at 1 Jul 2023	9,322	9,614	5,839	1,221	25,996	2,080
2 Movement in risk levels	80	792	607	(186)	1,293	103
4 Methodology and policy	—	—	—	—	—	—
8 RWAs at 30 Sep 2023	9,402	10,406	6,446	1,035	27,289	2,183
1 RWAs at 1 Apr 2023	7,994	8,337	5,476	1,601	23,408	1,873
2 Movement in risk levels	1,378	1,308	201	(291)	2,596	208
3 Model updates/changes	—	—	—	(89)	(89)	(7)
4 Methodology and policy	(50)	(31)	162	—	81	6
8 RWAs at 30 Jun 2023	9,322	9,614	5,839	1,221	25,996	2,080
1 RWAs at 1 Jan 2023	7,630	11,091	3,429	1,775	23,925	1,914
2 Movement in risk levels	364	(2,754)	2,047	(174)	(517)	(41)
4 Methodology and policy	—	—	—	—	—	—
8 RWAs at 31 Mar 2023	7,994	8,337	5,476	1,601	23,408	1,873

RWAs under the internal model approach decreased by \$5.0bn in the fourth quarter in 2023, primarily due to a decrease in VaR and SVaR averages and the impact of a new model implementation for IRC.

## 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

Global Treasury measures, monitors and manages interest rate risk in the banking book. This includes reviewing and challenging the interest rate risk management impacts of proposed new products and the related behavioural assumptions used for the hedging activities. Global Treasury is also responsible for maintaining and updating the transfer pricing framework, informing the Holdings Asset and Liability Committee of the Group's overall banking book interest rate risk exposure.

All material interest rate risks must be identified, measured, monitored, managed and controlled by metrics within limits, at a local entity level. Key metrics used to monitor IRRBB include: projected NII and economic value of equity ('EVE') sensitivities under varying interest rate scenarios as prescribed by the regulators and internally calibrated shocks. A SVaR is used for the portfolio of liquid securities, held by Markets Treasury, that are accounted for at FVOCI.

We monitor EVE and NII sensitivities against thresholds at both entity and consolidated levels. Global Treasury is subject to an independent oversight and challenge from Treasury Risk, Internal Audit and model governance. The sensitivity calculations exclude pensions, insurance and interests in associates.

Stress testing is used to assess how the bank copes with severe economic scenarios, in particular the bank's resilience to ensure there is enough capital to withstand extreme shocks.

At HSBC, stress testing also forms a key part of our risk management framework. HSBC runs various internal and regulatory stress tests during the year both at a Group and individual entity level. These help to identify the Group's exposure to key economic risks, how they impact on its financial and capital position in the event of a severe economic shock. Identifying these risks allows the Group to actively assess and implement effective risk management strategies to help mitigate risks before they occur. This also helps to ensure that the Group has adequate capital and liquidity to withstand extreme hypothetical economic shocks, as defined in the stress scenarios, and helps determine our capital requirements under the internal capital adequacy process ('ICAAP').

### Economic value of equity and net interest income sensitivity

EVE sensitivities represent the expected movement in EVE due to pre-specified interest rate shocks, where all other economic variables are held constant. This represents the present value of the future banking book cash flows that could be distributed to equity providers under a managed run-off scenario. This can be used to assess the economic capital required to support interest rate risk in the banking book and provides a comprehensive view of the potential long term effects of the changes in interest rates. The Group and the operating entities monitor EVE sensitivities as a percentage of their capital resources, and this is currently calculated on a quarterly basis.

NII sensitivities apply varying interest rate scenarios (i.e. simulation modelling) under a static balance sheet whilst all other economic variables are held constant. This metric reflects the bank's sensitivity of NII due to changes in market interest rates, and is assessed over both one year and three years horizon.

### Active management of IRRBB

Interest rate risk that can be economically hedged is transferred to Markets Treasury. Hedging is generally executed through interest rate derivatives or fixed-rate bonds. 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.

Markets Treasury safeguards the entities by ensuring that the 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. Treasury Risk measures and monitors (against limits) the Markets Treasury activities using metrics including present value of one basis point, credit spread of one basis point and VaR on a daily basis.

A large majority of the Markets Treasury activities is on a banking book basis. The only Markets Treasury activity treated as trading 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 NII 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 CRR II disclosure requirement.

The NII 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 pound 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 shocks:

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

### Key modelling assumptions

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 the risk free rates back to the reporting date. All equity instruments that have no coupon or call dates are excluded. 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.

For NII 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. 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. We apply beta assumptions to the managed rate products, reflecting the degree to which we expect changes to market and policy rates to be passed on to customers. Customer pricing includes flooring where there are contractual obligations and customer optionality including prepayment and early redemption risk is included where present. The impact of flooring is limited in the current high rate environment.

Non-maturing deposits ('NMD') are deposits that have no explicit maturity and no explicit repricing date, thus behaviouralisation assumptions are applied.

## Pillar 3 Disclosures at 31 December 2023

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

### Quantitative information on IRRBB

The most adverse NII sensitivity scenario over the next 12 months is the parallel down shock, resulting in a decrease in projected NII of \$3,223m as at 31 December 2023, as compared to \$8,497m as at 31 December 2022.

At 31 December 2023, the maximum decline in EVE was in the parallel up shock at \$7,303m. This translates to 5.07% of tier 1 capital.

As of 31 December 2022, the maximum decline in EVE was in the parallel up shock at \$4,891m. This translated to 3.52% of tier 1 capital.

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

Table 14: Quantitative information on IRRBB (UK IRRBB1)

		ΔEVE		ΔNII		Tier 1 capital	
		31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022	31 Dec 2023	31 Dec 2022
		\$m	\$m	\$m	\$m	\$m	\$m
10	Parallel shock up	(7,303)	(4,891)	1,337	7,094		
20	Parallel shock down	3,572	1,937	(3,223)	(8,497)		
30	Steepener shock	(1,664)	(325)				
40	Flattener shock	(519)	(1,441)				
50	Short rates shock up	(2,700)	(3,630)				
60	Short rates shock down	1,075	1,058				
70	Maximum	(7,303)	(4,891)	(3,223)	(8,497)		
80	Tier 1 capital					144,163	139,067

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

The average repricing maturity for NMDs, as of 31 December 2023, was 12 months, which increased from 4 months as of 31 December 2022 due to a change in our methodology. The longest repricing maturity for NMDs, as of 31 December 2023 was 120 months or 10 years (excluding a legacy portfolio that was disposed in January 2024). Besides this portfolio, the longest repricing maturity does not exceed 10 years across the Group.

For further details of our IRRBB and NII, see page 214 of the Annual Report and Accounts 2023.

## 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 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 \$147bn to LCR HQLA and \$7bn to LCR inflows on an average basis. In 2023, this methodology was enhanced to consider non-convertible currencies more accurately.

At 31 December 2023, all of the Group's material operating entities exceeded their minimum required regulatory levels. The average Group LCR for the 12 months to 31 December 2023 was 136% or \$171bn above regulatory requirement, after the deduction related to limitations in transferring liquidity around the Group.

The average Group LCR HQLA of \$648bn (31 December 2022: \$647bn) was held in a range of asset classes and currencies.

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

#### 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.

For further details of our approach to managing Liquidity Risk, see Treasury Risk management section on page 14.

#### 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 133% at 31 December 2023 and 136% at 31 December 2022.

#### 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.

More details on the concentration of funding and liquidity sources may be found on page 211 of the Annual Report and Accounts 2023.



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 15: Level and components of HSBC Group consolidated liquidity coverage ratio (LIQ1)

	Quarter ended 31 Dec 2023		Quarter ended 30 Sep 2023		Quarter ended 30 Jun 2023		Quarter ended 31 Mar 2023	
	Total unweigh- ted value \$m	Total weighted value \$m	Total unweigh- ted value \$m	Total weighted value \$m	Total unweigh- ted value \$m	Total weighted value \$m	Total unweigh- ted value \$m	Total weighted value \$m
UK-1b	Number of data points used in the calculation of averages		12		12		12	
<b>High quality liquid assets</b>								
1	Total high quality liquid assets ('HQLA')		647,505		641,068		631,213	
<b>Cash outflows</b>								
2	Retail deposits and small business funding		863,872		91,250		860,071	
3	– of which:							
	stable deposits		361,335		18,067		360,588	
4	less stable deposits		502,537		73,183		499,484	
5	Unsecured wholesale funding		800,916		360,317		801,147	
6	– operational deposits (all counterparties) and deposits in networks of cooperative banks		252,460		61,719		253,059	
7	– non-operational deposits (all counterparties)		538,682		288,824		539,000	
8	– unsecured debt		9,774		9,774		9,088	
9	Secured wholesale funding		31,011		31,452		31,452	
10	Additional requirements		321,004		102,152		320,392	
11	– outflows related to derivative exposures and other collateral requirements		53,412		47,645		55,499	
13	– credit and liquidity facilities		267,592		54,507		264,893	
14	Other contractual funding obligations		101,018		65,818		100,799	
15	Other contingent funding obligations		664,049		21,774		657,492	
16	<b>Total cash outflows</b>		<b>672,322</b>		<b>673,835</b>		<b>673,835</b>	
<b>Cash inflows</b>								
17	Secured lending transactions (including reverse repos)		335,246		48,630		324,746	
18	Inflows from fully performing exposures		110,597		83,435		109,814	
19	Other cash inflows		121,553		63,206		124,722	
20	<b>Total cash inflows</b>		<b>567,396</b>		<b>195,271</b>		<b>559,282</b>	
UK-20c	Inflows Subject to 75% Cap		567,396		195,271		559,282	
<b>Liquidity coverage ratio (Adjusted value)</b>								
UK-21	Liquidity Buffer		647,505		641,068		631,213	
22	Total net cash outflows		477,051		476,772		477,679	
23	Liquidity coverage ratio (%)		136		134		132	

## Pillar 3 Disclosures at 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 16: Net stable funding ratio (LIQ2)

	Unweighted value by residual maturity				Weighted value \$m	
	No maturity \$m	< 6 months \$m	6 months to < 1yr \$m	≥ 1yr \$m		
<b>Available stable funding ('ASF') Items</b>						
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	298,162	341	44,298	44,468
12	– NSFR derivative liabilities	2,512				
13	– All other liabilities and capital instruments not included in the above categories		298,162	341	44,298	44,468
14	<b>Total available stable funding ('ASF')</b>					<b>1,601,935</b>
<b>Required stable funding ('RSF') Items</b>						
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	901,120	915,170
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 customer 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		146,922	56,183	293,216	621,521
21	– of which: With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk		1,763	1,737	26,424	241,619
22	– Performing residential mortgages		10,921	9,643	372,701	–
23	– of which: With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk		7,672	7,736	314,039	–
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		117,310	23,378	227,850	265,005
25	Interdependent assets		4,348	–	3,110	–
26	Other assets:	–	194,499	137	164,262	197,739
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
29	– NSFR derivative assets		–	–	–	–
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	151,521	162,128
32	Off-balance sheet items		184,909	73,254	655,060	37,305
33	<b>Total RSF</b>					<b>1,202,448</b>
34	Net stable funding ratio (%)					133

Table 16: Net stable funding ratio (LIQ2) (continued)

31 December 2022						
Unweighted value by residual maturity						
	No maturity	< 6 months	6 months to < 1yr	≥ 1yr	Weighted value	
	\$m	\$m	\$m	\$m	\$m	
Available stable funding ('ASF') items						
1	Capital items and instruments	181,299	—	2	22,715	204,014
2	– Own funds	181,299	—	2	22,715	204,014
4	Retail deposits		863,711	1,944	310	797,557
5	– Stable deposits		363,776	512	67	346,110
6	– Less stable deposits		499,935	1,432	243	451,447
7	Wholesale funding:		1,067,123	39,756	161,892	537,266
8	– Operational deposits		257,372	—	83	128,381
9	– Other wholesale funding		809,751	39,756	161,809	408,885
10	Interdependent liabilities		3,034	—	—	—
11	Other liabilities:	1,458	266,213	181	13,036	13,127
12	– NSFR derivative liabilities	1,458				
13	– All other liabilities and capital instruments not included in the above categories		266,213	181	13,036	13,127
14	Total available stable funding ('ASF')					1,551,964
Required stable funding ('RSF') Items						
15	Total high-quality liquid assets ('HQLA')					40,715
16	Deposits held at other financial institutions for operational purposes		137	—	—	68
17	Performing loans and securities:		578,774	97,176	853,370	876,950
18	– Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut		201,569	10,244	1,637	13,932
19	– Performing securities financing transactions with financial customers collateralised by other assets and loans and advances to financial institutions		92,957	2,803	4,464	14,652
20	– Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs		154,459	55,113	306,612	627,587
21	– of which: With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk		2,034	1,880	74,199	238,637
22	– Performing residential mortgages		10,628	9,807	357,656	—
23	– of which: With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk		6,488	6,717	258,903	—
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		119,161	19,209	183,001	220,779
25	Interdependent assets		1,564	—	3,074	—
26	Other assets:	—	200,726	47	150,600	184,245
27	– Physical traded commodities				14,024	11,920
28	– Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs		21,817	—	—	18,544
29	– NSFR derivative assets		2,652	—	—	2,648
30	– NSFR derivative liabilities before deduction of variation margin posted		123,285	—	—	6,446
31	– All other assets not included in the above categories		52,972	47	136,576	144,687
32	Off-balance sheet items		237,272	22,908	579,258	36,374
33	Total RSF					1,138,352
34	Net stable funding ratio (%)					136

## Analysis of on-balance sheet encumbered and unencumbered assets and off-balance sheet collateral

### On-balance sheet encumbered and unencumbered assets

This disclosure aims to facilitate an understanding of available and unrestricted assets that could be used to support potential future funding and collateral needs.

### Off-balance sheet collateral

The fair value of assets accepted as collateral that we are permitted to sell or repledge in the absence of default was \$496bn at 31 December 2023 (2022: \$450bn).

The fair value of any such collateral actually sold or repledged was \$284bn (2022: \$228bn).

We are obliged to return equivalent securities. These transactions are conducted under terms that are usual and customary to standard

reverse repo, stock borrowing and derivative transactions.

The fair value of collateral received and re-pledged in relation to reverse repos, stock borrowing and derivatives is reported on a gross basis. The related balance sheet receivables and payables are reported on a net basis where required under IFRS offset criteria. In 2023 we held \$212bn (2022: \$222bn) of unencumbered collateral available to support potential future funding and collateral needs. This portfolio was on account of reverse repo, stock borrowing and derivative transactions where collateral was received and is potentially available for encumbrance.

*For further details of collateral obligations under derivative contracts in the event of downgrade, see page 83.*

*For further details of risks to liquidity, see page 204 onwards of the Annual Report and Accounts 2023.*

The table below summarises the total on-balance sheet assets capable of supporting future funding and collateral needs, and shows the extent to which they are currently pledged for this purpose.

Table 17: Analysis of on-balance sheet encumbered and unencumbered assets<sup>1</sup>

	Assets encumbered as a result of transactions with counterparties other than central banks			Assets positioned at central banks (i.e. pre-positioned plus encumbered)	Unencumbered assets not positioned at central banks				Total
	As a result of covered bonds	As a result of securities	Other		Assets readily available for encumbrance	Other assets capable of being encumbered	Reverse repos/stock borrowing and derivative assets	Assets that cannot be encumbered	
Cash and balances at central banks	—	—	—	—	285,834	6	—	28	285,868
Items in the course of collection from other banks	—	—	—	—	—	—	—	6,342	6,342
Hong Kong Government certificates of indebtedness	—	—	—	—	—	—	—	42,024	42,024
Trading assets	—	—	82,438	635	159,053	6,227	31,184	9,622	289,159
– treasury and other eligible bills	—	—	5,351	538	18,544	—	—	—	24,433
– debt securities	—	—	36,822	97	57,846	2,048	—	9,295	106,108
– equity securities	—	—	40,265	—	82,463	906	—	29	123,663
– loans and advances to banks	—	—	—	—	200	31	9,330	200	9,761
– loans and advances to customers	—	—	—	—	—	3,242	21,854	98	25,194
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	—	—	1,267	—	1,959	4,893	149	102,375	110,643
– treasury and other eligible bills	—	—	—	—	—	—	—	1,419	1,419
– debt securities	—	—	—	—	262	102	—	61,339	61,703
– equity securities	—	—	—	—	1,682	828	—	37,873	40,383
– loans and advances to banks and customers	—	—	—	—	15	3,959	149	1,743	5,866
– other assets	—	—	1,267	—	—	4	—	1	1,272
Derivatives	—	—	—	—	—	—	229,714	—	229,714
Loans and advances to banks	—	—	373	16,374	3,800	73,433	—	18,922	112,902
Loans and advances to customers	1,785	3,641	2,353	55,492	20,785	809,297	—	45,182	938,535
Reverse repurchase agreements – non-trading	—	—	—	—	—	—	252,217	—	252,217
Financial investments	—	401	54,855	29,388	328,635	5,715	—	23,769	442,763
– treasury and other eligible bills	—	401	9,872	4,342	116,786	1,363	—	407	133,171
– debt securities	—	—	44,983	25,031	211,452	3,873	—	22,373	307,712
– equity securities	—	—	—	15	397	479	—	556	1,447
– other instruments	—	—	—	—	—	—	—	433	433
Prepayments, accrued income and other assets	—	19	59,816	175	918	25,449	—	78,878	165,255
Assets held for sale	7,387	1,752	3,514	33	25,367	63,462	3,251	9,368	114,134
Current tax assets	—	—	—	—	—	—	—	1,536	1,536
Interest in associates and joint ventures	—	—	—	—	23	26,865	—	456	27,344
Goodwill and intangible assets	—	—	—	—	—	—	—	12,487	12,487
Deferred tax	—	—	—	—	—	—	—	7,754	7,754
<b>At 31 Dec 2023</b>	<b>9,172</b>	<b>5,813</b>	<b>204,616</b>	<b>102,097</b>	<b>826,374</b>	<b>1,015,347</b>	<b>516,515</b>	<b>358,743</b>	<b>3,038,677</b>

Table 17: Analysis of on-balance sheet encumbered and unencumbered assets<sup>1</sup> (continued)

	Assets encumbered as a result of transactions with counterparties other than central banks			Assets positioned at central banks (i.e. pre-positioned plus encumbered)	Unencumbered assets not positioned at central banks					Total
	As a result of covered bonds	As a result of securitizations	Other		Assets readily available for encumbrance	Other assets capable of being encumbered	Reverse repos/stock borrowing receivables and derivative assets	Assets that cannot be encumbered		
	\$m	\$m	\$m		\$m	\$m	\$m	\$m	\$m	
Cash and balances at central banks	—	—	—	—	326,910	6	—	86	327,002	
Items in the course of collection from other banks	—	—	—	—	—	—	—	7,297	7,297	
Hong Kong Government certificates of indebtedness	—	—	—	—	—	—	—	43,787	43,787	
Trading assets	—	—	60,259	423	118,062	6,272	25,502	7,575	218,093	
– treasury and other eligible bills	—	—	6,304	147	16,193	253	—	—	22,897	
– debt securities	—	—	27,090	276	41,518	1,887	—	7,355	78,126	
– equity securities	—	—	26,865	—	60,351	810	—	—	88,026	
– loans and advances to banks	—	—	—	—	—	88	8,556	125	8,769	
– loans and advances to customers	—	—	—	—	—	3,234	16,946	95	20,275	
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	—	—	1,610	—	1,937	2,021	270	94,263	100,101	
– treasury and other eligible bills	—	—	—	—	—	—	—	1,518	1,518	
– debt securities	—	—	—	—	307	118	—	58,655	59,080	
– equity securities	—	—	—	—	1,610	731	—	32,093	34,434	
– loans and advances to banks and customers	—	—	—	—	20	1,169	270	1,996	3,455	
– other assets	—	—	1,610	—	—	3	—	1	1,614	
Derivatives	—	—	—	—	—	—	284,159	—	284,159	
Loans and advances to banks	—	—	547	12,641	4,241	68,288	—	18,758	104,475	
Loans and advances to customers	843	3,537	2,758	63,365	19,754	799,349	—	33,955	923,561	
Reverse repurchase agreements – non-trading	—	—	—	—	—	—	253,754	—	253,754	
Financial investments	—	173	36,965	15,731	284,011	4,717	—	23,129	364,726	
– treasury and other eligible bills	—	173	6,005	5,734	107,722	942	—	680	121,256	
– debt securities	—	—	30,960	9,960	175,849	3,191	—	21,706	241,666	
– equity securities	—	—	—	37	440	584	—	635	1,696	
– other instruments	—	—	—	—	—	—	—	108	108	
Prepayments, accrued income and other assets	—	14	65,904	110	5,139	25,596	—	59,386	156,149	
Assets held for sale	8,467	2,145	4,053	9,766	26,273	58,531	5,513	1,171	115,919	
Current tax assets	—	—	—	—	—	—	—	1,230	1,230	
Interest in associates and joint ventures	—	—	—	—	73	28,763	—	418	29,254	
Goodwill and intangible assets	—	—	—	—	—	—	—	11,419	11,419	
Deferred tax	—	—	—	—	—	—	—	8,360	8,360	
At 31 Dec 2022	9,310	5,869	172,096	102,036	786,400	993,543	569,198	310,834	2,949,286	

<sup>1</sup> On adoption of IFRS 17 'Insurance Contracts', comparative data previously published under IFRS 4 'Insurance Contracts' have been restated.

## 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 are 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 include 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 \$253bn of encumbered assets, which represents 8.7% of the total assets. The carrying amount of encumbered other assets is \$104bn which is predominantly cash collateral posted for derivative margin requirements of \$60bn and loans and advances of \$34bn.

HSBC Group has \$2.7tn of unencumbered assets, which represents 91.3% of the total assets. The carrying amount of unencumbered other assets of \$1.8tn is predominantly loans and advances of \$1.3tn and derivatives financial assets of \$248bn.

The carrying amount of selected financial liabilities is \$305bn which primarily relates to repurchase agreements of \$182bn and cash collateral posted for derivatives margin requirements of \$82bn.

HSBC has \$241bn of collateral encumbered, which represents 51.7% of the total collateral received.

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

Table 18: 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 assets	
	<i>of which: notionally eligible EHQLA and HQLA</i>		<i>of which: notionally eligible EHQLA and HQLA</i>		<i>of which: EHQLA and HQLA</i>		<i>of which: EHQLA and HQLA</i>	
	Total	030	Total	050	Total	080	Total	100
	010	030	040	050	060	080	090	100
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
010 <b>Assets of the reporting institution</b>	<b>253,264</b>	<b>105,080</b>			<b>2,669,362</b>	<b>697,566</b>		
020 Loans on demand	10,664	–	–	–	343,720	307,729	–	–
030 Equity instruments	32,385	18,049	32,385	18,049	76,018	16,704	76,018	16,704
040 Debt securities	105,816	85,034	105,545	84,816	417,083	343,652	413,780	340,930
050 – of which:								
covered bonds	6	6	6	6	6,553	5,560	6,553	5,560
060 securitisations	–	–	–	–	5,866	1,815	5,853	1,815
070 issued by general governments	95,471	80,989	95,204	80,989	321,464	275,133	318,614	272,693
080 issued by financial corporations	6,604	3,227	6,603	3,227	51,915	37,352	51,683	37,352
090 issued by non-financial corporations	3,502	700	3,502	700	9,899	2,535	9,897	2,534
120 Other assets	104,399	1,997			1,832,541	29,481		

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

Table 19: 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 or own debt securities issued available for encumbrance	
	<i>of which: notionally eligible EHQLA and HQLA</i>		<i>of which: EHQLA and HQLA</i>	
	Total	030	Total	060
	010	030	040	060
	\$m	\$m	\$m	\$m
130 <b>Collateral received by the reporting institution</b>	<b>240,610</b>	<b>170,561</b>	<b>224,419</b>	<b>130,130</b>
150 Equity instruments	24,626	12,158	25,292	8,841
160 Debt securities	215,984	158,403	199,127	121,289
170 – of which:				
covered bonds	440	409	338	324
180 securitisations	408	8	1,562	77
190 issued by general governments	181,891	146,196	145,244	98,235
200 issued by financial corporations	25,323	7,794	30,081	9,469
210 issued by non-financial corporations	7,412	3,461	15,612	7,359
241 <b>Own covered bonds and asset-backed securities issued and not yet pledged</b>			2,866	–
250 <b>Total assets, collateral received and own debt securities issued</b>	<b>493,874</b>	<b>275,641</b>		

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

Table 20: Sources of encumbrance (UK AE3)

	<b>Matching liabilities, contingent liabilities or securities lent</b>	<b>Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered</b>
	<b>010</b>	<b>030</b>
	<b>\$m</b>	<b>\$m</b>
010 Carrying amount of selected financial liabilities	<b>305,125</b>	<b>371,113</b>

## 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.

*For further details of balance sheet encumbered and unencumbered assets, see page 27.*

## 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 a rounded judgement of a firm's business model, also taking into account the PRA's view of a firm's options and capacity to protect its capital position under stress, such as, through capital generation.

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](https://www.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 break-up 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 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 their resolution groups for which they are responsible. This may occur, for example, in the event that host resolution authorities felt 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, the Asian resolution group and the US resolution group. 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
European resolution group	HSBC Holdings plc	HSBC Bank plc
		HSBC UK Bank plc
		HSBC Continental Europe
Asian resolution group	HSBC Asia Holdings Limited	The Hongkong and Shanghai Banking Corporation 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 capital requirements.

Including capital buffers this requirement is equivalent to 26.7% of RWAs as at 31 December 2023 for which we have a buffer of \$42bn. The chart below highlights the Group's binding requirements

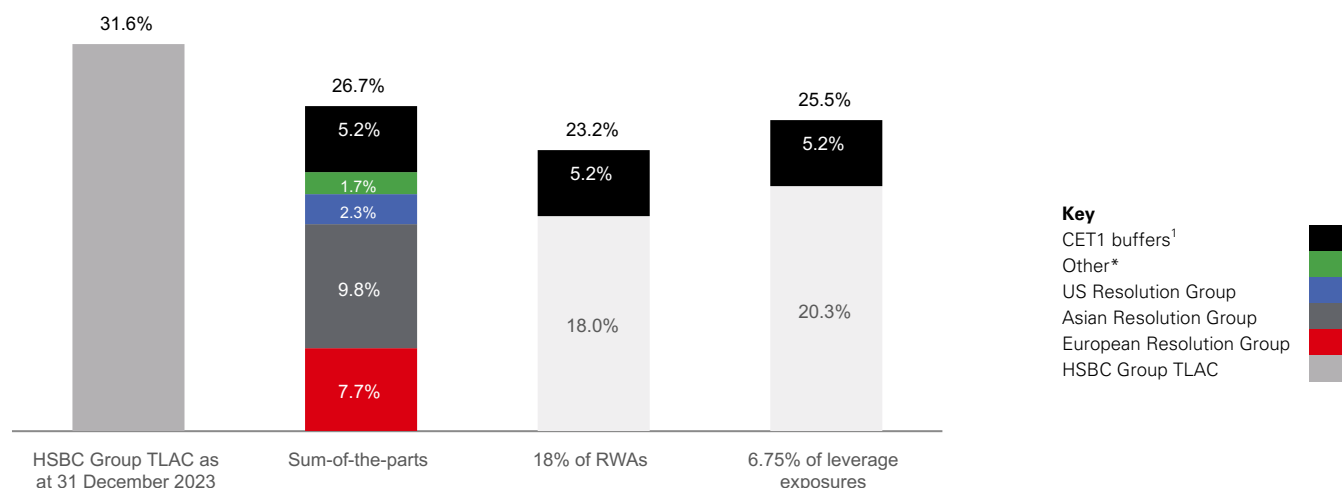
The external MREL requirement applicable in 2023 was the highest of one of the following:

- the sum of all loss absorbing capital ('LAC') requirements and other capital requirements relating to other Group entities or sub-groups;
- 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



<sup>1</sup> 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, since 1 January 2022, non-CET1 own funds issued by HSBC Bank plc, HSBC Bank USA NA and HSBC Continental Europe SA no longer 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 203 of the Annual Report and Accounts 2023.

### 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.

Table 21.i: Key metrics of the European resolution group<sup>1</sup> (KM2)

		At				
		31 Dec 2023	30 Sep 2023	30 Jun 2023	31 Mar 2023	31 Dec 2022
		\$bn	\$bn	\$bn	\$bn	\$bn
1	Total loss absorbing capacity ('TLAC') available	103.0	99.4	103.3	101.0	93.9
1a	Fully loaded ECL accounting model TLAC available	103.0	99.4	103.3	101.0	93.8
2	Total RWAs at the level of the resolution group	275.0	261.4	271.3	273.7	258.3
3	TLAC as a percentage of RWA (row1/row2) (%)	37.5	38.0	38.1	36.9	36.3
3a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model RWA (%)	37.4	38.0	38.1	36.9	36.3
4	Leverage exposure measure at the level of the resolution group <sup>2</sup>	969.0	907.0	927.0	906.1	845.2
5	TLAC as a percentage of leverage exposure measure (row1/row4) (%) <sup>2</sup>	10.6	11.0	11.1	11.1	11.1
5a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model leverage exposure measure (%) <sup>2</sup>	10.6	11.0	11.1	11.1	11.1
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 <i>pari passu</i> with excluded liabilities and that is recognised as external TLAC, divided by funding issued that ranks <i>pari passu</i> 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

## Pillar 3 Disclosures at 31 December 2023

Table 21.ii: Key metrics of the Asian resolution group<sup>3</sup>

		At				
		31 Dec 2023 \$bn	30 Sep 2023 \$bn	30 Jun 2023 \$bn	31 Mar 2023 \$bn	31 Dec 2022 \$bn
1	Total loss absorbing capacity ('TLAC') available	110.7	108.2	110.3	115.2	108.0
1a	Fully loaded ECL accounting model TLAC available	110.7	108.2	110.3	115.2	108.0
2	Total RWAs at the level of the resolution group	411.2	404.2	404.1	404.3	413.3
3	TLAC as a percentage of RWA (row1/row2) (%)	26.9	26.8	27.3	28.5	26.1
3a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model RWA (%)	26.9	26.8	27.3	28.5	26.1
4	Leverage exposure measure at the level of the resolution group	1,237.8	1,222.8	1,211.6	1,206.3	1,192.3
5	TLAC as a percentage of leverage exposure measure (row1/row4) (%)	8.9	8.8	9.1	9.6	9.1
5a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model leverage exposure measure (%)	8.9	8.8	9.1	9.6	9.1
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 <i>pari passu</i> with excluded liabilities and that is recognised as external TLAC, divided by funding issued that ranks <i>pari passu</i> 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 21.iii: Key metrics of the US resolution group

		At				
		31 Dec 2023 \$bn	30 Sep 2023 \$bn	30 Jun 2023 \$bn	31 Mar 2023 \$bn	31 Dec 2022 \$bn
1	Total loss absorbing capacity ('TLAC') available	23.1	23.1	24.0	24.0	23.8
1a	Fully loaded ECL accounting model TLAC available <sup>4</sup>	23.1	23.1	24.0	24.0	23.8
2	Total RWAs at the level of the resolution group	105.1	106.0	107.2	108.2	108.5
3	TLAC as a percentage of RWA (row1/row2) (%)	22.0	21.8	22.4	22.1	21.9
3a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model RWA (%) <sup>4</sup>	22.0	21.8	22.4	22.1	21.9
4	Leverage exposure measure at the level of the resolution group <sup>5</sup>	222.4	216.3	217.5	215.0	215.6
5	TLAC as a percentage of leverage exposure measure (row1/row4) (%) <sup>5</sup>	10.4	10.7	11.0	11.1	11.0
5a	Fully loaded ECL accounting model TLAC as a percentage of fully loaded ECL accounting model leverage exposure measure (%) <sup>4,5</sup>	10.4	10.7	11.0	11.1	11.0
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 <i>pari passu</i> with excluded liabilities and that is recognised as external TLAC, divided by funding issued that ranks <i>pari passu</i> with excluded liabilities and that would be recognised as external TLAC if no cap was applied (%)	No	No	No	No	N/A

1 The European resolution group reports in accordance with CRR II. On adoption of IFRS 17 'Insurance Contracts', comparative data previously published under IFRS 4 'Insurance Contracts' have been restated.

2 The leverage exposure is calculated in line with the PRA's UK leverage rules, and excludes central bank claims.

3 Reporting for the Asian resolution group follows the HKMA regulatory rules. For the Asian resolution group, there are no IFRS 9 transitional arrangements.

4 The US resolution group is reported under the US transitional arrangements for expected credit losses.

5 For the US resolution group, the leverage exposure and ratio for the current period are based on 'total assets for the leverage ratio' as reported in the regulatory capital calculations.

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, its own funds are reduced to avoid duplication of own funds and TLAC eligible liabilities across resolution groups and non-resolution group entities. This reduction includes investment in TLAC eligible liabilities, issued by the Asian and US resolution groups, which is against own funds rather than on a corresponding basis against non-regulatory capital elements of TLAC. 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 in addition to the investment in TLAC eligible liabilities noted above.

Table 22: TLAC composition (TLAC1)

	At 31 Dec 2023				At 31 Dec 2022				
	Group <sup>1,2</sup>	Resolution group			Group <sup>1,2</sup>	Resolution group			
		European <sup>1,2</sup>	Asian <sup>3</sup>	US <sup>4,5</sup>		European <sup>1,2</sup>	Asian <sup>3</sup>	US <sup>4,5</sup>	
<b>Regulatory capital elements of TLAC and adjustments (\$bn)</b>									
1	Common equity tier 1 capital ('CET1')	126.5	3.9	65.1	12.4	119.3	3.3	63.1	13.5
2	Additional tier 1 capital ('AT1') before TLAC adjustments	17.7	17.6	6.9	1.6	19.8	19.7	6.9	1.8
4	Other adjustments	—	(17.6)	—	—	—	(19.7)	—	—
5	AT1 instruments eligible under the TLAC framework	17.7	—	6.9	1.6	19.8	—	6.9	1.8
6	Tier 2 capital ('T2') before TLAC adjustments	27.0	27.0	8.9	2.2	23.4	23.9	7.9	2.3
7	Amortised portion of T2 instruments where remaining maturity > 1 year	3.2	3.2	—	—	3.3	3.3	—	—
8	T2 capital ineligible as TLAC as issued out of subsidiaries to third parties	(1.1)	(0.7)	—	—	(2.2)	(2.2)	—	—
9	Other adjustments	(0.1)	(27.1)	—	(2.2)	—	(23.9)	—	(2.3)
10	T2 instruments eligible under the TLAC framework	29.0	2.4	8.9	—	24.5	1.1	7.9	—
11	TLAC arising from regulatory capital	173.2	6.3	80.9	14.1	163.6	4.4	77.9	15.3
<b>Non-regulatory capital elements of TLAC</b>									
12	External TLAC instruments issued directly by the bank and subordinated to excluded liabilities	96.7	96.7	29.8	9.0	89.5	89.5	30.1	8.5
17	TLAC arising from non-regulatory capital instruments before adjustments	96.7	96.7	29.8	9.0	89.5	89.5	30.1	8.5
<b>Non-regulatory capital elements of TLAC: adjustments</b>									
18	TLAC before deductions	269.9	103.0	110.7	23.1	253.1	93.9	108.0	23.8
22	TLAC after deductions	269.9	103.0	110.7	23.1	253.1	93.9	108.0	23.8
<b>Risk-weighted assets and leverage exposure measure for TLAC purposes</b>									
23	Total risk-weighted assets	854.1	275.0	411.2	105.1	839.7	258.3	413.3	108.5
24	Leverage exposure measure	2,574.8	969.0	1,237.8	222.4	2,417.2	845.2	1,192.3	215.6
<b>TLAC ratios and buffers</b>									
25	TLAC (as a percentage of risk-weighted assets)	31.6	37.5	26.9	22.0	30.1	36.3	26.1	21.9
26	TLAC (as a percentage of leverage exposure)	10.5	10.6	8.9	10.4	10.5	11.1	9.1	11.0
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	4.0	8.2	N/A	N/A	3.9
28	Institution-specific buffer requirement expressed as a percentage of risk-weighted assets	5.2	N/A	N/A	2.5	4.9	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	0.4	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 The Group and the European resolution group report in accordance with CRR II. On adoption of IFRS 17 'Insurance Contracts', comparative data previously published under IFRS 4 'Insurance Contracts' have been restated.

2 The leverage exposure is calculated in line with the PRA's UK leverage rules, and excludes central bank claims.

3 Reporting for the Asian resolution group follows the HKMA regulatory rules. For the Asian resolution group, there are no IFRS 9 transitional arrangements.

4 The US accounting standard corresponding to IFRS 9 is in force with transitional adjustments.

5 For the US resolution group, leverage exposures and ratios are based on 'total assets for the leverage ratio' as reported in the regulatory capital calculations.

## 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 2023.

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 European resolution group comprises HSBC Holdings plc, the designated resolution entity, together with its material operating entities – namely HSBC Bank plc and its subsidiaries, and HSBC UK Bank plc and its subsidiaries.

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

Table 23: HSBC Holdings plc creditor ranking (TLAC3)

		Creditor ranking (\$m)				Sum of 1 to 4
		1 (most junior)	2	3	4 (most senior)	
		Ordinary shares <sup>1</sup>	Preference shares, AT1 instruments and certain Subordinated notes	Subordinated notes	Senior notes and other <i>pari passu</i> liabilities	
1	Description of creditor ranking					
2	Total capital and liabilities net of credit risk mitigation	9,631	18,560	32,435	107,510	168,136
3	– of row 2 that are excluded liabilities <sup>2</sup>	–	–	–	1,217	1,217
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3) <sup>3</sup>	9,631	18,560	32,435	106,293	166,919
5	– of row 4 that are potentially eligible as TLAC <sup>3</sup>	9,631	17,660	30,435	100,351	158,077
6	– of row 5:					
	with 1 year ≤ residual maturity < 2 years	–	–	3,161	8,888	12,049
7	with 2 years ≤ residual maturity < 5 years	–	–	4,265	51,142	55,407
8	with 5 years ≤ residual maturity < 10 years	–	–	7,617	31,690	39,307
9	with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	15,392	8,631	24,023
10	that are perpetual securities	9,631	17,660	–	–	27,291

1 Excludes the value of share premium and reserves attributable to ordinary shareholder.

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 TLAC eligible securities of \$5.0bn which are maturing within one year, *pari passu* liabilities of \$2.9bn and the ineligible internal subordinated notes issued to HSBC Capital Funding (Dollar 1) LP of \$0.9bn.

Table 24: HSBC UK Bank plc creditor ranking (TLAC2)

		Creditor ranking (\$m)			Sum of 1 to 3	
		1 (most junior)	1	2		3 (most senior)
		Ordinary shares <sup>2</sup>	AT1 instruments	Subordinated loans	Senior subordinated loans	
1	Is the resolution entity the creditor/investor? <sup>1</sup>	Yes	Yes	Yes	Yes	
2	Description of creditor ranking					
3	Total capital and liabilities net of credit risk mitigation	–	2,800	4,193	14,799	21,792
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	–	2,800	4,193	14,799	21,792
6	– of row 5 that are eligible as TLAC	–	2,800	4,193	14,799	21,792
7	– of row 6:					
	with 1 year ≤ residual maturity < 2 years	–	–	–	2,638	2,638
8	with 2 years ≤ residual maturity < 5 years	–	–	–	4,379	4,379
9	with 5 years ≤ residual maturity < 10 years	–	–	4,193	7,782	11,975
11	that are perpetual securities	–	2,800	–	–	2,800

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 share premium and reserves attributable to ordinary shareholders.

Table 25: HSBC Bank plc creditor ranking (TLAC2)

		Creditor ranking (\$m)			Sum of 1 to 3
		1 (most junior)	2	3 (most senior)	
1	Is the resolution entity the creditor/investor? <sup>1</sup>	Yes	Yes	Partially	
2	Description of creditor ranking	Ordinary shares <sup>2</sup>	Third Dollar preference shares and AT1 instruments	Subordinated notes and subordinated loans	
3	Total capital and liabilities net of credit risk mitigation	1,016	5,367	20,413	26,796
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4) <sup>3</sup>	1,016	5,367	20,413	26,796
6	– of row 5 that are eligible as TLAC	1,016	5,367	18,670	25,053
	– of row 6:				
8	with 2 years ≤ residual maturity < 5 years	–	–	3,584	3,584
9	with 5 years ≤ residual maturity < 10 years	–	–	14,698	14,698
10	with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	388	388
11	that are perpetual securities	1,016	5,367	–	6,383

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

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. From 1 January 2022, 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 no longer count towards MREL for HSBC Bank plc.

### Asian resolution group

The Asian resolution group 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 26: HSBC Asia Holdings Ltd creditor ranking<sup>1</sup> (TLAC3)

		Creditor ranking (\$m)				Sum of 1 to 4
		1 (most junior)	2	3	4 (most senior)	
1	Description of creditor ranking	Ordinary shares <sup>2</sup>	AT1 instruments	Tier 2 instruments	LAC loans	
2	Total capital and liabilities net of credit risk mitigation	57,587	6,700	3,305	30,637	98,229
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3)	57,587	6,700	3,305	30,637	98,229
5	– of row 4 that are potentially eligible as TLAC	57,587	6,700	3,305	30,637	98,229
6	– of row 5 with 1 year ≤ residual maturity < 2 years	–	–	–	1,250	1,250
7	– of row 5 with 2 years ≤ residual maturity < 5 years	–	–	–	15,419	15,419
8	– of row 5 with 5 years ≤ residual maturity < 10 years	–	–	3,305	6,553	9,858
9	– of row 5 with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	–	7,415	7,415
10	– of row 5 that are perpetual securities	57,587	6,700	–	–	64,287

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

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

## Pillar 3 Disclosures at 31 December 2023

Table 27: The Hongkong and Shanghai Banking Corporation Ltd creditor ranking (TLAC2)

		Creditor ranking (\$m)				Sum of 1 to 4
		1 (most junior)	2	3	4 (most senior)	
1	Is the resolution entity the creditor/investor?	Yes	Yes	Yes	Yes	
2	Description of creditor ranking	Ordinary shares <sup>1</sup>	AT1 instruments	Tier 2 instruments	LAC loans	
3	Total capital and liabilities net of credit risk mitigation	23,064	6,700	3,305	30,637	63,706
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	23,064	6,700	3,305	30,637	63,706
6	– of row 5 that are eligible as TLAC	23,064	6,700	3,305	30,637	63,706
7	– of row 6 with 1 year ≤ residual maturity < 2 years	–	–	–	1,250	1,250
8	– of row 6 with 2 years ≤ residual maturity < 5 years	–	–	–	15,419	15,419
9	– of row 6 with 5 years ≤ residual maturity < 10 years	–	–	3,305	6,553	9,858
10	– of row 6 with residual maturity ≥ 10 years, but excluding perpetual securities	–	–	–	7,415	7,415
11	– of row 6 that are perpetual securities	23,064	6,700	–	–	29,764

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

Table 28: Hang Seng Bank Ltd creditor ranking (TLAC2)

		Creditor ranking (\$m)			Sum of 1 to 3
		1 (most junior)	2	3 (most senior)	
1	Is the resolution entity the creditor/investor? <sup>1</sup>	No	No	No	
2	Description of creditor ranking	Ordinary shares <sup>2</sup>	AT1 instruments	LAC loans	
3	Total capital and liabilities net of credit risk mitigation	1,236	1,500	3,521	6,257
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	1,236	1,500	3,521	6,257
6	– of row 5 that are eligible as TLAC	1,236	1,500	3,521	6,257
8	– of row 6 with 2 years ≤ residual maturity < 5 years	–	–	2,522	2,522
9	– of row 6 with 5 years ≤ residual maturity < 10 years	–	–	999	999
11	– of row 6 that are perpetual securities	1,236	1,500	–	2,736

1 62.14% of Hang Seng Bank Limited's ordinary share capital is owned by The Hongkong and Shanghai Banking Corporation Limited. Hang Seng Bank Limited's other TLAC eligible securities are directly held by The Hongkong and Shanghai Banking Corporation Limited.

2 Excludes the value of reserves attributable to ordinary shareholders.

### US resolution group

The US resolution group comprises HSBC North America Holdings Inc. and its subsidiaries. HSBC North America Holdings Inc. is the designated resolution entity.

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

Table 29: HSBC North America Holdings Inc. creditor ranking<sup>1</sup> (TLAC3)

		Creditor ranking (\$m)			Sum of 1 to 2
		1 (most junior)	1	2 (most senior)	
1	Description of creditor ranking	Common stock <sup>2</sup>	Preferred stock	other <i>pari passu</i> liabilities	
2	Total capital and liabilities net of credit risk mitigation	–	1,640	10,614	12,254
3	– of row 2 that are excluded liabilities <sup>3</sup>	–	–	189	189
4	Total capital and liabilities less excluded liabilities (row 2 minus row 3) <sup>4</sup>	–	1,640	10,425	12,065
5	– of row 4 that are potentially eligible as TLAC	–	1,640	9,000	10,640
	– of row 5:				
7	with 2 years ≤ residual maturity < 5 years	–	–	6,500	6,500
8	with 5 years ≤ residual maturity < 10 years	–	–	2,500	2,500
10	that are perpetual securities	–	1,640	–	1,640

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

2 The nominal value of common stock is \$2. This excludes the value of share premium and reserves attributable to ordinary shareholders.

3 Excluded liabilities consists of 'unrelated liabilities' as defined in the Final US TLAC rules. This mainly represents accrued employee benefit obligations.

4 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 138 of the Annual Report and Accounts 2023.*

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 55.*

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 in order 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 68.*

### 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: 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 177 and 191 of the Annual Report and Accounts 2023.*

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.

Table 30: Performing and non-performing exposures and related provisions (CR1)

		Gross carrying amount/ nominal amount <sup>1,2,3</sup>									Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				Collateral and financial guarantees received	
		Performing exposures			Non- performing			Performing exposures			Non- performing		Accu- mulat ed partial write- off	On perform- ing expo- sures	On non- perform- ing expo- sures	
		<i>of</i>	<i>of</i>		<i>of</i>	<i>of</i>		<i>of</i>	<i>of</i>		<i>of</i>					
		<i>which:</i> <i>stage</i> <i>1</i>	<i>which:</i> <i>stage</i> <i>2</i>		<i>which:</i> <i>stage</i> <i>3</i>	<i>which:</i> <i>stage</i> <i>3</i>		<i>which:</i> <i>stage</i> <i>1</i>	<i>which:</i> <i>stage</i> <i>2</i>		<i>which:</i> <i>stage</i> <i>3</i>					
	\$bn	\$bn	\$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	<b>Loans and advances</b>	<b>1,314.2</b>	<b>1,183.8</b>	<b>125.0</b>	<b>20.1</b>	<b>20.1</b>	<b>(4.4)</b>	<b>(1.2)</b>	<b>(3.2)</b>	<b>(7.2)</b>	<b>(7.2)</b>	<b>(2.0)</b>	<b>900.6</b>	<b>9.6</b>		
020	Central banks	41.8	41.1	0.6	–	–	–	–	–	–	–	–	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	<b>Debt securities</b>	<b>433.3</b>	<b>430.6</b>	<b>1.2</b>	<b>–</b>	<b>–</b>	<b>(0.1)</b>	<b>–</b>	<b>(0.1)</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>32.7</b>	<b>–</b>		
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	<b>Off-balance-sheet exposures</b>	<b>1,017.6</b>	<b>656.0</b>	<b>31.6</b>	<b>3.0</b>	<b>1.7</b>	<b>(0.3)</b>	<b>(0.2)</b>	<b>(0.1)</b>	<b>(0.3)</b>	<b>(0.2)</b>	<b>–</b>	<b>142.8</b>	<b>0.3</b>		
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	<b>Total at 31 Dec 2023</b>	<b>3,097.2</b>	<b>2,601.3</b>	<b>159.0</b>	<b>23.1</b>	<b>21.8</b>	<b>(4.8)</b>	<b>(1.4)</b>	<b>(3.4)</b>	<b>(7.5)</b>	<b>(7.4)</b>	<b>(2.0)</b>	<b>1,076.1</b>	<b>9.9</b>		



Table 30: Performing and non-performing exposures and related provisions (CR1) (continued)

	Gross carrying amount/ nominal amount <sup>1,2,3</sup>					Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions					Collateral and financial guarantees received			
	Performing exposures		Non- performing			Performing exposures		Non- performing			Accu- mulated partial write-off	On perform- ing expo- sures	On non- perform- ing expo- sures	
	of which: stage 1	of which: stage 2	of which: stage 3	of which: stage 1	of which: stage 2	of which: stage 1	of which: stage 2	of which: stage 3						
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	
005	Cash balances at central banks and other demand deposits	374.4	372.9	1.5	0.1	0.1	—	—	—	—	—	—	—	
010	Loans and advances	1,275.5	1,129.1	143.2	20.4	20.4	(4.9)	(1.1)	(3.8)	(7.1)	(7.1)	(0.8)	887.6	9.3
020	Central banks	32.5	32.5	—	—	—	—	—	—	—	—	—	11.7	—
030	General governments	11.1	10.6	0.5	0.3	0.3	—	—	—	—	—	—	3.5	0.2
040	Credit institutions	131.8	131.4	0.3	—	—	(0.1)	—	(0.1)	—	—	—	89.4	—
050	Other financial corporations	237.7	230.0	4.8	0.5	0.5	(0.1)	—	(0.1)	(0.1)	(0.1)	—	172.3	0.1
060	Non-financial corporations	446.8	358.1	88.5	16.2	16.2	(2.6)	(0.5)	(2.1)	(6.2)	(6.2)	(0.6)	243.9	7.0
070	– of which: SMEs	36.0	28.6	7.4	3.0	3.0	(0.3)	(0.1)	(0.2)	(0.5)	(0.5)	—	27.5	1.7
080	Households	415.6	366.5	49.1	3.4	3.4	(2.1)	(0.6)	(1.5)	(0.8)	(0.8)	(0.2)	366.8	2.0
090	Debt securities	355.0	351.2	2.2	—	—	(0.1)	(0.1)	—	—	—	—	22.2	—
100	Central banks	26.0	24.8	1.2	—	—	—	—	—	—	—	—	—	—
110	General governments	288.3	286.7	0.8	—	—	—	—	—	—	—	—	21.4	—
120	Credit institutions	24.6	24.5	0.1	—	—	—	—	—	—	—	—	0.7	—
130	Other financial corporations	13.0	12.7	—	—	—	—	—	—	—	—	—	—	—
140	Non-financial corporations	3.1	2.5	0.1	—	—	(0.1)	(0.1)	—	—	—	—	0.1	—
150	Off-balance-sheet exposures	954.1	608.3	37.3	2.6	1.9	(0.4)	(0.1)	(0.2)	(0.2)	(0.1)	—	129.4	0.5
160	Central banks	1.1	1.1	—	—	—	—	—	—	—	—	—	—	—
170	General governments	4.3	2.9	0.3	—	—	—	—	—	—	—	—	—	—
180	Credit institutions	48.9	42.3	0.5	—	—	—	—	—	—	—	—	0.1	—
190	Other financial corporations	87.8	65.5	3.2	—	—	—	—	—	—	—	—	14.1	—
200	Non-financial corporations	567.5	255.9	29.6	1.8	1.1	(0.4)	(0.1)	(0.2)	(0.2)	(0.1)	—	57.6	0.2
210	Households	244.5	240.6	3.7	0.8	0.8	—	—	—	—	—	—	57.6	0.3
220	Total at 31 Dec 2022	2,959.0	2,461.5	184.2	23.1	22.4	(5.4)	(1.3)	(4.0)	(7.3)	(7.2)	(0.8)	1,039.2	9.8

1 Includes reverse repos and settlement accounts.

2 The staging analysis is non-additive as totals include instruments not eligible for staging, such as those held at fair value through profit and loss ('FVPL').

3 On-balance sheet exposures exclude the assets held for sale.

The table below presents the residual maturity breakdown of on- and off-balance sheet loans and debt securities.

Table 31: Maturity of exposures (CR1-A)

	Net exposure value <sup>1,2</sup>						Total \$m
	On demand \$m	<= 1 year \$m	> 1 year <= 5 years \$m	> 5 years \$m	No stated maturity \$m		
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	<b>Total at 31 Dec 2023</b>	<b>258,301</b>	<b>1,118,989</b>	<b>621,319</b>	<b>608,710</b>	<b>1,369</b>	<b>2,608,688</b>
1	Loans and advances	231,779	904,387	490,137	468,358	—	2,094,661
2	Debt securities	—	162,925	128,019	65,295	—	356,239
3	Total at 31 Dec 2022	231,779	1,067,312	618,156	533,653	—	2,450,900

1 Includes on-balance sheet reverse repos and excludes assets held for sale, cash balances with central banks and other demand deposits, securitisation positions and settlement accounts.

2 This table has been updated to include free deliveries. The comparatives have not been restated.

## Pillar 3 Disclosures 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 2023.

Table 32: Changes in the stock of non-performing loans and advances (CR2)

		12 months to 31 Dec	
		2023	2022
		Gross carrying value	Gross carrying value
		\$m	\$m
10	<b>Initial stock of non-performing loans and advances</b>	<b>21,611</b>	20,021
20	Inflows to non-performing portfolios	<b>9,630</b>	11,825
30	Outflows from non-performing portfolios	<b>(2,277)</b>	(2,956)
40	Outflows due to write-offs	<b>(3,923)</b>	(2,801)
50	Outflow due to other situations <sup>1</sup>	<b>(5,190)</b>	(4,478)
60	<b>Final stock of non-performing loans and advances</b>	<b>19,851</b>	21,611

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

## Non-performing and forborne exposures

Tables 33 to 37 are presented in accordance with the European Banking Authority's ('EBA') 'Guidelines on disclosure of non-performing and forborne exposures'.

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 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 2023* definition of stage 3 credit-impaired is aligned to the EBA's definition of non-performing exposures. The IFRS 9 accounting standard Expected credit losses 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.

The table below breaks down performing and non-performing forborne exposures are classified by FINREP counterparty sector and showing the gross carrying amount, accumulated impairments and collateral and financial guarantees received against these exposures.

Table 33: Credit quality of forborne exposures (CQ1)

		Gross carrying amount/nominal amount				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
		Performing forborne \$m	Non-performing forborne		On performing forborne exposures \$m	On non performing forborne exposures \$m	Total \$m	of which: forborne non-performing exposures \$m	
			Total \$m	of which: defaulted \$m					of which: impaired \$m
010	<b>Loans and advances</b>	<b>6,666</b>	<b>6,859</b>	<b>6,859</b>	<b>6,859</b>	<b>(373)</b>	<b>(2,267)</b>	<b>6,343</b>	<b>2,892</b>
050	Other financial corporations	70	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	<b>Loan commitments given</b>	<b>86</b>	<b>329</b>	<b>329</b>	<b>329</b>	<b>—</b>	<b>(1)</b>	<b>65</b>	<b>45</b>
100	<b>Total at 31 Dec 2023</b>	<b>6,752</b>	<b>7,188</b>	<b>7,188</b>	<b>7,188</b>	<b>(373)</b>	<b>(2,268)</b>	<b>6,408</b>	<b>2,937</b>
010	Loans and advances	5,524	5,854	5,854	5,854	(276)	(1,825)	4,341	2,259
050	Other financial corporations	43	14	14	14	(1)	(8)	26	2
060	Non-financial corporations	4,831	4,670	4,670	4,670	(151)	(1,516)	3,568	1,627
070	Households	650	1,170	1,170	1,170	(124)	(301)	747	630
090	Loan commitments given	137	210	210	210	(4)	(1)	68	40
100	<b>Total at 31 Dec 2022</b>	<b>5,661</b>	<b>6,064</b>	<b>6,064</b>	<b>6,064</b>	<b>(280)</b>	<b>(1,826)</b>	<b>4,409</b>	<b>2,299</b>

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 2023 was 1.51% calculated in line with the EBA's guidelines.

Table 34: Credit quality of performing and non-performing exposures by past due days (CO3)

		Gross carrying amount/nominal amount											
		Performing exposures				Non-performing exposures							
		Total	Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days	Total	Unlikely to pay that are not past due or are past due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 2 years	Past due > 2 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	of which: defaulted
\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	
<b>005</b>	<b>Cash balances at central banks and other demand</b>	<b>332.1</b>	<b>332.1</b>	—	—	—	—	—	—	—	—	—	—
<b>010</b>	<b>Loans and advances</b>	<b>1,314.2</b>	<b>1,312.2</b>	<b>2.0</b>	<b>20.1</b>	<b>13.3</b>	<b>1.8</b>	<b>1.9</b>	<b>1.2</b>	<b>1.3</b>	<b>0.2</b>	<b>0.3</b>	<b>20.1</b>
020	Central banks	41.8	41.8	—	—	—	—	—	—	—	—	—	—
030	General governments	8.5	8.5	—	0.2	0.2	—	—	—	—	—	—	0.2
040	Credit institutions	138.4	138.4	—	—	—	—	—	—	—	—	—	—
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
<b>090</b>	<b>Debt securities</b>	<b>433.3</b>	<b>433.3</b>	—	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—	—
140	Non-financial corporations	3.4	3.4	—	—	—	—	—	—	—	—	—	—
<b>150</b>	<b>Off-balance-sheet</b>	<b>1,017.6</b>			<b>3.0</b>								<b>3.0</b>
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
<b>220</b>	<b>Total at 31 Dec 2023</b>	<b>3,097.2</b>	<b>2,077.5</b>	<b>2.0</b>	<b>23.1</b>	<b>13.3</b>	<b>1.8</b>	<b>1.9</b>	<b>1.2</b>	<b>1.3</b>	<b>0.2</b>	<b>0.3</b>	<b>23.1</b>
005	Cash balances at central banks and other demand	374.4	374.4	—	0.1	0.1	—	—	—	—	—	—	0.1
010	Loans and advances	1,275.5	1,273.5	2.0	20.4	12.9	2.0	2.3	1.0	1.5	0.2	0.5	20.4
020	Central banks	32.5	32.5	—	—	—	—	—	—	—	—	—	—
030	General governments	11.1	11.1	—	0.3	0.3	—	—	—	—	—	—	0.3
040	Credit institutions	131.8	131.8	—	—	—	—	—	—	—	—	—	—
050	Other financial corporations	237.7	237.3	0.4	0.5	0.2	—	0.3	—	—	—	—	0.5
060	Non-financial corporations	446.8	446.0	0.8	16.2	10.5	1.4	1.6	0.9	1.2	0.2	0.4	16.2
070	– of which SMEs	36.0	35.8	0.2	3.0	1.2	0.2	1.2	0.1	0.1	0.1	0.1	3.0
080	Households	415.6	414.8	0.8	3.4	1.9	0.6	0.4	0.1	0.3	—	0.1	3.4
090	Debt securities	355.0	355.0	—	—	—	—	—	—	—	—	—	—
100	Central banks	26.0	26.0	—	—	—	—	—	—	—	—	—	—
110	General governments	288.3	288.3	—	—	—	—	—	—	—	—	—	—
120	Credit institutions	24.6	24.6	—	—	—	—	—	—	—	—	—	—
130	Other financial corporations	13.0	13.0	—	—	—	—	—	—	—	—	—	—
140	Non-financial corporations	3.1	3.1	—	—	—	—	—	—	—	—	—	—
150	Off-balance-sheet exposures	954.1			2.6								2.6
160	Central banks	1.1			—								—
170	General governments	4.3			—								—
180	Credit institutions	48.9			—								—
190	Other financial corporations	87.8			—								—
200	Non-financial corporations	567.5			1.8								1.8
210	Households	244.5			0.8								0.8
<b>220</b>	<b>Total at 31 Dec 2022</b>	<b>2,959.0</b>	<b>2,002.9</b>	<b>2.0</b>	<b>23.1</b>	<b>13.0</b>	<b>2.0</b>	<b>2.3</b>	<b>1.0</b>	<b>1.5</b>	<b>0.2</b>	<b>0.5</b>	<b>23.1</b>

## Pillar 3 Disclosures at 31 December 2023

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 represents 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 35: Collateral obtained by taking possession and execution processes (CQ7)

	At 31 Dec 2023		At 31 Dec 2022	
	Collateral obtained by taking possession		Collateral obtained by taking possession	
	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	79.4	(11.9)	75.8	(8.2)
030 Residential immovable property	65.3	(9.2)	58.7	(7.7)
040 Commercial immovable property	13.9	(2.7)	6.5	(0.5)
050 Movable property (auto, shipping, etc.)	0.1	—	—	—
070 Other	0.1	—	10.6	—
080 <b>Total</b>	<b>79.4</b>	<b>(11.9)</b>	<b>75.8</b>	<b>(8.2)</b>

## 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.

Table 36: Quality of non-performing exposures by geography (CQ4)

		a	b	c	d	e	f	g
		Gross carrying/ Nominal amount				Accumulated impairment	Provisions on off-balance sheet commit- ments and financial guarantee given	Accumulated negative changes in fair value due to credit risk on non- performing exposures
		Total	of which: non- performing	of which: defaulted	of which: subject to impairment			
		\$m	\$m	\$m	\$m	\$m	\$m	\$m
010	<b>On-balance sheet exposures<sup>1</sup></b>	<b>1,767,522</b>	<b>20,051</b>	<b>20,051</b>	<b>1,760,605</b>	<b>(11,712)</b>		—
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	<b>Off-balance sheet exposures</b>	<b>1,020,552</b>	<b>3,007</b>	<b>3,007</b>			<b>(611)</b>	
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	<b>Total at 31 Dec 2023</b>	<b>2,788,074</b>	<b>23,058</b>	<b>23,058</b>	<b>1,760,605</b>	<b>(11,712)</b>	<b>(611)</b>	<b>—</b>
010	On-balance sheet exposures <sup>1</sup>	1,650,915	20,391	20,391	1,646,188	(12,114)		—
020	United Kingdom	333,439	5,952	5,952	331,655	(2,511)		—
030	Hong Kong	357,883	4,117	4,117	357,386	(2,247)		—
040	United States	249,322	486	486	248,618	(326)		—
070	Other countries/territories	710,271	9,836	9,836	708,529	(7,030)		—
080	Off-balance sheet exposures	956,752	2,635	2,635			(582)	
090	Hong Kong	215,287	832	832			(47)	
100	United Kingdom	119,840	458	458			(147)	
110	United States	116,053	124	124			(57)	
140	Other countries/territories	505,572	1,221	1,221			(331)	
150	<b>Total at 31 Dec 2022</b>	<b>2,607,667</b>	<b>23,026</b>	<b>23,026</b>	<b>1,646,188</b>	<b>(12,114)</b>	<b>(582)</b>	<b>—</b>

<sup>1</sup> Excludes cash and balances at central banks.

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.

Table 37: Credit quality of loans and advances to non-financial corporations by industry (CO5)

		Gross carrying amount			Accumulated impairment	
		Total	of which: non-performing	of which: defaulted		of which: subject to impairment
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 <sup>1</sup>	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 <sup>1</sup>	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 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	<b>Total at 31 Dec 2023</b>	<b>443,360</b>	<b>15,472</b>	<b>15,472</b>	<b>442,473</b>	<b>(8,225)</b>
010	Agriculture, forestry and fishing	6,643	259	259	6,643	(122)
020	Mining and quarrying	8,529	234	234	8,529	(173)
030	Manufacturing	93,419	2,174	2,174	93,419	(1,281)
040	Electricity, gas, steam and air conditioning supply	17,893	312	312	17,893	(114)
050	Water supply	3,001	26	26	3,001	(21)
060	Construction <sup>1</sup>	39,344	3,613	3,613	39,344	(2,437)
070	Wholesale and retail trade	90,033	3,063	3,063	90,031	(1,823)
080	Transport and storage	25,975	555	555	25,975	(250)
090	Accommodation and food service activities	17,137	786	786	17,137	(244)
100	Information and communication	18,065	276	276	18,065	(117)
110	Financial and insurance activities	—	—	—	—	—
120	Real estate activities <sup>1</sup>	76,531	2,239	2,239	76,531	(970)
130	Professional, scientific and technical activities	17,946	542	542	17,946	(271)
140	Administrative and support service activities	25,126	1,005	1,005	25,126	(409)
150	Public administration and defence, compulsory social security	1,188	—	—	1,188	(1)
160	Education	2,471	119	119	2,471	(60)
170	Human health services and social work activities	3,898	266	266	3,898	(90)
180	Arts, entertainment and recreation	1,862	146	146	1,862	(77)
190	Other services	13,888	600	600	13,789	(273)
200	<b>Total at 31 Dec 2022</b>	<b>462,949</b>	<b>16,215</b>	<b>16,215</b>	<b>462,848</b>	<b>(8,733)</b>

<sup>1</sup> Following an internal review, HSBC has reclassified its exposures in NACE categories 060 Construction and 120 Real Estate activities. The comparatives have been restated.

### 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 187 and 197 of the Annual Report and Accounts 2023.*

#### 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 190 of the Annual Report and Accounts 2023.*

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 on-balance 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. In the residential mortgage business, Group policy prescribes a revaluation of the portfolio at intervals of up to three years, or more frequently as the need arises; for example, where market conditions are subject to significant change, and for non performing loans on a regular basis (at least annually). Residential property collateral values are determined through a combination of professional appraisals, 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, credit risk mitigation data is incorporated into the internal risk parameters for exposures and feeds into the calculation of the expected loss ('EL') band value summarising both customer delinquency and product or facility risk. Credit and credit risk mitigation data form inputs submitted by all Group offices to centralised databases.

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.

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 38: Credit risk mitigation techniques – overview (CR3)

	Total Exposures: secured and unsecured	Exposures unsecured: carrying amount	Exposures secured: carrying amount	of which: Exposures secured by collateral	of which: Exposures secured by financial guarantees
	\$m	\$m	\$m	\$m	\$m
<b>1 Loans and advances</b>	<b>1,654,769</b>	<b>744,550</b>	<b>910,219</b>	<b>813,834</b>	<b>96,385</b>
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
<b>2 Debt securities</b>	<b>433,135</b>	<b>400,465</b>	<b>32,670</b>	<b>–</b>	<b>32,670</b>
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
<b>3 Total at 31 Dec 2023</b>	<b>2,087,904</b>	<b>1,145,015</b>	<b>942,889</b>	<b>813,834</b>	<b>129,055</b>
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		
1 Loans and advances	1,658,346	761,479	896,867	801,086	95,781
Central banks	392,081	380,348	11,733	11,653	80
General governments	11,390	7,725	3,665	2,864	801
Credit Institutions	146,621	57,268	89,353	89,237	116
Other financial corporations	237,942	65,486	172,456	166,691	5,765
Non-financial corporations	454,216	203,332	250,884	162,828	88,056
Households	416,096	47,320	368,776	367,813	963
2 Debt securities	354,899	332,651	22,248	–	22,248
Central banks	26,043	26,043	–	–	–
General governments	288,223	266,780	21,443	–	21,443
Credit Institutions	24,640	23,983	657	–	657
Other financial corporations	12,968	12,930	38	–	38
Non-financial corporations	3,025	2,915	110	–	110
3 Total at 31 Dec 2022	2,013,245	1,094,130	919,115	801,086	118,029
4 – of which: non-performing exposures	13,255	3,963	9,292	6,094	3,198
5 – of which: defaulted	13,255	3,963	9,292		

Table 38 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.

## Pillar 3 Disclosures at 31 December 2023

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 CR3 table.

Table 38.i: Analysis of accounting lines comprising total exposures in CR3

	Loans and advances: secured and unsecured \$m
<b>Assets as reported in financial statements at 31 Dec 2023</b>	
Cash and balances at central banks <sup>1</sup>	279,631
Loans and advances to banks	112,902
Loans and advances to customers <sup>2</sup>	938,516
Reverse repurchase agreement - non trading	252,217
Other financial assets <sup>3</sup>	71,503
<b>Carrying amount at 31 Dec 2023 reported in table CR3<sup>4</sup></b>	<b>1,654,769</b>

<sup>1</sup> Cash and balances with central banks recognised as loans and advances excludes cash in hand \$6,237m.

<sup>2</sup> Loans and advances to customers excludes asset-backed securities amounting to \$19m.

<sup>3</sup> Includes acceptances, settlement balances and items in course of collection; financial assets measured at FVOCI, FVPL and amortised cost; deconsolidation of insurance/other entities and consolidation of banking associates.

<sup>4</sup> Carrying amount reconciles to 'Loans and advances' total exposures: secured and unsecured in table CR3.

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 39: Standardised approach – credit conversion factor ('CCF') and credit risk mitigation ('CRM') effects<sup>1</sup> (CR4)

	Exposures before CCF and CRM		Exposures post-CCF and CRM		RWAs and RWA density	
	On-balance sheet amount \$m	Off-balance sheet amount \$m	On-balance sheet amount \$m	Off-balance sheet amount \$m	RWAs \$m	RWA density %
<b>Asset classes</b>						
1 Central governments or central banks	302,253	2,862	326,719	2,346	5,346	1.62
2 Regional governments or local authorities	2,554	356	5,944	39	799	13.35
3 Public sector entities	9,322	197	311	13	104	32.15
4 Multilateral development banks	12,122	474	14,071	244	122	0.85
5 International organisations	3,954	—	3,954	—	—	—
6 Institutions	1,377	1,747	1,838	2,052	1,640	42.17
7 Corporates	75,298	80,459	68,980	11,414	77,697	96.64
8 Retail	21,936	50,309	21,171	440	15,924	73.68
9 Secured by mortgages on immovable property	33,469	1,015	33,469	303	12,951	38.35
10 Exposures in default <sup>2</sup>	2,349	632	2,277	221	3,169	126.92
11 Exposures associated with particularly high risk	220	57	161	7	251	150.00
14 Collective investment undertakings	2,125	19	2,125	9	1,811	84.89
15 Equity	16,488	71	16,487	71	37,662	227.44
16 Other items	14,559	331	14,559	331	9,620	64.61
17 <b>Total at 31 Dec 2023</b>	<b>498,026</b>	<b>138,529</b>	<b>512,066</b>	<b>17,490</b>	<b>167,096</b>	<b>31.55</b>
1 Central governments or central banks	318,605	1,753	343,176	1,844	4,519	1.31
2 Regional governments or local authorities	9,560	292	12,133	33	2,403	19.75
3 Public sector entities	7,265	129	553	4	177	31.78
5 International organisations	1,186	—	1,186	—	—	—
6 Institutions	787	109	876	48	608	65.80
7 Corporates	65,726	84,385	59,201	8,545	63,049	93.07
8 Retail	23,315	48,432	22,400	247	15,739	69.50
9 Secured by mortgages on immovable property	32,318	615	32,318	192	12,615	38.80
10 Exposures in default	2,699	639	2,576	157	3,295	120.56
11 Exposures associated with particularly high risk	328	66	255	20	412	149.82
14 Collective investment undertakings <sup>3</sup>	3,807	886	3,807	460	6,510	152.57
15 Equity	15,417	73	15,417	73	34,737	224.25
16 Other items	15,055	337	15,055	337	9,520	61.85
17 <b>Total at 31 Dec 2022</b>	<b>496,068</b>	<b>137,716</b>	<b>508,953</b>	<b>11,960</b>	<b>153,584</b>	<b>29.48</b>

<sup>1</sup> This table has been updated to include free deliveries. The comparatives have not been restated.

<sup>2</sup> Non-performing exposures have been excluded following the PRA published PS14/23 – The non-performing exposures capital deduction regulation.

<sup>3</sup> Includes equity exposures within CIUs calculated under the look-through approach using the equity simple risk-weight method. These balances have been reported in CR10.5 and OV1 from 1 January 2023.



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

Table 40: IRB – Effect on the RWA of credit derivatives used as CRM techniques<sup>1</sup> (CR7)

		At			
		At 31 Dec 2023		At 31 Dec 2022	
		Pre-credit derivatives RWAs	Actual RWAs	Pre-credit derivatives RWAs	Actual RWAs
		\$m	\$m	\$m	\$m
1	<b>Exposures under FIRB</b>	<b>77,994</b>	<b>77,544</b>	79,264	78,790
2	Central governments and central banks	161	161	167	167
3	Institutions	20	20	67	67
4	Corporates <sup>2</sup>	<b>77,813</b>	<b>77,363</b>	79,030	78,556
4.1	– of which: SMEs	4,562	4,562	7,828	7,828
4.3	– of which: Others	73,251	72,801	71,202	70,728
5	<b>Exposures under AIRB</b>	<b>387,429</b>	<b>386,306</b>	399,697	398,888
6	Central governments and central banks	55,600	55,571	53,383	53,383
7	Institutions	12,579	12,538	13,779	13,768
8	Corporates <sup>2</sup>	<b>232,490</b>	<b>231,437</b>	242,935	242,137
8.1	– of which: SMEs	8,025	8,025	12,552	12,552
8.2	– of which: Specialised lending <sup>2</sup>	4,339	4,339	4,019	4,019
8.3	– of which: Others	220,126	219,073	226,364	225,566
9	Retail	<b>86,760</b>	<b>86,760</b>	89,600	89,600
9.1	of which Retail – SMEs - Secured by immovable property collateral	249	249	328	328
9.2	of which Retail – Non-SMEs - Secured by immovable property collateral	55,672	55,672	60,476	60,476
9.3	of which Retail – Qualifying revolving	15,609	15,609	13,679	13,679
9.4	of which Retail – SMEs - Other	2,906	2,906	2,842	2,842
9.5	of which Retail – Non-SMEs - Other	12,324	12,324	12,275	12,275
10	<b>Total</b>	<b>465,423</b>	<b>463,850</b>	478,961	477,678

1 This table has been updated to include free deliveries. The comparatives have not been restated.

2 From 1 January 2023, specialised lending exposures under the slotting approach are excluded from this table. The comparatives have been restated accordingly.

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

Table 41: IRB approach – Disclosure of the extent of the use of CRM techniques<sup>1</sup> (CR7-A)

		Funded credit Protection (FCP)					
				Part of exposures covered by Other eligible collateral (%)			
		Total exposures	Part of exposures covered by financial collateral	Total	Part of exposures covered by Immovable property collateral	Part of exposures covered by receivables	Part of exposures covered by other physical collateral
		\$bn	%	%	%	%	%
<b>AIRB</b>							
1	Central governments and central banks	463.4	6.38	–	–	–	–
2	Institutions	80.5	2.26	0.79	–	–	0.79
3	Corporates	474.7	8.18	19.15	13.36	2.53	3.26
3.1	– of which: Corporates – SMEs	15.6	9.78	61.70	52.11	2.43	7.16
3.2	Corporates – specialised lending <sup>2</sup>	11.7	0.33	1.12	0.37	–	0.75
3.3	Corporates – other	447.4	8.33	18.13	12.34	2.60	3.19
4	Retail	501.0	4.05	71.69	71.44	0.01	0.24
4.1	– of which: Retail – immovable property SMEs	0.8	1.62	94.67	94.13	0.52	0.01
4.2	Retail – immovable property non-SMEs	389.6	0.16	91.68	91.68	–	–
4.3	Retail – qualifying revolving	68.4	–	–	–	–	–
4.4	Retail – other SMEs	8.5	4.90	0.47	–	0.44	0.02
4.5	Retail – other non-SMEs	33.7	57.24	3.54	–	–	3.54
5	<b>Total at 31 Dec 2023</b>	<b>1,519.6</b>	<b>5.96</b>	<b>29.66</b>	<b>27.73</b>	<b>0.79</b>	<b>1.14</b>

## Pillar 3 Disclosures at 31 December 2023

Table 41: IRB approach – Disclosure of the extent of the use of CRM techniques<sup>1</sup> (CR7-A)

	Total exposures \$bn	Part of exposures covered by financial collateral %	Funded credit Protection (FCP)			
			Part of exposures covered by Other eligible collateral (%)			
			Total %	Part of exposures covered by immovable property collateral %	Part of exposures covered by receivables %	Part of exposures covered by other physical collateral %
<b>FIRB</b>						
2 Institutions	—	—	—	—	—	—
3 Corporates	162.6	20.39	17.55	12.09	3.21	2.25
3.1 – of which: Corporates – SMEs	8.6	0.66	64.07	50.09	8.96	5.01
3.3 Corporates – other	154.0	21.49	14.96	9.97	2.89	2.10
4 <b>Total at 31 Dec 2023</b>	<b>162.6</b>	<b>20.39</b>	<b>17.55</b>	<b>12.09</b>	<b>3.21</b>	<b>2.25</b>
<b>IRB</b>						
Specialised lending under the slotting approach	35.0	—	—	—	—	—
Equity exposures	2.4	—	—	—	—	—

Table 41: IRB approach – Disclosure of the extent of the use of CRM techniques<sup>1</sup> (CR7-A) (continued)

	Unfunded credit Protection	Credit risk mitigation methods in the calculation of RWAs		
		Part of exposures covered by guarantees %	RWA post- all CRM assigned to the obligor exposure class \$bn	RWA with substitution effects \$bn
<b>AIRB</b>				
1 Central governments and central banks	0.07	55.5	55.6	
2 Institutions	0.10	12.1	12.5	
3 Corporates	1.19	231.9	231.4	
3.1 – of which: Corporates – SMEs	1.67	8.0	8.0	
3.2 Corporates – specialised lending <sup>2</sup>	10.75	4.4	4.3	
3.3 Corporates – other	0.92	219.5	219.1	
4 Retail	6.20	86.8	86.8	
4.1 – of which: Retail – immovable property SMEs	0.09	0.2	0.2	
4.2 Retail – immovable property non-SMEs	7.96	55.7	55.7	
4.3 Retail – qualifying revolving	—	15.6	15.6	
4.4 Retail – other SMEs	0.27	2.9	2.9	
4.5 Retail – other non-SMEs	0.06	12.4	12.4	
5 <b>Total at 31 Dec 2023</b>	<b>2.44</b>	<b>386.3</b>	<b>386.3</b>	
<b>FIRB</b>				
1 Central governments and central banks	—	—	0.20	
2 Institutions	—	—	—	
3 Corporates	—	77.6	77.3	
3.1 – of which: Corporates – SMEs	—	4.6	4.6	
3.3 Corporates – other	—	73.0	72.7	
4 <b>Total at 31 Dec 2023</b>	<b>—</b>	<b>77.6</b>	<b>77.5</b>	
<b>IRB</b>				
Specialised lending under the slotting approach	—	25.9	25.9	
Equity exposures	—	5.7	5.7	

Table 41: IRB approach – Disclosure of the extent of the use of CRM techniques<sup>1</sup> (CR7-A) (continued)

		Funded credit protection							
		Total exposures \$bn		Part of exposures covered by Other eligible collateral (%)				Part of exposures covered by	
				Part of exposu- res covered by financial collateral	Total	Part of exposu- res covered by immov-able property collateral	Part of exposu- res covered by receiva- bles	Part of exposu- res covered by other physical collateral	Total
AIRB		%	%	%	%	%	%	%	
1	Central governments and central banks	409.7	6.48	—	—	—	—	—	—
2	Institutions	77.6	4.66	1.27	0.05	0.41	0.80	—	—
3	Corporates	467.2	7.26	22.08	15.60	2.63	3.80	0.55	0.55
	– of which:								
3.1	Corporates – SMEs	17.7	12.72	61.46	54.85	1.48	3.81	6.69	6.69
3.2	Corporates – specialised lending <sup>2</sup>	10.4	2.40	—	—	—	—	—	—
3.3	Corporates – other	439.1	7.15	21.01	14.39	2.74	3.89	0.32	0.32
4	Retail	497.7	5.36	70.85	69.96	—	0.89	0.11	0.11
	– of which:								
4.1	Retail – immovable property SMEs	0.8	1.56	91.73	91.15	0.54	0.05	—	—
4.2	Retail – immovable property non-SMEs	380.9	0.09	91.21	91.21	—	—	—	—
4.3	Retail – qualifying revolving	62.8	—	—	—	—	—	—	—
4.4	Retail – other SMEs	9.7	1.68	0.13	—	0.07	0.06	—	—
4.5	Retail – other non-SMEs	43.5	60.08	10.18	—	—	10.18	1.25	1.25
5	Total at 31 Dec 2022	1452.2	6.25	31.45	29.00	0.87	1.57	0.22	0.22
FIRB									
2	Institutions	0.2	—	—	—	—	—	—	—
3	Corporates	154.3	15.50	16.89	11.85	3.61	1.44	—	—
	– of which:								
3.1	Corporates – SMEs	13.7	0.67	61.01	44.78	11.78	4.46	—	—
3.3	Corporates – other	140.6	16.95	12.59	8.64	2.81	1.14	—	—
4	Total at 31 Dec 2022	154.5	15.49	16.88	11.84	3.61	1.44	—	—
IRB									
	Specialised lending under the slotting approach	38.7	—	—	—	—	—	—	—
	Equity exposures <sup>3</sup>	—	—	—	—	—	—	—	—

## Pillar 3 Disclosures at 31 December 2023

Table 41: IRB approach – Disclosure of the extent of the use of CRM techniques<sup>1</sup> (CR7-A) (continued)

	Unfunded credit protection	Credit risk mitigation methods in the calculation of RWAs	
		Part of exposures covered by guarantees	RWA post- all CRM assigned to the obligor exposure class
AIRB	%	\$bn	\$bn
1 Central governments and central banks	0.12	53.4	53.4
2 Institutions	0.16	13.3	13.8
3 Corporates	1.36	242.6	242.2
3.1 – of which:			
Corporates – SMEs	1.75	12.5	12.5
3.2 Corporates – specialised lending <sup>2</sup>	2.13	4.1	4.1
3.3 Corporates – other	1.33	226.0	225.6
4 Retail	6.44	89.6	89.6
4.1 – of which:			
Retail – immovable property SMEs	0.11	0.3	0.3
4.2 Retail – immovable property non-SMEs	8.40	60.5	60.5
4.3 Retail – qualifying revolving	—	13.7	13.7
4.4 Retail – other SMEs	0.32	2.8	2.8
4.5 Retail – other non-SMEs	0.05	12.3	12.3
5 Total at 31 Dec 2022	2.69	398.9	399.0
FIRB			
1 Central governments and central banks	—	—	0.2
2 Institutions	—	0.1	0.1
3 Corporates	—	78.7	78.5
3.1 – of which:			
Corporates – SMEs	—	7.8	7.8
3.2 Corporates – specialised lending <sup>2</sup>	—	—	—
3.3 Corporates – other	—	70.9	70.7
4 Total at 31 Dec 2022	—	78.8	78.8
IRB			
Specialised lending under the slotting approach	—	27.0	27.0
Equity exposures <sup>3</sup>	—	—	—

<sup>1</sup> This table has been updated to include free deliveries. The comparatives have not been restated.

<sup>2</sup> Specialised lending exposures under the slotting approach are disclosed separately in the table. The comparatives have been restated accordingly.

<sup>3</sup> No comparatives are provided for December 2022, as disclosures were enhanced from June 2023.

## Credit risk approaches

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

Table 42: Scope of the use of IRB and SA approaches<sup>1 2</sup> (UK CR6-A)

	Exposure value as defined in Article 166 CRR II for exposures subject to IRB approach	Total exposure value for exposures subject to the Standardised approach and to the IRB approach <sup>3</sup>	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 <sup>4</sup>
	\$m	\$m	%	%	%
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 <b>Total at 31 Dec 2023</b>	<b>1,781,949</b>	<b>2,231,240</b>	<b>13.64</b>	<b>76.47</b>	<b>9.89</b>
1 Central governments or central banks	409,735	747,092	43.88	54.78	1.34
1.1 of which: Regional governments or local authorities		20,031	0.02	63.49	36.49
1.2 of which: Public sector entities		12,163	56.38	21.17	22.45
2 Institutions	77,751	78,487	2.34	97.66	—
3 Corporates	660,143	699,593	10.96	87.41	1.63
3.1 of which: Corporates-Specialised lending, excluding slotting approach		9,367	—	100.00	—
3.2 of which: Corporates - Specialised lending under slotting approach		38,149	—	100.00	—
4 Retail	497,707	542,906	11.21	88.73	0.06
4.1 of which: Retail – Secured by real estate SMEs		844	1.19	98.81	—
4.2 of which: Retail – Secured by real estate non-SMEs		403,440	7.75	92.25	—
4.3 of which: Retail – Qualifying revolving		56,376	6.05	93.95	—
4.4 of which: Retail – Other SMEs		12,937	27.98	71.96	0.05
4.5 of which: Retail – Other non-SMEs		69,309	32.49	67.03	0.47
5 Equity		17,407	100.00	—	—
6 Other non-credit obligation assets	67,626	83,012	18.54	81.46	—
7 <b>Total at 31 Dec 2022</b>	<b>1,712,962</b>	<b>2,168,497</b>	<b>23.05</b>	<b>75.94</b>	<b>1.01</b>

1 This table has been updated to include free deliveries. The comparatives have not been restated.

2 Further alignment to leverage rules and our reporting of exposures under permanent partial use have been updated for this period. The comparatives have not been restated.

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

4 Percentage of total exposure value subject to a roll-out plan, includes other STD exposures which 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 ECAI 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 55.

Table 43: CQS reference table

	Institutions (includes banks)					
	Central government or central banks		Credit assessment method			
	Corporates	Sovereign method	Sovereign method	Maturity > 3 months	Maturity 3 months or less	
Credit Quality Step 1	20%	0%	20%	20%	20%	20%
Credit Quality Step 2	50%	20%	50%	50%	50%	20%
Credit Quality Step 3	100%	50%	100%	50%	50%	20%
Credit Quality Step 4	100%	100%	100%	100%	100%	50%
Credit Quality Step 5	150%	100%	100%	100%	100%	50%
Credit Quality Step 6	150%	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<sup>3</sup> (CR5)

Risk weight ('RW%')		0%	2%	20%	35%	50%	75%	100%	150%	250%	370%	1,250%	Others	Total credit exposure amount (post-CCF and CRM) \$bn	of which: un-rated <sup>1</sup> \$bn
		\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn		
<b>Asset classes</b>															
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	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 <sup>2</sup>	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	<b>Total at 31 Dec 2023</b>	<b>349.3</b>	<b>1.4</b>	<b>11.5</b>	<b>32.4</b>	<b>4.2</b>	<b>21.6</b>	<b>88.8</b>	<b>4.3</b>	<b>16.0</b>	<b>—</b>	<b>0.1</b>	<b>—</b>	<b>529.6</b>	<b>147.2</b>
<b>Asset classes</b>															
1	Central governments or central banks	343.1	—	—	—	—	—	0.1	—	1.8	—	—	—	345.0	0.1
2	Regional governments or local authorities	4.5	—	6.5	—	0.3	—	0.8	—	0.1	—	—	—	12.2	0.4
3	Public sector entities	0.1	—	0.4	—	—	—	0.1	—	—	—	—	—	0.6	0.1
5	International organisations	1.2	—	—	—	—	—	—	—	—	—	—	—	1.2	—
6	Institutions	—	—	0.1	—	0.5	—	0.3	—	—	—	—	—	0.9	0.3
7	Corporates	—	—	3.9	0.8	2.3	—	59.3	1.4	—	—	—	—	67.7	58.2
8	Retail	—	—	1.6	—	—	21.0	—	—	—	—	—	—	22.6	22.6
9	Secured by mortgages on immovable property	—	—	—	30.5	—	—	2.0	—	—	—	—	—	32.5	32.5
10	Exposures in default	—	—	—	—	—	—	1.6	1.1	—	—	—	—	2.7	2.7
11	Exposures associated with particularly high risk	—	—	—	—	—	—	—	0.3	—	—	—	—	0.3	0.3
14	Units or shares in collective investment undertakings <sup>2</sup>	0.5	—	0.5	—	0.2	—	0.9	—	—	0.2	0.1	1.9	4.3	3.0
15	Equity	—	—	—	—	—	—	2.7	—	12.8	—	—	—	15.5	15.5
16	Other items	—	—	7.4	—	—	—	8.0	—	—	—	—	—	15.4	15.4
17	<b>Total at 31 Dec 2022</b>	<b>349.4</b>	<b>—</b>	<b>20.4</b>	<b>31.3</b>	<b>3.3</b>	<b>21.0</b>	<b>75.8</b>	<b>2.8</b>	<b>14.7</b>	<b>0.2</b>	<b>0.1</b>	<b>1.9</b>	<b>520.9</b>	<b>151.1</b>

1 Deferred tax assets risk weighted at 250% are excluded from the 'unrated' column. The comparatives have been restated.

2 Includes equity exposures within CIUs calculated under the look-through approach using the equity simple risk-weight method. These balances have been reported in CR10.5 and OV1 from 1 January 2023.

3 This table has been updated to include free deliveries. The comparatives have not been restated.

### 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 2023, portfolios in much of Europe, Asia and North America were on AIRB approaches. 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 due.

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	<ul style="list-style-type: none"> <li>– 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.)</li> <li>– Default backstop of 90+ days past due for all portfolios</li> <li>– May be subject to a sovereign cap</li> </ul>	<ul style="list-style-type: none"> <li>– Point in time (based on current conditions, adjusted to take into account estimates of future conditions that will impact PD)</li> <li>– Default backstop of 90+ days past due for all portfolios</li> </ul>
EAD	<ul style="list-style-type: none"> <li>– Cannot be lower than current balance</li> </ul>	<ul style="list-style-type: none"> <li>– Amortisation captured for term products</li> </ul>
LGD	<ul style="list-style-type: none"> <li>– Downturn LGD (consistent with losses we would expect to suffer during a severe but plausible economic downturn)</li> <li>– Regulatory floors may apply to mitigate risk of underestimating downturn LGD due to lack of historical data</li> <li>– Discounted using cost of capital</li> <li>– All collection costs included</li> </ul>	<ul style="list-style-type: none"> <li>– Expected LGD (based on estimate of loss given default including the expected impact of future economic conditions such as changes in value of collateral)</li> <li>– No floors</li> <li>– Discounted using the original effective interest rate of the loan</li> <li>– Only costs associated with obtaining/selling collateral included</li> </ul>
Other		<ul style="list-style-type: none"> <li>– Discounted back from point of default to balance sheet date</li> </ul>

## 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 which 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 specify detailed new 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 2023, 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 45 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.

## Pillar 3 Disclosures at 31 December 2023

Table 45: Wholesale IRB credit risk models

Portfolio	IRB exposure class	RWA \$bn	Component model	Number of material component models	Model description and methodology	Number of years loss data	Regulatory Floors
Sovereign	Central government and central banks, Institutions, Corporates – Others	48.7	PD	1	A shadow rating approach that includes macroeconomic and political factors, constrained with expert judgement.	>10	No
			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
			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.	>10	EAD must be at least equal to the current utilisation of the balance at account level
Banking institutions	Institutions	12.5	PD	1	A statistical model that combines quantitative analysis on financial information with expert inputs and macroeconomic factors.	>10	PD floor of 0.03%
			LGD	1	A quantitative model that produces both downturn and expected LGD. Several securities types are included in the model 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
Corporates <sup>1</sup>			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%
Large corporates							
Regional corporates			PD	10	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%
Non-banks financial institutions	Corporates – Other, institutions	296.1	PD	10	Predominantly statistical models that combine quantitative analysis on financial information with expert inputs.	>10	PD floor of 0.03%
All corporates			LGD	6	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	
			EAD	5	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

<sup>1</sup> Excludes Corporate SME and 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 as a result of no defaults in 2021 and only two in 2022 and 2023. Similarly the banks portfolio registers actuals that are nil or significantly below the estimate, with

only one default in 2022. Whilst 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 46: Wholesale IRB models – estimated and actual values

	2023		2022		2021	
	Estimated	Actuals	Estimated	Actuals	Estimated	Actuals
	%	%	%	%	%	%
Sovereigns <sup>1</sup>	<b>2.81</b>	<b>0.82</b>	2.12	1.44	3.63	—
Banks	<b>1.33</b>	—	2.70	0.37	3.03	—
Corporates <sup>2</sup>	<b>1.55</b>	<b>1.02</b>	1.76	0.88	1.76	1.02

<sup>1</sup> The estimated PD excludes inactive sovereign obligors.

<sup>2</sup> 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.

## Pillar 3 Disclosures at 31 December 2023

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

Table 47: Wholesale IRB exposure – back-testing of probability of default (PD) per portfolio<sup>1</sup> (CR9)

A-IRB PD range	Number of obligors		Observed average default rate %	Exposures weighted average PD %	Average PD %	Average historic annual default rate %
	End of previous year <sup>2</sup>	of which: number which defaulted in the year				
<b>2023</b>						
<b>Sovereigns<sup>3</sup></b>						
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)	—	—	—	—	—	—
<b>Banks</b>						
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)	—	—	—	—	—	—
<b>Corporates<sup>4</sup></b>						
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 47: Wholesale IRB exposure – back-testing of probability of default (PD) per portfolio<sup>1</sup> (CR9) (continued)

F-IRB PD range	Number of obligors		Observed average default rate %	Exposures weighted average PD %	Average PD %	Average historic annual default rate %
	End of previous year <sup>2</sup>	of which: number which defaulted in the year				
<b>2023</b>						
<b>Corporates<sup>4</sup></b>						
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					
<b>2022</b>						
<b>Sovereigns<sup>3</sup></b>						
0.00 to <0.15	59	—	—	0.01	0.04	—
0.00 to <0.10	55	—	—	0.01	0.03	—
0.10 to <0.15	4	—	—	—	0.13	—
0.15 to <0.25	7	1	14.29	0.22	0.22	2.86
0.25 to <0.50	10	—	—	—	0.37	—
0.50 to <0.75	7	—	—	0.63	0.63	—
0.75 to <2.50	22	—	—	0.87	1.31	—
0.75 to <1.75	19	—	—	0.87	1.16	—
1.75 to <2.5	3	—	—	—	2.25	—
2.5 to <10.00	27	1	3.70	6.57	5.18	0.74
2.5 to <5	15	—	—	4.20	3.74	—
5 to <10	12	1	8.33	7.85	6.98	1.67
10.00 to <100.00	7	—	—	13.00	16.29	3.33
10 to <20	6	—	—	13.00	13.00	—
30.00 to <100.00	1	—	—	—	36.00	6.67
100.00 (Default)	1					
<b>Banks</b>						
0.00 to <0.15	245	—	—	0.04	0.07	—
0.00 to <0.10	171	—	—	0.03	0.05	—
0.10 to <0.15	74	—	—	0.13	0.13	—
0.15 to <0.25	71	—	—	0.22	0.22	—
0.25 to <0.50	50	—	—	0.37	0.37	—
0.50 to <0.75	47	1	2.13	0.63	0.63	0.43
0.75 to <2.50	81	1	1.23	1.29	1.23	0.25
0.75 to <1.75	74	1	1.35	1.27	1.13	0.27
1.75 to <2.5	7	—	—	2.25	2.25	—
2.5 to <10.00	23	—	—	4.27	4.70	—
2.5 to <5	17	—	—	4.20	4.20	—
5 to <10	6	—	—	6.21	6.10	—
10.00 to <100.00	17	—	—	13.04	67.71	1.91
10 to <20	2	—	—	13.00	13.00	0.91
30.00 to <100.00	15	—	—	75.00	75.00	1.18
100.00 (Default)	17					
<b>Corporates<sup>4</sup></b>						
0.00 to <0.15	5,686	1	0.02	0.09	0.10	0.03
0.00 to <0.10	2,700	—	—	0.06	0.06	0.02
0.10 to <0.15	2,986	1	0.03	0.13	0.13	0.05
0.15 to <0.25	4,493	11	0.24	0.22	0.22	0.14
0.25 to <0.50	4,651	7	0.15	0.37	0.37	0.12
0.50 to <0.75	5,668	9	0.16	0.63	0.63	0.14
0.75 to <2.50	16,660	51	0.31	1.35	1.45	0.46

Table 47: Wholesale IRB exposure – back-testing of probability of default (PD) per portfolio<sup>1</sup> (CR9) (continued)

	Number of obligors		Observed average default rate %	Exposures weighted average PD %	Average PD %	Average historic annual default rate %
	End of previous year <sup>2</sup>	of which: number which defaulted in the year				
0.75 to <1.75	12,672	34	0.27	1.16	1.20	0.41
1.75 to <2.5	3,988	17	0.43	2.25	2.25	0.63
2.5 to <10.00	6,366	84	1.32	4.22	4.39	1.67
2.5 to <5	4,402	40	0.91	3.56	3.51	1.23
5 to <10	1,964	44	2.24	6.46	6.36	2.73
10.00 to <100.00	906	74	8.17	17.60	18.10	9.40
10 to <20	748	51	6.82	15.07	13.12	7.84
30.00 to <100.00	158	23	14.56	49.35	41.68	16.4
100.00 (Default)	495					
Corporates F-IRB <sup>4</sup>						
0.00 to <0.15	7,668	—	—	0.09	0.11	0.08
0.00 to <0.10	2,185	—	—	0.05	0.05	0.03
0.10 to <0.15	5,483	—	—	0.13	0.13	0.10
0.15 to <0.25	7,443	5	0.07	0.22	0.22	0.09
0.25 to <0.50	7,060	5	0.07	0.37	0.37	0.23
0.50 to <0.75	5,974	47	0.79	0.63	0.63	0.75
0.75 to <2.50	18,485	174	0.94	1.39	1.45	0.93
0.75 to <1.75	14,341	94	0.66	1.17	1.21	0.85
1.75 to <2.5	4,144	80	1.93	2.25	2.25	1.21
2.5 to <10.00	9,552	260	2.72	4.34	4.46	3.87
2.5 to <5	6,797	107	1.57	3.54	3.63	2.38
5 to <10	2,755	153	5.55	6.82	6.52	8.13
10.00 to <100.00	1,448	169	11.67	16.52	18.20	15.48
10 to <20	1,266	123	9.72	13.46	12.90	13.64
30.00 to <100.00	182	46	25.27	50.26	55.07	28.17
100.00 (Default)	2,493					

1 Data represents an annual view as of 30 September.

2 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.

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

4 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 approximately 100 retail IRB models used globally and we disclose information on our significant local models which represent 71% 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.

In April 2023, HSBC received PRA approval for the UK residential mortgage rating system. This single rating system incorporates the

previously separately disclosed HSBC UK residential mortgages and First Direct residential mortgages.

The Hong Kong Hang Seng credit cards rating system has been disclosed for the first time at 31 December 2023.

Figures for the comparative periods have not been restated for the above.

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 48: Retail IRB risk rating systems

Portfolio	Exposure class	RWA \$bn	Component model	Number of material component models	Model description and methodology	Number of years loss data <sup>1</sup>	Applicable Pillar 1 regulatory thresholds and overlays
UK residential mortgages <sup>2</sup>	Retail – secured by mortgages on immovable property non-SME	18.38	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%
			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 over 48 months and up to a 72 month period from the default date	>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
UK HSBC credit cards	Retail – qualifying revolving	4.24	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%
			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

## Pillar 3 Disclosures at 31 December 2023

Table 48: Retail IRB risk rating systems (continued)

Portfolio	Exposure class	RWA \$bn	Component model	Number of material component models	Model description and methodology	Number of years loss data <sup>1</sup>	Applicable Pillar 1 regulatory thresholds and overlays
<b>UK HSBC personal loans</b>	Retail – other non-SME	4.48	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%
			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 provides a conservative estimate.	7–10	EAD must at least be equal to current balance
<b>UK business banking</b>	Retail – other SME	2.14	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%
			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
<b>Hong Kong HSBC residential mortgages<sup>3</sup></b>	Retail – secured by mortgages on immovable property non-SME	11.32	PD	2	Statistical model built on internal behavioural data and bureau information, and calibrated to a long-run default rate.	>10	PD floor of 0.03%
			LGD	2	Statistical model 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% at portfolio level
			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
<b>Hong Kong Hang Seng residential mortgages<sup>3</sup></b>	Retail – secured by mortgages on immovable property non-SME	8.08	PD	2	Statistical model built on internal behavioural data, and calibrated to a long-run default rate.	>10	PD floor of 0.03%
			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 of 10% at portfolio level
			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
<b>Hong Kong HSBC credit cards</b>	Retail – qualifying revolving	3.12	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%
			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	
			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



Table 48: Retail IRB risk rating systems (continued)

Portfolio	Exposure class	RWA \$bn	Component model	Number of material component models	Model description and methodology	Number of years loss data <sup>1</sup>	Applicable Pillar 1 regulatory thresholds and overlays	
<b>Hong Kong HSBC personal instalment loans</b>	Retail – other non-SME	1.95	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%	
			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
<b>Hong Kong Hang Seng credit cards<sup>4</sup></b>	Retail – qualifying revolving	3.31	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%	
			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
<b>US HSBC personal first lien residential mortgages<sup>5</sup></b>	Retail – secured by mortgages on immovable property non-SME	4.71	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%	
			LGD	1	Statistical model based on identifying the main risk drivers of loss and recovery and grouping them into homogeneous pools. Downturn LGD is derived based on the peak default rate observed. Additional assumptions and estimations are made on incomplete workouts. For LGD purposes the time lapse between default event and the closure of the exposure is six years.	>10		LGD floor of 10% at portfolio level
			EAD	1	Rule-based calculation based on current balance which provides a conservative estimate of EAD.	>10		EAD must at least be equal to current balance

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

<sup>2</sup> The UK residential mortgages rating system approved by the PRA in April 2023 is reflected in the 31 December 2023 results. The comparatives have not been restated in any retail risk tables and reflect the previous rating systems for HSBC and First Direct residential mortgages.

<sup>3</sup> HKMA applies a risk weight floor of 15% to residential mortgages.

<sup>4</sup> The Hong Kong Hang Seng credit cards approved rating system results are disclosed at 31 December 2023. The comparatives have not been restated in any retail risk tables.

<sup>5</sup> In US mortgage business, first lien is a primary claim on a property which takes precedence over all subsequent claims and will be paid first from the proceeds in case of the property's foreclosure sale.

## 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 2023, the observed default rates have remained lower than PD estimates across most the UK, Hong Kong and the US portfolios, and remained stable in comparison to the previous reporting period.

The table below provides an overview of Retail PD model performance for IRB exposures, it shows the estimated vs actuals movements across asset classes. The data represents an annual view as of 30 September. The shows pure modelled percentage and does not reflect adjustments for capital requirements.

Table 49: Retail IRB models – estimated and actual values

	2023		2022		2021	
	Estimated %	Actuals %	Estimated %	Actuals %	Estimated %	Actuals %
<b>UK</b>						
UK residential mortgage <sup>1</sup>	0.57	0.21	—	—	—	—
HSBC credit card	0.75	0.79	0.77	0.82	0.92	0.95
HSBC personal loans	2.46	1.89	2.72	1.86	3.27	2.32
Business Banking (Retail SME)	4.09	4.02	4.27	3.84	2.67	3.11
<b>Hong Kong</b>						
HSBC residential mortgage	0.60	0.05	0.58	0.04	0.59	0.04
Hang Seng residential mortgage	0.38	0.13	0.35	0.12	0.37	0.13
HSBC credit card	0.31	0.26	0.34	0.25	0.48	0.22
HSBC personal instalment loans	1.75	1.18	1.79	1.22	2.08	1.78
Hong Kong Hang Seng credit cards <sup>2</sup>	0.57	0.23	—	—	—	—
<b>US</b>						
US HSBC personal first lien residential mortgage	0.79	0.35	0.95	0.44	1.25	0.60

1 The UK residential mortgages rating system approved by the PRA in April 2023 is reflected in the 31 December 2023 results. The comparatives have not been restated and reflect the previous rating systems for HSBC and First Direct residential mortgages.

2 The Hong Kong Hang Seng credit cards approved rating system results are disclosed from 31 December 2023. The comparatives have not been restated in any retail risk tables.

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.

Table 50: Retail IRB exposure – back-testing of probability of default (PD) per portfolio<sup>1,2</sup> (CR9)

PD range	Number of obligors		Observed average default rate %	Exposures weighted average PD %	Average PD %	Average historic annual default rate %
	End of previous year	of which: number which defaulted in the year				
<b>2023</b>						
<b>Retail – Secured by real estate non-SME</b>						
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					
<b>Retail – qualifying revolving</b>						
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

Table 50: Retail IRB exposure – back-testing of probability of default (PD) per portfolio<sup>1,2</sup> (CR9) (continued)

PD range	Number of obligors		Observed average default rate %	Exposures weighted average PD %	Average PD %	Average historic annual default rate %
	End of previous year	of which: number which defaulted in the year				
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	13,112	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					
<b>Retail – other non-SME</b>						
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					
<b>Retail – other SME</b>						
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					

## Pillar 3 Disclosures at 31 December 2023

Table 50: Retail IRB exposure – back-testing of probability of default (PD) per portfolio<sup>1,2</sup> (CR9) (continued)

PD range 2022 <sup>2</sup>	Number of obligors		Observed average default rate %	Exposures weighted average PD (%)	Average PD (%)	Average historic annual default rate (%)
	End of previous year	<i>of which: number which defaulted in the year</i>				
Retail – Secured by real estate non-SME						
0.00 to <0.15	774,402	279	0.04	0.05	0.06	0.03
0.00 to <0.10	661,796	207	0.03	0.05	0.05	0.03
0.10 to <0.15	112,606	72	0.06	0.07	0.08	0.05
0.15 to <0.25	98,974	80	0.08	0.11	0.13	0.07
0.25 to <0.50	86,695	125	0.14	0.12	0.17	0.12
0.50 to <0.75	27,909	49	0.18	0.17	0.24	0.12
0.75 to <2.50	53,974	175	0.32	0.69	0.78	0.20
0.75 to <1.75	42,362	126	0.30	0.46	0.44	0.16
1.75 to <2.5	11,612	49	0.42	2.02	2.02	0.47
2.50 to <10.00	13,380	191	1.43	0.93	1.66	0.67
2.5 to <5	11,808	116	0.98	0.59	1.01	0.37
5 to <10	1,572	75	4.77	6.74	6.52	5.61
10.00 to <100.00	5,161	946	18.33	19.93	23.60	14.51
10 to <20	2,439	213	8.73	10.48	11.62	7.48
20 to <30	1,172	162	13.82	9.40	17.18	6.53
30.00 to <100.00	1,550	571	36.84	47.52	47.31	37.44
100.00 (Default)	12,311					
Retail – qualifying revolving						
0.00 to <0.15	4,356,285	2,539	0.06	0.02	0.02	0.02
0.00 to <0.10	3,846,117	1,803	0.05	0.01	0.02	0.01
0.10 to <0.15	510,168	736	0.14	0.04	0.06	0.03
0.15 to <0.25	352,448	685	0.19	0.14	0.17	0.12
0.25 to <0.50	396,990	1,417	0.36	0.16	0.21	0.16
0.50 to <0.75	133,601	835	0.62	0.44	0.57	0.42
0.75 to <2.50	428,983	5,107	1.19	0.45	0.63	0.55
0.75 to <1.75	385,105	3,912	1.02	0.36	0.50	0.42
1.75 to <2.5	43,878	1,195	2.72	1.40	1.82	1.79
2.50 to <10.00	125,682	5,269	4.19	1.03	2.13	1.28
2.5 to <5	107,574	3,684	3.42	0.72	1.53	0.85
5 to <10	18,108	1,585	8.75	4.23	5.67	5.53
10.00 to <100.00	50,400	13,189	26.17	9.84	20.23	8.80
10 to <20	28,277	3,246	11.48	1.38	4.12	1.63
20 to <30	10,814	2,251	20.82	6.94	7.32	7.15
30.00 to <100.00	11,309	7,692	68.02	72.78	72.84	65.56
100.00 (Default)	16,159					

Table 50: Retail IRB exposure – back-testing of probability of default (PD) per portfolio<sup>1,2</sup> (CR9) (continued)

PD range	Number of obligors		Observed average default rate %	Exposures weighted average PD (%)	Average PD (%)	Average historic annual default rate (%)
	End of previous year	of which: number which defaulted in the year				
<b>Retail – other non-SME</b>						
0.00 to <0.15	23,848	30	0.13	—	0.12	0.01
0.00 to <0.10	4,689	6	0.13	—	0.06	—
0.10 to <0.15	19,159	24	0.13	0.03	0.13	0.02
0.15 to <0.25	113,618	178	0.16	0.18	0.19	0.15
0.25 to <0.50	5,939	10	0.17	0.03	0.14	0.02
0.50 to <0.75	63,201	212	0.34	0.46	0.58	0.39
0.75 to <2.50	190,804	1,416	0.74	0.90	1.32	0.70
0.75 to <1.75	148,339	837	0.56	0.76	1.14	0.55
1.75 to <2.5	42,465	579	1.36	1.49	1.98	1.21
2.50 to <10.00	67,011	2,272	3.39	3.41	4.70	3.00
2.5 to <5	42,830	1,059	2.47	2.32	3.44	2.14
5 to <10	24,181	1,213	5.02	6.30	6.93	5.14
10.00 to <100.00	16,764	4,683	27.93	27.68	38.96	21.23
10 to <20	7,428	797	10.73	7.77	13.81	6.70
20 to <30	2,136	299	14.00	21.64	24.48	17.31
30.00 to <100.00	7,200	3,587	49.82	70.14	69.20	51.65
100.00 (Default)	9,275					
<b>Retail – other SME</b>						
0.00 to <0.15	19,679	29	0.15	0.11	0.11	0.07
0.00 to <0.10	5,056	5	0.10	0.08	0.08	0.05
0.10 to <0.15	14,623	24	0.16	0.12	0.12	0.08
0.15 to <0.25	35,172	62	0.18	0.20	0.20	0.15
0.25 to <0.50	57,617	166	0.29	0.38	0.36	0.40
0.50 to <0.75	66,203	335	0.51	0.62	0.61	0.67
0.75 to <2.50	290,838	3,657	1.26	1.74	1.47	1.36
0.75 to <1.75	209,249	2,163	1.03	1.39	1.21	1.14
1.75 to <2.5	81,589	1,494	1.83	2.11	2.14	2.01
2.50 to <10.00	179,681	9,194	5.12	5.19	5.11	4.30
2.5 to <5	96,017	2,978	3.10	3.56	3.53	3.34
5 to <10	83,664	6,216	7.43	6.82	6.94	5.98
10.00 to <100.00	76,127	18,300	24.04	26.06	24.33	15.88
10 to <20	41,569	5,492	13.21	13.95	14.01	8.34
20 to <30	15,921	3,910	24.56	24.46	24.31	14.99
30.00 to <100.00	18,637	8,898	47.74	48.32	47.37	34.44
100.00 (Default)	26,142					

1 The UK residential mortgages rating system approved by the PRA in April 2023 is reflected in the 31 December 2023 results. The comparatives have not been restated in any retail risk tables and reflect the previous rating systems for HSBC and First Direct residential mortgages.

2 The Hong Kong Hang Seng credit cards approved rating system results are disclosed from 31 December 2023. The comparatives have not been restated in any retail risk tables.

## Model performance

Model validation 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 main material IRB models to HSBC's lead regulator, the PRA.

*For further details of model performance, see page 232 of the Annual Report and Accounts 2023.*

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 47 and 50 above validate the reliability of PD calculations by comparing the PD used in IRB calculations with actual default experience. In Table 50, 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.

## Credit risk

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.

Table 51: Specialised lending and equity exposures under the simple risk-weight approach (CR10)

Specialised lending: Project 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	—	—	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	—	—
<b>Total at 31 Dec 2023</b>	Less than 2.5 years	—	—	—	—	—	—
	Equal to or more than 2.5 years	4	—	—	4	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	—	10	70	—	—	—
	Equal to or more than 2.5 years	169	25	90	181	154	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	2	—	250	2	5	—
	Equal to or more than 2.5 years	1	—	250	1	2	—
Category 5	Less than 2.5 years	3	6	—	4	—	2
	Equal to or more than 2.5 years	—	1	—	—	—	—
Total at 31 Dec 2022	Less than 2.5 years	5	16	—	6	5	2
	Equal to or more than 2.5 years	170	26	—	182	156	2

Specialised lending: Income-producing real estate and high volatility commercial 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	11,478	2,014	50	12,482	6,111	—
	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
	Equal 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
	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
	Equal to or more than 2.5 years	408	—	—	408	—	204
<b>Total at 31 Dec 2023</b>	Less than 2.5 years	23,562	3,510	—	25,196	18,127	557
	Equal to or more than 2.5 years	9,335	769	—	9,782	7,732	289

Category 1	Less than 2.5 years	13,533	2,404	50	14,678	7,287	—
	Equal to or more than 2.5 years	7,875	847	70	8,380	5,815	33
Category 2	Less than 2.5 years	6,093	970	70	6,501	4,504	26
	Equal to or more than 2.5 years	3,183	501	90	3,449	3,041	27
Category 3	Less than 2.5 years	2,038	51	115	2,058	2,342	58
	Equal to or more than 2.5 years	346	6	115	345	384	10
Category 4	Less than 2.5 years	855	112	250	905	2,232	72
	Equal to or more than 2.5 years	187	46	250	196	485	16
Category 5	Less than 2.5 years	447	—	—	447	—	222
	Equal to or more than 2.5 years	235	11	—	237	—	119
Total at 31 Dec 2022	Less than 2.5 years	22,966	3,537	—	24,589	16,365	378
	Equal to or more than 2.5 years	11,826	1,411	—	12,607	9,725	205

Table 51: 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	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
<b>Total at 31 Dec 2023</b>	Less than 2.5 years	6	13	—	11	5	—
	Equal to or more than 2.5 years	31	—	—	31	20	1
Category 1	Less than 2.5 years	587	35	50	613	306	—
	Equal to or more than 2.5 years	542	28	70	563	393	2
Category 2	Less than 2.5 years	58	2	70	59	42	—
	Equal to or more than 2.5 years	38	—	90	38	34	—
Category 3	Less than 2.5 years	4	—	115	5	5	—
	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	3	—	—	3	—	1
	Equal to or more than 2.5 years	—	—	—	—	—	—
Total at 31 Dec 2022	Less than 2.5 years	652	37	—	680	353	1
	Equal to or more than 2.5 years	580	28	—	601	427	2

Table 51.i: Equity exposures under simple risk-weighted approach<sup>1</sup>

Regulatory categories	On-balance sheet amount	Off-balance sheet amount	RW	Exposure amount	RWAs	Expected losses
	\$m	\$m	%	\$m	\$m	\$m
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 <sup>2</sup>	—	830	—	481	1,343	6
<b>Total at 31 Dec 2023</b>	<b>1,966</b>	<b>830</b>		<b>2,447</b>	<b>5,662</b>	<b>26</b>

<sup>1</sup> No comparatives are provided as disclosures were enhanced from June 2023.

<sup>2</sup> Off-balance sheet CIU equity exposures are calculated as per CRR II Article 132(c).

## Pillar 3 Disclosures at 31 December 2023

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 IRB approach are not included in this table. Slotting exposures are disclosed in table 51, Specialised lending and equity exposures under the simple risk-weight approach (CR10).

Table 52: IRB – Credit risk exposures by portfolio and PD range<sup>1</sup> (CR6)

PD scale	On-balance sheet exposures	Off-balance sheet exposures pre-CCF	Exposure weighted average CCF	Exposure post-CCF and post-CRM	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity (years)	Risk weighted exposure amount after supporting factors	Density of risk weighted exposure amount	Expected loss amount	Value adjustments and provisions
	\$bn	\$bn	%	\$bn	%		%	years	\$bn	%	\$bn	\$bn
<b>AIRB – Central government and central banks</b>												
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 <0.10	434.7	1.4	38.4	435.9	0.01	201	42.8	1.9	29.2	7	–	–
0.10 to <0.15	9.7	0.5	31.9	8.1	0.13	144	45.0	1.7	2.5	31	–	–
0.15 to <0.25	1.5	0.5	1.2	1.5	0.22	9	45.0	1.2	0.5	37	–	–
0.25 to <0.50	–	0.1	0.8	–	0.37	5	36.0	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	–
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	–
100.00 (Default)	0.2	–	–	0.1	100.00	2	6.1	4.6	–	23	–	–
<b>Sub-total</b>	<b>459.7</b>	<b>2.9</b>	<b>34.1</b>	<b>459.0</b>	<b>0.21</b>	<b>485</b>	<b>42.9</b>	<b>1.9</b>	<b>48.5</b>	<b>11</b>	<b>0.4</b>	<b>0.1</b>
<b>AIRB – Institutions</b>												
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	–	–	–	–
<b>Sub-total</b>	<b>76.1</b>	<b>18.7</b>	<b>25.8</b>	<b>80.1</b>	<b>0.11</b>	<b>3,520</b>	<b>38.4</b>	<b>1.4</b>	<b>12.5</b>	<b>16</b>	<b>–</b>	<b>–</b>
<b>AIRB – Corporate – specialised lending (excluding slotting)</b>												
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	0.07	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	–
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	–
100.00 (Default)	0.1	–	86.9	0.1	100.00	7	24.1	3.5	–	24	–	–
<b>Sub-total</b>	<b>9.0</b>	<b>5.8</b>	<b>47.4</b>	<b>10.1</b>	<b>3.95</b>	<b>239</b>	<b>27.5</b>	<b>3.4</b>	<b>4.3</b>	<b>43</b>	<b>0.1</b>	<b>0.1</b>



Table 52: IRB – Credit risk exposures by portfolio and PD range<sup>1</sup> (CR6) (continued)

	On- balance sheet expo- sures	Off- balance sheet expo- sures pre-CCF	Expo- sure weigh- ted average CCF	Expo- sure 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
<b>AIRB – Corporate – SME<sup>2</sup></b>												
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	—	—	—	—	22.22	—	2.2	1.0	—	10	—	—
30.00 to <100.00	0.1	—	12.2	0.1	88.17	14	8.7	1.0	—	36	—	—
100.00 (Default)	0.2	—	29.3	0.2	100.00	65	36.9	1.6	0.4	209	0.1	—
<b>Sub-total</b>	<b>12.6</b>	<b>12.8</b>	<b>23.6</b>	<b>15.7</b>	<b>3.15</b>	<b>7,724</b>	<b>30.7</b>	<b>1.9</b>	<b>8.0</b>	<b>51</b>	<b>0.1</b>	<b>0.1</b>
<b>AIRB – Corporate – Other</b>												
0.00 to <0.15	99.3	173.3	31.8	179.5	0.07	8,298	42.4	1.8	36.8	20	—	—
0.00 to <0.10	70.0	111.5	33.1	123.9	0.05	4,288	41.0	1.9	19.6	16	—	—
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	—
0.50 to <0.75	35.0	43.6	26.7	41.4	0.63	5,576	38.9	1.5	25.2	61	0.1	—
0.75 to <2.50	83.5	97.4	29.9	85.5	1.36	23,675	38.9	1.7	71.1	83	0.5	—
0.75 to <1.75	55.3	66.2	28.7	70.6	1.17	17,839	39.3	1.7	59.7	85	0.4	—
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	—
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	—
5 to <10	7.6	6.6	31.5	5.5	6.56	1,851	41.4	1.8	8.6	155	0.2	—
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	—
10 to <20	5.6	2.8	34.5	5.1	14.95	994	30.7	1.5	7.7	150	0.3	—
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	—
100.00 (Default)	8.1	1.1	40.4	8.0	100.00	2,091	41.2	1.5	7.7	96	3.9	—
<b>Sub-total</b>	<b>314.4</b>	<b>438.9</b>	<b>30.1</b>	<b>439.4</b>	<b>2.74</b>	<b>57,580</b>	<b>40.8</b>	<b>1.7</b>	<b>219.1</b>	<b>50</b>	<b>5.6</b>	<b>4.6</b>
<b>Wholesale AIRB – Total at 31 Dec 2023</b>	<b>871.8</b>	<b>479.1</b>	<b>30.0</b>	<b>1,004.3</b>		<b>69,548</b>		<b>1.8</b>	<b>292.4</b>	<b>29.0</b>	<b>6.2</b>	<b>4.9</b>

## Pillar 3 Disclosures at 31 December 2023

Table 52: IRB – Credit risk exposures by portfolio and PD range<sup>1</sup> (CR6) (continued)

PD scale	On-balance sheet exposures \$bn	Off-balance sheet exposures pre-CCF \$bn	Exposure weighted average CCF %	Exposure post CCF and CRM \$bn	Exposure weighted average PD %	Number of obligors <sup>1</sup>	Exposure weighted average LGD %	Exposure weighted average maturity years	Risk weighted exposure amount after supporting factors <sup>2</sup> \$bn	Density of risk weighted exposure amount %	Expected loss amount \$bn	Value adjustments and provisions <sup>3</sup> \$bn
<b>AIRB – Secured by mortgages on immovable property SME</b>												
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	–	–
0.15 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	–	–	15.0	–	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	–	–
<b>Sub-total</b>	<b>0.8</b>	<b>0.1</b>	<b>2.6</b>	<b>0.8</b>	<b>5.55</b>	<b>3,298</b>	<b>21.5</b>	<b>–</b>	<b>0.2</b>	<b>30</b>	<b>–</b>	<b>–</b>
<b>AIRB – Secured by mortgages on immovable property non-SME<sup>2</sup></b>												
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	–
0.50 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	–
0.75 to <1.75	50.2	1.7	61.4	51.3	1.02	243,976	13.2	–	9.9	19	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	0.2	–	83.0	0.2	48.59	1,482	9.2	–	0.1	48	–	–
100.00 (Default)	1.8	–	24.9	1.8	100.00	11,604	20.2	–	2.4	133	0.3	–
<b>Sub-total</b>	<b>377.8</b>	<b>24.6</b>	<b>51.2</b>	<b>389.6</b>	<b>1.00</b>	<b>1,788,239</b>	<b>14.4</b>	<b>–</b>	<b>55.7</b>	<b>14</b>	<b>0.6</b>	<b>0.4</b>
<b>AIRB – Qualifying revolving retail exposures</b>												
0.00 to <0.15	6.8	82.9	44.1	43.3	0.06	15,531,226	89.6	–	1.8	4	–	–
0.00 to <0.10	5.3	72.4	44.4	37.4	0.05	13,483,286	89.2	–	1.3	4	–	–
0.10 to <0.15	1.5	10.5	42.3	5.9	0.13	2,047,940	92.0	–	0.5	8	–	–
0.15 to <0.25	1.2	7.5	53.6	5.1	0.20	2,102,315	89.0	–	0.7	14	–	–
0.25 to <0.50	2.2	7.9	46.8	5.9	0.37	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	–
0.75 to <1.75	3.5	4.4	54.9	5.9	1.22	1,314,354	91.3	–	3.2	55	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	–
2.5 to <5	1.6	0.9	73.7	2.4	3.60	538,680	85.7	–	2.6	111	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	–
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	–
100.00 (Default)	0.2	–	25.2	0.1	100.00	194,895	83.5	–	0.3	182	0.1	–
<b>Sub-total</b>	<b>19.4</b>	<b>106.6</b>	<b>46.3</b>	<b>68.4</b>	<b>0.98</b>	<b>23,066,880</b>	<b>89.4</b>	<b>–</b>	<b>15.6</b>	<b>23</b>	<b>0.7</b>	<b>0.8</b>

Table 52: IRB – Credit risk exposures by portfolio and PD range<sup>1</sup> (CR6) (continued)

PD scale	On-balance sheet exposures \$bn	Off-balance sheet exposures pre-CCF \$bn	Exposure weighted average CCF %	Exposure post CCF and post CRM \$bn	Exposure weighted average PD %	Number of obligors <sup>1</sup>	Exposure weighted average LGD %	Exposure weighted average maturity years	Risk weighted exposure amount after supporting factors <sup>2</sup> \$bn	Density of risk weighted exposure amount %	Expected loss amount \$bn	Value adjustments and provisions <sup>3</sup> \$bn
<b>AIRB – Other SME</b>												
0.00 to <0.15	–	3.6	0.7	0.1	0.07	39,567	51.5	–	–	10	–	–
0.00 to <0.10	–	3.6	0.3	0.1	0.05	16,985	38.4	–	–	6	–	–
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	–
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	–
100.00 (Default)	1.1	–	44.8	0.2	100.00	19,485	42.2	–	0.2	120	0.1	–
<b>Sub-total</b>	<b>7.3</b>	<b>6.9</b>	<b>19.1</b>	<b>3.6</b>	<b>9.27</b>	<b>1,027,170</b>	<b>68.5</b>	<b>–</b>	<b>2.9</b>	<b>80</b>	<b>0.2</b>	<b>0.3</b>
<b>AIRB – Other non-SME</b>												
0.00 to <0.15	7.6	39.3	8.2	11.1	0.07	337,774	36.0	–	0.7	7	–	–
0.00 to <0.10	6.0	35.9	5.8	8.2	0.05	188,348	40.9	–	0.5	6	–	–
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	6.9	2.6	10.0	7.4	1.34	504,843	54.1	–	4.9	65	0.1	–
0.75 to <1.75	5.8	2.2	8.3	6.2	1.18	383,876	51.1	–	3.7	59	0.1	–
1.75 to <2.5	1.1	0.4	19.7	1.2	2.11	120,967	68.9	–	1.2	97	–	–
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	–
10 to <20	0.2	–	44.3	0.2	13.27	33,173	72.1	–	0.3	143	–	–
20 to <30	0.1	–	15.6	0.1	26.17	23,224	75.0	–	0.2	196	–	–
30.00 to <100.00	0.2	0.1	26.4	0.2	73.65	15,214	71.1	–	0.2	105	0.1	–
100.00 (Default)	0.2	–	131.2	0.2	100.00	20,889	68.3	–	0.4	179	0.1	–
<b>Sub-total</b>	<b>26.8</b>	<b>51.7</b>	<b>10.9</b>	<b>33.7</b>	<b>1.86</b>	<b>1,961,213</b>	<b>45.9</b>	<b>–</b>	<b>12.4</b>	<b>37</b>	<b>0.4</b>	<b>0.3</b>
<b>Retail AIRB – Total at 31 Dec</b>	<b>432.10</b>	<b>189.90</b>	<b>36.3</b>	<b>496.10</b>		<b>27,846,800</b>		<b>–</b>	<b>86.8</b>	<b>17</b>	<b>1.9</b>	<b>1.8</b>

## Pillar 3 Disclosures at 31 December 2023

Table 52: IRB – Credit risk exposures by portfolio and PD range<sup>1</sup> (CR6) (continued)

PD scale	On-balance sheet exposures \$bn	Off-balance sheet exposures pre-CCF \$bn	Exposure weighted average CCF %	Exposure post-CCF and post-CRM \$bn	Exposure weighted average PD %	Number of obligors <sup>1</sup>	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk weighted exposure amount after supporting factors <sup>2</sup> \$bn	Density of risk weighted exposure amount %	Expected loss amount \$bn	Value adjustments and provisions <sup>3</sup> \$bn
<b>FIRB – Central government and central banks</b>												
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	–	–
<b>Sub-total</b>	<b>–</b>	<b>–</b>	<b>60.3</b>	<b>0.6</b>	<b>0.03</b>	<b>–</b>	<b>45.0</b>	<b>4.9</b>	<b>0.2</b>	<b>28</b>	<b>–</b>	<b>–</b>
<b>FIRB – Institutions</b>												
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	–	–	–	–	–	–	–	–	–	–	–	–
<b>Sub-total</b>	<b>–</b>	<b>–</b>	<b>7.8</b>	<b>0.2</b>	<b>0.05</b>	<b>1</b>	<b>45.0</b>	<b>0.4</b>	<b>–</b>	<b>8</b>	<b>–</b>	<b>–</b>
<b>FIRB – Corporate – SME<sup>2</sup></b>												
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	0.6	20.6	2.0	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	–
<b>Sub-total</b>	<b>8.1</b>	<b>2.5</b>	<b>18.7</b>	<b>8.2</b>	<b>7.22</b>	<b>9,728</b>	<b>38.2</b>	<b>2.6</b>	<b>4.6</b>	<b>56</b>	<b>0.2</b>	<b>0.1</b>
<b>FIRB – Corporate – Other</b>												
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	9.7	8.8	31.3	13.4	0.37	5,570	36.6	2.0	6.9	51	–	–
0.50 to <0.75	8.8	7.6	33.6	11.4	0.63	4,593	35.0	1.8	7.0	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	–
0.75 to <1.75	18.7	14.6	27.9	22.1	1.20	35,542	35.7	1.9	18.0	81	0.1	–
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	–
2.50 to <10.00	8.8	6.7	42.7	10.0	4.21	5,546	35.8	2.1	12.3	123	0.2	–
2.5 to <5	6.8	5.7	43.4	8.0	3.61	4,135	35.9	2.2	9.4	119	0.1	–
5 to <10	2.0	1.0	38.5	2.0	6.51	1,411	35.4	1.7	2.9	139	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	–
10 to <20	2.7	0.8	37.7	2.4	11.76	871	38.4	1.7	4.3	187	0.1	–
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	–
<b>Sub-total</b>	<b>112.7</b>	<b>111.6</b>	<b>36.5</b>	<b>148.9</b>	<b>3.14</b>	<b>72,076</b>	<b>33.6</b>	<b>1.9</b>	<b>72.7</b>	<b>49</b>	<b>2.2</b>	<b>1.8</b>
<b>FIRB – Total at 31 Dec 2023</b>	<b>120.8</b>	<b>114.1</b>	<b>36.1</b>	<b>157.9</b>		<b>81,805</b>		<b>2.0</b>	<b>77.5</b>	<b>49</b>	<b>2.4</b>	<b>1.9</b>

Table 52: IRB – Credit risk exposures by portfolio and PD range<sup>1</sup> (CR6) (continued)

PD scale	On-balance sheet exposures \$bn	Off-balance sheet exposures pre-CCF \$bn	Exposure weighted average CCF %	Exposure post-CCF and post-CRM \$bn	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk weighted exposure amount after supporting factors \$bn	Density of risk weighted exposure amount %	Expected loss amount \$bn	Value adjustments and provisions \$bn
AIRB – Central government and central banks												
0.00 to <0.15	387.3	2.4	43.4	389.2	0.02	390	42.8	1.8	27.3	7	—	—
0.00 to <0.10	379.4	2.4	43.6	381.2	0.01	262	42.7	1.8	24.3	6	—	—
0.10 to <0.15	7.9	—	39.1	8.0	0.13	128	45.3	2.3	3.0	38	—	—
0.15 to <0.25	0.9	—	50.0	0.5	0.22	13	43.9	1.6	0.2	42	—	—
0.25 to <0.50	1.4	—	41.0	1.4	0.37	12	45.0	1.0	0.7	49	—	—
0.50 to <0.75	5.2	0.3	82.9	5.5	0.63	30	40.0	1.2	3.3	60	—	—
0.75 to <2.50	6.2	0.1	57.0	6.1	1.92	79	44.8	1.1	6.4	104	0.1	—
0.75 to <1.75	1.6	0.1	57.0	1.6	0.99	66	45.0	1.2	1.4	89	—	—
1.75 to <2.5	4.6	—	75.0	4.5	2.25	13	44.7	1.0	5.0	110	0.1	—
2.50 to <10.00	0.6	—	—	0.3	6.26	9	38.4	1.3	0.4	136	—	—
2.5 to <5	0.3	—	—	0.1	4.20	5	45.0	1.0	0.2	138	—	—
5 to <10	0.3	—	—	0.2	7.85	4	33.3	1.5	0.2	135	—	—
10.00 to <100.00	3.2	—	—	3.2	14.97	7.0	45.0	1.2	6.9	212	0.3	—
10 to <20	2.6	—	—	2.6	10.48	5	45.0	1.2	5.4	202	0.2	—
20 to <30	—	—	—	—	—	—	—	—	—	—	—	—
30.00 to <100.00	0.6	—	—	0.6	36.00	2	45.0	1.0	1.5	261	0.1	—
100.00 (Default)	0.3	—	57.0	0.2	100.00	3	20.1	3.5	0.2	102	—	—
Sub-total	405.1	2.8	47.5	406.4	0.23	543	42.8	1.8	45.4	11	0.4	0.1
AIRB – Institutions												
0.00 to <0.15	68.8	12.0	28.9	72.6	0.05	3,056	38.5	1.4	10.3	14	—	—
0.00 to <0.10	59.5	8	28.3	61.7	0.04	1,967	37.8	1.4	6.7	11	—	—
0.10 to <0.15	9.3	4	30.1	10.9	0.13	1,089	42.3	1.3	3.6	33	—	—
0.15 to <0.25	2.1	1.8	24.9	2.6	0.22	220	44.5	1.4	1.1	42	—	—
0.25 to <0.50	0.8	0.5	39.1	1.0	0.37	118	41.6	1.2	0.5	55	—	—
0.50 to <0.75	1.4	0.1	25.2	1.4	0.63	115	44.7	1.1	1.1	74	—	—
0.75 to <2.50	0.4	0.6	32.6	0.4	1.72	140	48.5	1.7	0.5	112	—	—
0.75 to <1.75	0.2	0.1	28.8	0.2	1.36	76	50.6	1.4	0.3	98	—	—
1.75 to <2.5	0.2	0.5	33.5	0.2	2.25	64	45.5	2.1	0.2	132	—	—
2.50 to <10.00	0.1	0.1	22.7	0.1	4.60	41	48.3	1.2	0.1	154	—	—
2.5 to <5	0.1	0.1	19.9	0.1	3.79	35	53.6	1.4	0.1	167	—	—
5 to <10	—	—	31.9	—	5.79	6	40.5	1.0	—	134	—	—
10.00 to <100.00	—	—	90.0	—	10.00	2	60.5	0.5	—	244	—	—
10 to <20	—	—	90.0	—	10.00	2	60.5	0.5	—	244	—	—
100.00 (Default)	—	—	—	—	100.00	3	21.9	2.2	0.2	914	—	—
Sub-total	73.6	15.1	28.8	78.1	0.11	3,695	38.9	1.4	13.8	18	—	—
AIRB – Corporate – specialised lending (excluding slotting)												
0.00 to <0.15	3.0	0.3	62.0	2.8	0.09	39	20.2	3.9	0.5	16	—	—
0.00 to <0.10	1.8	0.1	85.4	1.8	0.07	12	16.8	4.4	0.2	12	—	—
0.10 to <0.15	1.2	0.2	50.5	1.0	0.13	27	26.0	3.1	0.3	22	—	—
0.15 to <0.25	0.9	0.9	40.9	1.1	0.22	41	27.9	3.4	0.3	29	—	—
0.25 to <0.50	0.7	0.3	48.7	0.8	0.37	27	31.6	4.1	0.4	51	—	—
0.50 to <0.75	0.9	1.0	45.2	1.4	0.63	32	29.6	3.3	0.8	55	—	—
0.75 to <2.50	2.4	1.0	39.4	2.2	1.12	50	28.5	3.8	1.4	63	—	—
0.75 to <1.75	2.3	1.0	39.4	2.1	1.08	47	28.9	3.8	1.4	64	—	—
1.75 to <2.5	0.1	—	—	0.1	2.25	3	13.9	4.4	—	46	—	—
2.50 to <10.00	0.4	0.1	57.2	0.3	5.23	9	22.0	4.0	0.2	75	—	—
2.5 to <5	0.1	—	—	0.1	3.05	4	20.0	3.3	—	67	—	—
5 to <10	0.3	0.1	57.2	0.2	5.75	5	22.5	4.1	0.2	77	—	—
10.00 to <100.00	0.2	0.3	56.3	0.4	38.46	6	19.8	3.0	0.5	114	—	—
20 to <30	—	—	—	—	—	—	—	—	—	—	—	—
30.00 to <100.00	0.2	0.3	56.3	0.4	38.46	6	19.8	3.0	0.5	114	—	—
100.00 (Default)	0.1	—	100.0	0.1	100.00	4	25.2	3.5	—	28	0.1	—
Sub-total	8.6	3.9	45.8	9.1	3.64	208	25.6	3.7	4.1	44	0.1	0.1

## Pillar 3 Disclosures at 31 December 2023

Table 52: IRB – Credit risk exposures by portfolio and PD range<sup>1</sup> (CR6) (continued)

PD scale	On-balance sheet exposures \$bn	Off-balance sheet exposures pre-CCF \$bn	Exposure weighted average CCF %	Exposure post-CCF and post-CRM \$bn	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk weighted exposure amount after supporting factors \$bn	Density of risk weighted exposure amount %	Expected loss amount \$bn	Value adjustments and provisions \$bn
AIRB – Corporate – SME												
0.00 to <0.15	0.2	0.6	29.4	0.6	0.12	315	41.6	1.7	0.2	23	—	—
0.00 to <0.10	—	0.1	26.4	0.1	0.06	70	35.7	1.4	—	11	—	—
0.10 to <0.15	0.2	0.5	30.0	0.5	0.13	245	42.7	1.7	0.2	26	—	—
0.15 to <0.25	0.5	1.1	23.4	1.0	0.22	612	44.6	1.5	0.3	33	—	—
0.25 to <0.50	1.0	1.6	24.7	1.5	0.37	879	33.9	2.0	0.6	38	—	—
0.50 to <0.75	1.7	1.6	24.8	2.1	0.63	945	37.0	2.0	1.1	54	—	—
0.75 to <2.50	7.3	4.8	25.9	8.3	1.50	3,453	31.4	1.9	5.1	62	0.1	—
0.75 to <1.75	5.2	3.6	25.7	6.2	1.25	2,459	31.7	1.9	3.7	60	0.1	—
1.75 to <2.5	2.1	1.2	26.5	2.1	2.25	994	30.8	1.7	1.4	68	—	—
2.50 to <10.00	2.4	1.4	25.2	2.5	4.09	1,092	34.1	1.7	2.3	91	—	—
2.5 to <5	1.9	1.2	24.3	2.1	3.59	874	34.3	1.7	1.8	88	—	—
5 to <10	0.5	0.2	30.8	0.4	6.51	218	33.4	1.7	0.5	105	—	—
10.00 to <100.00	0.2	0.1	32.6	0.2	23.79	127	51.4	1.3	0.4	221	—	—
10 to <20	0.1	0.1	32.9	0.1	13.07	69	46.5	1.4	0.2	173	—	—
30.00 to <100.00	0.1	—	32.3	0.1	36.00	58	57.0	1.1	0.2	277	—	—
100.00 (Default)	1.4	0.2	41.8	1.4	100.00	270	34.6	1.7	2.6	180	0.3	—
Sub-total	14.7	11.4	25.8	17.6	9.87	7,693	34.2	1.8	12.6	71	0.4	0.3
AIRB – Corporate – Other												
0.00 to <0.15	94.1	166.6	32.0	179.2	0.08	8,780	42.6	1.9	38.2	21	0.1	—
0.00 to <0.10	64.0	106.9	33.7	121.5	0.05	4,808	41.4	2.0	20.5	17	—	—
0.10 to <0.15	30.1	59.7	28.9	57.7	0.13	3,972	45.2	1.7	17.7	31	0.1	—
0.15 to <0.25	31.7	53.7	30.2	54.2	0.22	5,838	42.6	1.8	22.4	41	0.1	—
0.25 to <0.50	26.4	36.9	28.7	42.2	0.37	4,880	40.2	1.7	21.3	51	0.1	—
0.50 to <0.75	34.2	36.7	27.1	42.1	0.63	5,651	39.1	1.7	27.2	65	0.1	—
0.75 to <2.50	87.2	87.3	28.6	79.7	1.36	20,154	38.2	1.7	69.0	87	0.4	—
0.75 to <1.75	57.0	55.4	28.8	66.2	1.19	14,415	38.4	1.8	55.7	84	0.3	—
1.75 to <2.5	30.2	31.9	27.8	13.5	2.24	5,739	37.1	1.6	13.3	98	0.1	—
2.50 to <10.00	27.1	19.9	26.5	22.1	4.45	6,665	38.3	1.7	27.8	126	0.4	—
2.5 to <5	16.9	14.4	25.3	15.0	3.59	4,675	38.5	1.6	17.8	119	0.2	—
5 to <10	10.2	5.5	30.2	7.1	6.28	1,990	37.8	1.9	10.0	141	0.2	—
10.00 to <100.00	7.6	3.8	26.4	6.2	21.83	1,342	44.4	1.7	14.3	231	0.6	—
10 to <20	6.2	3.2	26.6	4.7	14.72	1,014	43.9	1.7	10.6	228	0.3	—
20 to <30	—	—	—	—	23.69	1	93.6	1.0	—	509	—	—
30.00 to <100.00	1.4	0.6	25.7	1.5	43.42	327	46.0	1.9	3.7	240	0.3	—
100.00 (Default)	7.6	0.8	40.0	7.0	100.00	1,029	42.0	1.5	5.4	77	3.3	—
Sub-total	315.9	405.7	30.2	432.7	2.57	54,339	41.0	1.8	225.6	52	5.1	5.0
Wholesale AIRB – Total at 31 Dec 2022	817.9	438.9	30.3	943.9		66,478		1.8	301.5	32	6.0	5.5

Table 52: IRB – Credit risk exposures by portfolio and PD range<sup>1</sup> (CR6) (continued)

PD scale	On-balance sheet exposures \$bn	Off-balance sheet exposures pre-CCF \$bn	Exposure weighted average CCF %	Exposure post-CCF and post-CRM \$bn	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk weighted exposure amount after supporting factors \$bn	Density of risk weighted exposure amount %	Expected loss amount \$bn	Value adjustments and provisions \$bn
AIRB – Secured by mortgages on immovable property SME												
0.00 to <0.15	—	—	—	—	0.07	14	18.6	—	—	3	—	—
0.00 to <0.10	—	—	—	—	0.07	14	18.6	—	—	3	—	—
0.15 to <0.25	—	—	—	—	0.22	6	25.2	—	—	9	—	—
0.25 to <0.50	0.4	—	—	0.4	0.38	1,327	18.3	—	—	10	—	—
0.50 to <0.75	—	—	116.5	0.1	0.65	351	33.9	—	—	30	—	—
0.75 to <2.50	0.1	—	135.2	0.1	1.72	664	37.7	—	0.1	60	—	—
0.75 to <1.75	—	—	77.7	—	1.15	287	26.2	—	—	35	—	—
1.75 to <2.5	0.1	—	150.6	0.1	2.22	377	47.9	—	0.1	82	—	—
2.50 to <10.00	0.2	—	81.2	0.2	4.46	1,213	24.8	—	0.2	68	—	—
2.5 to <5	0.2	—	51.3	0.2	3.77	935	24.3	—	0.1	61	—	—
5 to <10	—	—	91.7	—	6.79	278	26.6	—	0.1	90	—	—
10.00 to <100.00	—	—	31.6	—	19.23	151	26.0	—	—	119	—	—
20 to <30	—	—	23.6	—	12.14	81	29.5	—	—	124	—	—
10 to <20	—	—	58.6	—	25.44	70	23.0	—	—	115	—	—
100.00 (Default)	0.1	—	95.6	0.1	100.00	244	29.5	—	—	83	—	—
Sub-total	0.8	—	114.1	0.9	5.75	3,970	24.1	—	0.3	38	—	—
AIRB – Secured by mortgages on immovable property non-SME												
0.00 to <0.15	218.2	17.0	83.5	234.8	0.07	1,137,440	14.4	—	24.3	10	0.1	—
0.00 to <0.10	176.1	13.1	78.9	188.6	0.06	942,653	14.5	—	16.4	9	0.1	—
0.10 to <0.15	42.1	3.9	99.0	46.2	0.12	199,433	13.9	—	7.9	17	—	—
0.15 to <0.25	47.9	2.9	93.2	50.6	0.20	228,267	15.7	—	8.3	16	—	—
0.25 to <0.50	39.2	3.7	43.8	40.8	0.36	196,491	15.2	—	8.0	20	—	—
0.50 to <0.75	15.6	1.0	52.6	16.1	0.59	64,122	13.6	—	3.9	24	—	—
0.75 to <2.50	25.4	1.7	47.5	26.2	1.29	116,080	12.6	—	7.8	30	0.1	—
0.75 to <1.75	21.9	1.5	48.9	22.6	1.17	104,293	12.8	—	6.7	30	0.1	—
1.75 to <2.5	3.5	0.2	36.5	3.6	2.03	12,483	11.6	—	1.1	30	—	—
2.50 to <10.00	7.5	0.2	73.0	7.7	4.30	32,756	11.4	—	3.4	44	—	—
2.5 to <5	6.6	0.1	76.4	6.8	3.96	27,316	11.1	—	2.8	41	—	—
5 to <10	0.9	0.1	64.8	0.9	6.80	5,612	13.7	—	0.6	69	—	—
10.00 to <100.00	1.7	0.1	80.3	1.9	21.35	17,412	17.9	—	2.7	143	0.1	—
10 to <20	0.9	0.1	100.0	1.0	13.88	13,257	12.9	—	1.1	105	—	—
20 to <30	0.6	—	47.9	0.6	23.82	2,189	30.1	—	1.3	224	0.1	—
30.00 to <100.00	0.2	—	25.3	0.3	46.31	2,130	10.1	—	0.3	111	—	—
100.00 (Default)	1.7	—	19.0	1.7	100.00	14,634	19.3	—	2.1	126	0.3	—
Sub-total	357.2	26.6	75.5	379.8	0.86	1,807,202	14.5	—	60.5	16	0.6	0.6
AIRB – Qualifying revolving retail												
0.00 to <0.15	6.4	77.7	44.7	41.0	0.06	17,770,403	90.0	—	1.8	4	—	—
0.00 to <0.10	4.9	67.1	44.6	34.8	0.04	15,413,204	89.5	—	1.2	3	—	—
0.10 to <0.15	1.5	10.6	44.7	6.2	0.13	2,358,283	92.8	—	0.6	9	—	—
0.15 to <0.25	1.0	6.8	53.7	4.6	0.21	2,214,698	90.9	—	0.7	16	—	—
0.25 to <0.50	1.7	6.4	48.1	4.8	0.38	2,103,146	90.7	—	1.0	22	0.1	—
0.50 to <0.75	1.3	1.9	58.7	2.5	0.59	740,517	90.8	—	0.9	35	—	—
0.75 to <2.50	3.5	4.5	56.2	5.9	1.37	1,764,020	91.1	—	3.6	60	0.1	—
0.75 to <1.75	3.0	4.1	54.0	5.1	1.23	1,416,077	91.7	—	2.9	56	0.1	—
1.75 to <2.5	0.5	0.4	78.5	0.8	2.22	348,030	87.6	—	0.7	84	—	—
2.50 to <10.00	1.9	0.9	85.2	2.6	4.55	842,575	86.4	—	3.3	125	0.1	—
2.5 to <5	1.3	0.7	77.5	1.8	3.67	576,290	86.3	—	2.0	110	0.1	—
5 to <10	0.6	0.2	116.6	0.8	6.64	266,299	86.7	—	1.3	160	—	—
10.00 to <100.00	0.7	0.2	90.4	0.8	23.18	238,340	85.1	—	2.0	243	0.2	—
10 to <20	0.5	0.1	128.0	0.6	14.21	157,412	84.3	—	1.4	230	0.1	—
20 to <30	0.1	0.1	36.3	0.1	25.95	44,627	90.7	—	0.3	333	—	—
30.00 to <100.00	0.1	—	50.3	0.1	68.70	36,311	85.1	—	0.3	245	0.1	—
100.00 (Default)	0.2	—	51.6	0.2	100.00	226,907	67.9	—	0.4	238	0.1	—
Sub-total	16.7	98.4	46.7	62.4	1.02	25,900,606	90.0	—	13.7	22	0.6	0.6

## Pillar 3 Disclosures at 31 December 2023

Table 52: IRB – Credit risk exposures by portfolio and PD range<sup>1</sup> (CR6) (continued)

PD scale	On-balance sheet exposures \$bn	Off-balance sheet exposures pre-CCF \$bn	Exposure weighted average CCF %	Exposure post-CCF and post-CRM \$bn	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years) years	Risk weighted exposure amount after supporting factors \$bn	Density of risk weighted exposure amount %	Expected loss amount \$bn	Value adjustments and provisions \$bn
AIRB – Other SME												
0.00 to <0.15	—	—	100.2	—	0.11	31,363	89.5	—	—	20	—	—
0.00 to <0.10	—	—	100.0	—	0.07	6,564	79.1	—	—	13	—	—
0.10 to <0.15	—	—	100.2	—	0.13	24,799	93.3	—	—	23	—	—
0.15 to <0.25	—	—	73.5	—	0.21	29,212	92.5	—	—	31	—	—
0.25 to <0.50	—	0.1	62.1	0.1	0.41	83,283	78.2	—	0.1	41	—	—
0.50 to <0.75	0.2	0.2	81.0	0.3	0.61	76,334	61.4	—	0.1	40	—	—
0.75 to <2.50	2.9	1.2	57.0	1.5	1.61	543,172	75.0	—	1.1	77	—	—
0.75 to <1.75	2.0	0.9	56.0	1.1	1.45	399,430	76.2	—	0.8	75	—	—
1.75 to <2.5	0.90	0.3	60.3	0.4	2.15	143,742	71.0	—	0.3	82	—	—
2.50 to <10.00	2.4	0.8	36.0	1.0	5.06	333,499	65.5	—	0.9	90	—	—
2.5 to <5	1.20	0.6	29.1	0.6	3.67	186,820	63.1	—	0.5	87	—	—
5 to <10	1.20	0.2	59.4	0.4	6.89	146,679	68.5	—	0.4	94	—	—
10.00 to <100.00	1.7	0.1	60.4	0.3	22.05	215,793	78.7	—	0.4	142	0.1	—
10 to <20	1.10	0.1	50.1	0.2	13.75	135,916	80.9	—	0.2	130	—	—
20 to <30	0.30	—	83.7	0.1	24.19	36,354	68.4	—	0.1	139	—	—
30.00 to <100.00	0.30	—	70.9	—	44.93	43,523	87.5	—	0.1	183	0.1	—
100.00 (Default)	1.5	0.2	5.5	0.2	100.00	58,538	46.8	—	0.2	104	0.1	—
Sub-total	8.7	2.6	49.3	3.4	10.15	1,371,194	69.9	—	2.8	83	0.2	0.4
AIRB – Other non-SME												
0.00 to <0.15	10.1	44.5	9.8	14.7	0.07	612,413	28.8	—	0.8	6	—	—
0.00 to <0.10	7.1	38.9	7.3	10.0	0.04	417,003	31.4	—	0.4	4	—	—
0.10 to <0.15	3.0	5.6	27.1	4.7	0.12	195,957	23.3	—	0.4	8	—	—
0.15 to <0.25	2.3	3.6	20.8	3.4	0.21	317,038	40.3	—	0.6	19	—	—
0.25 to <0.50	7.0	5.3	13.5	7.9	0.37	354,354	38.3	—	2.1	26	—	—
0.50 to <0.75	3.0	3.5	9.9	3.4	0.63	98,836	27.7	—	0.8	25	—	—
0.75 to <2.50	11.1	4.1	8.2	11.7	1.32	473,196	32.9	—	4.8	41	—	—
1.75 to <2.5	9.5	3.6	7.3	10.0	1.17	381,069	30.6	—	3.7	37	—	—
0.75 to <1.75	1.6	0.5	14.4	1.7	2.13	99,885	45.7	—	1.1	66	—	—
2.50 to <10.00	2.2	0.7	35.3	2.5	4.42	252,503	51.6	—	2.1	81	0.1	—
2.5 to <5	1.5	0.5	47.0	1.8	3.39	152,003	48.6	—	1.4	74	0.1	—
5 to <10	0.7	0.2	5.3	0.7	7.06	101,211	59.0	—	0.7	99	—	—
10.00 to <100.00	0.5	0.2	11.4	0.6	33.81	90,328	52.9	—	0.7	106	0.1	—
10 to <20	0.2	0.1	16.7	0.3	14.17	44,922	65.2	—	0.4	136	—	—
20 to <30	0.1	—	9.2	0.1	26.71	27,259	57.3	—	0.1	150	—	—
30.00 to <100.00	0.2	0.1	9.5	0.2	59.78	18,474	36.6	—	0.2	55	0.1	—
100.00 (Default)	0.2	—	19.7	0.2	100.00	21,327	71.8	—	0.4	267	0.1	—
Sub-total	36.4	61.9	10.9	44.4	1.59	2,219,995	34.1	—	12.3	28	0.3	0.3
Retail AIRB - Total at 31 Dec 2022	419.8	189.5	39.1	490.9		31,302,967		—	89.6	18	1.7	1.9



Table 52: IRB – Credit risk exposures by portfolio and PD range<sup>1</sup> (CR6) (continued)

PD scale	On-balance sheet exposures \$bn	Off-balance sheet exposures pre-CCF \$bn	Exposure weighted average CCF %	Exposure post-CCF and post-CRM \$bn	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years) years	Risk weighted exposure amount after supporting factors \$bn	Density of risk weighted exposure amount %	Expected loss amount \$bn	Value adjustments and provisions \$bn
FIRB – Central government and central banks												
0.00 to <0.15	—	—	75.0	0.7	0.04	—	45.0	3.6	0.2	24	—	—
0.00 to <0.10	—	—	75.0	0.7	0.04	—	45.0	3.6	0.2	24	—	—
0.75 to <2.50	—	—	—	—	—	—	—	—	—	—	—	—
1.75 to <2.5	—	—	—	—	—	—	—	—	—	—	—	—
Sub-total	—	—	75.0	0.7	0.04	—	45.0	3.6	0.2	24	—	—
FIRB – Institutions												
0.00 to <0.15	—	—	14.6	0.1	0.05	1	45.0	2.3	—	19	—	—
0.00 to <0.10	—	—	18.0	0.1	0.05	1	45.0	2.3	—	19	—	—
0.10 to <0.15	—	—	6.3	—	0.13	—	45.0	0.2	—	17	—	—
0.15 to <0.25	—	—	20.1	—	0.22	—	45.0	2.5	—	49	—	—
0.25 to <0.50	0.1	—	—	0.1	0.37	1	45.0	1.6	0.1	53	—	—
Sub-total	0.1	—	15.9	0.2	0.25	2	45.0	1.9	0.1	41	—	—
FIRB – Corporate – SME												
0.00 to <0.15	0.8	0.3	18.9	0.8	0.13	1,425	40.8	2.7	0.2	31	—	—
0.00 to <0.10	—	—	—	—	0.07	2	45.0	1.5	—	17	—	—
0.10 to <0.15	0.8	0.3	18.9	0.8	0.13	1,423	40.8	2.7	0.2	31	—	—
0.15 to <0.25	1.9	0.7	16.3	2.0	0.22	2,647	38.9	2.3	0.7	35	—	—
0.25 to <0.50	2.3	0.7	10.8	2.3	0.37	2,734	38.1	2.7	1.1	48	—	—
0.50 to <0.75	2.0	0.5	18.9	2.0	0.63	1,962	38.2	2.6	1.2	60	—	—
0.75 to <2.50	3.9	0.9	20.7	3.8	1.33	4,346	38.3	2.4	2.9	75	0.1	—
0.75 to <1.75	3.3	0.8	21.5	3.3	1.18	3,708	38.3	2.4	2.4	73	0.1	—
1.75 to <2.5	0.6	0.1	15.1	0.5	2.25	638	38.3	2.3	0.5	88	—	—
2.50 to <10.00	1.2	0.3	21.7	1.1	4.79	1,449	37.5	2.4	1.2	107	—	—
2.5 to <5	0.7	0.2	27.4	0.7	3.59	852	37.0	2.5	0.6	97	—	—
5 to <10	0.5	0.1	11.4	0.4	6.55	597	38.1	2.1	0.6	122	—	—
10.00 to <100.00	0.4	—	17.7	0.3	14.60	412	38.4	1.9	0.5	157	—	—
10 to <20	0.4	—	18.1	0.3	12.71	359	38.3	1.9	0.5	154	—	—
30.00 to <100.00	—	—	11.2	—	38.02	53	39.7	2.1	—	190	—	—
100.00 (Default)	0.6	—	15.0	0.6	100.00	348	38.7	2.2	—	—	0.2	—
Sub-total	13.1	3.4	17.4	12.9	5.79	15,323	38.5	2.4	7.8	61	0.3	0.2
FIRB – Corporate – Other												
0.00 to <0.15	26.0	44.3	44.4	53.0	0.08	7,716	33.4	2.0	9.9	19	—	—
0.00 to <0.10	16.3	29	48.2	34.1	0.05	2,835	34.5	2.0	5.4	16	—	—
0.10 to <0.15	9.7	15.3	37.4	18.9	0.13	4,881	31.6	1.9	4.5	24	—	—
0.15 to <0.25	10.9	13.7	35.7	17.7	0.22	5,058	34.7	1.9	6.6	37	—	—
0.25 to <0.50	9.8	9.8	34.1	12.8	0.37	4,397	36.5	1.8	6.3	49	—	—
0.50 to <0.75	8.2	6.4	32.5	10.6	0.63	3,620	30.9	1.6	5.6	53	—	—
0.75 to <2.50	29.7	23.5	35.2	27.2	1.45	37,293	40.0	2.0	26.8	98	0.2	—
0.75 to <1.75	17.4	15.6	34.4	21.7	1.25	34,021	40.2	2.0	20.6	95	0.1	—
1.75 to <2.5	12.3	7.9	39.6	5.5	2.25	3,272	39.5	2.1	6.2	114	0.1	—
2.50 to <10.00	8.8	6.3	38.5	9.2	4.31	4,810	39.5	2.1	12.4	135	0.2	—
2.5 to <5	6.3	4.3	42.4	6.8	3.60	3,750	38.9	2.3	8.7	129	0.1	—
5 to <10	2.5	2.0	28.1	2.4	6.26	1,060	41.0	1.6	3.7	153	0.1	—
10.00 to <100.00	2.2	0.7	47.7	1.7	12.90	740	35.3	1.7	3.1	179	0.1	—
10 to <20	2.1	0.7	48.8	1.7	12.05	651	35.3	1.7	3.0	180	0.1	—
30.00 to <100.00	0.1	—	11.2	—	58.60	89	36.4	1.2	0.1	151	—	—
100.00 (Default)	3.4	0.7	49.1	3.5	100.00	1,664	44.8	2.2	—	—	1.6	—
Sub-total	99.0	105.4	39.6	135.7	3.43	65,298	35.7	1.9	70.7	52	2.1	1.7
FIRB – Total at 31 Dec 2022	112.2	108.8	38.9	149.5		80,623		2.0	78.8	53	2.4	1.9

1 This table has been updated to include free deliveries. The comparatives have not been restated.

2 Some exposures were reclassified to Corporate Other in June 2023.

3 A new mortgage model was implemented for HSBC UK in May 2023, which changed the exposure distribution across PD bands.

## 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 Value at Risk ('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;

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.

Table 53: 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)	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	<b>Total at 31 Dec 2023</b>					<b>120,276</b>	<b>120,403</b>	<b>120,403</b>	<b>30,936</b>
1	SA-CCR (for derivatives)	6,718	9,675	–	1.40	22,950	22,950	22,950	9,451
2	IMM (for derivatives and SFTs)	–	–	26,664	1.45	38,663	38,663	38,663	11,759
2b	derivatives and long settlement transactions <sup>2</sup>	–	–	26,664	1.45	38,663	38,663	38,663	11,759
4	Financial collateral comprehensive method (for SFTs)					56,378	56,524	56,524	7,795
6	<b>Total at 31 Dec 2022</b>					<b>117,991</b>	<b>118,137</b>	<b>118,137</b>	<b>29,005</b>

- 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 counterparty ('CCPs'), are assigned within the overall credit risk management process. The credit risk function assigns a limit against each counterparty to cover exposure which 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.

## Credit valuation adjustment

CVAs represent the risk of mark-to-market losses on the expected counterparty risk to OTC derivatives and SFTs which 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 54: Credit valuation adjustment capital charge (CCR2)

		At			
		At 31 Dec 2023		At 31 Dec 2022	
		Exposure value	RWAs	Exposure value	RWAs
		\$m	\$m	\$m	\$m
1	Total transactions subject to the Advanced method	21,957	1,605	21,969	1,313
2	– VaR component (including the 3 × multiplier)		285		246
3	– stressed VaR component (including the 3 × multiplier)		1,320		1,067
4	Transactions subject to the Standardised method	10,083	1,158	12,291	1,971
5	<b>Total transactions subject to own funds requirements for CVA risk</b>	<b>32,040</b>	<b>2,763</b>	<b>34,260</b>	<b>3,284</b>

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 and CVA charge.

Table 55: Standardised approach – CCR exposures by regulatory exposure class and risk weights (CCR3)

Risk weight	0%	4%	20%	50%	100%	150%	Total exposure value	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
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
	<b>Total at 31 Dec 2023</b>	<b>9,096</b>	<b>484</b>	<b>152</b>	<b>89</b>	<b>2,216</b>	<b>175</b>	<b>12,212</b>
1	Central governments and central banks	7,640	—	35	7	45	—	7,727
2	Regional government or local authorities	151	—	2	—	14	—	167
3	Public sector entities	—	—	—	—	—	—	—
4	Multilateral development banks	—	—	—	—	—	—	—
5	International organisations	—	—	—	—	—	—	—
6	Institutions	—	—	54	5	403	—	462
7	Corporates	—	—	12	37	1,578	418	2,045
	Total at 31 Dec 2022	7,791	—	103	49	2,040	418	10,401

## 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.

A 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 412 of the Annual Report and Accounts 2023.*

## Pillar 3 Disclosures at 31 December 2023

The table below analyses the collateral used in derivatives and SFT transactions.

Table 56: Composition of collateral for CCR exposure (CCR5)

		Collateral used in derivative transactions				Collateral used in SFTs	
		Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
		Segregated	Unsegregated	Segregated	Unsegregated		
		\$m	\$m	\$m	\$m	\$m	\$m
1	Cash	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	<b>Total at 31 Dec 2023</b>	<b>14,630</b>	<b>162,472</b>	<b>19,145</b>	<b>126,818</b>	<b>545,553</b>	<b>391,466</b>
1	Cash	152	177,183	248	122,264	—	466
2	Debt	10,204	20,969	16,038	23,899	450,480	288,372
3	Equity	—	—	—	—	48,339	36,566
4	Other	—	—	—	—	1,316	1,480
5	<b>Total at 31 Dec 2022</b>	<b>10,356</b>	<b>198,152</b>	<b>16,286</b>	<b>146,163</b>	<b>500,135</b>	<b>326,884</b>

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. Where the credit derivative is used to hedge our own portfolio, no counterparty credit risk capital requirement arises.

Table 57: Credit derivatives exposures (CCR6)

	At 31 Dec 2023		At 31 Dec 2022		
	Protection bought	Protection sold	Protection bought	Protection sold	
	\$m	\$m	\$m	\$m	
<b>Notionals</b>					
1	Single-name credit default swaps	48,240	37,713	60,822	52,598
2	Index credit default swaps	25,536	23,786	30,108	28,584
3	Total return swaps	4,571	13,156	1,015	10,745
6	<b>Total notionals<sup>1</sup></b>	<b>78,347</b>	<b>74,655</b>	<b>91,945</b>	<b>91,927</b>
<b>Fair values</b>					
7	Positive fair value (asset)	444	906	594	496
8	Negative fair value (liability)	(1,171)	(690)	(774)	(490)

<sup>1</sup> These are products where we act as an intermediary for our clients, enabling them to take position in the underlying securities.

## 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 in-depth due diligence of the unique risks associated with these organisations.

The table below provides a breakdown of the exposures and RWAs related to QCCPs and non-QCCPs.

Table 58: Exposures to central counterparties (CCR8)

	At 31 Dec 2023		At 31 Dec 2022	
	Exposure value	RWAs	Exposure value	RWAs
	\$m	\$m	\$m	\$m
1	<b>Exposures to qualifying central counterparties ('QCCPs') (total)</b>	<b>14,477</b>	<b>1,355</b>	<b>1,258</b>
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions)	14,477	289	13,654
3	– OTC derivatives	5,668	113	4,676
4	– exchange-traded derivatives	4,599	92	3,760
5	– securities financing transactions	4,210	84	5,218
7	Segregated initial margin	6,834	—	7,452
8	Non-segregated initial margin	13,506	271	17,510
9	Pre-funded default fund contributions	—	795	—
11	<b>Exposures to non-QCCPs (total)</b>	<b>136</b>	<b>204</b>	<b>1,082</b>
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions)	136	204	644
13	– OTC derivatives	—	—	5
15	– Securities financing transactions	136	204	639
18	Non-segregated initial margin	25	25	38
19	Pre-funded default fund contributions	—	17	—
20	Unfunded default fund contributions	—	74	—

## 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 non-domestic 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 guidelines.

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 2023, 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 \$0.02bn (31 December 2022: \$0.04bn) and for a two-notch downgrade was \$0.11bn (31 December 2022: \$0.1bn).

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

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 %
<b>AIRB – Central government and central banks</b>							
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
<b>Sub-total</b>	<b>10,904</b>	<b>1.97</b>	<b>89</b>	<b>45.0</b>	<b>0.30</b>	<b>2,075</b>	<b>19</b>
<b>AIRB – Institutions</b>							
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	247	1.70	97	45.8	0.72	278	112
2.50 to <10.00	31	3.98	19	45.7	0.60	45	146
10.00 to <100.00	–	–	–	–	–	–	–
<b>Sub-total</b>	<b>42,037</b>	<b>0.09</b>	<b>1,654</b>	<b>44.8</b>	<b>0.70</b>	<b>7,453</b>	<b>18</b>
<b>AIRB – Corporates</b>							
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	622	0.63	522	48.5	1.34	473	76
0.75 to <2.50	1,986	1.40	1,694	46.6	1.25	2,156	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	–	–
<b>Sub-total</b>	<b>21,031</b>	<b>0.81</b>	<b>8,210</b>	<b>46.8</b>	<b>1.30</b>	<b>8,188</b>	<b>39</b>
<b>AIRB – Total at 31 Dec 2023</b>	<b>73,972</b>	<b>0.57</b>	<b>9,953</b>	<b>45.4</b>	<b>0.80</b>	<b>17,716</b>	<b>24</b>
<b>FIRB – Corporates</b>							
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	–	–
<b>FIRB – Total at 31 Dec 2023</b>	<b>34,348</b>	<b>0.28</b>	<b>12,540</b>	<b>45.0</b>	<b>0.86</b>	<b>10,846</b>	<b>32</b>
<b>Total (all portfolios) at 31 Dec 2023</b>	<b>108,320</b>	<b>0.48</b>	<b>22,493</b>	<b>45.3</b>	<b>0.82</b>	<b>28,562</b>	<b>26</b>

## Pillar 3 Disclosures at 31 December 2023

Table 59: IRB – CCR exposures by portfolio and PD scale (CCR4) (continued)

PD scale	Exposure value	Exposure weighted average PD	Number of obligors	Exposure weighted average LGD	Exposure weighted average maturity	RWAs	Density of risk weighted exposure amounts
	\$m	%		%	years		\$m
<b>AIRB – Central government and central banks</b>							
0.00 to <0.15	11,835	0.03	99	45.0	0.58	732	6
0.15 to <0.25	231	0.22	10	45.0	0.28	65	28
0.25 to <0.50	—	—	—	—	—	—	—
0.50 to <0.75	1	0.63	3	45.0	1.45	1	76
0.75 to <2.50	204	2.22	7	45.0	0.91	224	110
2.50 to <10.00	—	—	—	—	—	—	—
10.00 to <100.00	20	10.00	2	45.0	1	39	197
Sub-total	12,291	0.09	121	45.0	0.58	1,061	9
<b>AIRB – Institutions</b>							
0.00 to <0.15	48,882	0.07	5,561	45.0	0.81	7,842	16
0.15 to <0.25	2,237	0.22	490	46.0	0.90	941	42
0.25 to <0.50	595	0.37	104	45.4	0.76	312	52
0.50 to <0.75	692	0.63	101	45.1	0.77	500	72
0.75 to <2.50	342	1.53	129	45.3	0.54	551	161
2.50 to <10.00	36	3.32	20	45.8	0.97	45	126
10.00 to <100.00	—	20.39	4	45.0	0.46	1	218
Sub-total	52,784	0.10	6,409	45.0	0.81	10,192	19
<b>AIRB – Corporates</b>							
0.00 to <0.15	13,936	0.07	3,365	45.8	1.34	2,816	20
0.15 to <0.25	3,258	0.22	1,178	47.2	0.97	1,301	40
0.25 to <0.50	1,993	0.37	616	47.8	2.04	1,188	60
0.50 to <0.75	1,044	0.63	501	45.7	1.00	743	71
0.75 to <2.50	2,658	1.39	1,937	45.7	1.24	2,603	98
2.50 to <10.00	342	4.69	253	46.4	2.76	575	168
10.00 to <100.00	32	32.65	38	44.2	1.72	67	211
100.00 (Default)	78	100.00	9	47.9	0.03	—	—
Sub-total	23,341	0.74	7,897	46.1	1.34	9,293	40
<b>AIRB – Total at 31 Dec 2022</b>	<b>88,416</b>	<b>0.27</b>	<b>14,427</b>	<b>45.3</b>	<b>0.92</b>	<b>20,546</b>	<b>23</b>
<b>FIRB – Corporates</b>							
0.00 to <0.15	20,421	0.07	4,362	45.0	1.25	3,697	18
0.15 to <0.25	3,270	0.22	1,058	45.0	0.91	1,231	38
0.25 to <0.50	1,084	0.37	526	45.0	1.45	626	58
0.50 to <0.75	1,281	0.63	544	45.0	0.21	910	71
0.75 to <2.50	1,854	1.43	1,552	45.0	1.80	1,861	100
2.50 to <10.00	295	4.16	295	45.0	1.13	410	139
10.00 to <100.00	31	19.51	51	45.0	1.18	70	225
100.00 (Default)	15	100.00	38	45.0	0.97	—	—
<b>FIRB – Total at 31 Dec 2022</b>	<b>28,251</b>	<b>0.33</b>	<b>8,426</b>	<b>45.0</b>	<b>1.21</b>	<b>8,805</b>	<b>31</b>
<b>Total (all portfolios) at 31 Dec 2022</b>	<b>116,667</b>	<b>0.28</b>	<b>22,853</b>	<b>45.2</b>	<b>0.99</b>	<b>29,351</b>	<b>25</b>

# 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)	Capital requirement before securitisation (\$m)	Capital requirement after securitisation (\$m)
HBEU	Metrix Portfolio Distribution Plc	Corporate loans	Dec-19	Dec-26	1,006	46	32
HBUK	Neon Portfolio Distribution DAC	Corporate loans	Dec-19	Dec-26	1,610	117	25
HNAH	NA <sup>1</sup>	Corporate loans	Dec-21	Dec-28	2,199	196	37
HBCE	NA <sup>1</sup>	Corporate loans	Dec-22	Dec-29	3,623	224	55
HBUK	Neon Portfolio Distribution DAC	Corporate loans	Dec-23	Dec-30	2,280	146	35

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

## HSBC as originator

We are originator in five synthetic securitisation programmes outstanding as at 31 December 2023, 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 397 of the Financial Statements in the Annual Report and Accounts 2023.*

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	✓	✗	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 343 and 397 respectively in the Financial Statements of the Annual Report and Accounts 2023.*

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 390 of the Financial Statements of the Annual Report and Accounts 2023.*

### 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 2023, our involvement in securitisation activities reflected the following:

- \$10.7bn positions held as synthetic transactions (2022: \$10.4bn);
- 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 (2022: \$0.1bn), which relates to assets within SPEs that are consolidated for regulatory purposes; and
- total exposures include off-balance sheet exposure of \$11.4bn (2022: \$14.0bn), 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 397 of the Annual Report and Accounts 2023.*



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

	Bank acts as originator					Bank acts as sponsor			Bank acts as investor		
	Traditional		Synthetic			Traditional			Traditional		
	Non-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 <b>Total at 31 Dec 2023</b>	<b>59</b>	<b>59</b>	<b>10,718</b>	<b>10,718</b>	<b>10,777</b>	<b>2,192</b>	<b>5,351</b>	<b>7,543</b>	<b>2,242</b>	<b>15,479</b>	<b>17,721</b>
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
1 Total at 31 Dec 2022	41	41	10,418	10,418	10,459	2,011	5,384	7,395	1,419	14,156	15,575
2 Retail (total)	41	41	—	—	41	1,127	4,812	5,939	1,206	7,632	8,838
3 – residential mortgage	41	41	—	—	41	50	1,736	1,786	267	1,355	1,622
4 – credit card	—	—	—	—	—	—	—	—	—	1,276	1,276
5 – other retail exposures	—	—	—	—	—	1,077	3,076	4,153	939	5,001	5,940
7 Wholesale (total)	—	—	10,418	10,418	10,418	884	572	1,456	213	6,524	6,737
8 – loans to corporates	—	—	10,418	10,418	10,418	—	67	67	—	2,622	2,622
9 – commercial mortgage	—	—	—	—	—	—	65	65	—	3,397	3,397
10 – lease and receivables	—	—	—	—	—	884	342	1,226	213	339	552
11 – other wholesale	—	—	—	—	—	—	98	98	—	166	166

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 61: Securitisation exposures in the trading book (SEC2)

	At 31 Dec 2023			At 31 Dec 2022		
	Bank acts as investor <sup>1</sup>			Bank acts as investor <sup>1</sup>		
	Traditional			Traditional		
	STS	Non-STS	Sub-total	STS	Non-STS	Sub-total
\$m	\$m	\$m	\$m	\$m	\$m	
1 <b>Total exposures</b>	<b>476.0</b>	<b>3,174.0</b>	<b>3,650.0</b>	552.0	3,110.0	3,662.0
2 <b>Retail (total)</b>	<b>462.0</b>	<b>2,029.0</b>	<b>2,491.0</b>	512.0	1,914.0	2,426.0
3 – residential mortgage	98.0	1,509.0	1,607.0	129.0	1,458.0	1,587.0
4 – credit card	25.0	1.0	26.0	9.0	4.0	13.0
5 – other retail exposures	339.0	519.0	858.0	374.0	452.0	826.0
7 <b>Wholesale (total)</b>	<b>14.0</b>	<b>1,145.0</b>	<b>1,159.0</b>	40.0	1,196.0	1,236.0
8 – loans to corporates	—	69.0	69.0	—	1.0	1.0
9 – commercial mortgage	—	807.0	807.0	—	807.0	807.0
10 – lease and receivables	2.0	—	2.0	3.0	—	3.0
11 – other wholesale	12.0	269.0	281.0	37.0	388.0	425.0

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

## Pillar 3 Disclosures at 31 December 2023

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

	Exposure values (by risk weight bands/deductions)					Exposure values (by regulatory approach)				
	≤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	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
1 <b>Total at 31 Dec 2023</b>	<b>15,322</b>	<b>2,650</b>	<b>145</b>	<b>190</b>	<b>13</b>	<b>10,764</b>	<b>7,315</b>	<b>228</b>	<b>13</b>	
2 Traditional transactions	4,677	2,650	145	128	2	57	7,315	228	2	
3 Securitisation	4,677	2,650	145	128	2	57	7,315	228	2	
4 – retail underlying	3,216	2,459	145	63	2	57	5,750	76	2	
5 – of which: STS	1,227	–	–	–	–	–	1,227	–	–	
6 – wholesale	1,461	191	–	65	–	–	1,565	152	–	
7 – of which: STS	965	–	–	–	–	–	965	–	–	
9 Synthetic transactions	10,645	–	–	62	11	10,707	–	–	11	
10 Securitisation	10,645	–	–	62	11	10,707	–	–	11	
12 – wholesale	10,645	–	–	62	11	10,707	–	–	11	
1 Total at 31 Dec 2022	14,894	2,574	202	159	25	10,434	7,136	259	25	
2 Traditional securitisation	4,520	2,574	202	140	–	41	7,136	259	–	
3 Securitisation	4,520	2,574	202	140	–	41	7,136	259	–	
4 – retail underlying	3,280	2,425	202	73	–	41	5,843	96	–	
5 – of which: STS	1,127	–	–	–	–	–	1,127	–	–	
6 – wholesale	1,240	149	–	67	–	–	1,293	163	–	
7 – of which: STS	884	–	–	–	–	–	884	–	–	
9 Synthetic securitisation	10,374	–	–	19	25	10,393	–	–	25	
10 Securitisation	10,374	–	–	19	25	10,393	–	–	25	
12 – wholesale	10,374	–	–	19	25	10,393	–	–	25	

Table 62: Securitisation exposures in the non-trading book and associated regulatory capital requirements – bank acting as originator or as sponsor (SEC3) (continued)

	RWAs (by regulatory approach)				Capital charge after cap			
	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
1 <b>Total at 31 Dec 2023</b>	<b>2,169</b>	<b>1,633</b>	<b>108</b>	<b>164</b>	<b>173</b>	<b>131</b>	<b>9</b>	<b>13</b>
2 Traditional transactions	7	1,633	108	21	1	131	9	2
3 Securitisation	7	1,633	108	21	1	131	9	2
4 – retail underlying	7	1,236	85	21	1	99	7	2
5 – of which: STS	–	151	–	–	–	12	–	–
6 – wholesale	–	397	23	–	–	32	2	–
7 – of which: STS	–	101	–	–	–	8	–	–
9 Synthetic transactions	2,162	–	–	143	172	–	–	11
10 Securitisation	2,162	–	–	143	172	–	–	11
12 – wholesale	2,162	–	–	143	172	–	–	11
1 Total at 31 Dec 2022	1,729	1,681	130	306	138	134	10	24
2 Traditional securitisation	2	1,681	130	–	–	134	10	–
3 Securitisation	2	1,681	130	–	–	134	10	–
4 – retail underlying	2	1,327	106	–	–	106	8	–
5 – of which: STS	–	143	–	–	–	11	–	–
6 – wholesale	–	354	24	–	–	28	2	–
7 – of which: STS	–	95	–	–	–	8	–	–
9 Synthetic securitisation	1,727	–	–	306	138	–	–	24
10 Securitisation	1,727	–	–	306	138	–	–	24
12 – wholesale	1,727	–	–	306	138	–	–	24

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

	Exposure values (by risk weight bands)					Exposure values (by regulatory approach)				
	≤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	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
1 <b>Total at 31 Dec 2023</b>	<b>13,754</b>	<b>2,807</b>	<b>1,128</b>	<b>32</b>	—	—	<b>1,418</b>	<b>16,303</b>	—	
2 Traditional securitisation	13,754	2,807	1,128	32	—	—	1,418	16,303	—	
3 Securitisation	13,754	2,807	1,128	32	—	—	1,418	16,303	—	
4 – retail underlying	9,238	1,125	454	29	—	—	731	10,115	—	
5 – of which: STS	2,176	—	—	—	—	—	49	2,127	—	
6 – wholesale	4,516	1,682	674	3	—	—	687	6,188	—	
7 – of which: STS	66	—	—	—	—	—	—	66	—	
1 Total at 31 Dec 2022	12,592	2,033	899	50	1	235	1,434	13,905	1	
2 Traditional securitisation	12,592	2,033	899	50	1	235	1,434	13,905	1	
3 Securitisation	12,592	2,033	899	50	1	235	1,434	13,905	1	
4 – retail underlying	7,960	634	196	48	—	—	835	8,003	—	
5 – of which: STS	1,206	—	—	—	—	—	—	1,206	—	
6 – wholesale	4,632	1,399	703	2	1	235	599	5,902	1	
7 – of which: STS	213	—	—	—	—	—	—	213	—	

Table 63.i: Securitisation exposures in the non-trading book and associated capital requirements – bank acting as investor (SEC4) (continued)

	RWAs (by regulatory approach)				Capital charge after cap				
	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	
1 <b>Total at 31 Dec 2023</b>	—	<b>777</b>	<b>3,034</b>	<b>2</b>	—	<b>62</b>	<b>243</b>	—	
2 Traditional securitisation	—	777	3,034	2	—	62	243	—	
3 Securitisation	—	777	3,034	2	—	62	243	—	
4 – retail underlying	—	161	1,844	—	—	13	148	—	
5 – of which: STS	—	5	218	—	—	—	17	—	
6 – wholesale	—	616	1,190	2	—	49	95	—	
7 – of which: STS	—	—	7	—	—	—	1	—	
1 Total at 31 Dec 2022	35	743	2,453	8	3	60	197	1	
2 Traditional securitisation	35	743	2,453	8	3	60	197	1	
3 Securitisation	35	743	2,453	8	3	60	197	1	
4 – retail underlying	—	203	1,355	6	—	16	108	1	
5 – of which: STS	—	—	141	—	—	—	11	—	
6 – wholesale	35	540	1,098	2	3	44	89	—	
7 – of which: STS	—	—	21	—	—	—	2	—	

The table below shows RWAs and exposures by type, risk-weight bands and regulatory approach for trading securitisation exposures where the bank acts as an investor.

Table 63.ii: Securitisation exposures in the trading book and associated capital requirements – bank acting as investor (SEC4)

	Exposure values (by risk weight bands)					Exposure values (by regulatory)				
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to < 1250% RW	1250%/ deductions	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions		
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m		
1 <b>Total exposures</b>	<b>3,208</b>	<b>201</b>	<b>124</b>	<b>115</b>	<b>3</b>	<b>1,364</b>	<b>2,284</b>	—		
2 Traditional securitisation	3,208	201	124	115	3	1,364	2,284	—		
3 Securitisation	3,208	201	124	115	3	1,364	2,284	—		
4 – retail underlying	2,229	169	81	13	—	1,178	1,314	—		
5 – of which: STS	416	31	10	6	—	213	249	—		
6 – wholesale	979	32	43	102	3	186	970	—		
7 – of which: STS	12	2	—	—	—	2	12	—		
1 Total at 31 Dec 2022	3,185	196	143	135	3	1,382	2,277	3		
2 Traditional securitisation	3,185	196	143	135	3	1,382	2,277	3		
3 Securitisation	3,185	196	143	135	3	1,382	2,277	3		
4 – retail underlying	2,134	167	83	42	—	1,115	1,311	—		
5 – of which: STS	449	36	12	15	—	353	159	—		
6 – wholesale	1,051	29	60	93	3	267	966	3		
7 – of which: STS	37	3	—	—	—	3	37	—		

## Pillar 3 Disclosures at 31 December 2023

Table 63.ii: Securitisation exposures in the trading book and associated capital requirements – bank acting as investor (SEC4) (continued)

	RWAs (by regulatory approach)			Capital charge after cap		
	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions
	\$m	\$m	\$m	\$m	\$m	\$m
1 <b>Total exposures</b>	<b>515</b>	<b>369</b>	<b>38</b>	<b>41</b>	<b>30</b>	<b>3</b>
2 Traditional securitisation	515	369	38	41	30	3
3 Securitisation	515	369	38	41	30	3
4 – retail underlying	273	199	3	22	16	—
5 – of which: STS	42	26	—	3	2	—
6 – wholesale	242	170	35	19	14	3
7 – of which: STS	—	1	—	—	—	—
1 Total at 31 Dec 2022	588	356	42	47	28	3
2 Traditional securitisation	588	356	42	47	28	3
3 Securitisation	588	356	42	47	28	3
4 – retail underlying	293	211	4	23	17	—
5 – of which: STS	78	18	—	6	1	—
6 – wholesale	295	145	38	24	11	3
7 – of which: STS	1	4	—	—	—	—

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

	Total outstanding nominal amount		Total amount of specific credit risk adjustments made during the period
	of which: exposures in default		
	\$m	\$m	\$m
1 <b>Total at 31 Dec 2023</b>	<b>19,298</b>	<b>68</b>	<b>22</b>
2 Retail (total)	5,885	64	—
3 – residential mortgage	1,835	19	—
5 – other retail exposures	4,050	45	—
7 Wholesale (total)	13,413	4	22
8 – loans to corporates	11,761	—	22
9 – commercial mortgage	64	—	—
10 – lease and receivables	1,500	4	—
11 – other wholesale	88	—	—
1 Total at 31 Dec 2022	18,910	85	23
2 Retail (total)	5,980	81	—
3 – residential mortgage	1,827	35	—
5 – other retail exposures	4,153	46	—
7 Wholesale (total)	12,930	4	23
8 – loans to corporates	11,540	—	23
9 – commercial mortgage	65	—	—
10 – lease and receivables	1,226	4	—
11 – other wholesale	99	—	—

# 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 14.

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 218 of the Annual Report and Accounts 2023.*

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

Table 65: Market risk under standardised approach (MR1)

		At	
		31 Dec 2023	31 Dec 2022
		RWAs \$m	RWAs \$m
<b>Outright products</b>			
1	Interest rate risk (general and specific)	1,150	1,684
2	Equity risk (general and specific)	108	64
3	Foreign exchange risk	12,875	10,391
4	Commodity risk	107	570
<b>Options</b>			
7	Scenario approach	10	10
8	<b>Securitisation (specific risk)</b>	<b>922</b>	<b>986</b>
9	<b>Total</b>	<b>15,172</b>	<b>13,705</b>

The \$1.5bn uplift in market risk RWAs under the standardised approach reflects hedges related to the agreed sale of our banking business in Canada. The rise was partly offset by changes in capitalisation methodology of white metals in HSBC Bank plc.

Table 66: Market risk under IMA (MR2-A)

		At 31 Dec 2023		At 31 Dec 2022	
		RWAs \$m	Capital requirements \$m	RWAs \$m	Capital requirements \$m
1	<b>VaR (higher of values a and b)<sup>1</sup></b>	<b>7,164</b>	<b>573</b>	7,630	611
(a)	Previous day's VaR ('VaRt-1')		218		154
(b)	Multiplication factor (mc) x average of previous 60 working days ('VaRavg')		573		611
2	<b>Stressed VaR (higher of values a and b)<sup>1</sup></b>	<b>8,297</b>	<b>664</b>	11,091	887
(a)	Latest available stressed VaR ('sVaRt-1')		269		153
(b)	Multiplication factor (ms) x average of previous 60 working days ('sVaRavg')		664		887
3	<b>IRC (higher of values a and b)<sup>1</sup></b>	<b>5,163</b>	<b>413</b>	3,429	274
(a)	Most recent IRC measure		410		274
(b)	12 weeks average IRC measure		413		274
5	<b>Other</b>	<b>1,694</b>	<b>135</b>	1,775	142
6	<b>Total</b>	<b>22,318</b>	<b>1,785</b>	23,925	1,914

<sup>1</sup> VaR average values are calculated on a 60 business days basis. Stressed VaR and IRC average values are calculated on a 12-week basis.

Under the Internal model approach, RWAs decreased by \$1.6bn over the year, mainly due to reductions in Risk not in VaR ('RNIV') add-ons for rates and equities asset classes. This was largely offset by an increase in the IRC add-on owing to position changes.

## 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 218 of the Annual Report and Accounts 2023.*

## 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, stressed VaR also captures risk factors considered in the VaR-based RNIV approach through a corresponding stressed VaR 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 which 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

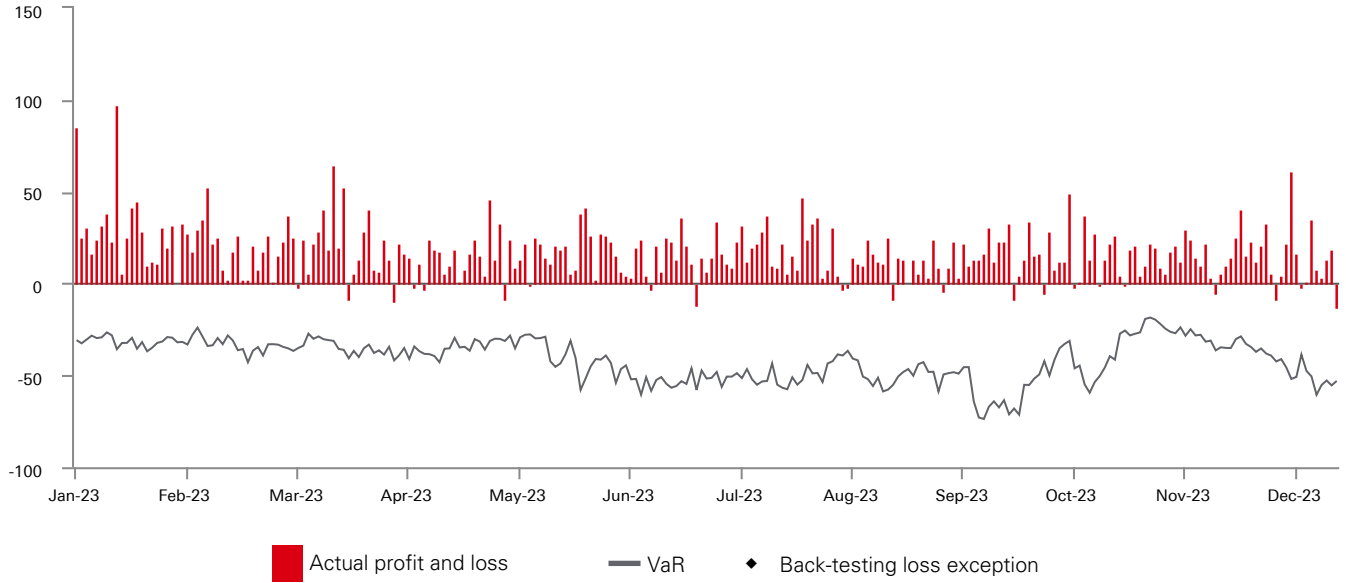
exception occurs, to quarterly submissions. VaR back-testing loss, and not profit, exceptions count towards the multiplier determined by the PRA for the purposes of the market risk capital requirement calculation. The multiplier is increased if there are five or more loss

exceptions in a 250-day period. During 2023, the Group experienced no back-testing exceptions on losses against actual or hypothetical profit and losses

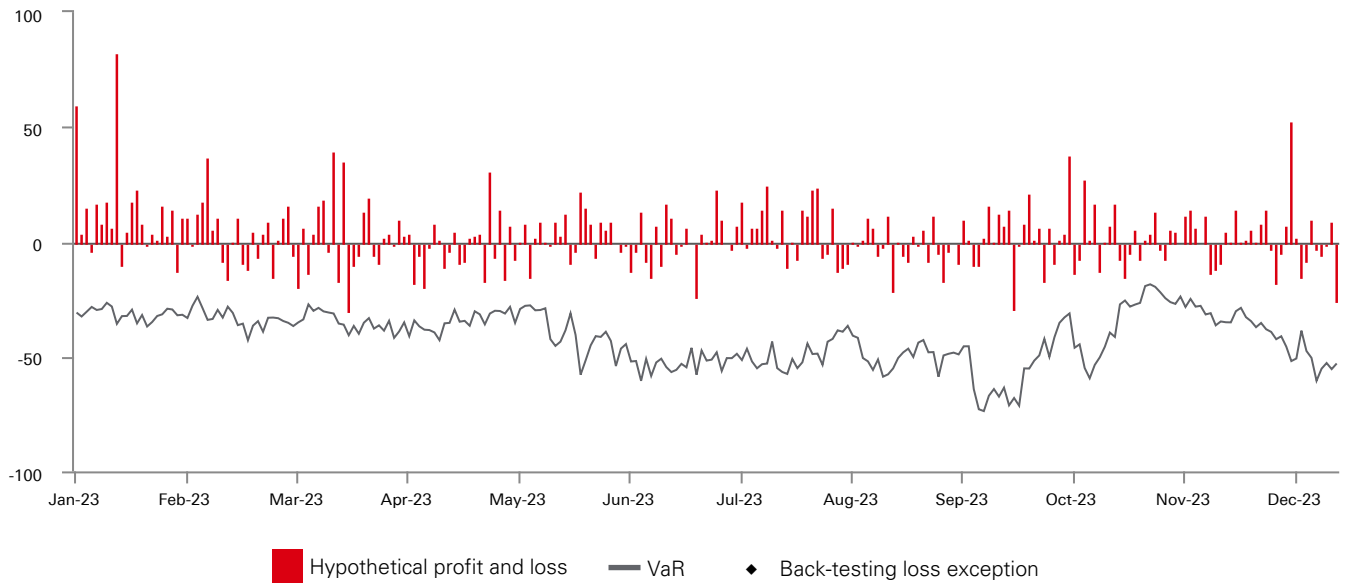
The following graphs show a 12-month history for VaR back-testing exceptions against both actual and hypothetical profit and loss.

**Table 67: 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	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.
Stressed VaR	99%	10-day	Stressed VaR 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 68: IMA values for trading portfolios (MR3)

		At 31 Dec	
		2023	2022
		\$m	\$m
<b>VaR (10 day 99%)</b>			
1	Maximum value	<b>294.1</b>	260.6
2	Average value	<b>201.4</b>	150.3
3	Minimum value	<b>109.5</b>	113.7
4	Period end	<b>176.0</b>	160.1
<b>Stressed VaR (10 day 99%)</b>			
5	Maximum value	<b>342.5</b>	312.5
6	Average value	<b>221.6</b>	206.3
7	Minimum value	<b>115.6</b>	136.6
8	Period end	<b>266.9</b>	160.6
<b>Incremental risk charge (99.9%)</b>			
9	Maximum value	<b>557.7</b>	301.1
10	Average value	<b>455.6</b>	258.6
11	Minimum value	<b>347.0</b>	200.5
12	Period end	<b>409.8</b>	274.0

## VaR

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

VaR	Regulatory	Management
Scope	Regulatory approval (PRA)	Broader population of trading and 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 RNIIVs.

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 2023*, which shows a fully diversified view used for internal risk management.

In 2023, trading VaR (10 day, 99%) increased by \$16m, and was mainly driven by the interest rate risk component of VaR, including:

- interest rate risk exposures in currencies held across fixed income and foreign exchange business lines to facilitate client-driven activity; and
- the effects of relatively large short-term interest rate shocks for key currencies which are captured in the VaR scenario window.

## Stressed VaR

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

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

- potential market movements employed for stressed VaR 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 Stressed VaR.



This assessment relies on a weekly monitoring which resulted in the following period changes during 2023:

- between January 2008 and December 2008 from January 2023;
- between September 2012 and August 2013 from April 2023;
- between February 2022 and January 2023 from July 2023;
- between October 2021 and October 2022 from October 2023;
- between November 2007 and November 2008 from November 2023

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 \$106m in 2023, which was primarily driven by loss contributions from interest rate exposures in the Fixed Income and Foreign Exchange businesses.

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

Table 69: Prudential valuation adjustments (PV1)

	Risk Category	Category level AVA - Valuation uncertainty						Total category level post-diversification	of which: Total core approach in the trading book	of which: Total core approach in the banking book	
		Equity	Interest rates	FX	Credit	Commodities	Un-earned credit spreads AVA				Investment and funding costs AVA
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
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
<b>12</b>	<b>Total Additional Valuation Adjustments (AVAs) at 31 Dec 2023</b>								<b>1,238</b>	<b>903</b>	<b>335</b>
1	Market price uncertainty	394	303	34	185	5	73	—	415	271	144
3	Close-out cost	83	116	31	29	2	232	—	247	224	23
4	Concentrated positions	50	135	19	88	—	—	—	292	199	93
6	Model risk	35	104	4	16	—	79	36	137	136	1
7	Operational risk	23	31	3	10	—	—	—	67	51	16
10	Future administrative costs	—	5	—	6	—	—	—	11	9	2
<b>12</b>	<b>Total Additional Valuation Adjustments (AVAs) at 31 Dec 2022</b>								<b>1,169</b>	<b>890</b>	<b>279</b>

The net PVA charge increased by \$69m compared to 2022 as a result of:

- increased market price uncertainty and exit cost related to illiquid exposures, partially offset by reduction in underlying exposures and improvement in credit and liquidity conditions.

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. In 2023, an internally built model replaced the external vendor engine.

In 2023, the IRC increased by \$136m and was mainly driven by exposures to investment-grade sovereigns in Asia and Europe, coupled with lower offsetting gains from credit index hedges.

## 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 items for which the highest PVA is observed include (i) asset backed securities and other fixed income securities, (ii) structured derivative products and (iii) valuation adjustments related to derivatives.

## Non-financial risk

Non-financial risk is the risk of loss resulting from people, inadequate or failed internal processes, data or systems, or external events. Sound non-financial risk management is central to achieving fair outcomes for our customers, grow our business safely and maintain 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.

Operational risk is part of non-financial risk. The table below provides details of the overall calculation. We currently use the standardised approach in determining our operational risk capital requirement.

Table 70: Operational risk own funds requirements and risk-weighted exposure amounts (OR1)

	Relevant indicator			Own funds requirements	Risk weighted exposure amount
	2021	2022	2023		
Banking activities	\$m	\$m	\$m	\$m	\$m
2 Banking activities subject to standardised (TSA)/alternative standardised (ASA) approaches				<b>7,773</b>	<b>97,157</b>
3 Subject to TSA:					
Corporate Finance	1,252	678	<b>734</b>		
Trading and Sales	5,295	5,507	<b>1,769</b>		
Commercial Banking	17,441	23,146	<b>33,815</b>		
Retail Banking	15,472	19,764	<b>24,617</b>		
Payment and Settlement	1,662	1,909	<b>2,087</b>		
Agency Services	1,042	1,031	<b>979</b>		
Asset Management	2,194	2,056	<b>2,054</b>		

## Organisation and responsibilities

The RMF sets out our approach to governance and risk appetite and the principles for our management of non-financial risks and associated controls. Responsibility for managing non-financial risk lies with our people. During 2023, 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 GRCO 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 operational 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 2023. 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 RMMs and the Non-Financial Risk Management Board ('NFRMB'). The NFRMB is a formal governance body which provides recommendations and advice to the GRCO in relation to the management of the HSBC Non-Financial Risk profile, including elements of the RMF which support non-financial risk management.

## Measurement and monitoring

The RMF is written as a high-level standard, supplemented by detailed policies. These policies explain our approach to identifying, assessing, monitoring and controlling non-financial risk and give 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 non-financial risk exposure against that risk 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

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## 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 eight markets, which are Hong Kong, Singapore, mainland China, France, the UK, Malta, Mexico and Argentina. We also have a life insurance manufacturing associate in India.

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, reducing 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 233 of the Annual Report and Accounts 2023.*

## 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 71: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (UK CCyB1)

Country/ territory	General credit exposures		Relevant credit exposures – Market risk		Securiti- sation exposures	Own funds requirements							
	SA	IRB	Sum of long/ short posi- tions for SA	Inter- nal models	Total Exposure value for non- trading book	Total exposure value	Relevant credit expo- sures – Credit risk	Relevant credit expo- sures – Market risk	Securi- tisation posi- tions in the non- trading book	Total	Risk weigh- ted expo- sure amo- unts	Own funds require- ments weig- hts	CCyB rate
							\$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	–
Mainland China	22,944	62,761	205	1,041	1,691	88,642	5,552	22	20	5,594	69,925	11.01	–
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	–
Indonesia	558	6,559	–	84	–	7,201	368	6	–	374	4,675	0.74	–
Ireland	730	5,913	863	7	710	8,223	196	18	9	223	2,788	0.44	1.00
Lithuania	–	6	–	1	–	7	–	–	–	–	–	–	1.00
Luxembourg	4,385	8,144	4	40	–	12,573	716	5	–	721	9,013	1.42	0.50
Malaysia	2,408	12,148	–	35	–	14,591	581	3	–	584	7,300	1.15	–
Mexico	27,369	4,628	–	146	741	32,884	1,825	9	10	1,844	23,049	3.63	–
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	–
Singapore	2,437	32,938	–	38	–	35,413	997	5	–	1,002	12,525	1.97	–
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	–
United Arab Emirates	4,581	17,406	–	37	–	22,024	721	2	–	723	9,037	1.42	–
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	–
Other countries/ territories	28,969	91,363	450	868	679	122,329	4,845	121	9	4,975	62,187	9.79	–
<b>Total</b>	<b>176,262</b>	<b>1,295,316</b>	<b>3,650</b>	<b>4,510</b>	<b>36,010</b>	<b>1,515,748</b>	<b>49,752</b>	<b>433</b>	<b>631</b>	<b>50,816</b>	<b>635,200</b>	<b>100.00</b>	

Table 71: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (UK CCyB1) (continued)

Country/ territory	General credit exposures		Relevant credit exposures – Market risk		Securiti- sation exposures	Own funds requirements							
	SA	IRB	Sum of long/ short posi- tions for SA	Inter- nal models	Total Exposure value for non- trading book	Total exposure value	Relevant credit risk	Relevant credit expos- ures	Securi- tisation posi- tions in the non- trading book	Total	Risk weigh- ted expo- sure amo- unts	Own funds require- ments weigh- ts	CCyB rate
							– Credit risk	– Market risk	–				
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	%	%
Australia	937	40,379	694	17	769	42,796	1,027	19	10	1,056	13,200	2.10	—
Bulgaria	1	13	—	1	—	15	—	—	—	—	—	—	1.00
Canada	776	70,429	—	10	188	71,403	2,062	4	3	2,069	25,850	4.10	—
Mainland China	25,526	66,571	316	604	1,285	94,302	6,246	16	15	6,277	78,475	12.50	—
Croatia	—	—	—	—	—	—	—	—	—	—	—	—	—
Cyprus	—	—	—	—	—	—	—	—	—	—	—	—	—
Czech Republic	70	390	—	2	—	462	23	—	—	23	300	0.10	1.50
Denmark	1	1,833	—	26	—	1,860	72	2	—	74	925	0.20	2.00
Estonia	—	—	—	—	—	1	—	—	—	—	—	—	1.00
France	4,346	49,688	51	48	6,110	60,243	1,453	8	77	1,538	19,225	3.10	—
Germany	840	13,846	172	12	606	15,476	571	7	6	584	7,300	1.20	—
Hong Kong	22,358	347,602	—	297	—	370,257	11,165	20	—	11,185	139,813	22.20	1.00
Iceland	—	14	—	—	—	14	—	—	—	—	—	—	2.00
India	3,941	17,643	—	208	501	22,293	1,173	5	14	1,192	14,900	2.40	—
Indonesia	658	6,055	—	1	—	6,714	348	7	—	355	4,438	0.70	0.50
Ireland	—	—	—	—	—	—	—	—	—	—	—	—	—
Lithuania	—	—	—	—	—	—	—	—	—	—	—	—	—
Luxembourg	1,323	7,167	3	11	—	8,504	361	2	—	363	4,538	0.70	0.50
Malaysia	2,539	11,869	—	9	—	14,417	647	4	—	651	8,138	1.30	—
Mexico	21,271	3,760	—	45	517	25,593	1,400	9	6	1,415	17,700	2.80	—
Netherlands	1,422	8,723	375	56	952	11,528	417	10	12	439	5,488	0.90	—
Norway	1	463	—	31	—	495	8	1	—	9	113	—	2.00
Romania	—	28	—	5	—	33	1	—	—	1	13	—	0.50
Saudi Arabia	20,912	3,354	—	112	—	24,378	1,536	18	—	1,554	19,425	3.10	—
Singapore	2,269	33,694	—	55	—	36,018	890	4	—	894	11,175	1.80	—
Slovakia	14	35	—	1	—	50	1	—	—	1	25	—	1.00
Slovenia	—	—	—	—	—	—	—	—	—	—	—	—	—
Sweden	6	1,113	—	17	—	1,136	30	1	—	31	388	0.10	1.00
Taiwan	—	—	—	—	—	—	—	—	—	—	—	—	—
United Arab Emirates	4,538	17,336	—	42	—	21,916	719	1	—	720	9,000	1.40	—
United Kingdom	13,967	349,536	935	324	12,002	376,764	9,010	50	248	9,308	116,350	18.50	1.00
United States	6,154	112,427	82	276	9,508	128,447	4,594	15	162	4,771	59,638	9.50	—
Other countries/ territories	32,114	114,883	1,036	926	962	149,921	5,706	119	14	5,839	72,933	11.60	—
<b>Total</b>	<b>165,984</b>	<b>1,278,852</b>	<b>3,664</b>	<b>3,136</b>	<b>33,400</b>	<b>1,485,036</b>	<b>49,460</b>	<b>322</b>	<b>567</b>	<b>50,349</b>	<b>629,350</b>	<b>100.00</b>	

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 72: Amount of institution-specific countercyclical capital buffer (UK CCyB2)

	2023	2022
Total Risk Exposure Amount (\$m)	<b>854,114</b>	839,720
Institution specific countercyclical capital buffer rate (%)	<b>0.67</b>	0.42
Institution specific countercyclical capital buffer requirement (\$m)	<b>5,723</b>	3,527

## 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 2023. This includes gender and ethnic representation.

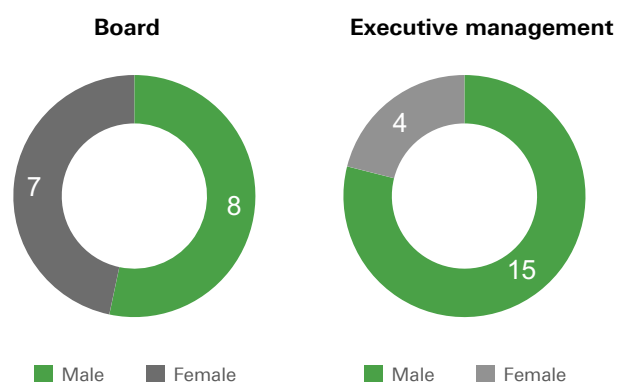
The Financial Conduct Authority ('FCA') requires all listed companies to publish in their Annual Report and Accounts, information on female and ethnic heritage representation on the Board and in senior management. The following tables outline the current gender and ethnic diversity of the HSBC Holdings Board and executive management reflecting data gathered through self-identification. HSBC Board adheres to its agreed principles for recruitment to the Board and its diversity and inclusion policy. Details of the Board members, their directorships, targets and achievements are available on pages 239 to 243 and 313 in the *Annual Report and Accounts 2023*.

### Board gender representation

The below table represents our gender diversity within our board and executive management within HSBC. We continued to improve our board equality in 2023.

	Board members		Number of senior positions <sup>1</sup>	Executive management	
	Number	%		Number	%
Male	8	53	4	15	79
Female	7	47	—	4	21
Other	—	—	—	—	—
Not specified/prefer not to say	—	—	—	—	—

#### Gender

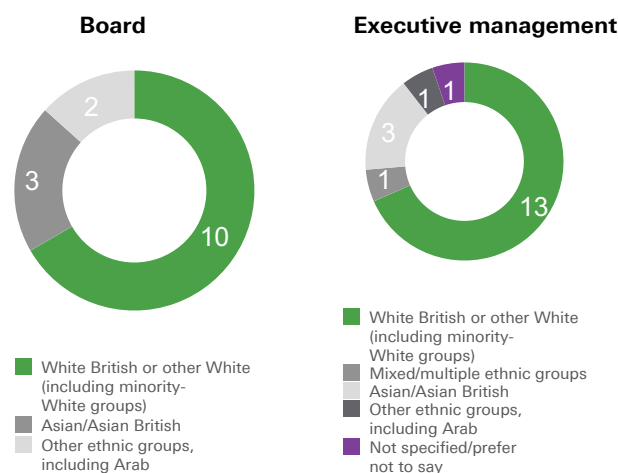


### Board ethnicity representation

The below table represents our ethnicity diversity within our board and executive management within HSBC.

	Board members		Number of senior positions <sup>1</sup>	Executive management <sup>2</sup>	
	Number	%		Number	%
White British or other White (including minority-White groups)	10	67	4	13	68
Mixed/multiple ethnic groups	—	—	—	1	5
Asian/Asian British	3	20	—	3	16
Black/African/Caribbean/Black British	—	—	—	—	—
Other ethnic groups, including Arab	2	13	—	1	5
Not specified/prefer not to say	—	—	—	1	5

#### Ethnic diversity



<sup>1</sup> Senior positions on the Board comprise the Group Chairman, Group Chief Executive, Group Chief Financial Officer and Senior Independent non-executive Director.

<sup>2</sup> Executive management comprises the Group Chief Executive, his direct reports, and the Group Company Secretary and Chief Governance Officer.

Further detail of our diversity and inclusion activity, together with our Gender and Ethnicity Pay Gap Report 2023, is available on [www.hsbc.com/diversitycommitments](http://www.hsbc.com/diversitycommitments).

## Appendix I

### Summary of disclosures withheld

CRD IV reference	Description	Rationale
448(a)	Key assumptions (including assumptions regarding loan prepayments and behaviour of non-maturity deposits) on their exposure to interest rate risk on positions not included in the trading book.	Assumptions regarding fixed term loan repayments and term behaviouralisation of non-maturity deposits and capital drive HSBC's structural interest rates positioning and market hedging requirements. These assumptions are proprietary and their disclosure could give key business strategy information to our competitors.

## 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, we also benchmark against other agencies' ratings in an equivalent manner.

#### Mapping of internal ratings to external ratings

Default risk	Customer Risk Rating	PD range %	Central governments and central banks	Institutions	Corporates <sup>1</sup>
			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-	A-
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	B	B+	B+
	5.3	3.580 to 4.914	B	B	B
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 Management	8.1	15.001 to 22.000	CCC+	CCC	CCC
	8.2	22.001 to 50.000	CCC	CCC- to CC	CCC- to CC
	8.3	50.001 to 99.999	CCC- to C	C	C
Default	9/10	100.000	Default	Default	Default

<sup>1</sup> Corporates excludes specialised lending exposures subject to supervisory slotting approach.

# Compliance with CRR II Pillar 3 Requirements

Article	Regulatory Requirements	Compliance reference
<b>Disclosure requirements and policies</b>		
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 v) 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.	HSBC Holdings plc has a Pillar 3 policy. 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 '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.	The HSBC Credit Risk Management process is disclosed in the <i>Annual Report and Accounts 2023</i> on page 147.
<b>Non-material, proprietary or confidential information</b>		
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.	
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 102.
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.	



(continued)

Article	Regulatory Requirements	Compliance reference
<b>Frequency and scope of disclosures</b>		
433	<p>Institutions shall publish the disclosures required under Titles II and III in the manner set out in Articles 433a, 433b and 433c.</p> <p>Annual disclosures shall be published on the same date as the date on which institutions publish their financial statements or as soon as possible thereafter.</p> <p>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.</p> <p>Any delay between the date of publication of the disclosures required under this Part and the relevant financial statements shall be reasonable.</p>	<p>HSBC Holdings plc complies with the frequency requirements set out in Article 433a for a large institution.</p> <p>The annual Pillar 3 Disclosures are published the same date as the Annual Report and Accounts.</p> <p>HSBC semi-annual and quarterly Pillar 3 disclosures are published as soon as possible after the interim and quarterly financial statements.</p>
433a (1)	<p>Large institutions shall disclose the information outlined below with the following frequency:</p> <p>(a) all the information required under this Part on an annual basis;</p> <p>(b) on a semi-annual basis the information referred to in:</p> <p>(i) point (a) of Article 437;</p> <p>(ii) point (e) of Article 438;</p> <p>(iii) points (e) to (l) of Article 439;</p> <p>(iv) Article 440;</p> <p>(v) points (c), (e), (f) and (g) of Article 442;</p> <p>(vi) point (e) of Article 444;</p> <p>(vii) Article 445;</p> <p>(viii) point (a) and (b) of Article 448(1);</p> <p>(ix) point (j) to (l) of Article 449;</p> <p>(x) points (a) and (c) of Article 451(1);</p> <p>(xi) Article 451a(3); (xii) point (g) of Article 452;</p> <p>(xiii) points (f) to (j) of Article 453;</p> <p>(xiv) points (d), (e) and (g) of Article 455;</p> <p>(c) on a quarterly basis the information referred to in:</p> <p>(i) points (d) and (h) of Article 438;</p> <p>(ii) the key metrics referred to in Article 447;</p> <p>(iii) Article 451a(2).</p>	<p>HSBC Holdings plc complies with the frequency requirements set out in this article.</p>
433a (2)	<p>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:</p> <p>(a) all the information required under this Part on an annual basis;</p> <p>(b) the key metrics referred to in Article 447 on a semi-annual basis.</p>	<p>This disclosure is not applicable as HSBC Holdings plc is a Global Systemically Important Institution (G-SII).</p>
433a (3)	<p>Large institutions that are subject to Article 92a or 92b 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.</p>	<p>HSBC Holdings plc complies with this disclosure requirement under Article 437a.</p>
433a (4)	<p>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.</p>	<p>HSBC Holdings plc complies with this requirement and completes additional leverage disclosures on a quarterly basis.</p>
<b>Disclosures by small and non-complex institutions</b>		
433b (1)	<p>Small and non-complex institutions shall disclose the information outlined below with the following frequency:</p> <p>(a) on an annual basis the information referred to in:</p> <p>(i) points (a), (e) and (f) of Article 435(1);</p> <p>(ii) point (d) of Article 438;</p> <p>(iii) points (a) to (d), (h), and (i) of Article 450(1);</p> <p>(b) on a semi-annual basis the key metrics referred to in Article 447.</p>	<p>This disclosure is not applicable to HSBC Holdings plc.</p>
433b (2)	<p>By way of derogation from paragraph 1 of this Article, small and non-complex institutions that are non-listed institutions shall disclose the key metrics referred to in Article 447 on an annual basis.</p>	<p>This disclosure is not applicable to HSBC Holdings plc.</p>
<b>Disclosures by other institutions</b>		
433c (1)	<p>Institutions that are not subject to Article 433a or 433b shall disclose the information outlined below with the following frequency:</p> <p>(a) all the information required under this Part on an annual basis;</p> <p>(b) the key metrics referred to in Article 447 on a semi-annual basis;</p> <p>(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.</p>	<p>This disclosure is not applicable to HSBC Holdings plc.</p>
433c (2)	<p>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:</p> <p>(a) points (a), (e) and (f) of Article 435(1);</p> <p>(b) points (a), (b) and (c) of Article 435(2);</p> <p>(c) point (a) of Article 437;</p> <p>(d) points (c) and (d) of Article 438;</p> <p>(e) the key metrics referred to in Article 447;</p> <p>(f) points (a) to (d), (h) to (k) of Article 450(1).</p>	<p>This disclosure is not applicable to HSBC Holdings plc.</p>

## Pillar 3 Disclosures at 31 December 2023

(continued)

Article	Regulatory Requirements	Compliance reference
<b>Means of disclosures</b>		
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, <a href="http://www.hsbc.com/investors">www.hsbc.com/investors</a>
<b>Timing and means of disclosures under Article 441</b>		
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, <a href="http://www.hsbc.com/investors">www.hsbc.com/investors</a>
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).
<b>Risk management objectives and policies</b>		
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;	HSBC Holdings plc complies with the requirement as set out below. For a summary of the scope of application of regulatory methodologies for credit risk, counterparty credit risk, equity, market risk and operational risk management strategy see page 19.  For Climate Risk, see page 6 of <i>Pillar 3 31 December 2023</i> , page 141 of the <i>Annual Report and Accounts 2023</i> for ESG and page 221 for Climate risk .
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	For Credit Risk, see page 38 of <i>Pillar 3 31 December 2023</i> and page 147 of the <i>Annual Report and Accounts 2023</i> .  For Counterparty Credit Risk, see page 81.
435 (1) (c)	the scope and nature of risk reporting and measurement systems	For Market Risk, see page 92 of <i>Pillar 3 2023</i> and page 218 of the <i>Annual Reports and Accounts 2023</i> .  For Non Financial and Operational Risk, see page 97.  For Treasury and Capital Risk, see page 14 of <i>Pillar 3 2023</i> and page 203 of the <i>Annual Reports and Accounts 2023</i> .  For Model Risk, see page 232 of the <i>Annual Report and Accounts 2023</i> .
435 (1) (d)	the policies for hedging and mitigating risk, and the strategies and processes for monitoring the continuing effectiveness of hedges and mitigants	For Resilience Risk, see page 230 of the <i>Annual Reports and Accounts 2023</i> .  For Regulatory Compliance Risk, see page 231 of the <i>Annual Reports and Accounts 2023</i> .
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	Refer to the 'Risk management section' on page 12 and page 136 of the <i>Annual Report and Accounts 2023</i> .
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 management section on page 12 and page 136 of the <i>Annual Report and Accounts 2023</i> .

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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 <i>Annual Report and Accounts 2023</i> on page 238.
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 <i>Annual Report and Accounts 2023</i> on page 238.
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, <a href="http://www.hsbc.com/investors">www.hsbc.com/investors</a>
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 <i>Annual Report and Accounts 2023</i> on page 274.
435 (2) (e)	the description of the information flow on risk to the management body.	Refer to the Group Risk Committee in the HSBC <i>Annual Report and Accounts 2023</i> on page 274.
<b>Scope of application</b>		
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 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	Refer to Structure of the regulatory group on page 8.  Table 2: Reconciliation of regulatory own funds to balance sheet in the audited financial statements (UK CC2) on page 8.  Table 3: Principal entities with a different regulatory and accounting scope of consolidation (LI3) on page 9.
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 10.
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 11.  Refer to the 'Explanations of differences between accounting and regulatory exposure amounts' section on page 11.
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 69: Prudential valuation adjustments (PV1) on page 96.
436 (f)	any current or expected material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities between the parent undertaking and its subsidiaries	Refer to the 'Capital risk' section on page 14.  Refer to the 'Minimum requirement for own funds and eligible liabilities' section on page 31.
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 14.
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 31.
<b>Own funds</b>		
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 8.  Table 6: Composition of Regulatory own funds (UK CC1) on page 15.
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, <a href="http://www.hsbc.com/investors">www.hsbc.com/investors</a>
437 (c)	the full terms and conditions of all Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments	
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 15.

## Pillar 3 Disclosures at 31 December 2023

(continued)

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 15.
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.
<b>Disclosure of own funds and eligible liabilities</b>		
437a	Institutions that are subject to Article 92a or 92b 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, <a href="http://www.hsbc.com/investors">www.hsbc.com/investors</a>  Table 22: TLAC composition (TLAC1) on page 34.
437a (b)	The ranking of eligible liabilities in the creditor hierarchy	Refer to TLAC3 tables for all three resolution groups on page 35.
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, <a href="http://www.hsbc.com/investors">www.hsbc.com/investors</a>  Refer to TLAC3 tables for all three resolution groups on page 35.
437a (d)	Total amount of excluded liabilities referred to in Article 72a(2)	Refer to TLAC3 tables for all three resolution groups on page 35.
<b>Own funds requirement and risk-weighted exposure amounts</b>		
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 30.
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 5.
438 (c)	the result of the institution's internal capital adequacy assessment process	Refer to the 'Internal capital adequacy assessment section' on page 30.
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 10: 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 51: Specialised lending and equity exposures under the simple risk-weight approach (CR10) on page 69.
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 the key drivers explaining those variations	Table 11: RWA flow statements of credit risk exposures under the IRB approach (CR8) on page 21. Table 12: RWA flow statements of CCR exposures under IMM (CCR7) on page 21. Table 13: RWA flow statements of market risk exposures under IMA (MR2-B) on page 21.
<b>Exposures to counterparty credit risk (CCR)</b>		
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 81.

(continued)

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 82.
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 83.
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 83.
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 56: Composition of collateral for CCR exposure (CCR5) on page 82.
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 53: Analysis of counterparty credit risk exposure by approach (excluding centrally cleared exposures) (CCR1) on page 81.
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 53: Analysis of counterparty credit risk exposure by approach (excluding centrally cleared exposures) (CCR1) on page 81.
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 54: Credit valuation adjustment capital charge (CCR2) on page 81.
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 58: Exposures to central counterparties (CCR8) on page 83.
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 57: Credit derivatives exposures (CCR6) on page 82.
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 53: Analysis of counterparty credit risk exposure by approach (excluding centrally cleared exposures) (CCR1) on page 81.
439 (l)	separately, the disclosures included in point (e) of Article 444 and point (g) of Article 452	Table 55: Standardised approach – CCR exposures by regulatory exposure class and risk weights (CCR3) on page 82.  Table 59: IRB – CCR exposures by portfolio and PD scale (CCR4) on page 84.
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.
<b>Countercyclical capital buffers</b>		
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 71: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer (UK CCyB1) on page 99.
440 (b)	the amount of their institution-specific countercyclical capital buffer	Table 72: Amount of institution-specific countercyclical capital buffer (UK CCyB2) on page 100.
<b>Indicators of global systemic importance</b>		
441	G-SIBs 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, <a href="http://www.hsbc.com/investors">www.hsbc.com/investors</a>  G-SIB capital buffers are calculated by the Financial Stability Board ('FSB') and provided to institutions at a later date.

## Pillar 3 Disclosures at 31 December 2023

(continued)

Article	Regulatory Requirements	Compliance reference
<b>Credit risk adjustments</b>		
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 41.
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 41.
442 (c)	information on the amount and quality of performing, non-performing and forborne exposures for loans, debt securities and off-balance-sheet 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 33: Credit quality of forborne exposures (CQ1) on page 41. Table 35: Collateral obtained by taking possession and execution processes (CQ7) on page 43. Table 36: Quality of non-performing exposures by geography (CQ4) on page 43. Table 37: Credit quality of loans and advances to non-financial corporations by industry (CQ5) on page 44.
442 (d)	an ageing analysis of accounting past due exposures	Table 34: Credit quality of performing and non-performing exposures by past due days (CQ3) on page 42.
442 (e)	the gross carrying amounts of both defaulted and non-defaulted exposures, the accumulated specific and general credit risk adjustments, the accumulated write-offs taken against those exposures and the net carrying amounts and their distribution by geographical area and industry type and for loans, debt securities and off-balance-sheet exposures	Table 30: Performing and non-performing exposures and related provisions (CR1) on page 39. Table 33: Credit quality of forborne exposures (CQ1) on page 41. Table 36: Quality of non-performing exposures by geography (CQ4) on page 43. Table 37: Credit quality of loans and advances to non-financial corporations by industry (CQ5) on page 44.
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 32: Changes in the stock of non-performing loans and advances (CR2) on page 41.
442 (g)	the breakdown of loans and debt securities by residual maturity	Table 31: Maturity of exposures (CR1-A) on page 40.
<b>Encumbered and unencumbered assets</b>		
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.	HSBC Holdings plc complies with the requirement as set out below.
443a (a)	General narrative information on asset encumbrance, including: An explanation of any difference between the regulatory consolidation scope used for the purpose of the disclosures on asset encumbrance and the scope retained for the application of the liquidity requirements on a consolidated basis as defined in Chapter 2 of Title I of Part Two CRR, which is used to define (E)HQLA eligibility;	Refer to 'Asset encumbrance' section on page 29.
443a (b)	An explanation of any difference between, on the one hand, pledged and transferred assets in accordance with the applicable accounting frameworks and as applied by the institution and, on the other hand, encumbered assets and an indication of any difference of treatment of transactions, such as when some transactions are deemed to lead to pledge or transfer of assets but not to encumbrance of assets, or vice versa;	Table 18: Encumbered and unencumbered assets (UK AE1) on page 29. Table 19: Collateral received and own debt securities issued (UK AE2) on page 29. Table 20: Sources of encumbrance (UK AE3) on page 30.
443a (c)	The exposure value used for the purposes of disclosure and how median exposure values are derived.	
443b	Narrative information on the impact of the business model on assets encumbrance and the importance of encumbrance to the institution's business model, which provides users with the context of the disclosures required in Template UK AE1 and UK AE2.	Refer to 'Importance of encumbrance' section on page 30.
443b (a)	The institution's funding model, including the following: The main sources and types of encumbrance, detailing, where applicable, encumbrance due to significant activities with derivatives, securities lending, repos, covered bonds issuance and securitisation;	Refer to 'Asset encumbrance' section on page 29. Table 20: Sources of encumbrance (UK AE3) on page 30.
443b (b)	The structure of encumbrance between entities within a group, and especially whether the encumbrance level of the consolidated group stems from particular entities and whether there is significant intragroup encumbrance;	This disclosure is not applicable to HSBC Holdings plc.
443b (c)	Information on over-collateralisation, especially regarding covered bonds and securitisations, and the incidence of over-collateralisation on the levels of encumbrance;	This disclosure is not applicable to HSBC Holdings plc.
443b (d)	Additional information on encumbrance of assets, collateral and off-balance sheet items and the sources of encumbrance by any significant currencies other than the reporting currency as referred to in Article 415(2) CRR;	Refer to 'Analysis of on-balance sheet encumbered and unencumbered assets and off-balance sheet collateral' section on page 27.

(continued)

Article	Regulatory Requirements	Compliance reference
443b (e)	A general description of the proportion of items included in column 060 'Carrying amount of unencumbered assets' in Template UK AE1 that the institution would not deem available for encumbrance in the normal course of its business (e.g. intangible assets, including goodwill, deferred tax assets, property, plant and other fixed assets, derivative assets, reverse repo and stock borrowing receivables);	Refer to 'Asset encumbrance' section on page 29.
443b (f)	The amount of underlying assets and of cover pool assets of retained securitisations and retained covered bonds, and whether those underlying and cover pool assets are encumbered or unencumbered, along with the amount of associated retained securitisations and retained covered bonds;	This disclosure is not applicable to HSBC Holdings plc.
443b (g)	Where relevant for explaining the impact of their business model on their level of encumbrance, details (including quantitative information if relevant) on each of the following:  (i) the types and amounts of encumbered and unencumbered assets included in row 120 of Template UK AE1;  (ii) the amounts and types of encumbered assets and off-balance sheet items included in row 010 of Template UK AE3 that are not associated with any liabilities;	Refer to the 'Asset encumbrance' section on page 29.
443b (h)	where relevant in the context of their use of encumbrance in relation to their business model, additional information on the breakdown of the following rows in the templates UK AE1, UK AE2 and UK AE3:  (i) Row 120 of Template UK AE1 - "Other assets", (ii) Row 230 of Template UK AE2 "Other collateral received", (iii) Row 010 of Template UK AE3 - "Carrying amount of selected financial liabilities" (especially if part of the encumbrance of assets is associated with liabilities and another part is not)	Refer to the 'Asset encumbrance' section on page 29.
<b>Use of the standardised approach</b>		
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 ECALs 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 53.
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 53.
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 53.
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 53.
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 funds.	Table 39: Standardised approach – credit conversion factor ('CCF') and credit risk mitigation ('CRM') effects (CR4) on page 47.  Table 44: Standardised approach – exposures by asset classes and risk weights (CR5) on page 55.
<b>Exposure to market risk</b>		
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 65: Market risk under standardised approach (MR1) on page 92.
<b>Operational risk management</b>		
446	Institutions shall disclose the following information about their operational risk management:	HSBC Holdings plc complies with the requirement as set out below.
446 (a)	the approaches for the assessment of own funds requirements for operational risk that the institution qualifies for;	Table 70: Operational risk own funds requirements and risk-weighted exposure amounts (OR1) on page 97.  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.	

## Pillar 3 Disclosures at 31 December 2023

(continued)

Article	Regulatory Requirements	Compliance reference
<b>Disclosure of key metrics</b>		
447	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;	
447 (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 5.
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 5.
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 5.
447 (h)	their own funds and eligible liabilities ratios and their components, numerator and denominator, as calculated in accordance with Articles 92a and 92b and broken down at the level of each resolution group, where applicable.	Refer to 'Key metrics of the resolution groups' section on page 32.
<b>Exposures to interest rate risk on positions not included in the trading book</b>		
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 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.
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 14: Quantitative information on IRRBB (UK IRRBB1) on page 23.
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;	



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Article	Regulatory Requirements	Compliance reference
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 22.
448 (1) (f)	the description of the overall risk management and mitigation strategies for those risks;	
448 (1) (g)	average and longest repricing maturity assigned to non-maturing deposits.	Refer to the 'Interest rate risk in the banking book' section on page 22.
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.
<b>Exposure to securitisation positions</b>		
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 86.
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 86.
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 87 and our securitisation approaches section on page 19.
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 86.
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.

## Pillar 3 Disclosures at 31 December 2023

(continued)

Article	Regulatory Requirements	Compliance reference
449 (g)	a summary of their accounting policies for securitisation activity, including where relevant a distinction between securitisation and re-securitisation positions;	Refer to the 'securitisation accounting treatment' section on page 87.
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 53.
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 87.
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 60: Securitisation exposures in the non-trading book (SEC1) on page 88.
		Table 61: Securitisation exposures in the trading book (SEC2) on page 88.
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 62: Securitisation exposures in the non-trading book and associated regulatory capital requirements – bank acting as originator or as sponsor (SEC3) on page 89.
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 re-securitisation 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 63.i: Securitisation exposures in the non-trading book and associated capital requirements – bank acting as investor (SEC4) on page 90.
449 (l)	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 64: Exposures securitised by the institution – Institution acts as originator or as sponsor (SEC5) on page 91.
<b>Remuneration disclosures</b>		
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.
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 details of HSBC's identified staff and material risk takers, is set out in the Directors' Remuneration Report of the <i>Annual Report and Accounts 2023</i> on page 279.
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;	
450 (1) (d)	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;	
450 (1) (e)	information on the performance criteria on which the entitlement to shares, options or variable components of remuneration is based;	
450 (1) (f)	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 <i>Annual Report and Accounts 2023</i> for information on remuneration of staff whose professional activities have a material impact on institutions' risk profile in table REM5 on page 303.

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Article	Regulatory Requirements	Compliance reference
450 (1) (h)	<p>aggregate quantitative information on remuneration, broken down by senior management and members of staff whose professional activities have a material impact on the risk profile of the institutions, indicating the following:</p> <p>(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;</p> <p>(ii) the amounts and forms of awarded variable remuneration, split into cash, shares, share-linked instruments and other types separately for the part paid upfront and the deferred part;</p> <p>(iii) the amounts of deferred remuneration awarded for previous performance periods, split into the amount due to vest in the financial year and the amount due to vest in subsequent years;</p> <p>(iv) the amount of deferred remuneration due to vest in the financial year, and the number of beneficiaries of those awards;</p> <p>(v) the guaranteed variable remuneration awards during the financial year, and the number of beneficiaries of those awards;</p> <p>(vi) severance payments awarded in previous periods, that have been paid out during the financial year;</p> <p>(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;</p>	<p>Refer to the <i>Annual Report and Accounts 2023</i> on page 303 for the below disclosures:</p> <p>Remuneration awarded for the financial year (REM1).</p> <p>Special payments to staff whose professional activities have a material impact on institutions' risk profile (REM2).</p> <p>Deferred remuneration at 31 December 2023 (REM3).</p>
450 (1) (i)	<p>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;</p>	<p>Refer to the <i>Annual Report and Accounts 2023</i> on page 303.</p> <p>Identified staff - remuneration by band (REM4).</p>
450 (1) (k)	<p>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).</p> <p>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 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.</p>	<p>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.</p> <p>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 in the second paragraph.</p> <p>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 <i>Annual Report and Accounts 2023</i> on page 303.</p>
450 (2)	<p>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.</p> <p>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.</p>	<p>Refer to the Directors' Remuneration Report of the <i>Annual Report and Accounts 2023</i> on page 279.</p>
<b>Leverage</b>		
451 (1)	<p>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:</p>	<p>HSBC Holdings plc complies with the requirement as set out below.</p>
451 (1) (a)	<p>the leverage ratio;</p>	<p>Table 7: Leverage ratio common disclosure (UK LR2-LRCom) on page 17.</p>
451 (1) (b)	<p>the leverage ratio calculated as if central bank claims were required to be included in the total exposure measure;</p>	<p>Table 1: Key metrics (KM1/IFRS9-FL) on page 5.</p>
451 (1) (c)	<p>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;</p>	<p>Table 8: Summary reconciliation of accounting assets and leverage ratio exposures (UK LR1- LRSum) on page 18.</p>
451 (1) (d)	<p>a description of the processes used to manage the risk of excessive leverage;</p>	
451 (1) (e)	<p>a description of the factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers;</p>	<p>Refer to Leverage ratio section on page 17.</p>
451 (1) (f)	<p>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;</p>	<p>No temporary treatment for HSBC. Row UK-25b in the LR2-CRCom table on page 17 shows the leverage ratio is aligned to row UK-25.</p>
451 (1) (g)	<p>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.</p>	<p>Table 7: Leverage ratio common disclosure (UK LR2-LRCom) on page 17.</p> <p>Table 1: Key metrics (KM1/IFRS9-FL) on page 5.</p>

## Pillar 3 Disclosures at 31 December 2023

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Article	Regulatory Requirements	Compliance reference
451 (2)	LREQ firm must disclose each of the following - 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.	Table 7: Leverage ratio common disclosure (UK LR2-LRCom) on page 17. Table 1: Key metrics (KM1/IFRS9-FL) on page 5.
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 18.
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 7: Leverage ratio common disclosure (UK LR2-LRCom) on page 17. Table 1: Key metrics (KM1/IFRS9-FL) on page 5.
451 (4) (b)	for the purposes of paragraphs 2(a) 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), unless paragraph 5 applies in which case it shall be the sum derived in accordance with that paragraph.	Table 7: Leverage ratio common disclosure (UK LR2-LRCom) on page 17. Table 1: Key metrics (KM1/IFRS9-FL) on page 5.
<b>Disclosure of liquidity requirement</b>		
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 15: Level and components of HSBC Group consolidated liquidity coverage ratio (LIQ1) on page 24.
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 15: Level and components of HSBC Group consolidated liquidity coverage ratio (LIQ1) on page 24.
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 15: Level and components of HSBC Group consolidated liquidity coverage ratio (LIQ1) on page 24.
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 16: Net stable funding ratio (LIQ2) on page 25.
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 16: Net stable funding ratio (LIQ2) on page 25.
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 16: Net stable funding ratio (LIQ2) on page 25.
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 14.

(continued)

Article	Regulatory Requirements	Compliance reference
<b>Use of the IRB approach to credit risk</b>		
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 55.
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 52.
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 13.
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 13.
452 (e)	the scope and main content of the reporting related to credit risk models;	Refer to the 'Credit risk management' section on page 38.
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 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;	Table 46: Wholesale IRB models – estimated and actual values on page 59. Table 49: Retail IRB models – estimated and actual values on page 66. For retail, refer to 'Retail risk rating systems', 'Retail credit models', and 'model performance' sections on page 62, 65 and 68 respectively. For wholesale, refer to 'Wholesale risk rating system' and 'Whole sale models' sections from page 55.
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;	Table 52: IRB – Credit risk exposures by portfolio and PD range (CR6) on page 71.
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 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 47: Wholesale IRB exposure – back-testing of probability of default (PD) per portfolio' (CR9) on page 61. Table 50: Retail IRB exposure – back-testing of probability of default (PD) per portfolio (CR9) on page 65.

## Pillar 3 Disclosures at 31 December 2023

(continued)

Article	Regulatory Requirements	Compliance reference
<b>Use of credit risk mitigation techniques</b>		
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;	
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 45.
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 'Concentration risk' section on page 43.
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 38: Credit risk mitigation techniques – overview (CR3) on page 46.
453 (g)	the corresponding conversion factor and the credit risk mitigation associated with the exposure and the incidence of credit risk mitigation techniques with and without substitution effect;	Table 39: Standardised approach – credit conversion factor ('CCF') and credit risk mitigation ('CRM') effects (CR4) on page 47. Table 41: IRB approach – Disclosure of the extent of the use of CRM techniques (CR7-A) on page 48.
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;	Table 39: Standardised approach – credit conversion factor ('CCF') and credit risk mitigation ('CRM') effects (CR4) on page 47.
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 associated with the exposure; the disclosure set out in this point shall be made separately for each exposure class;	Table 39: Standardised approach – credit conversion factor ('CCF') and credit risk mitigation ('CRM') effects (CR4) on page 47.
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 48.
<b>Use of the Advanced Measurement Approaches to operational risk</b>		
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
<b>Use of internal market risk models</b>		
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 93.
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 consistent with the required soundness standard and the approaches used in the validation of the model;	Refer to 'Incremental risk charge' in the 'Market Risk' section on page 96.
455 (a) (iii)	a description of stress testing applied to the sub-portfolio;	Refer to 'Stress testing' in the 'Market Risk' section on page 95.
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 93.
455 (b)	the scope of permission by the competent authority;	Refer to 'Market risk capital models' section on page 95 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;	Refer to 'Prudent valuation adjustment' section on page 96.

(continued)

Article	Regulatory Requirements	Compliance reference
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 68: IMA values for trading portfolios (MR3) on page 95.
455 (e)	the elements of the own funds requirement as specified in Article 364;	Table 66: Market risk under IMA (MR2-A) on page 92.
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 one 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 67: Comparison of VaR estimates with gains/losses (MR4) on page 94.

## Other Information

### Abbreviations

The following abbreviated terms are used throughout this document.

#### Currencies

\$	United States dollar
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#### A

AIRB <sup>1</sup>	Advanced internal ratings based approach
ALCO	Asset and Liability Management Committee
ASF	Available stable funding
AT1 capital	Additional tier 1 capital
AVA	Additional value adjustment

#### B

Basel	Basel Committee on Banking Supervision
BoCom	Bank of Communications Co., Limited, one of China's largest banks
BoE	Bank of England

#### C

CCP <sup>1</sup>	Central counterparty
CCR <sup>1</sup>	Counterparty credit risk
CCyB <sup>1</sup>	Countercyclical capital buffer
CDS <sup>1</sup>	Credit default swap
CET1 <sup>1</sup>	Common equity tier 1
CEO	Chief Executive Officer
CIU	Collective investment undertakings
CMB	Commercial Banking, a global business
CRA	Credit risk adjustment
CRD IV <sup>1</sup>	Capital Requirements Regulation and Directive
CRE <sup>1</sup>	Commercial real estate
CRM <sup>1</sup>	Credit risk mitigation/mitigant
CRR <sup>1</sup>	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
CSRD	Corporate Sustainability Reporting Directive
CVA <sup>1</sup>	Credit valuation adjustment

#### D

DBRS	Morningstar DBRS ratings
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#### E

EAD <sup>1</sup>	Exposure at default
EBA	European Banking Authority
EC	European Commission
ECA	External credit agency
ECAI	External Credit Assessment Institution
ECL <sup>1</sup>	Expected Credit Losses
EEPE	Effective Expected Positive Exposure
EL <sup>1</sup>	Expected loss
EHQLA	Extremely high-quality liquid assets
ESG	Environmental, social and governance
EU	European Union
EVE	Economic value of equity

#### F

FCA	Financial Conduct Authority
Fitch	Fitch Ratings
FIRB	Foundation internal rating based approach
FSB	Financial Stability Board
FVOCI <sup>1</sup>	Fair value through other comprehensive income
FVPL	Fair value through profit or loss

#### G

GAC	Group Audit Committee
GBM	Global Banking and Markets, a global business
GCRCO	Group Chief Risk and Compliance Officer
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

#### H

HKMA	Hong Kong Monetary Authority
HNIV	HSBC Innovation Bank Limited

Hong Kong The Hong Kong Special Administrative Region of the People's Republic of China

HQLA	High-quality liquid assets
HSBC	HSBC Holdings together with its subsidiary undertakings

#### I

IAA	Internal assessment approach
ICAAP <sup>1</sup>	Internal capital adequacy assessment process
ICR	Individual capital requirement
IFRSs	International Financial Reporting Standards
IMM <sup>1</sup>	Internal model method
IRB <sup>1</sup>	Internal ratings-based approach
IRRBB	Interest rate risk in the banking book
IRC	Incremental risk charge
ISSB	International Sustainability Standards Board

#### L

LAC	Loss absorbing capital
LCR <sup>1</sup>	Liquidity coverage ratio
LGD <sup>1</sup>	Loss given default
Libor	London interbank offered rate

#### M

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

#### N

NII <sup>1</sup>	Net Interest Income
NMD	Non-maturing deposits
NSFR <sup>1</sup>	Net stable funding ratio

#### O

OTC <sup>1</sup>	Over-the-counter
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#### P

PD <sup>1</sup>	Probability of default
PFE	Potential future exposure
PIT	Point-in-time
PRA <sup>1</sup>	Prudential Regulation Authority (UK)
PVA	Prudent valuation adjustment

#### Q

QCCP	Qualifying central counterparty
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#### R

RAS	Risk appetite statement
RBWM	Retail Bank and Wealth Management, a former global business now part of Wealth and Personal Banking
Retail IRB <sup>1</sup>	Retail internal ratings-based approach
RMF	Risk Management Framework
RMM	Risk Management Meeting
RNIV	Risks not in VaR
RSF	Required stable funding
RWA	Risk-weighted asset

#### S

SAB	Saudi Awwal Bank formerly 'The Saudi British Bank'
SA/STD <sup>1</sup>	Standardised approach
SA-CCR	Standardised approach for counterparty credit risk



S&P	Standard and Poor's rating agency
SEC-ERBA	Securitisation external rating-based approach
SEC-IRBA	Securitisation internal rating-based approach
SEC-SA	Securitisation standardised approach
SFT	Securities financing transactions
SME	Small and medium-sized enterprise
SPE <sup>1</sup>	Special purpose entity
SREP	Supervisory review and evaluation process
STS	Simple transparent and standardised
SVaR	Stressed Value at risk
SVB UK	Silicon Valley Bank UK Limited
<b>T</b>	
TCFD	Task Force on Climate-related Financial Disclosures
TLAC <sup>1</sup>	Total Loss Absorbing Capacity
T1 capital <sup>1</sup>	Tier 1 capital
T2 capital <sup>1</sup>	Tier 2 capital
<b>V</b>	
VaR <sup>1</sup>	Value at risk
<b>W</b>	
WPB	Wealth and Personal Banking, a global business

<sup>1</sup> Full definition included in the Glossary published on HSBC website [www.hsbc.com](http://www.hsbc.com)

## Cautionary statement regarding forward-looking statements

This Pillar 3 Disclosures at 31 December 2023 contains 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 targets, commitments and ambitions 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, proxy statements, 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 Israel-Hamas war 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 Israel-Hamas war, 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 Israel-Hamas war (including the continuation and 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, including between China and the US, the UK, the EU, India and 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 Ibor and the transition of the remaining legacy Ibor 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 the 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 the impact of the Russia-Ukraine war on inflation); 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, which continues to be characterised by uncertainty and political disagreement, despite the signing of the Trade and Cooperation Agreement between the UK and 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 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 non-bank financial services companies; and
- 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

## Pillar 3 Disclosures at 31 December 2023

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management, hedging and other techniques); our ability to achieve our financial, investment, capital and ESG targets, commitments and ambitions (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 benefits 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, 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, including the integration of SVB UK into our CMB business; changes in our ability to manage third-party, 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 diverse and skilled personnel; 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 140 to 144 of the *Annual Report and Accounts 2023*.

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