

Risk review

Our risk review outlines our approach to risk management, how we identify and monitor top and emerging risks, and the actions we take to mitigate them. In addition, it explains our material banking risks, including how we manage capital.

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Bangkok, Thailand, 1990s. Customer Service Desk.

Our approach to risk

Our risk appetite

Our risk appetite defines the level and types of risk that we are willing to take, while informing the financial planning process and guiding strategic decision making. Our risk appetite is defined as the aggregate level of risk that we are comfortable to take to achieve our strategic objectives. Risk appetite also provides a mechanism for non-executive directors and executive directors to collectively establish the Group's willingness to engage in certain activities and assess these activities.

Enterprise-wide application

Our risk appetite is expressed holistically through various risk management mechanisms and activities, in both quantitative and qualitative terms. The Group Risk and Compliance function carried out a review in 2024, which led to enhancements to our Global Risk Appetite Framework to help ensure it remains aligned to industry best practices, regulatory expectations and our strategic goals. Our Global Risk Appetite Framework continues to evolve and expand its scope as part of our periodic review process.

The Board reviews and approves the Group's risk appetite regularly to make sure it remains fit for purpose. The Group's risk appetite is considered, developed, and enhanced through the following principles:

- alignment with our strategy, purpose, values, external risk environment, reputational and customer needs;
- compliance with applicable laws, regulations and regulatory priorities;
- forward-looking insights into future risk exposure;
- sufficiency of available capital, liquidity and balance sheet leverage to absorb the risks;
- capacity and capabilities of people to manage the risk landscape;
- functionality, capacity and resilience of available systems to manage the risk landscape;
- effectiveness of the applicable control environment to mitigate risk; and
- internally and externally disclosed commitments.

We formally articulate our risk appetite through our Risk Appetite Statement ('RAS'). Setting out our risk appetite helps ensure that we agree a suitable level of risk for our strategy. In this way, risk appetite informs our financial planning process and helps senior management to allocate capital to business activities, services and products.

At a Group level, performance against the RAS is reported to the Group Risk Management Meeting alongside key risk indicators to support targeted insight and discussion of breaches of risk appetite and any associated mitigating actions. This reporting allows risks to be promptly identified and mitigated, and informs risk-adjusted remuneration to drive a strong risk culture.

Coverage of each principal subsidiary and material operating entity is monitored through a RAS, which helps ensure they remain aligned with the Group's RAS. Each RAS and business activity is guided and underpinned by qualitative principles and/or quantitative metrics.

Risk management

We recognise that the primary role of risk management is to help protect our customers, business, colleagues, shareholders and the communities that we serve, while ensuring we are able to support our strategy and provide sustainable growth. This is supported through our three lines of defence model described on page 128.

In addition, we recognise the importance of a strong culture, which refers to our shared attitudes, beliefs, values and standards that shape behaviours including those related to risk awareness, risk taking and risk management. All our people are responsible for the management of risk, with ultimate supervisory oversight residing with the Board.

The implementation of our business strategy remains a key focus. As we implement change initiatives, we actively manage the execution risks. We also perform periodic risk assessments, including against strategies, to help ensure retention of key personnel for our continued safe operation.

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

Group Risk and Compliance is independent from the global businesses, including our sales and trading functions. It provides challenge, oversight and appropriate balance in risk/return decisions.

Our risk management framework

The following diagram and descriptions summarise key aspects of the risk management framework, including governance, structure, risk management tools and our culture, which together help align employee behaviour with risk appetite.

Key components of our risk management framework

HSBC values and risk culture		
Risk governance	Non-executive risk governance	The Board approves the Group's risk appetite, plans and performance targets. It sets the 'tone from the top' and is advised by the Group Risk Committee (see page 251).
	Executive risk governance	Our executive risk governance structure is responsible for the enterprise-wide management of all risks, including key policies and frameworks for the management of risk within the Group (see pages 128 and 137).
Roles and responsibilities	Three lines of defence model	Our 'three lines of defence' model defines roles and responsibilities for risk management. An independent Group Risk and Compliance function helps ensure the necessary balance in risk/return decisions (see page 128).
Processes and tools	Risk appetite	The Group has processes in place to identify, assess, monitor, manage and report risks to help ensure we remain within our risk appetite and to anticipate, prevent, respond to, and recover from, significant operational disruptions.
	Enterprise-wide risk management tools	
	Active risk management: identification/assessment, monitoring, management and reporting	
	Operational resilience	
Internal controls	Policies and procedures	Policies and procedures define the minimum requirements for the controls required to manage our risks.
	Control activities	Operational and resilience risk management defines minimum standards and processes for managing operational risks and internal controls.
	Systems and infrastructure	The Group has systems and processes that support the identification, capture and exchange of information to support risk management activities.

Risk governance

The Board has ultimate supervisory responsibility for the effective management of risk and approves our risk appetite.

The Group Chief Risk and Compliance Officer, supported by members of the Group Risk Management Meeting, holds executive accountability for the ongoing monitoring, assessment and management of the risk environment and the effectiveness of the risk management framework.

The Group Chief Risk and Compliance Officer is also responsible for the oversight of reputational risk, with the support of the Group Reputational Risk Committee. The Group Reputational Risk Committee considers matters arising from customers, transactions and third parties that either present a serious potential reputational risk to the Group or merit a Group-led decision to help enable a consistent risk management approach across the regions, global businesses and global functions. Further details can be found under the 'Reputational risk' section of www.hsbc.com/who-we-are/esg-and-responsible-business/managing-risk.

Day-to-day responsibility for risk management is delegated to senior managers with individual accountability for decision making. 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, including regulatory compliance and financial crime, as described in the following commentary, 'Our responsibilities'.

We use a defined executive risk governance structure to help enable appropriate oversight and accountability of risk, which facilitates reporting and escalation to the Group Risk Management Meeting. This structure is summarised in the following table.

Governance structure for the management of risk and compliance

Authority	Membership	Responsibilities include:
Group Risk Management Meeting	Group Chief Risk and Compliance Officer Group Chief Legal Officer Group CEO Group CFO Group Head of Financial Crime and Group Money Laundering Reporting Officer All other Group Executive Committee members	<ul style="list-style-type: none"> Supporting the Group Chief Risk and Compliance Officer in exercising Board-delegated risk management authority Overseeing the implementation of risk appetite and the risk management framework Forward-looking assessment of the risk environment, analysing possible risk impacts and taking appropriate action Monitoring all categories of risk and determining appropriate mitigating action Promoting a supportive Group culture in relation to risk management and conduct
Group Risk and Compliance Executive Committee	Group Chief Risk and Compliance Officer Chief risk and compliance officers of HSBC's global businesses Regional chief risk and compliance officers and chief risk officers Heads of Global Risk and Compliance sub-functions	<ul style="list-style-type: none"> Supporting the Group Chief Risk and Compliance Officer in providing strategic direction for the Group Risk and Compliance function, setting priorities and providing oversight Overseeing a consistent approach to accountability for, and mitigation of, risk and compliance across the Group

Governance structure for the management of risk and compliance (continued)

Authority	Membership	Responsibilities include:
Global business/regional risk management meetings	Global business/regional chief risk and compliance officers and chief risk officers Global business/regional chief executive officers Global business/regional chief financial officers Global business/regional heads of global functions	<ul style="list-style-type: none"> – Supporting the Group Chief Risk and Compliance Officer in exercising Board-delegated risk management authority – Forward-looking assessment of the risk environment – Implementation of risk appetite and the risk management framework – Monitoring all categories of risk and overseeing appropriate mitigating actions – Embedding a supportive culture in relation to risk management and controls

▣ The Board committees with responsibility for oversight of risk-related matters are set out on page 249.

▣ Treasury risks are the responsibility of the Group Executive Committee and the Group Risk Committee. Global Treasury actively manages these risks, supported by the Holdings Asset and Liability Management Committee ('ALCO') and local ALCOs, overseen by Treasury Risk Management and the Group Risk Management Meeting. Further details on treasury risk management are set out on page 200.

Our responsibilities

All our people are responsible for identifying and managing risk within the scope of their roles. Roles are defined using the three lines of defence model, which takes into account our business and functional structures as described below.

Three lines of defence

To create a robust control environment to manage risks, we use an activity-based three lines of defence model. This model delineates management accountabilities and responsibilities for risk management and the control environment.

The model underpins our approach to risk management by clarifying responsibility and encouraging collaboration, as well as enabling effective coordination of risk and control activities. The three lines of defence are summarised below:

- The first line of defence owns the risks and is responsible for identifying, recording, reporting and managing these risks in line with risk appetite, including that the right controls and assessments are in place to mitigate them.
- The second line of defence challenges the first line of defence on effective risk management, and provides advice, guidance and assurance of the first line of defence to help ensure it is managing risk effectively.
- The third line of defence is our Global Internal Audit function, which provides independent assurance as to whether our risk management approach and processes are designed and operating effectively.

Group Risk and Compliance function

Our Group Risk and Compliance function is responsible for the Group's risk management framework. This responsibility includes establishing global policy, monitoring risk profiles, and identifying and managing forward-looking risk. Group Risk and Compliance is made up of sub-functions covering all risks to our business. Forming part of the second line of defence, the Group Risk and Compliance function is independent from the global businesses, including sales and trading functions. It provides challenge, appropriate oversight and balance in risk/return decisions.

Responsibility for minimising both financial and non-financial risk, including regulatory compliance and financial crime, lies with our people. They are required to manage the risks of the business and operational activities for which they are responsible. We maintain adequate oversight of our risks through our various specialist risk stewards and the collective accountability held by our chief risk and compliance officers.

We have continued to strengthen the control environment and our approach to the management of risk, as set out in our risk management framework. Our ongoing focus is on helping to enable more effective oversight and better end-to-end identification and management of financial and non-financial risks. This is overseen by the Enterprise Risk Management function, headed by the Global Head of Enterprise Risk Management.

Stress testing and recovery planning

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

Internal stress tests

Our internal capital assessment uses a range of stress scenarios that explore risks identified by management. They include potential adverse macroeconomic, geopolitical, climate and operational risk events, as well as other potential events that are specific to HSBC.

The selection of stress scenarios is based upon the output of our identified top and emerging risks and our risk appetite processes. Stress testing analysis helps management understand the nature and extent of vulnerabilities to which the Group is exposed. Using this information, management decides whether risks can or should be mitigated through management actions or, if they were to crystallise, be absorbed through capital and liquidity. This in turn informs decisions about preferred capital and liquidity levels and allocations.

During 2024, we completed a Group-wide internal stress test alongside testing of the Group's strategy, otherwise known as the corporate plan, to test and inform our strategy and assumptions. The stress scenario assessed the impact of two contrasting scenarios envisioning severe macroeconomic conditions over a five-year period. These scenarios reflected the uncertain inflation and interest rate environment, heightened geopolitical tensions, banking sector challenges and global economic stress.

In addition to the Group-wide stress testing scenarios, each major subsidiary conducts regular macroeconomic and event-driven scenario analysis specific to its region. They also participate, as required, in the regulatory stress testing programmes of the jurisdictions in which they operate, such as stress tests required by the Bank of England ('BoE') in the UK, the Federal Reserve Board ('FRB') in the US, and the Hong Kong Monetary Authority ('HKMA') in Hong Kong.

We also conduct reverse stress tests each year at Group level and, where required, at subsidiary entity level to understand potential extreme conditions that would make our business model non-viable. Reverse stress testing identifies potential stresses and vulnerabilities we might face, and helps inform early warning triggers, management actions and contingency plans designed to mitigate risks.

Recovery and resolution plans

Recovery and resolution plans form part of the integral framework safeguarding the Group's financial stability under severe stress. The Group recovery plan, together with stress testing, helps us identify credible recovery options that can be implemented under a range of idiosyncratic and market-wide stress scenarios. The aim is to mitigate the potential shortfall in capital and liquidity pressures. The Group continues to develop its recovery and resolution capabilities, including in relation to the Resolvability Assessment Framework.

Key developments in 2024

In 2024, we continued to manage risks related to macroeconomic and geopolitical uncertainties and develop risk management capabilities through the continued enhancement of our risk management framework. We also retained our focus on risk transformation and financial crime and continued to assess the Group's operational resilience capability while prioritising the most significant enterprise risks. We made progress with, and continue to develop capabilities to address key risks. More specifically, we sought to enhance our risk management in the following areas:

- We are advancing on our comprehensive initiative aimed at strengthening our global regulatory reporting processes and making them more sustainable. This multifaceted programme includes enhancing data, consistency and controls.
- We are further strengthening our control environment through the delivery of a new Global Control Oversight function which aims to help drive a centralised and consistent approach to controls oversight across the first line of defence business and process owners.
- We continue to maintain a focus on our technology and cybersecurity controls to improve the resilience and security of our technology services in response to the heightened external threat environment.
- We have improved the quality of our strategic change investment processes and associated control monitoring and are seeking to transition to a more agile approach to delivery of complex transformation portfolios and initiatives.
- We continue to enhance our model risk framework in response to changes in regulation and external factors. AI and machine learning models remain a key focus. Progress has been made in enhancing governance activity in this area with particular focus on generative AI due to the pace of technological change and regulatory and wider interest in adoption and usage.
- We enhanced our processes, framework and controls to improve the oversight of our material third parties. We have strengthened our due diligence and monitoring capabilities, with respect to the financial stability of our third parties to better manage our supply chain and operational resilience. We will continue to assess and manage our operational resilience.
- Through our climate risk programme, we made progress on embedding climate considerations throughout our organisation, including through risk policy updates. We also developed risk metrics to monitor and manage exposures, and further enhanced our internal climate scenario analysis. We continue to implement our climate risk programme to complete our annual materiality assessment and make changes to our policies, processes and capabilities to better embed climate considerations throughout our organisation.
- We deployed industry-leading technology and advanced analytics capabilities into new markets to improve our ability to identify suspicious activities and prevent financial crime. We will continue to evaluate technological solutions to improve our capabilities in the detection and prevention of financial crime.
- We continued to embed our regulatory management systems focusing on forward-looking analysis, regulatory mapping, and regulatory content for our inventory.
- We continued to enhance our frameworks, policies and governance processes to embed regulatory requirements.

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Top and emerging risks

We use a top and emerging risks process to provide a forward-looking view of issues with the potential to threaten the execution of our strategy or operations over the medium to long term.

We proactively assess the internal and external risk environment, as well as review the themes identified across our regions and global businesses, for any risks that may require global escalation. We update our top and emerging risks as necessary.

Our current top and emerging risks are as follows.

Externally driven

Geopolitical and macroeconomic risks

Elections and subsequent changes of government during 2024 have created uncertainty as domestic and foreign policy priorities have shifted. The US in particular is expected to continue to bring about changes to economic and foreign policy that will have broad economic and geopolitical implications.

Key economic and financial risks are monitored closely. Major markets, including the US and UK, continued to grow during the second half of 2024, due to expansionary fiscal policies and the positive impact of monetary easing on domestic demand and investment. Similarly, Hong Kong and mainland China also continued to grow, despite ongoing declines in house prices and weakness in consumer spending.

The outlook for 2025 remains uncertain as the new US administration intends to enact a significant change in economic and foreign policies that could have an uncertain impact on global growth, inflation and interest rates. In particular, the prospect of additional US tariffs and retaliatory actions on trade has started to weigh on economic growth forecasts and has raised future inflation expectations. Consequently, markets now expect that major central banks will adopt a more cautious approach to lowering policy interest rates during the course of 2025.

The prospective impact on individual economies from the imposition of higher US tariffs will depend on the breadth and level of the increases and the dependence of the relevant countries' exports on US import demand. Emerging markets with higher levels of US dollar-denominated debt and weaker public finances could be further impacted by higher US interest rates and US dollar strength which could result in higher repayment costs and refinancing risks and the associated possibility of sovereign rating downgrades.

The country and sector implications of changing global trade policies remains an area that is closely monitored. The implications for export demand from mainland China and Hong Kong is a key area of concern.

Markets continue to finance high public deficits, but debt sustainability remains a risk when set against a backdrop of more uncertain global growth prospects and a higher interest rate environment. Debt levels continue to rise in major markets as demands grow on government budgets from rising social welfare costs, defence and climate transition. We are monitoring the fiscal and market implications of recent government changes, including in the UK and the US, where election pledges are ambitious relative to already stretched fiscal positions. As global yields have increased, government bond prices have become increasingly sensitive to differences in growth and inflation expectations between markets, as well as the perception of fiscal and funding risks. A loss of investor confidence could drive a rise in yields, raise funding costs for governments and lead to tax increases and expenditure cuts that are negative for growth. For HSBC, the risks of a sharp rise in funding costs in our key markets relate both to the credit and refunding risks of our customers, market pricing risks of assets held for sale, and risks to net interest margins.

We continue to monitor real estate conditions in mainland China and Hong Kong, where activity remains mixed. Various central government policies have been introduced to support the property market and wider economy, but meaningful signs of recovery are yet to be observed, with the exception of the residential real estate market in Hong Kong, which has seen some improvement in sentiment and transaction volumes in the fourth quarter of 2024.

In Hong Kong, the high vacancy rate in the commercial real estate sector and the elevated interest rate environment have added downward pressure to the commercial real estate market. Commercial land sales resumed during the latter part of 2024 after a halt earlier in the year, and the recent reduction in interest rates has provided some liquidity relief to borrowers operating in this sector. Nevertheless, a sustainable recovery in underlying demand is yet to materialise, so the pressure on property prices may persist. We continue to closely monitor the risk of further credit deterioration and defaults in the portfolio.

The Israel-Hamas conflict may resurge. While a 42-day ceasefire was agreed in January 2025, the durability of the ceasefire remains uncertain. The regional economic impact of this conflict was relatively limited throughout 2024. The US and UK imposed additional sanctions on Iran in 2024 in response to Iran's activities and the increase in tensions between Israel and Iran. Further sanctions may be imposed and could increase the risk within our operations. While supply chains have largely adapted to the Russia-Ukraine war and the conflict in the Middle East, the disruption of key supply routes, particularly through the Red Sea, continues to impact global supply costs. Escalation, resurgence or other changes in the Russia-Ukraine war and the conflict in the Middle East could impact economic activity regionally or globally for a prolonged period, which in turn could have a material adverse effect on the Group's business, financial condition, results of operations, prospects, liquidity, capital position and credit ratings. HSBC actively monitors and responds to financial sanctions and trade restrictions that have been adopted in response to the conflicts.

The sanctions and trade restrictions imposed by the US, the UK, and the EU, as well as other countries, as a result of the Russia-Ukraine war, remain complex, far-reaching and evolving. The US has expanded the reach of its secondary sanctions regime, which includes broad discretion to impose severe sanctions on non-US banks that are knowingly or even unknowingly engaged in certain transactions or services directly or indirectly involving Russia's military-industrial base, including certain third-party activities that are difficult to detect or beyond HSBC's control. The imposition of such sanctions against any non-US HSBC entity could result in significant adverse commercial, operational and reputational consequences for HSBC. In response to such sanctions and trade restrictions, as well as asset flight, Russia has implemented certain countermeasures, including the expropriation of foreign assets.

Following a strategic review in 2022, HSBC Europe BV (a wholly-owned subsidiary of HSBC Bank plc) entered into an agreement to sell its wholly-owned subsidiary HSBC Bank Russia (RR) (Limited Liability Company), which was completed in May 2024.

Global tensions over trade and technology are resulting in divergent regulatory standards and compliance regimes, presenting long-term strategic challenges for multinational businesses. The relationships between China and several other countries, including the US and the UK, remain complex.

To date, the US, the UK, the EU and other countries have imposed various sanctions and trade restrictions on Chinese persons and companies, and there is a continued risk of additional sanctions and trade restrictions or tariffs being imposed by the US and other governments in relation to, among other things, alleged human rights abuses, advances in certain sensitive technologies, territorial conflicts, and the illicit trade of fentanyl and other synthetic opioids. Strategic competition with China has the potential to impact the Group's operations and global supply chains remain vulnerable to a

deterioration in the relationship between China and other countries. For example, the US recently imposed a new programme restricting certain US outbound investments in Chinese companies engaged in sensitive technology sectors and the EU is considering a similar programme. In addition, during 2024 both the US and the EU raised the rate at which they levy tariffs on a range of Chinese imports, including electric vehicles. These have been imposed on the basis of unfair competition, where the Chinese government is accused of providing unfair subsidies to industry.

China, in turn, imposed a number of its own sanctions and trade restrictions that target, or provide authority to target, foreign individuals or companies as well as certain goods such as rare earth minerals and metals, and technology and services. These, as well as certain other retaliatory measures, have been and may continue to be imposed against certain countries, businesses and individuals.

Existing and additional sanctions, trade restrictions, counter-sanctions and other retaliatory measures relating to the foregoing or other geopolitical tensions may adversely affect the Group, its customers and the markets in which the Group operates by creating regulatory, reputational and market risks, including additional inflationary pressures, and a more complex operating environment.

As the geopolitical landscape evolves, compliance by multinational corporations with their legal or regulatory obligations in one jurisdiction may be seen as supporting the law or policy objectives of that jurisdiction over another, creating additional legal, regulatory, reputational and political risks for the Group. We maintain dialogue with our regulators in various jurisdictions on the impact of legal and regulatory obligations on our business and customers.

The financial impact on the Group of geopolitical risks in Asia is heightened due to the region's relatively high contribution to the Group's profitability, particularly in Hong Kong.

While it is the Group's policy to comply with all applicable laws and regulations of all jurisdictions in which it operates, geopolitical tensions and potential ambiguities in the Group's compliance obligations continue to present challenges and risks for the Group, and could have a material adverse impact on the Group's strategy, business, customers, operations, financial results and reputation.

More stringent data privacy, national security and cybersecurity laws in a number of markets could pose potential challenges to intra-Group data sharing. These developments may affect our ability to manage financial crime risks across markets due to limitations on cross-border transfers of personal information.

Provisioning against credit loss is conducted under the IFRS 9 'Financial Instruments' (IFRS 9) calculations of ECL, which use forward-looking scenarios that incorporate the economic and financial risks detailed above.

Key considerations in our calculation of ECLs included inflationary pressures, interest rates and changes to economic and financial policies. In the fourth quarter of 2024, to address heightened policy uncertainty following the US election and to overcome any lags in consensus forecasts, an adjustment factor based on more recent views of expected tariffs and other policy changes was modelled and then applied to each of the economic scenarios. The effect was to lower growth expectations in our major markets, while the impact on inflation and interest rates was varied.

Following the adjustment the Central scenario continues to be assigned the highest probability weighting across all of our major markets. Outer scenarios have incorporated more adverse tariff escalations and the escalation of key geopolitical risks.

There remains uncertainty regarding the adequacy of our models to reflect credit losses under emerging risks which are not captured under the historical loss experience of our models, or to adequately distinguish risks for specific sectors or portfolios.

The above risks could also have an impact on our customers and we continue to closely monitor the potential impacts and offer support to our customers in line with regulatory, government and wider stakeholder expectations.

For further details of our Central and other scenarios, see 'Measurement uncertainty and sensitivity analysis of ECL estimates' on page 148.

Mitigating actions

- We closely monitor geopolitical and economic developments in key markets and sectors and undertake scenario analysis where appropriate. This helps us to take actions to manage our portfolios where necessary, including through enhanced monitoring, amending our risk appetite and/or reducing limits and exposures.
- We stress test portfolios of particular concern to identify sensitivity to loss under a range of scenarios, with management actions being taken to rebalance exposures and manage risk appetite where necessary.
- We apply management judgemental adjustments where modelled ECL does not fully reflect the identified risks and related uncertainty, or to capture significant late-breaking events.
- We regularly review key portfolios – including our commercial real estate portfolio – to help ensure that individual customer or portfolio risks are understood and that our ability to manage the level of facilities offered through any downturn is appropriate.
- We continue to seek to manage sanctions and trade restrictions through the use of reasonably-designed policies, procedures and controls, which are subject to ongoing testing and enhancements.
- We have taken steps, where necessary, to enhance physical security in geographical areas deemed to be at high risk from terrorism and military conflicts.

Technology and cybersecurity risk

Like other organisations, we operate in an extensive and complex technology landscape. We need to remain resilient in order to support customers, our colleagues and financial markets globally. Risks arise where, for example, technology is not understood, maintained or developed appropriately. We also continue to operate in an increasingly complex cyber threat environment globally. These threats include potential unauthorised access to systems including access to customer data, whether ours or that of our third-party suppliers'. These threats require ongoing investment in business and technical controls to defend against them.

Mitigating actions

- We continue to upgrade many of our technology systems and are transforming how software solutions are developed, delivered, maintained and tested as part of our investment in the Group's operational resilience capabilities to seek to meet the expectations of our customers and regulators, and to help prevent disruptions to our services.
- Our cyber intelligence and threat analysis team continually evaluate threat levels for the most prevalent cyber-attack types and their potential outcomes (see page 84), and we continue to seek to strengthen our controls to help reduce the likelihood and impact of attacks including advanced malware, data leakage, exposure through third parties and security vulnerabilities.
- We continue to seek to enhance our cybersecurity capabilities, including Cloud security, identity and access management, metrics and data analytics, and third-party security reviews and to invest in mitigating the potential threats of emerging technologies.
- We regularly report and review cyber risk and control effectiveness at executive level across global businesses, functions and regions, as well as at non-executive Board level to help enable appropriate visibility and governance of the risk and its mitigating actions.
- We participate globally in industry bodies and working groups, working together to seek to prevent, detect and defend against cyber-attacks on financial organisations globally.
- We respond to attempts to compromise our cybersecurity in accordance with our cybersecurity framework. To date, none of these attacks have had a material impact on our business or operations.

Environmental, social and governance ('ESG') risk

We are subject to financial and non-financial risks associated with ESG-related matters, such as climate change, nature-related and human rights issues. These matters can impact us both directly and indirectly through our business activities and relationships. For details of how we govern ESG, see page 74.

We may face credit losses if climate-related regulatory, legislative or technological developments impact customers' business models or if extreme weather events disrupt or interrupt customers' operations, resulting in financial difficulty for customers and/or stranded assets, and impacting their ability to repay their debts. Our customers may find that their business models fail to align to a net zero economy or face disruption to their operations or deterioration to their assets as a result of extreme weather.

Trading losses may arise if climate change results in changes to macroeconomic and financial variables that negatively impact our trading book exposures.

We may also be exposed to liquidity impacts in the form of deposit outflows due to changes in customer behaviours driven by impacts to profitability/wealth, or from reputational concerns relating to the progress we make towards our climate-related ambitions and targets.

We may face impacts to our real estate portfolios due to changes to the climate, an increase in the frequency and severity of extreme weather events and chronic shifts in weather patterns, which could impact both property values and the ability of borrowers to afford their mortgage payments. This may lead to the reduced availability or increased cost of insurance, including insurance that protects property pledged as collateral of HSBC mortgages.

Operational risk may increase if extreme weather events impact critical operations and premises.

We may face regulatory compliance risk resulting from the increasing pace, breadth and depth of climate-related regulatory expectations, including on the management of climate risk, and variations in climate-related reporting standards, requiring implementation in short timeframes across multiple jurisdictions.

Conduct risk may arise in association with the increasing demand for 'green' or 'sustainable' products where there are differing and developing standards or taxonomies.

We may face reputational risk arising from how we decide to support our customers in high-emitting sectors in their transition to net zero, the preferences of different stakeholders in relation to our approach to the transition to net zero, and if we make insufficient progress in achieving our climate-related ambitions and targets.

We may also be exposed to model risk, as the uncertain and evolving impacts of climate change as well as data and methodology limitations, present challenges to creating reliable and accurate model outputs.

Reputational, regulatory compliance and legal risks may increase as we make progress towards our ESG-related ambitions and targets, with stakeholders likely to place greater focus on our actions, such as the development of ESG-related policies, our disclosures and financing and investment decisions relating to our ESG-related ambitions and targets.

We may be exposed to additional risks if we fail to:

- make sufficient progress towards our ESG-related ambitions and targets;
- set adequate plans to execute those plans or adapt those plans to changes in the external environment;
- manage the risks associated both with meeting and not meeting our ESG-related ambitions and targets; and
- meet evolving regulatory expectations and requirements on the management of ESG risks.

We may face additional risks if we knowingly or unknowingly make inaccurate, unclear, misleading, or unsubstantiated claims regarding sustainability to our stakeholders.

We may face climate and ESG-related litigation and regulatory enforcement risks, either directly if stakeholders think that we are not adequately managing climate and ESG-related risks, or indirectly, if our clients and customers are themselves the subject of litigation, potentially resulting in the revaluation of their assets.

Requirements, policy objectives, expectations, views or market and public perceptions and preferences in connection with the transition to a net zero economy and ESG-related matters may vary by jurisdiction and stakeholder, particularly in light of the differing perspectives of stakeholders in different markets, including the UK, the US, the EU and other markets regarding climate impacts and the nature of the appropriate responses to climate change. We may be subject to potentially conflicting approaches to ESG matters in certain jurisdictions, which may impact our ability to conduct certain business within those jurisdictions or result in additional regulatory compliance, reputational, political or litigation risks. For example, our reputation and client relationships may be damaged as a result of our decision to participate, or not to participate, in certain projects perceived to be associated with causing or exacerbating climate change, as well as any decisions we make to continue to conduct or change our activities in response to considerations relating to climate change, including the transition to net zero. These risks may also arise from divergence in the implementation of ESG, climate policy and financial regulation in the many regions in which we operate, including initiatives to apply and enforce policy and regulation with extraterritorial effect.

We may face financial reporting risk in relation to our climate and ESG disclosures, as data remains of limited quality and consistency, exposing us to the risk of using incomplete and inaccurate data and models that could result in sub-optimal decision making. Methodologies, data, scenarios and industry standards that we have used may evolve over time in line with market practice, regulation or developments in science, where applicable. Any such developments in methodologies and scenarios, and changes in the availability, accuracy and verifiability of data over time and our ability to collect and process such data, exposes us to financial reporting risk in relation to our climate and ESG disclosures. This could result in revisions to our internal measurement frameworks as well as reported data going forward, including on financed emissions, meaning that such data may not be reconcilable or comparable year on year. We may also have to re-evaluate our progress towards our ESG-related ambitions and targets in the future.

We may also be exposed to nature-related risks beyond climate change. These risks may arise when the provision of ecosystem services, such as water availability, air quality and soil quality, is compromised, primarily by the five key drivers of nature loss: changes in land/freshwater/sea-use; climate change; pollution of air, water and soil; over-exploitation of natural resources; and invasive alien species. They can manifest themselves in a variety of ways for both HSBC and its customers, including through macroeconomic, market, credit, reputational, regulatory compliance and legal risks.

Regulation and disclosure requirements in relation to human rights are increasing. Businesses are expected to be transparent about their efforts to identify and respond to the risk of adverse human rights impacts arising from their business activities and relationships. Failure to manage this risk may negatively impact people and communities, which in turn may result in reputational, regulatory compliance and legal risks for HSBC.

Mitigating actions

- The Environmental Risk Steering Meeting provides oversight of environmental risk and the risk of greenwashing. For further details of the Group's ESG governance structure, see page 74.
- Our climate risk programme continues to support the development of our climate risk management capabilities across four key pillars: governance and risk appetite, risk management, stress testing and scenario analysis, and disclosures.

Risk review

- We continue to enhance our approach to managing and mitigating the risk of greenwashing.
- Our sustainability risk policies form part of our broader risk management framework and are important mechanisms for managing risks. Our sustainability risk policies focus on mitigating reputational, credit, legal and other risks related to our customers' environmental and social impacts. For further details of our sustainability risk policies, see page 62.
- We are developing our understanding of nature-related risks in line with European regulatory expectations.
- In 2024, we focused on our approach to human rights risk management relating to the goods and services we buy from third parties and in respect of our business customers. For further details of our approach to human rights risk management, see page 75.
- The scope of our financial reporting risk framework includes oversight of the accuracy and completeness of climate and ESG disclosures. Our risk appetite statement references our climate and ESG disclosures. Our internal controls incorporate requirements for addressing the risk of misstatement in climate and ESG disclosures. To support this, we have developed a framework to guide control implementation over climate and ESG disclosures, which includes areas such as process and data governance, and risk assessment.
- We continue to engage with our customers, investors and regulators proactively on the management of climate and ESG risks. We also engage with initiatives, including the Climate Financial Risk Forum, Task Force on Climate-related Financial Disclosures and CDP (formerly the Carbon Disclosure Project) to help drive best practice for climate risk management.

▣ For further details of our approach to climate risk management, see 'Climate risk' on page 219.

▣ Our ESG review can be found on page 41.

Financial crime risk

Financial institutions remain under considerable regulatory scrutiny regarding their ability to detect and prevent financial crime. In 2024, these risks continued to be exacerbated by rising geopolitical tensions and ongoing macroeconomic factors. These challenges require managing conflicting laws and approaches to legal and regulatory regimes, and implementing increasingly complex and less predictable sanctions and trade restrictions.

Amid increasing cost of living pressures, we continue to face increasing regulatory expectations with respect to managing internal and external fraud and protecting customers. The accessibility and increasing sophistication of generative AI brings additional financial crime risks. While there is potential for the technology to support financial crime detection, there is also a risk that criminals use generative AI to perpetrate fraud, particularly scams.

The digitisation of financial services continues to have an impact on the payments ecosystem, with an increasing number of new market entrants and payment mechanisms, not all of which are subject to the same level of regulatory scrutiny or regulations as banks. Developments around digital assets and currencies have continued at pace, with an increasing regulatory and enforcement focus on the financial crimes linked to these types of assets.

The intersection of ESG issues and financial crime continues to pose risks related to potential 'greenwashing', human rights issues and environmental crime, as our organisation, customers and suppliers transition to net zero. In addition, climate change itself could heighten risks linked to vulnerable migrant populations in countries where financial crime is already more prevalent.

We also continue to face increasing challenges presented by national data privacy requirements, which may affect our ability to manage financial crime risks across markets.

Mitigating actions

- We continue to seek to manage sanctions and trade restrictions through the use of reasonably designed policies, procedures and controls, which are subject to ongoing testing and enhancements.
- We continue to develop our fraud controls and invest in capabilities to fight financial crime through the application of advanced analytics and AI, while monitoring technological developments and engaging with third parties.
- We continue to assess the impact of a rapidly changing payments ecosystem, as well as risks associated with direct and indirect exposure to digital assets and currencies, in an effort to maintain appropriate financial crime controls.
- We regularly review our existing policies and control framework so that developments relating to ESG are considered and the related financial crime risks are mitigated to the extent possible.
- We engage with regulators, policymakers and relevant international bodies, seeking to address data privacy challenges through international standards, guidance and legislation.

Digitalisation and technological advances risk

Developments in technology and changes to regulations are enabling new entrants to the industry, particularly with respect to payments. This challenges us to continue innovating to address evolving customer requirements, drive efficiency and adapt our products to attract and retain customers. As a result, we may need to increase investment in our business to adapt or develop products and services to respond to our customers' evolving needs. We aim to ensure that new digital capabilities do not weaken our resilience or wider risk management capabilities.

New technologies such as generative AI, large language models, blockchain, and quantum computing offer both business opportunities and potential risks for HSBC. As with the use of all technologies, we aim to maximise their potential while seeking to ensure a robust control environment is in place to help manage the inherent risks.

Mitigating actions

- We continue to monitor this emerging risk and advances in technology, as well as changes in customer behaviours, to understand how these may impact our business.
- We assess new technologies to help develop appropriate controls and maintain resilience.
- We closely monitor and assess financial crime risk and the impact on payment transparency and wider payment infrastructure.
- We conduct risk assessments and have governance in place (for example on AI and digital assets and currencies) to help enable Group-wide cross-risk focus on areas of emerging technology.
- We make public commitments as to how we engage with new technology innovation, for example publishing HSBC's Principles for the Ethical Use of Data and AI.
- We continue to make improvements to our related policies and to our control framework in order to enhance the end-to-end management of risks from new technology innovations.

Evolving regulatory environment risk

We aim to keep abreast of the emerging regulatory compliance and conduct risk agenda. Current focus areas include but are not limited to: ESG developments, particularly managing the risk of 'greenwashing'; ensuring good customer outcomes and addressing customer vulnerabilities; enhancements to regulatory reporting controls; employee compliance including the use of e-communication channels; and developments in legal principles or conduct requirements (including in relation to the risk of such developments in one part of the financial industry being construed as applying to other parts of the financial industry, which could lead to legal or regulatory proceedings).

The competitive landscape in which the Group operates may be impacted by future regulatory changes and government intervention including changes driven by governments adopting a pro-business growth agenda.

Mitigating actions

- We monitor regulatory developments to understand the evolving regulatory landscape, and seek to respond with changes in a timely manner.
- We engage with governments and regulators, and respond to consultations with a view to help shape regulations that can be implemented effectively.
- We hold regular meetings with relevant authorities to discuss strategic contingency plans, including those arising from geopolitical issues.
- Our purpose-led conduct approach aligns to our purpose and values, in particular the value ‘we take responsibility’.

Internally driven

Data risk

We use multiple systems and growing quantities of data to support our customers. Risk arises if data is incorrect, unavailable, misused or unprotected. Along with other banks and financial institutions, we need to meet external regulatory obligations and laws that cover data, such as the Basel Committee on Banking Supervision’s 239 guidelines and the General Data Protection Regulation.

Mitigating actions

- Through our global data management framework, we monitor the quality, availability and security of data that supports our customers and internal processes. We work towards resolving any identified data issues in a timely manner.
- We continue to make improvements to our data policies and to our control framework – which includes trusted sources, data flows and data quality – in order to enhance the end-to-end management of data risk.
- We have established a global data management utility and continue to simplify and unify data management activities across the Group.
- We seek to protect customer data through our data privacy framework, which establishes practices, design principles and guidelines that enable us to demonstrate compliance with data privacy laws and regulations.
- We continue to modernise our data and analytics infrastructure through investments in cloud technology, data visualisation, machine learning and AI.
- We continue to educate our employees on data risk and data management. We have delivered regular mandatory training globally on how to protect and manage data appropriately.

Risks arising from the receipt of services from third parties

We use third parties to provide a range of goods and services. It is critical that we seek to have appropriate risk management policies, processes and practices over the selection, governance and oversight of third parties and their supply chain, particularly for key activities that could affect our operational resilience. Any deficiency in the management of risks associated with our third parties could affect our ability to support our customers and meet regulatory expectations.

Mitigating actions

- We continue to monitor the effectiveness of the controls operated by our third-party providers and request third-party control reports, where required.

- We continued to develop the management of our intra-group arrangements using the same control standards as we apply to external third party arrangements.
- We have strengthened our due diligence and monitoring capabilities in respect of the financial stability of our third parties.
- We have strengthened the way third-party risk is overseen and managed across all non-financial risks, and have enhanced our processes, framework and reporting capabilities to help improve the visibility of risk and enable more robust management of our material third parties by our global businesses, functions and regions.
- We are implementing the changes required by new regulations as set by our regulators.

Model risk

Model risk arises whenever business decision making includes reliance on models. We use models in both financial and non-financial contexts, as well as in a range of business applications such as customer selection, product pricing, financial crime transaction monitoring, creditworthiness evaluation and financial reporting. Assessing model performance is a continuous undertaking including both regular monitoring of the model’s performance and more fundamental reviews of the model construct and data.

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

We continued to prioritise the redevelopment of internal ratings-based (‘IRB’) and internal model methods (‘IMM’) models, in relation to counterparty credit, as part of the IRB repair and Basel 3.1 and Fundamental Review of the Trading Book programmes. We have a key focus on enhancing the quality of data used as model inputs and ensuring that models adhere to both the letter and spirit of the regulation. Some models have been approved and a number are pending approval decisions from the UK’s Prudential Regulation Authority (‘PRA’) and other key regulators. We also launched a major project to develop 32 Wholesale IRB models which are expected to be submitted for regulatory approval over the next two and a half years.

Focus remains on AI and machine learning models where the pace of technological advances, including the development of generative AI, is driving significant changes in modelling techniques, and regulators across the globe are beginning to publish regulations and guidance.

Mitigating actions

- We are investing in the redevelopment of our IRB models used in our wholesale businesses to enhance our modelling capability and help ensure we meet regulatory expectations for the adoption of Basel 3.1 requirements.
- We updated our Model Risk Management (‘MRM’) framework to meet the requirements of the PRA’s SS1/23 with a programme of work in progress to implement these changes across our model landscape.
- We completed a review of model tiering across the organisation assessing the materiality and complexity of all models and assigning a new tier which will drive the level of oversight required at model level.
- We introduced a new framework to govern and manage the risks associated with Deterministic Quantitative Methods. These are complex and material calculators, which although not technically models, still present similar risks.
- Model Risk Governance committees at the Group, business and functional levels continue to provide oversight of model risk.
- Model Risk Management works closely with businesses to help develop IRB/IMM/IMA/IFRS 9/stress testing models to meet risk

Risk review

management, pricing, capital management, and credit risk measurement needs.

- Additional assurance work is performed by the model risk governance teams, which act as second lines of defence. The teams test whether controls implemented by model users comply with model risk policy and if model risk procedures are adequate.
- Models using AI or generative AI techniques are reviewed by the relevant risk teams and monitored by the business to help ensure that identified risks have adequate oversight and review. A framework to manage the range of risks that are generated by these advanced techniques and to recognise the multidisciplinary nature of these risks has been developed.

Change execution risk

The needs of our customers are evolving faster than ever, and the complexity and pace of strategic, regulatory and technological change require us to improve the way we prioritise resources and deliver strategic outcomes safely and sustainably. The embedding of structural changes throughout the Group, arising as part of the reorganisation of our businesses announced in October 2024, is expected to enable the strategy to be executed more efficiently but may elevate the level of change execution risk in the near to medium term.

Mitigating actions

- We have strengthened our investment case and prioritisation processes, while improving the monitoring and oversight of our change portfolio and overall operating control environment.
- The Change Prioritisation and Oversight Committee continues to oversee the prioritisation, strategic alignment, and management of execution risk for strategic change portfolios and initiatives. Additionally, the HSBC Holdings Board provides enhanced oversight over the simplification programme, directly supervising its mobilisation and delivery.
- Change benefits and funding will be aligned to the new Group organisational structure. Consideration of integrated business and technology architecture design will be a critical input to our prioritisation of future change investment.

Risks associated with workforce capability, capacity and environmental factors with potential impact on growth

Our global businesses and functions in all of our markets are exposed to risks associated with workforce capacity challenges, including challenges to retain, develop and attract high-performing employees in key labour markets, the changing skills requirements of our workforce and compliance with employment laws and regulations. Failure to manage these risks may have an impact on the delivery of our strategic objectives. It could also result in poor customer outcomes or a breach of employment laws and regulations, which may lead to regulatory sanctions or legal claims.

Mitigating actions

- We seek to promote an inclusive workforce and provide health and wellbeing support. We continue to build our speak-up culture through active campaigns.
- We monitor hiring activities and levels of employee attrition, with each business and function putting in place plans to help ensure they have effective workforce forecasting to meet business demands.
- We monitor people risks that could arise due to organisational restructuring, seeking to ensure that we manage redundancies sensitively and support impacted employees. We encourage our people leaders to focus on talent retention at all levels, with an empathetic mindset and approach, while ensuring the whole proposition of working at HSBC is well understood.
- Our Future Skills curriculum aims to provide skills that enable employees and HSBC to be successful in the future.
- We develop succession plans for key management roles, with oversight from the Group Executive Committee.

Our material banking risks

The material risk types associated with our banking and insurance manufacturing operations are described in the following tables:

Description of risks – banking operations

Risks	Arising from	Measurement, monitoring and management of risk
<p>Credit risk ■ See page 139</p> <p>Credit risk is the risk of financial loss if a customer or counterparty fails to meet an obligation under a contract.</p>	<p>Credit risk arises principally from direct lending, trade finance and leasing business, but also from other products such as guarantees and derivatives.</p>	<p>Credit risk is:</p> <ul style="list-style-type: none"> – measured as the amount that could be lost if a customer or counterparty fails to make repayments; – monitored using various internal risk management measures and within limits approved by individuals within a framework of delegated authorities; and – managed through a risk control framework, which outlines clear and consistent policies, principles and guidance for risk managers; and by setting limits and appetite across geographical markets, portfolios or sectors.
<p>Treasury risk ■ See page 200</p> <p>Treasury risk is the risk of having insufficient capital, liquidity or funding resources to meet financial obligations and satisfy regulatory requirements, including the risk of an adverse impact on earnings or capital due to structural and transactional foreign exchange exposures and changes in market interest rates, together with pension and insurance risk.</p>	<p>Treasury risk arises from changes to the respective resources and risk profiles driven by customer behaviour, management decisions or the external environment.</p>	<p>Treasury risk is:</p> <ul style="list-style-type: none"> – measured through risk appetite and more granular limits, set to provide an early warning of increasing risk, minimum ratios of relevant regulatory metrics, and metrics to monitor the key risk drivers impacting treasury resources; – monitored and projected against appetites and by using operating plans based on strategic objectives together with stress and scenario testing; and – managed through control of resources in conjunction with risk profiles, strategic objectives and cash flows.
<p>Market risk ■ See page 216</p> <p>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.</p>	<p>Market risk arises from both trading portfolios and non-trading portfolios. Market risk for non-trading portfolios is discussed in the Treasury risk section on page 212. Market risk exposures arising from our insurance operations are discussed on page 234.</p>	<p>Market risk is:</p> <ul style="list-style-type: none"> – measured using sensitivities, value at risk and stress testing, giving a detailed picture of potential gains and losses for a range of market movements and scenarios, as well as tail risks over specified time horizons; – monitored using value at risk, stress testing and other measures; and – managed using risk limits approved by the Group Risk Management Meeting and the risk management meetings in various global businesses.
<p>Climate risk ■ See page 219</p> <p>Climate risk relates to the financial and non-financial impacts that may arise as a result of climate change and the move to a net zero economy.</p>	<p>Climate risk can materialise through:</p> <ul style="list-style-type: none"> – physical risk, which arises from the increased frequency and severity of weather events; – transition risk, which arises from the process of moving to a net zero economy; – net zero alignment risk, which arises from failing to meet our net zero ambition or to meet external expectations related to net zero; and – the risk of greenwashing, which arises from the act of knowingly or unknowingly making inaccurate, unclear, misleading or unsubstantiated claims regarding sustainability to stakeholders. 	<p>Climate risk is:</p> <ul style="list-style-type: none"> – measured using risk metrics and stress testing; – monitored against risk appetite statements; and – managed through adherence to risk appetite thresholds, through specific policies, and through enhancements to processes and development of tools including the development of product market controls to manage the risk of greenwashing and the development of portfolio steering capabilities to manage our net zero ambitions.
<p>Resilience risk ■ See page 228</p> <p>Resilience risk is the risk of sustained and significant business disruption from execution, delivery, physical security or safety events, causing the inability to provide critical services to our customers, affiliates, and counterparties.</p>	<p>Resilience risk arises from failures or inadequacies in processes, people, systems or external events.</p>	<p>Resilience risk is:</p> <ul style="list-style-type: none"> – measured using a range of metrics and against our agreed risk appetite; – monitored through oversight of enterprise processes, risks, controls and strategic change programmes; and – managed by continual monitoring and thematic reviews.

Risk review

Description of risks – banking operations (continued)

Risks	Arising from	Measurement, monitoring and management of risk
<p>Regulatory compliance risk ▣ See page 229</p> <p>Regulatory compliance risk is the risk associated with breaching our duty to clients and other counterparties, inappropriate market conduct (including unauthorised trading) and breaching related financial services regulatory standards.</p>	<p>Regulatory compliance risk arises from the failure to observe relevant laws, codes, rules and regulations and can manifest itself in poor market or customer outcomes and lead to fines, penalties and reputational damage to our business.</p>	<p>Regulatory compliance risk is:</p> <ul style="list-style-type: none"> – measured by reference to risk appetite, identified metrics, incident assessments, regulatory feedback and the judgement and assessment of our regulatory compliance teams; – monitored against the first line of defence risk and control assessments, and the results of the monitoring and control assurance activities of the second line of defence functions; and – managed by establishing and communicating appropriate policies and procedures, training employees in them and monitoring activity to help embed their observance. Proactive risk control and/or remediation work is undertaken where required.
<p>Financial crime risk ▣ See page 229</p> <p>Financial crime risk is the risk that HSBC's products and services will be exploited for criminal activity. This includes fraud, bribery and corruption, tax evasion, sanctions and export control violations and evasion, money laundering, terrorist financing and proliferation financing.</p>	<p>Financial crime risk arises from day-to-day banking operations involving customers, third parties and employees.</p>	<p>Financial crime risk is:</p> <ul style="list-style-type: none"> – measured by reference to risk appetite, identified metrics, incident assessments, regulatory feedback and the judgement of, and assessment by, our financial crime teams; – monitored against the first line of defence risk and control assessments, and the results of the monitoring and control assurance activities of the second line of defence functions; and – managed by establishing and communicating appropriate policies and procedures, training employees and monitoring activity to help embed their observance. Proactive risk control and/or remediation work is undertaken where required.
<p>Model risk ▣ See page 230</p> <p>Model risk is the risk of the potential for adverse consequences from model errors or the inappropriate use of modelled outputs to inform business decisions.</p>	<p>Model risk arises in both financial and non-financial contexts whenever business decision making includes reliance on models.</p>	<p>Model risk is:</p> <ul style="list-style-type: none"> – measured by reference to model performance tracking and the output of detailed technical reviews and regulatory feedback, with key metrics including model review statuses and findings; – monitored against model risk appetite statements, insight from the independent validations completed by the model risk management team; and – managed by creating and communicating appropriate policies, procedures and guidance, training colleagues in their application, and supervising their adoption to help ensure operational effectiveness.

Our insurance manufacturing subsidiaries are regulated separately from our banking operations. Risks in our insurance entities are managed using methodologies and processes that are subject to Group oversight. Our insurance operations are also subject to many of the same risks as our banking operations, and these are covered by the Group's risk management processes. However, there are specific risks inherent to the insurance operations as noted below.

Description of risks – insurance manufacturing operations

Risks	Arising from	Measurement, monitoring and management of risk
<p>Financial risk ▣ See page 231</p> <p>For insurance entities, financial risk includes the risk of not being able to effectively match liabilities arising under insurance contracts with appropriate investments and that the expected sharing of financial performance with policyholders under certain contracts is not possible.</p>	<p>Exposure to financial risk arises from:</p> <ul style="list-style-type: none"> – market risk affecting the fair values of financial assets or their future cash flows; – credit risk; and – liquidity risk of entities being unable to make payments to policyholders as they fall due. 	<p>Financial risk is:</p> <ul style="list-style-type: none"> – measured for credit risk, in terms of economic capital and the amount that could be lost if a counterparty fails to make repayments; for market risk, in terms of economic capital, internal metrics and fluctuations in key financial variables; and for liquidity risk, in terms of internal metrics including stressed operational cash flow projections; – monitored through a framework of approved limits and delegated authorities; and – managed through a risk control framework, which outlines clear and consistent policies, principles and guidance. This includes using product design, asset liability matching and bonus rates.
<p>Insurance risk ▣ See page 235</p> <p>Insurance risk is the risk that, over time, the cost of insurance policies written, including claims and benefits, may exceed the total amount of premiums and investment income received.</p>	<p>The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, as well as lapse and surrender rates.</p>	<p>Insurance risk is:</p> <ul style="list-style-type: none"> – measured in terms of life insurance liabilities and economic capital allocated to insurance underwriting risk; – monitored through a framework of approved limits and delegated authorities; and – managed through a risk control framework, which outlines clear and consistent policies, principles and guidance. This includes using product design, underwriting, reinsurance and claims-handling procedures.

Credit risk

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Overview

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

Credit risk management

Key developments in 2024

There were no material changes to the policies and practices for the management of credit risk in 2024. We continued to apply the requirements of IFRS 9 'Financial Instruments' within the Credit Risk sub-function.

We actively managed the risks related to macroeconomic uncertainties, including interest rates, inflation, fiscal and monetary policy, broader geopolitical uncertainties and conflicts.

■ For further details, see 'Top and emerging risks' on page 131.

Governance and structure

We have established Group-wide credit risk management and related IFRS 9 processes. We continue to assess the impact of economic developments in key markets on specific customers, customer segments or portfolios. As credit conditions change, we take mitigating actions, including the revision of risk appetites or limits and tenors, as appropriate. In addition, we continue to evaluate the terms under which we provide credit facilities within the context of individual customer requirements, the quality of the relationship, local regulatory requirements, market practices and our local market position.

Credit Risk sub-function

(Audited)

Credit approval authorities are delegated by the Board to the Group CEO together with the authority to sub-delegate them. The Credit Risk sub-function in Group Risk and Compliance is responsible for the key policies and processes for managing credit risk, which include formulating Group credit policies and risk rating frameworks, guiding the Group's appetite for credit risk exposures, undertaking independent reviews and objective assessment of credit risk, and monitoring performance and management of portfolios.

The principal objectives of our credit risk management are:

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

Key risk management processes

IFRS 9 'Financial Instruments' process

The IFRS 9 process comprises three main areas: modelling, data and forward economic guidance; implementation; and governance.

Modelling, data and forward economic guidance

We have established IFRS 9 modelling and data processes in various geographies, which are subject to internal model risk governance including independent review of significant model developments.

We have a centralised process for generating unbiased and independent global economic scenarios. Scenarios are subject to a process of review and challenge by a dedicated central team and individually for each region. Each quarter, the scenarios and probability weights are reviewed and checked for consistency with the economic conjuncture and current economic and financial risks. These are subject to final review and approval by senior management in a forward economic guidance global business impairment committee.

Implementation

A centralised impairment engine performs the expected credit losses calculation using data, which is subject to a number of validation checks and enhancements, from a variety of client, finance and risk systems. Where possible, these checks and processes are performed in a globally consistent and centralised manner.

Governance

Regional management review forums are established in key sites and regions in order to review and approve the impairment results. Regional management review forums have representatives from Credit Risk and Finance. The key site and regional approvals are reported up to the relevant global business impairment committee for final approval of the Group's ECL for the period. Required members of the committee are the Wholesale Global Chief Corporate Credit Officer and Chief Risk and Compliance Officer for Wealth and Personal Banking Risk, as well as the relevant global business's Chief Financial Officer and the Global Financial Controller.

Concentration of exposure

(Audited)

Concentrations of credit risk arise when a number of counterparties or exposures have comparable economic characteristics, or such counterparties 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 similarly affected by changes in economic, political or other conditions. 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.

Credit quality of financial instruments

(Audited)

Our risk rating system facilitates the internal ratings-based approach under the Basel framework adopted by the Group to support the calculation of our minimum credit regulatory capital requirement. The five credit quality classifications encompass a range of granular internal credit rating grades assigned to wholesale and retail

Risk review

customers, and the external ratings attributed by external agencies to debt securities.

For debt securities and certain other financial instruments, external ratings have been aligned to the five quality classifications based upon the mapping of related customer risk rating ('CRR') to external credit rating.

Wholesale lending

The CRR 10-grade scale summarises a more granular underlying 23-grade scale of obligor probability of default ('PD'). All corporate customers are rated using the 10- or 23-grade scale, depending on the degree of sophistication of the Basel approach adopted for the exposure.

Credit quality classification

	Sovereign debt securities and bills	Other debt securities and bills	Wholesale lending and derivatives		Retail lending	
	External credit rating	External credit rating	Internal credit rating	12-month Basel probability of default %	Internal credit rating	12 month probability-weighted PD %
Quality classification^{1,2}						
Strong	BBB and above	A- and above	CRR 1 to CRR 2	0-0.169	Band 1 and 2	0.000-0.500
Good	BBB- to BB	BBB+ to BBB-	CRR 3	0.170-0.740	Band 3	0.501-1.500
Satisfactory	BB- to B and unrated	BB+ to B and unrated	CRR 4 to CRR 5	0.741-4.914	Band 4 and 5	1.501-20.000
Sub-standard	B- to C	B- to C	CRR 6 to CRR 8	4.915-99.999	Band 6	20.001-99.999
Credit impaired	Default	Default	CRR 9 to CRR 10	100	Band 7	100

1 Customer risk rating ('CRR').

2 12-month point-in-time probability-weighted probability of default ('PD').

Each CRR 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. This mapping between internal and external ratings is indicative and may vary over time.

Retail lending

Retail lending credit quality is based on a 12-month point-in-time probability-weighted PD.

Quality classification definitions

- 'Strong' exposures demonstrate a strong capacity to meet financial commitments, with negligible or low probability of default and/or low levels of expected loss.
- 'Good' exposures require closer monitoring and demonstrate a good capacity to meet financial commitments, with low default risk.
- 'Satisfactory' exposures require closer monitoring and demonstrate an average-to-fair capacity to meet financial commitments, with moderate default risk.
- 'Sub-standard' exposures require varying degrees of special attention and default risk is of greater concern.
- 'Credit-impaired' exposures have been assessed as described in Note 1.2(i) to the financial statements.

Forborne loans and advances

(Audited)

Forbearance measures consist of concessions towards an obligor that is experiencing or about to experience difficulties in meeting its financial commitments.

We continue to class loans as forborne when we modify the contractual payment terms due to having concerns about the borrowers' ability to meet contractual payments when they were due. Our definition of forborne captures non-payment-related concessions, such as covenant waivers.

■ For details of our policy on forbearance, see Note 1.2(i) in the financial statements.

Credit quality of forborne loans

For wholesale lending, where payment-related forbearance measures result in a diminished financial obligation, or if there are other indicators of impairment, the loan will be classified as credit impaired if it is not already so classified. All facilities with a customer, including loans that have not been modified, are considered credit impaired following the identification of a payment-related forborne loan. For retail lending, where a material payment-related concession has been granted, the loan will be classified as credit impaired. In isolation, non-payment related forbearance measures may not result in the loan being classified as credit impaired unless combined with other indicators of credit impairment. These are classed as performing forborne loans for both wholesale and retail lending.

Wholesale and retail lending forborne loans are classified as credit impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, observed over a minimum one-year period, and there are no other indicators of impairment. Any forborne loans not considered credit impaired will remain forborne for a minimum of two years from the date that credit impairment no longer applies. For wholesale and retail lending, any forbearance measures granted on a loan already classed as forborne results in the customer being classed as credit impaired.

Forborne loans and recognition of expected credit losses

(Audited)

Forborne loans expected credit loss assessments reflect the higher rates of losses typically experienced with these types of loans such that they are in stage 2 and stage 3. The higher rates are more pronounced in unsecured retail lending requiring further segmentation. For wholesale lending, forborne loans are typically assessed individually. Credit risk ratings are intrinsic to the impairment assessments. The individual impairment assessment takes into account the higher risk of the future non-payment inherent in forborne loans.

Impairment assessment

(Audited)

For details of our impairment policies on loans and advances and financial investments, see Note 1.2(i) on the financial statements.

Write-off of loans and advances

(Audited)

Under IFRS 9, write-off should occur when there is no reasonable expectation of recovering further cash flows from the financial asset.

This principle does not prohibit early write-off, which is defined in local policies to ensure effectiveness in the management of customers in the collections process.

Unsecured personal facilities, including credit cards, are generally written off at between 150 and 210 days past due. The standard period runs until the end of the month in which the account becomes 180 days contractually delinquent. However, in exceptional circumstances, to avoid unfair customer outcomes, deliver customer duty or meet regulatory expectations, the period may be extended further.

For secured facilities, write-off should occur upon repossession of collateral, receipt of proceeds via settlement, or determination that recovery of the collateral will not be pursued. Where these assets are maintained on the balance sheet beyond 60 months of consecutive delinquency-driven default, the prospect of recovery is reassessed.

Recovery activity, on both secured and unsecured assets, may continue after write-off.

Any unsecured exposures that are not written off at 180 days past due, and any secured exposures that are in 'default' status for 60 months or greater but are not written off, are subject to additional monitoring via the appropriate governance forums.

Credit risk in 2024

At 31 December 2024, gross loans and advances to banks and customers of \$1,042bn decreased by \$20.1bn on a reported basis compared with 31 December 2023. Gross loans and advances to customers decreased by \$9.2bn while gross loans and advances to banks decreased by \$10.9bn. This included total adverse foreign exchange movements of \$26.2bn.

On a constant currency basis, the increase of \$6.1bn was driven by a \$9.6bn rise in personal loans and advances to customers and a \$3.0bn rise in wholesale loans and advances to customers. These were partly offset by a \$6.5bn decrease in loans and advances to banks.

The rise in personal loans and advances to customers was driven by mortgage growth (up \$7.5bn), mainly in HSBC UK (up \$4.5bn), in our legal entities in the US (up \$2.7bn) and in Mexico (up \$0.3bn). There was a further increase in other personal lending (up \$2.1bn), mainly in our entities in Europe (up \$1.1bn) and in Asia (up \$1.0bn).

The rise in wholesale loans and advances to customers was driven by an increase in balances with non-bank financial institutions (up \$9.6bn), mainly in HSBC Bank plc (up \$4.2bn) and in our legal entities in Asia (up \$2.2bn), in the US (up \$1.2bn), in HSBC UK (up \$1.0bn) and in the Middle East (up \$0.8bn). This was partly offset by a \$6.6bn reduction in corporate and commercial balances, observed mainly in our legal entities in the US (down \$2.9bn) and in Asia (down \$2.4bn).

The decrease in loans and advances to banks was driven by lower central bank balances and money market lending balances in our legal entities in Asia (down \$9.1bn), partly offset by higher balances in our legal entities in the Middle East (up \$3.6bn).

The movement in gross loans and advances to banks and customers included a \$3.1bn decrease on a constant currency basis due to the reclassification of businesses into 'assets held for sale' during the period.

At 31 December 2024, the allowance for ECL of \$10.3bn decreased by \$1.7bn compared with 31 December 2023, including favourable foreign exchange movements of \$0.5bn. The \$10.3bn allowance comprised \$9.8bn in respect of assets held at amortised cost, \$0.4bn in respect of loan commitments and financial guarantees, and \$0.1bn in respect of debt instruments measured at fair value through other comprehensive income ('FVOCI').

On a constant currency basis, stage 3 gross loans and advances to customers at 31 December 2024 increased by \$3.9bn. The increase in stage 3 exposures was driven by defaults in the commercial real estate portfolio in Hong Kong, which are generally well collateralised. There was a decrease in the associated allowance for ECL due to write-offs of heavily-impaired exposures.

On a constant currency basis, the allowance for ECL in relation to loans and advances to customers decreased by \$0.9bn from 31 December 2023. This was attributable to:

- a \$0.8bn decrease in wholesale loans and advances to customers, which included a \$0.7bn decrease in stage 3 and a \$0.1bn decrease in stages 1 and 2; and
- a \$0.1bn decrease in personal loans and advances to customers driven by stages 1 and 2.

The ECL charge for 2024 was \$3.4bn, inclusive of recoveries. The ECL charge comprised: \$2.1bn in respect of wholesale lending, of which the stage 3 charge was \$1.6bn; \$1.2bn in respect of personal lending, of which \$0.9bn were in stage 3; and \$0.1bn in respect of other assets and debt instruments measured at FVOCI.

Wholesale lending charges were recognised mainly in our legal entities in Hong Kong (\$1.0bn). While the mainland China commercial real estate sector remained subdued, there were limited new defaults and lower total ECL charges of \$0.4bn during the period (\$1.0bn during 2023). ECL charges in the Hong Kong commercial real estate sector excluding exposure to mainland China borrowers of \$0.1bn during the period were also low due to the limited impact from defaults, driven by the high level of collateralisation in the portfolio.

Personal lending charges reflected higher charges in our legal entity in Mexico, mainly in our unsecured portfolio, due to portfolio growth and unemployment trends. In addition, there were higher charges in our legal entities in the UK and Hong Kong as a result of portfolio growth.

At 31 December 2024, gross other financial assets measured at amortised cost of \$828.6bn decreased by \$131.7bn on a reported basis compared with 31 December 2023. This included total adverse foreign exchange movements of \$30.7bn.

On a constant currency basis, the decrease of \$101.0bn was mainly driven by a \$91.9bn decrease in assets held for sale, due to the

completion of the disposals of our banking business in Canada and our retail banking operations in France.

Income statement movements are analysed further on page 90.

While credit risk arises across most of our balance sheet, ECL have typically been recognised on loans and advances to customers and banks, in addition to securitisation exposures and other structured products. As a result, our disclosures focus primarily on these two areas. For further details of:

- maximum exposure to credit risk, see page 148;
- measurement uncertainty and sensitivity analysis of ECL estimates, see page 148;
- reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees, see page 161;
- credit quality, see page 166;
- total wholesale lending for loans and advances to banks and customers by stage distribution, see page 171;
- wholesale lending collateral, see page 181;
- total personal lending for loans and advances to customers at amortised cost by stage distribution, see page 185; and
- personal lending collateral, see page 194.

Summary of credit risk

The following disclosure presents the gross carrying/nominal amount of financial instruments to which the impairment requirements in IFRS 9 are applied and the associated allowance for ECL.

Summary of financial instruments to which the impairment requirements in IFRS 9 are applied

(Audited)

	31 Dec 2024		At 31 Dec 2023	
	Gross carrying/ nominal amount \$m	Allowance for ECL ¹ \$m	Gross carrying/ nominal amount \$m	Allowance for ECL ¹ \$m
Loans and advances to customers at amortised cost	940,373	(9,715)	949,609	(11,074)
Loans and advances to banks at amortised cost	102,052	(13)	112,917	(15)
Other financial assets measured at amortised cost	828,580	(92)	960,271	(422)
– cash and balances at central banks	267,674	–	285,868	–
– Hong Kong Government certificates of indebtedness	42,293	–	42,024	–
– reverse repurchase agreements – non-trading	252,549	–	252,217	–
– financial investments	153,982	(9)	148,346	(20)
– assets held for sale ²	3,273	(4)	103,186	(324)
– prepayments, accrued income and other assets ³	108,809	(79)	128,630	(78)
Total gross carrying amount on-balance sheet	1,871,005	(9,820)	2,022,797	(11,511)
Loans and other credit-related commitments	619,367	(348)	661,015	(367)
Financial guarantees	16,998	(29)	17,009	(39)
Total nominal amount off-balance sheet⁴	636,365	(377)	678,024	(406)
	2,507,370	(10,197)	2,700,821	(11,917)
		Memorandum allowance for ECL⁵		Memorandum allowance for ECL⁵
	Fair value \$m	\$m	Fair value \$m	\$m
Debt instruments measured at fair value through other comprehensive income ('FVOCI')	346,124	(54)	302,348	(97)

- The total ECL is recognised in the loss allowance for the financial asset unless the total ECL exceeds the gross carrying amount of the financial asset, in which case the ECL is recognised as a provision.
- For further details on gross carrying amounts and allowances for ECL related to assets held for sale, see 'Assets held for sale' on page 146. At 31 December 2024, the gross carrying amount comprised \$1,113m of loans and advances to customers and banks (2023: \$84,075m) and \$2,160m of other financial assets at amortised cost (2023: \$19,111m). The corresponding allowance for ECL comprised \$4m of loans and advances to customers and banks (2023: \$303m) and \$0.3m of other financial assets at amortised cost (2023: \$21m).
- Includes only those financial instruments that are subject to the impairment requirements of IFRS 9. 'Prepayments, accrued income and other assets' as presented within the consolidated balance sheet on page 343 comprises both financial and non-financial assets, including cash collateral and settlement accounts. It also includes 'Items in the course of collection from other banks' which was presented separately in 2023.
- Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.
- Debt instruments measured at FVOCI continue to be measured at fair value with the allowance for ECL as a memorandum item. Change in ECL is recognised in 'Change in expected credit losses and other credit impairment charges' in the income statement.

The following table provides an overview of the Group's credit risk by stage and industry, and the associated ECL coverage. The financial assets recorded in each stage have the following characteristics:

- Stage 1: These financial assets are unimpaired and without significant increase in credit risk on which 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 for which 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 on which a lifetime ECL is recognised.
- POCI: Financial assets that are purchased or originated at a deep discount are seen to reflect the incurred credit losses on which a lifetime ECL is recognised.

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector at 31 December 2024

(Audited)

	Gross carrying/nominal amount ¹					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI ²	Total	Stage 1	Stage 2	Stage 3	POCI ²	Total	Stage 1	Stage 2	Stage 3	POCI ²	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	%	%	%	%	%
Loans and advances to customers at amortised cost	824,420	93,248	22,615	90	940,373	(1,078)	(2,546)	(6,040)	(51)	(9,715)	0.1	2.7	26.7	56.7	1.0
– personal	403,746	39,919	3,560	–	447,225	(570)	(1,158)	(796)	–	(2,524)	0.1	2.9	22.4	–	0.6
– corporate and commercial	340,987	51,231	18,376	90	410,684	(463)	(1,358)	(4,883)	(51)	(6,755)	0.1	2.7	26.6	56.7	1.6
– non-bank financial institutions	79,687	2,098	679	–	82,464	(45)	(30)	(361)	–	(436)	0.1	1.4	53.2	–	0.5
Loans and advances to banks at amortised cost	101,852	198	2	–	102,052	(9)	(2)	(2)	–	(13)	–	1.0	100.0	–	–
Other financial assets measured at amortised cost	826,621	1,806	153	–	828,580	(64)	(5)	(23)	–	(92)	–	0.3	15.0	–	–
Loan and other credit-related commitments	597,231	21,175	958	3	619,367	(137)	(121)	(90)	–	(348)	–	0.6	9.4	–	0.1
– personal	251,489	1,680	86	–	253,255	(17)	–	(5)	–	(22)	–	–	5.8	–	–
– corporate and commercial	231,201	17,453	838	3	249,495	(111)	(116)	(83)	–	(310)	–	0.7	9.9	–	0.1
– financial	114,541	2,042	34	–	116,617	(9)	(5)	(2)	–	(16)	–	0.2	5.9	–	–
Financial guarantees	15,353	1,397	248	–	16,998	(8)	(5)	(16)	–	(29)	0.1	0.4	6.5	–	0.2
– personal	1,416	11	–	–	1,427	–	–	–	–	–	–	–	–	–	–
– corporate and commercial	10,048	1,232	195	–	11,475	(7)	(5)	(15)	–	(27)	0.1	0.4	7.7	–	0.2
– financial	3,889	154	53	–	4,096	(1)	–	(1)	–	(2)	–	–	1.9	–	–
At 31 Dec 2024	2,365,477	117,824	23,976	93	2,507,370	(1,296)	(2,679)	(6,171)	(51)	(10,197)	0.1	2.3	25.7	54.8	0.4

1 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

2 Purchased or originated credit-impaired ('POCI').

Unless identified at an earlier stage, all financial assets are deemed to have suffered a significant increase in credit risk when they are 30 days past due ('DPD') and are transferred from stage 1 to stage 2. The following disclosure presents the ageing of stage 2 financial

assets by those less than 30 DPD and greater than 30 DPD and therefore presents those financial assets classified as stage 2 due to ageing (30 DPD) and those identified at an earlier stage (less than 30 DPD).

Stage 2 days past due analysis at 31 December 2024

(Audited)

	Gross carrying amount				Allowance for ECL				ECL coverage %			
	Stage 2	Up-to-date	1 to 29 DPD ¹	30 and > DPD ¹	Stage 2	Up-to-date	1 to 29 DPD ¹	30 and > DPD ¹	Stage 2	Up-to-date	1 to 29 DPD ¹	30 and > DPD ¹
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	%	%	%	%
Loans and advances to customers at amortised cost	93,248	90,157	1,888	1,203	(2,546)	(2,147)	(192)	(207)	2.7	2.4	10.2	17.2
– personal	39,919	37,676	1,361	882	(1,158)	(799)	(169)	(190)	2.9	2.1	12.4	21.5
– corporate and commercial	51,231	50,486	506	239	(1,358)	(1,326)	(21)	(11)	2.7	2.6	4.2	4.6
– non-bank financial institutions	2,098	1,995	21	82	(30)	(22)	(2)	(6)	1.4	1.1	9.5	7.3
Loans and advances to banks at amortised cost	198	198	–	–	(2)	(2)	–	–	1.0	1.0	–	–
Other financial assets measured at amortised cost	1,806	1,794	3	9	(5)	(5)	–	–	0.3	0.3	–	–

1 The days past due amounts presented above are on a contractual basis.

Risk review

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector at 31 December 2023

(Audited)

	Gross carrying/nominal amount ¹					Allowance for ECL					ECL coverage %				
	Stage 1	Stage 2	Stage 3	POCI ²	Total	Stage 1	Stage 2	Stage 3	POCI ²	Total	Stage 1	Stage 2	Stage 3	POCI ²	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	%	%	%	%	%
Loans and advances to customers at amortised cost	809,384	120,871	19,273	81	949,609	(1,130)	(2,964)	(6,950)	(30)	(11,074)	0.1	2.5	36.1	37.0	1.2
– personal	396,534	47,483	3,505	—	447,522	(579)	(1,434)	(854)	—	(2,867)	0.1	3.0	24.4	—	0.6
– corporate and commercial	342,878	69,738	14,958	81	427,655	(499)	(1,500)	(5,774)	(30)	(7,803)	0.1	2.2	38.6	37.0	1.8
– non-bank financial institutions	69,972	3,650	810	—	74,432	(52)	(30)	(322)	—	(404)	0.1	0.8	39.8	—	0.5
Loans and advances to banks at amortised cost	111,479	1,436	2	—	112,917	(10)	(3)	(2)	—	(15)	—	0.2	100.0	—	—
Other financial assets measured at amortised cost	946,873	12,734	664	—	960,271	(109)	(132)	(181)	—	(422)	—	1.0	27.3	—	—
Loan and other credit-related commitments	630,949	28,922	1,140	4	661,015	(153)	(128)	(86)	—	(367)	—	0.4	7.5	—	0.1
– personal	253,183	3,459	355	—	256,997	(23)	—	(2)	—	(25)	—	—	0.6	—	—
– corporate and commercial	246,210	20,928	736	4	267,878	(120)	(119)	(83)	—	(322)	—	0.6	11.3	—	0.1
– financial	131,556	4,535	49	—	136,140	(10)	(9)	(1)	—	(20)	—	0.2	2.0	—	—
Financial guarantees	14,746	1,879	384	—	17,009	(7)	(7)	(25)	—	(39)	—	0.4	6.5	—	0.2
– personal	1,106	13	—	—	1,119	—	—	—	—	—	—	—	—	—	—
– corporate and commercial	10,157	1,290	330	—	11,777	(6)	(6)	(24)	—	(36)	0.1	0.5	7.3	—	0.3
– financial	3,483	576	54	—	4,113	(1)	(1)	(1)	—	(3)	—	0.2	1.9	—	0.1
At 31 Dec 2023	2,513,431	165,842	21,463	85	2,700,821	(1,409)	(3,234)	(7,244)	(30)	(11,917)	0.1	2.0	33.8	35.3	0.4

1 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

2 Purchased or originated credit-impaired ('POCI').

Stage 2 days past due analysis at 31 December 2023

(Audited)

	Gross carrying amount				Allowance for ECL				ECL coverage %			
	Stage 2	Up-to-date	1 to 29 DPD ¹	30 and > DPD ¹	Stage 2	Up-to-date	1 to 29 DPD ¹	30 and > DPD ¹	Stage 2	Up-to-date	1 to 29 DPD ¹	30 and > DPD ¹
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	%	%	%	%
Loans and advances to customers at amortised cost	120,871	116,320	2,571	1,980	(2,964)	(2,458)	(245)	(261)	2.5	2.1	9.5	13.2
– personal	47,483	44,634	1,785	1,064	(1,434)	(974)	(214)	(246)	3.0	2.2	12.0	23.1
– corporate and commercial	69,738	68,446	697	595	(1,500)	(1,454)	(31)	(15)	2.2	2.1	4.4	2.5
– non-bank financial institutions	3,650	3,240	89	321	(30)	(30)	—	—	0.8	0.9	—	—
Loans and advances to banks at amortised cost	1,436	1,424	—	12	(3)	(3)	—	—	0.2	0.2	—	—
Other financial assets measured at amortised cost	12,734	12,417	171	146	(132)	(113)	(9)	(10)	1.0	0.9	5.3	6.8

1 The days past due amounts presented above are on a contractual basis.

Stage 2 decomposition

The following table presents the stage 2 decomposition of gross carrying amount and allowances for ECL for loans and advances to customers and banks. It also sets out the reasons why an exposure is classified as stage 2 and therefore presented as a significant increase in credit risk at 31 December 2024.

The quantitative classification shows gross carrying amount and allowances for ECL for which the applicable reporting date probability of default ('PD') measure exceeds defined quantitative thresholds for retail and wholesale exposures, as set out in Note 1.2 'Summary of material accounting policies', on page 359.

The qualitative classification primarily accounts for customer risk rating ('CRF') deterioration, watch-and-worry and retail management judgemental adjustments.

■ A summary of our current policies and practices for the significant increase in credit risk is set out in 'Summary of material accounting policies' on page 359.

Loans and advances to customers and banks¹

	At 31 Dec 2024							
	Loans and advances to customers						Loans and advances to banks at amortised cost	Total stage 2
	of which:							
	Personal	first lien mortgages	credit cards	other personal lending	Corporate and commercial	Non-bank financial institutions		
\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
Quantitative	36,356	30,992	2,904	2,460	37,787	1,658	176	75,977
Qualitative	3,452	3,107	85	260	13,327	438	22	17,239
of which: forbearance	175	70	40	65	1,086	3	—	1,264
30 DPD backstop ²	111	78	2	31	117	2	—	230
Total gross carrying amount	39,919	34,177	2,991	2,751	51,231	2,098	198	93,446
Quantitative	(1,118)	(121)	(651)	(346)	(1,124)	(28)	—	(2,270)
Qualitative	(35)	(8)	(9)	(18)	(229)	(2)	(2)	(268)
of which: forbearance	(5)	—	(1)	(4)	(12)	—	—	(17)
30 DPD backstop ²	(5)	(1)	—	(4)	(5)	—	—	(10)
Total allowance for ECL	(1,158)	(130)	(660)	(368)	(1,358)	(30)	(2)	(2,548)
ECL coverage %	2.9	0.4	22.1	13.4	2.7	1.4	1.0	2.7
Residual average life³ (in years)	17.0	19.5	<1.0	3.6	2.7	1.9	<1.0	
	At 31 Dec 2023							
Quantitative	35,742	31,178	1,940	2,624	53,034	2,955	781	92,512
Qualitative	11,678	7,077	2,477	2,124	16,241	653	642	29,214
of which: forbearance	171	69	34	68	982	2	—	1,155
30 DPD backstop ²	63	32	2	29	463	42	13	581
Total gross carrying amount	47,483	38,287	4,419	4,777	69,738	3,650	1,436	122,307
Quantitative	(1,103)	(149)	(554)	(400)	(1,225)	(24)	(1)	(2,353)
Qualitative	(324)	(50)	(142)	(132)	(270)	(6)	(2)	(602)
of which: forbearance	(4)	—	(1)	(3)	(11)	—	—	(15)
30 DPD backstop ²	(7)	(1)	(1)	(5)	(5)	—	—	(12)
Total allowance for ECL	(1,434)	(200)	(697)	(537)	(1,500)	(30)	(3)	(2,967)
ECL coverage %	3.0	0.5	15.8	11.2	2.2	0.8	0.2	2.4
Residual average life³ (in years)	16.0	19.3	<1.0	4.1	2.5	1.2	<1.0	

1 Where balances satisfy more than one of the above three criteria for determining a significant increase in credit risk, the corresponding gross carrying amount and allowance for ECL have been assigned in order of categories presented.

2 Days past due ('DPD').

3 Calculated as the difference between final contractual maturities and the reporting date, weighted based on the contribution of the instrument to the stage 2 total gross carrying amount of the corresponding product or sector.

Assets held for sale

(Audited)

At 31 December 2024, the most material balances held for sale arose from our business in South Africa and our private banking business in Germany.

Disclosures relating to assets held for sale are provided in the following credit risk tables, primarily where the disclosure is relevant to the measurement of these financial assets:

- ‘Maximum exposure to credit risk’ (page 148); and
- ‘Distribution of financial instruments by credit quality at 31 December’ (page 166);

Although there was a reclassification on the balance sheet, there was no separate income statement reclassification. As a result, charges for changes in expected credit losses and other credit impairment charges shown in the credit risk disclosures include charges relating to financial assets classified as ‘assets held for sale’.

‘Loans and other credit-related commitments’, ‘financial guarantees’ and ‘Debt instruments measured at fair value through other comprehensive income’ as reported in credit disclosures, also include exposures and allowances relating to financial assets classified as ‘assets held for sale’.

Loans and advances to customers and banks measured at amortised cost

(Audited)

	2024		2023	
	Total gross loans and advances \$m	Allowance for ECL \$m	Total gross loans and advances \$m	Allowance for ECL \$m
As reported	1,042,425	(9,728)	1,062,526	(11,089)
Reported in ‘Assets held for sale’	1,113	(4)	84,075	(303)
At 31 December	1,043,538	(9,732)	1,146,601	(11,392)

At 31 December 2024, gross loans and advances of our business in South Africa were \$660m and the related allowance for ECL was \$4m. Gross loans and advances of our private banking business in Germany were \$309m and of our French life insurance business were \$144m, both with negligible allowance for ECL.

These lending balances are part of associated disposal groups that are measured in their entirety at the lower of carrying amount and fair value less costs to sell. Any difference between the carrying amount of these assets and their sales price is part of the overall gain or loss on the associated disposal group as a whole.

Lending balances held for sale continue to be measured at amortised cost less allowances for impairment and, therefore, such carrying amounts may differ from fair value.

For further details of the carrying amount and the fair value at 31 December 2024 of loans and advances to banks and customers classified as held for sale, see Note 23 on the financial statements.

Gross loans and allowance for ECL on loans and advances to customers and banks reported in ‘Assets held for sale’

(Audited)

	South Africa		German Private Banking Business		Other		Total	
	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m
Loans and advances to customers at amortised cost	660	(4)	309	–	–	–	969	(4)
– personal	–	–	130	–	–	–	130	–
– corporate and commercial	586	(4)	19	–	–	–	605	(4)
– non-bank financial institutions	74	–	160	–	–	–	234	–
Loans and advances to banks at amortised cost	–	–	–	–	144	–	144	–
At 31 Dec 2024¹	660	(4)	309	–	144	–	1,113	(4)

	Banking business in Canada		Retail banking operations in France		Other		Total	
	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m
Loans and advances to customers at amortised cost	56,349	(220)	16,984	(82)	255	(1)	73,588	(303)
– personal	27,071	(95)	13,920	(79)	140	(1)	41,131	(175)
– corporate and commercial	27,789	(120)	3,012	(3)	–	–	30,801	(123)
– non-bank financial institutions	1,489	(5)	52	–	115	–	1,656	(5)
Loans and advances to banks at amortised cost	154	–	10,333	–	–	–	10,487	–
At 31 Dec 2023	56,503	(220)	27,317	(82)	255	(1)	84,075	(303)

1 The table above does not include disposals completed during 2024 including the sale of our retail banking operations in France completed on 1 January 2024 and our banking business in Canada completed on 28 March 2024. The sale of our business in Argentina was announced in the first quarter of 2024 and completed on 6 December 2024. The gross loans and advances to customers and banks in Argentina were \$1,760m and the associated allowance for ECL was \$34m at 31 March 2024. For more details, please refer to business disposals as disclosed in Note 23 on page 411.

The table below analyses the amount of ECL (charges)/releases arising from assets held for sale. The charges during the period relate to our businesses in Canada (\$41m) and in Argentina (\$40m).

Changes in expected credit losses and other credit impairment

(Audited)

	2024	2023
	\$m	\$m
ECL (charges)/releases arising from:		
– assets held for sale	(81)	(49)
– assets not held for sale	(3,333)	(3,398)
Year ended 31 Dec	(3,414)	(3,447)

Credit exposure

Maximum exposure to credit risk

(Audited)

This section provides information on balance sheet items and their offsets as well as loan and other credit-related commitments. Commentary on consolidated balance sheet movements in 2024 is provided on page 95.

'Maximum exposure to credit risk' table

The following table presents our maximum exposure before taking account of any collateral held or other credit enhancements (unless such enhancements meet accounting offsetting requirements).

The table excludes trading assets, financial assets designated and otherwise mandatorily measured at fair value through profit or loss, and financial investments measured at fair value through other comprehensive income as their carrying amount best represents the net exposure to credit risk. Equity securities are also excluded as they are not subject to credit risk.

For the financial assets recognised on the balance sheet, the maximum exposure to credit risk equals their carrying amount and is net of the allowance for ECL. For financial guarantees and other guarantees granted, it is the maximum amount that we would have to pay if the guarantees were called upon. For loan commitments and other credit-related commitments, it is generally the full amount of the committed facilities.

The offset in the table relates to amounts where there is a legally enforceable right of offset in the event of counterparty default and where, as a result, there is a net exposure for credit risk purposes. However, as there is no intention to settle these balances on a net basis under normal circumstances, they do not qualify for net presentation for accounting purposes. No offset has been applied to off-balance sheet collateral. In the case of derivatives, the offset column also includes collateral received in cash and other financial assets.

Other credit risk mitigants

While not disclosed as an offset in the following 'Maximum exposure to credit risk' table, other arrangements are in place that reduce our maximum exposure to credit risk. These include a charge over collateral on borrowers' specific assets, such as residential properties, collateral held in the form of financial instruments that are not held on the balance sheet and short positions in securities. In addition, for financial assets held as part of linked insurance/investment contracts the credit risk is predominantly borne by the policyholder. See page 358 and Note 31 on the financial statements for further details of collateral in respect of certain loans and advances and derivatives.

Collateral available to mitigate credit risk is disclosed in the 'Collateral' section on page 181.

Risk review

Maximum exposure to credit risk

(Audited)

	2024			2023		
	Maximum exposure	Offset	Net	Maximum exposure	Offset	Net
	\$m	\$m	\$m	\$m	\$m	\$m
Loans and advances to customers held at amortised cost	930,658	(22,822)	907,836	938,535	(22,607)	915,928
– personal	444,701	(2,256)	442,445	444,655	(2,470)	442,185
– corporate and commercial	403,929	(18,897)	385,032	419,852	(18,771)	401,081
– non-bank financial institutions	82,028	(1,669)	80,359	74,028	(1,366)	72,662
Loans and advances to banks at amortised cost	102,039	–	102,039	112,902	–	112,902
Other financial assets held at amortised cost	854,427	(4,383)	850,044	973,316	(13,919)	959,397
– cash and balances at central banks	267,674	–	267,674	285,868	–	285,868
– Hong Kong Government certificates of indebtedness	42,293	–	42,293	42,024	–	42,024
– reverse repurchase agreements – non-trading	252,549	(4,383)	248,166	252,217	(13,919)	238,298
– financial investments	153,973	–	153,973	148,326	–	148,326
– assets held for sale	27,234	–	27,234	114,134	–	114,134
– prepayments, accrued income and other assets	110,704	–	110,704	130,747	–	130,747
Derivatives	268,637	(254,257)	14,380	229,714	(222,059)	7,655
Total on-balance sheet exposure to credit risk	2,155,761	(281,462)	1,874,299	2,254,467	(258,585)	1,995,882
Total off-balance sheet	970,610	–	970,610	1,007,885	–	1,007,885
– financial and other guarantees	109,380	–	109,380	111,102	–	111,102
– loan and other credit-related commitments	861,230	–	861,230	896,783	–	896,783
At 31 Dec	3,126,371	(281,462)	2,844,909	3,262,352	(258,585)	3,003,767

Concentration of exposure

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.

For an analysis of:

- financial investments, see Note 16 on the financial statements;
- trading assets, see Note 11 on the financial statements;
- derivatives, see page 184 and Note 15 on the financial statements; and
- loans and advances by industry sector and by the location of the principal operations of the lending subsidiary (or, in the case of the operations of The Hongkong and Shanghai Banking Corporation

Limited, HSBC Bank plc, HSBC Bank Middle East Limited and HSBC Bank USA, by the location of the lending branch), see page 170 for wholesale lending and page 184 for personal lending.

Credit deterioration of financial instruments

(Audited)

- A summary of our current policies and practices regarding the identification, treatment and measurement of stage 1, stage 2, stage 3 (credit impaired) and POCI financial instruments can be found in Note 1.2 on the financial statements.

Measurement uncertainty and sensitivity analysis of ECL estimates

(Audited)

The recognition and measurement of ECL involves the use of judgement and estimation. We form multiple economic scenarios, apply these forecasts to credit risk models to estimate future credit losses, and probability weight the results to determine an unbiased ECL estimate.

Management assessed the current economic environment, reviewed the latest forecasts and discussed key risks before selecting the appropriate economic scenarios and their weightings.

The Central scenario is constructed to reflect the latest macroeconomic expectations. Outer scenarios incorporate the crystallisation of economic and geopolitical risks.

In the fourth quarter of 2024, the four economic scenarios were modified to reflect heightened policy uncertainty following the US election and to overcome any lags in consensus forecasts. An adjustment factor based on more recent views of expected tariffs and other policy changes was modelled and then applied to each of the economic scenarios. The effect was to lower growth expectations in our major markets, while the impact on inflation and interest rates was varied.

Management judgemental adjustments are used where modelled ECL does not fully reflect the identified risks and related uncertainty, or to capture significant late-breaking events.

At 31 December 2024, there was an overall reduction in management judgemental adjustments compared with 31 December 2023, as modelled outcomes better reflected the key risks at 31 December 2024.

Methodology

At 31 December 2024, four scenarios were used to capture the latest economic expectations and to articulate management's view of the range of risks and potential outcomes. Each scenario is updated with the latest economic forecasts and distributional estimates every quarter.

Three scenarios, the Upside, Central and Downside, are drawn from consensus forecasts, market data and distributional estimates of the entire range of economic outcomes. The fourth scenario, the Downside 2, represents management's view of severe downside risks. Consensus estimates are deployed as conditioning variables in a proprietary expansion of the scenario variables.

The Central scenario is deemed the 'most likely' scenario, and usually attracts the largest probability weighting. It is created using consensus forecasts, which is the average of a panel of external forecasts.

The outer scenarios represent the tails of the distribution and are less likely to occur. The consensus Upside and Downside scenarios are created with reference to forecast probability distributions for select markets that capture economists' views of the entire range of economic outcomes. In the later years of these scenarios, projections revert to long-term consensus trend expectations. Reversion to trend expectations is done with reference to historically observed quarterly changes in the values of macroeconomic variables.

The fourth scenario, the Downside 2, represents management's view of severe downside risks. It is a globally consistent, narrative-driven scenario that explores a more extreme economic outcome than those captured by the consensus scenarios. In this scenario, variables do not, by design, revert to long-term trend expectations and may instead explore alternative states of equilibrium, where economic variables move permanently away from past trends.

The consensus Downside and the consensus Upside scenarios are each constructed to be consistent with a 10% probability. The Downside 2 is calibrated to a 5% probability. The Central scenario is assigned the remaining 75%. This weighting scheme is deemed appropriate for the unbiased estimation of ECL in most circumstances. However, management may depart from this probability-based scenario weighting approach when the economic outlook and forecasts are determined to be particularly uncertain and risks are elevated.

For the fourth quarter of 2024, we assessed that consensus forecasts and distributional estimates did not adequately reflect the consequences of the US election on the global economic outlook. Due to the lag in forecasts there was increased uncertainty as to how tariffs would be implemented and economic policy would change. As such, scenarios have been constructed using the described standard methodology and an adjustment – to account for policy changes – applied. The adjustment was based on a modelled update to the Central scenario and incorporated a detailed narrative of US economic policy proposals, including specific tariff rates. The modelled results were then layered onto the Central scenario, which resulted in changes to most variables. To quantify the impact, the adjustment reduces GDP growth in our key markets by an average of 30bps and 50bps respectively, in the first two years of the Central scenario forecast. Outer scenarios were adjusted in parallel.

The scenario adjustment entailed no change in scenario probability weights, which remained in line with our Forward Economic Guidance ('FEG') framework. Uncertainties relating to the policy outlook have been addressed in the scenarios directly. Measures of dispersion and uncertainty have remained low but may reflect lags in the consensus economic forecasting process.

Scenarios produced to calculate ECL are aligned to HSBC's top and emerging risks.

Description of economic scenarios

The economic assumptions presented in this section have been formed by HSBC with reference to external forecasts and estimates, specifically for the purpose of calculating ECL.

Forecasts may change and remain subject to uncertainty. Outer scenarios are designed to capture the potential crystallisation of key economic and financial risks and alternative paths for economic variables.

In our key markets, the Central scenario incorporates potential impacts from anticipated changes to US economic and trade policy, including higher tariffs. The overall effect of the adjustment in our key markets is to lower GDP and raise inflation and unemployment estimates, relative to the consensus. Consequently, GDP growth and unemployment forecasts have deteriorated in the fourth quarter of 2024, compared with the fourth quarter of 2023. With regards to monetary policy, the expected path for interest rates in many of our markets is based on market futures. Interest rate expectations have increased relative to the fourth quarter of 2023, with fewer rate cuts forecast. The exception is mainland China, where the headwinds to growth ensure that forecast interest rates are lower.

At the end of 2024, risks to the economic outlook included a number of significant geopolitical issues. Within our Downside scenarios, the economic consequences from the crystallisation of those risks were captured by higher commodity and goods prices, the re-acceleration of inflation, a further rise in interest rates and a global recession.

The scenarios used to calculate ECL are described below.

The consensus Central scenario

HSBC's Central scenario reflects expectations for slower growth and higher inflation and unemployment across many of our key markets.

Expectations of lower GDP growth during 2025 are driven by the assumed effects of higher tariffs, which impede trade flows, weaken consumption and deter investment. In the scenario, the US applies tariffs on key trading partners, focusing on mainland China and Mexico at the outset of the new administration's term, before moving attention to other trading partners. Countries are expected to respond in kind. As a direct consequence of tariffs, trade growth is expected to be lower, which in turn weighs on GDP growth.

Mainland China, Hong Kong and Mexico experience the greatest negative consequences given their deeper trade and financial interlinkages, with the US economy. Indirect consequences from tariffs dampen growth elsewhere. Tariffs, or the threat of them, increases uncertainty, leading to lower confidence and reduced investment.

Tighter restrictions on immigration into the US are also expected to reduce the size of the labour force, putting upward pressure on wage growth. At the same time, higher tariff rates drive US inflation. Higher inflation is assumed to erode purchasing power and reduces GDP growth. In other markets, including in Mexico, higher inflation is also expected due to currency depreciation. The higher projected rates of inflation ensure that central banks are expected to slow the pace of interest rate reductions. The exception is in mainland China, where the PBoC cuts interest rates as the excess of domestic supply is expected to become more acute and drives prices lower.

Global GDP is expected to grow by 2.5% in 2025 in the Central scenario, and the average rate of global GDP growth is forecast to be 2.6% over the five-year forecast period. This is below the average growth rate over the five-year period prior to the onset of the pandemic of 2.9%.

The key features of our Central scenario are:

- GDP growth rates across the majority of our main markets are expected to slow in 2025 and 2026, due to the implementation of higher tariffs as well as underlying structural weaknesses in some economies. The most significant slowdowns in activity are expected to occur in the markets with the highest trade dependence with the US. Elevated interest rates and higher price levels are also expected to continue to weigh on some consumer and corporate segments.
- In most markets, unemployment is forecast to rise moderately in 2025 as economic activity slows, although it will remain low by historical standards.
- Inflation is forecast to increase in several of our main markets, as a result of tariffs, even as services price inflation is expected to ease as wage growth moderates. However, inflation largely remains within central banks' target ranges from 2025. The main exceptions are Hong Kong and mainland China, where inflation is expected to remain subdued, despite higher tariffs, due to weak domestic demand.
- Housing market conditions remain mixed, with price weakness expected to persist in Hong Kong and mainland China, stronger growth in the UAE and Mexico, and more muted price growth in the UK, US and France. High inventory levels remain the biggest drag on Hong Kong and mainland China residential property and this is expected to lead to another year of price declines in 2025, before a gradual recovery from 2026.
- Challenging conditions are also forecast to continue in certain segments of the commercial property sector in a number of our key markets. Structural changes to demand in the office segment in particular have driven lower valuations.
- Policy interest rates in key markets are forecast to gradually decline further in 2025. In the longer term, they are expected to remain at a higher level than in recent years.
- The Brent crude oil price is forecast to average around \$69 per barrel over the projection period.

Risk review

The Central scenario was created with forecasts available in late November, and reviewed continually until the end of December 2024. In accordance with HSBC's scenario framework, a probability weight of 75% has been assigned to the Central scenario across all major markets.

The following tables describe key macroeconomic variables in the consensus Central scenario.

Consensus Central scenario 2025–2029 (as at 4Q24)

	UK	US	Hong Kong	Mainland China	France	UAE	Mexico
GDP (annual average growth rate, %)							
2025	1.2	2.0	1.7	4.0	0.9	4.4	0.9
2026	1.3	1.6	1.8	3.7	0.9	4.2	1.2
2027	1.8	1.6	3.5	4.3	1.4	3.9	1.7
2028	1.6	1.8	3.1	3.9	1.5	3.6	1.9
2029	1.6	2.0	2.7	3.7	1.4	3.6	2.0
5-year average ¹	1.5	1.8	2.6	3.9	1.2	3.9	1.5
Unemployment rate (%)							
2025	4.9	4.4	3.3	5.2	7.5	2.7	3.5
2026	4.7	4.3	3.7	5.4	7.3	2.6	3.5
2027	4.5	4.3	3.3	5.2	7.2	2.6	3.5
2028	4.3	4.2	3.0	5.0	7.0	2.5	3.5
2029	4.3	4.1	2.9	5.0	7.0	2.5	3.5
5-year average ¹	4.5	4.2	3.2	5.2	7.2	2.6	3.5
House prices (annual average growth rate, %)							
2025	1.4	4.4	(0.5)	(5.9)	2.1	9.3	7.6
2026	3.8	3.2	2.4	(0.7)	4.4	5.1	4.5
2027	4.6	2.4	3.0	3.2	4.4	3.6	4.2
2028	3.5	2.5	2.7	4.1	3.8	1.8	4.0
2029	2.7	2.6	2.7	2.9	3.1	1.3	4.0
5-year average ¹	3.2	3.0	2.1	0.7	3.6	4.2	4.9
Inflation (annual average growth rate, %)							
2025	2.4	2.4	1.4	0.3	1.2	2.1	5.0
2026	2.1	2.8	1.9	1.0	1.6	1.9	3.9
2027	2.1	2.5	2.2	1.5	2.0	1.8	3.4
2028	2.0	2.2	2.2	1.7	2.3	1.9	3.4
2029	2.0	2.1	2.3	1.6	2.2	1.8	3.4
5-year average	2.1	2.4	2.0	1.2	1.9	1.9	3.8
Central bank policy rate (annual average, %)							
2025	4.2	4.1	4.5	2.9	2.1	4.1	9.4
2026	3.9	3.7	4.1	2.9	1.8	3.8	8.8
2027	3.8	3.7	4.0	3.0	2.0	3.7	8.8
2028	3.7	3.6	4.0	3.2	2.0	3.6	8.9
2029	3.7	3.6	4.0	3.3	2.1	3.6	8.9
5-year average ¹	3.9	3.7	4.1	3.1	2.0	3.8	8.9

¹ The five-year average is calculated over a projected period of 20 quarters from 1Q25 to 4Q29.

² For mainland China, the rate shown is the Loan Prime Rate.

Consensus Central scenario 2024–2028 (as at 4Q23)

	UK	US	Hong Kong	Mainland China	France	UAE	Mexico
GDP (annual average growth rate, %)							
2024	0.3	1.0	2.6	4.5	0.8	3.7	1.9
2025	1.2	1.8	2.7	4.4	1.5	4.0	2.2
2026	1.7	2.1	2.6	4.3	1.6	3.8	2.3
2027	1.6	2.0	2.6	3.8	1.5	3.4	2.4
2028	1.6	2.0	2.6	3.9	1.5	3.4	2.4
5-year average ¹	1.3	1.8	2.6	4.2	1.4	3.6	2.2
Unemployment rate (%)							
2024	4.7	4.3	3.0	5.2	7.5	2.6	2.9
2025	4.6	4.2	3.0	5.1	7.3	2.6	2.9
2026	4.3	4.0	3.2	5.1	7.0	2.6	2.9
2027	4.2	4.0	3.2	5.1	6.8	2.6	2.9
2028	4.2	4.0	3.2	5.1	6.8	2.6	2.9
5-year average ¹	4.4	4.1	3.1	5.1	7.1	2.6	2.9
House prices (annual average growth rate, %)							
2024	(5.5)	2.9	(6.6)	(0.6)	(1.0)	12.6	6.5
2025	0.1	2.7	(0.7)	1.1	2.4	7.7	4.2
2026	3.5	3.1	2.6	2.6	4.0	4.4	4.2
2027	3.0	2.7	2.8	4.0	4.4	2.6	4.0
2028	3.0	2.1	3.0	4.5	4.0	2.3	4.0
5-year average ¹	0.8	2.7	0.2	2.3	2.8	5.9	4.6
Inflation (annual average growth rate, %)							
2024	3.2	2.7	2.1	1.8	2.7	2.3	4.2
2025	2.2	2.2	2.1	2.0	1.8	2.2	3.6
2026	2.2	2.3	2.2	2.1	1.7	2.1	3.5
2027	2.3	2.2	2.4	2.0	1.9	2.1	3.5
2028	2.3	2.2	2.4	2.0	2.1	2.1	3.5
5-year average ¹	2.4	2.3	2.2	2.0	2.0	2.1	3.7
Central bank policy rate (annual average, %)							
2024	5.0	5.0	5.4	3.2	3.6	5.1	10.4
2025	4.3	4.0	4.4	3.3	2.8	4.1	8.6
2026	3.9	3.7	4.1	3.5	2.6	3.7	7.9
2027	3.8	3.7	4.1	3.7	2.6	3.7	7.9
2028	3.7	3.8	4.1	3.9	2.7	3.8	8.1
5-year average ¹	4.1	4.1	4.4	3.5	2.9	4.1	8.6

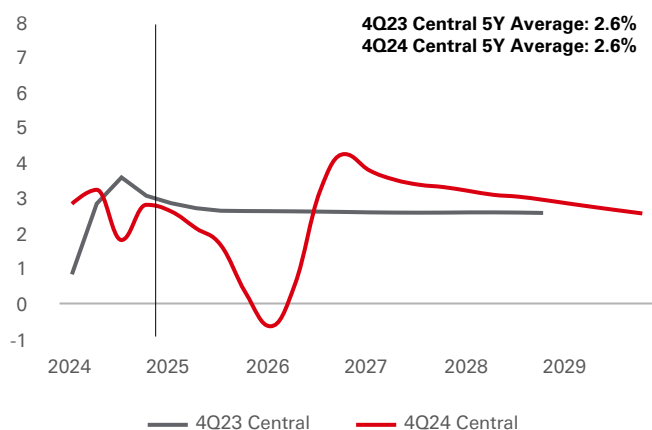
1 The five-year average is calculated over a projected period of 20 quarters from 1Q24 to 4Q28.

2 For mainland China, the rate shown is the Loan Prime Rate. In prior periods, including the 4Q23 disclosure, the reference rate shown for mainland China was the Lending Rate.

The graphs compare the Central scenario at the year end 2023 with economic expectations at the end of 2024.

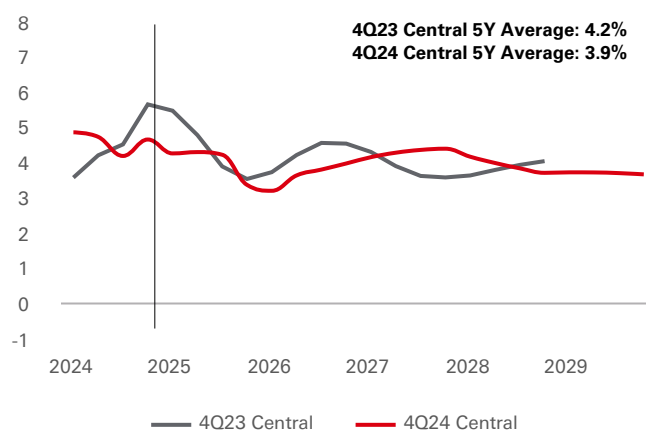
GDP growth: Comparison of Central scenarios

Hong Kong



Note: Real GDP shown as year-on-year percentage change.

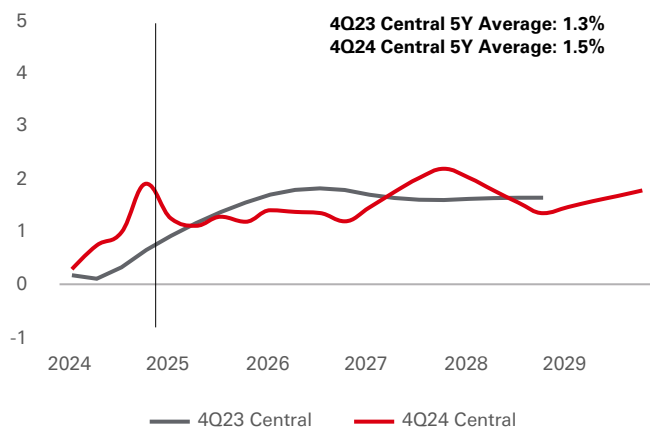
Mainland China



Note: Real GDP shown as year-on-year percentage change.

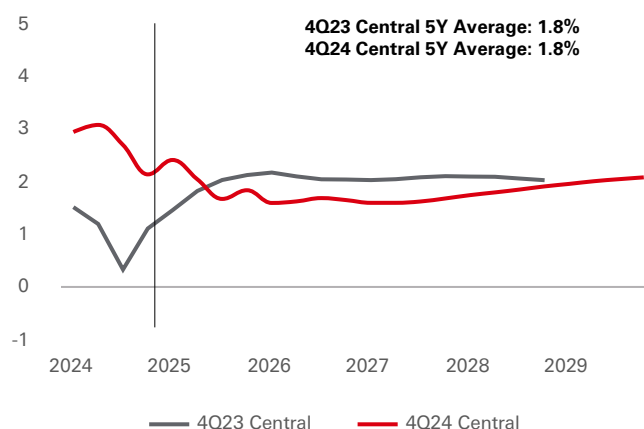
Risk review

UK



Note: Real GDP shown as year-on-year percentage change.

US



Note: Real GDP shown as year-on-year percentage change.

The consensus Upside scenario

Compared with the Central scenario, the consensus Upside scenario features stronger economic activity in the near term, before converging to long-run trend expectations. It also incorporates a faster fall in the rate of inflation than in the Central scenario.

The scenario is consistent with a number of key upside risk themes. These include only limited increases in tariffs and a faster fall in the rate of inflation that allows central banks to reduce interest rates

more quickly. The Upside scenario would also be consistent with a de-escalation in geopolitical tensions, where the Russia-Ukraine war moves quickly towards a conclusion, tensions in the Middle East subside and US-China relations become more cordial.

The following tables describe key macroeconomic variables in the consensus Upside scenario.

Consensus Upside scenario 2025–2029 (as at 4Q24)

	UK	US	Hong Kong	Mainland China	France	UAE	Mexico
GDP level (% , start-to-peak) ¹	11.3 (4Q29)	13.6 (4Q29)	21.4 (4Q29)	27.5 (4Q29)	8.9 (4Q29)	28.9 (4Q29)	13.6 (4Q29)
Unemployment rate (% , min) ²	3.5 (3Q26)	3.6 (1Q26)	2.9 (4Q29)	4.9 (4Q26)	6.4 (4Q26)	2.2 (4Q26)	3.0 (1Q25)
House price index (% , start-to-peak) ¹	24.2 (4Q29)	23.6 (4Q29)	25.3 (4Q29)	9.8 (4Q29)	22.8 (4Q29)	26.1 (4Q29)	31.7 (4Q29)
Inflation rate (YoY % change, min) ³	1.4 (1Q26)	1.6 (2Q26)	(0.1) (4Q25)	(1.0) (4Q25)	0.1 (4Q25)	0.6 (4Q25)	3.1 (2Q26)
Central bank policy rate (% , min) ²	3.6 (4Q25)	3.6 (1Q29)	4.0 (1Q29)	2.7 (1Q26)	1.4 (3Q25)	3.6 (1Q29)	7.6 (1Q26)

1 Cumulative change to the highest level of the series during the 20-quarter projection.

2 Lowest projected unemployment or policy interest rate in the scenario. For mainland China, rate shown is the Loan Prime Rate.

3 Lowest projected year-on-year percentage change in inflation in the scenario.

Consensus Upside scenario 2024–2028 (as at 4Q23)

	UK	US	Hong Kong	Mainland China	France	UAE	Mexico
GDP level (% , start-to-peak) ¹	10.8 (4Q28)	14.3 (4Q28)	21.8 (4Q28)	30.4 (4Q28)	10.4 (4Q28)	30.7 (4Q28)	17.8 (4Q28)
Unemployment rate (% , min) ²	3.1 (4Q24)	3.1 (2Q25)	2.4 (3Q24)	4.8 (4Q25)	6.2 (4Q25)	2.0 (4Q25)	2.4 (3Q24)
House price index (% , start-to-peak) ¹	13.0 (4Q28)	21.9 (4Q28)	17.9 (4Q28)	19.7 (4Q28)	19.6 (4Q28)	34.2 (4Q28)	30.6 (4Q28)
Inflation rate (YoY % change, min) ³	1.3 (2Q25)	1.4 (1Q25)	0.3 (4Q24)	0.6 (3Q24)	1.5 (3Q24)	1.4 (1Q25)	2.7 (1Q25)
Central bank policy rate (% , min) ²	3.7 (3Q28)	3.7 (2Q27)	4.1 (1Q27)	3.1 (3Q24)	2.6 (2Q26)	3.7 (1Q27)	7.8 (2Q25)

1 Cumulative change to the highest level of the series during the 20-quarter projection.

2 Lowest projected unemployment or policy interest rate in the scenario. For mainland China, the rate shown is the Loan Prime Rate. In prior periods, including the 4Q23 disclosure, the reference rate shown for mainland China was the Lending Rate.

3 Lowest projected year-on-year percentage change in inflation in the scenario.

Downside scenarios

Downside scenarios explore the intensification and crystallisation of a number of key economic and financial risks. These include a more material escalation of tariff policies and geopolitical tensions, which disrupt key commodity and goods markets, causing inflation and interest rates to rise, and creating a global recession.

As the geopolitical environment remains volatile and complex, risks include:

- an increase in protectionist policies, as countries that impose tariffs are met with retaliatory actions. This lowers investment, complicates international supply chains, and impedes trade flows;
- broader and more prolonged conflicts in the Middle East and between Russia and Ukraine, which further disrupt energy and food supplies; and

- continued differences between the US and China, which could affect economic confidence, and the global goods trade and supply chains for critical technologies.

High inflation and higher interest rates also remain key risks. Should tariffs increase significantly and geopolitical tensions escalate, energy and food prices could rise and increase pressure on household budgets and firms' costs. Higher inflation and labour supply shortages could also trigger a wage-price spiral and put sustained pressure on household incomes and corporate margins. In turn, it raises the risk that central banks react by raising interest rates, leading to higher defaults and an economic recession.

The consensus Downside scenario

In the consensus Downside scenario, economic activity is weaker compared with the Central scenario. In this scenario, GDP declines, unemployment rates rise, and asset prices fall. The scenario features an increase in tariffs over and above those assumed in the Central scenario and an escalation of geopolitical tensions, which causes a

rise in inflation, as supply chain constraints intensify and energy prices rise. The scenario also features a temporary increase in interest rates above the Central scenario, before the effects of weaker consumption demand begin to dominate and commodity prices and inflation fall again.

The following tables describe key macroeconomic variables in the consensus Downside scenario.

Consensus Downside scenario 2025–2029 (as at 4Q24)

	UK	US	Hong Kong	Mainland China	France	UAE	Mexico
GDP level (% , start-to-trough) ¹	(1.0) (4Q26)	(0.6) (3Q25)	(4.5) (4Q25)	(2.5) (3Q25)	(0.6) (1Q26)	0.3 (1Q25)	(2.1) (4Q26)
Unemployment rate (% , max) ²	6.1 (4Q25)	5.3 (3Q25)	5.1 (2Q26)	6.9 (4Q26)	8.3 (3Q25)	3.4 (1Q26)	4.1 (4Q25)
House price index (% , start-to-trough) ¹	(4.5) (1Q26)	(0.2) (1Q25)	(1.9) (2Q26)	(12.8) (3Q26)	(0.3) (1Q25)	(0.4) (1Q25)	2.1 (1Q25)
Inflation rate (YoY % change, max) ³	3.4 (4Q25)	4.5 (1Q26)	3.1 (1Q26)	2.0 (1Q26)	2.6 (3Q25)	2.8 (1Q26)	7.4 (4Q25)
Central bank policy rate (% , max) ²	5.0 (1Q25)	4.8 (1Q25)	5.2 (1Q25)	3.0 (1Q25)	3.2 (1Q25)	4.8 (1Q25)	11.5 (3Q25)

- 1 Cumulative change to the lowest level of the series during the 20-quarter projection.
- 2 The highest projected unemployment or policy interest rate in the scenario. For mainland China, the rate shown is the Loan Prime Rate.
- 3 The highest projected year-on-year percentage change in inflation in the scenario.

Consensus Downside scenario 2024–2028 (as at 4Q23)

	UK	US	Hong Kong	Mainland China	France	UAE	Mexico
GDP level (% , start-to-trough) ¹	(1.0) (2Q25)	(1.4) (3Q24)	(1.6) (3Q25)	(1.5) (1Q24)	(0.3) (2Q24)	1.4 (1Q24)	(0.3) (4Q24)
Unemployment rate (% , max) ²	6.4 (1Q25)	5.6 (4Q24)	4.7 (4Q25)	6.9 (4Q25)	8.5 (4Q24)	3.7 (4Q25)	3.5 (4Q25)
House price index (% , start-to-trough) ¹	(12.0) (2Q25)	(1.3) (3Q24)	(9.6) (4Q24)	(7.1) (3Q25)	(1.2) (3Q24)	0.3 (1Q24)	1.2 (1Q24)
Inflation rate (YoY % change, max) ³	4.1 (1Q24)	3.5 (4Q24)	3.8 (3Q24)	3.5 (4Q24)	3.8 (2Q24)	3.0 (1Q24)	6.5 (4Q24)
Central bank policy rate (% , max) ²	5.7 (1Q24)	5.6 (1Q24)	6.0 (1Q24)	3.2 (3Q24)	4.2 (1Q24)	5.7 (1Q24)	12.0 (3Q24)

- 1 Cumulative change to the lowest level of the series during the 20-quarter projection.
- 2 The highest projected unemployment or policy interest rate in the scenario. For mainland China, the rate shown is the Loan Prime Rate. In prior periods, including the 4Q23 disclosure, the reference rate shown for mainland China was the Lending Rate.
- 3 The highest projected year-on-year percentage change in inflation in the scenario.

Downside 2 scenario

The Downside 2 scenario features a deep global recession and reflects management's view of the tail of the economic distribution. It incorporates the crystallisation of a number of risks simultaneously, including significant increases in tariffs globally, where the US imposes particularly high and punitive tariffs on imports from mainland China and Mexico. A further escalation of geopolitical crises is also assumed, which creates severe supply disruptions to goods and energy markets.

In the scenario, as inflation surges and central banks tighten monetary policy further, consumer and business confidence falls. However, this impulse is assumed to be short-lived, as recession takes hold, causing a fall in demand, leading commodity prices to correct sharply and global price inflation to fall.

The following tables describe key macroeconomic variables in the Downside 2 scenario.

Downside 2 scenario 2025–2029 (as at 4Q24)

	UK	US	Hong Kong	Mainland China	France	UAE	Mexico
GDP level (% , start-to-trough) ¹	(9.1) (2Q26)	(4.1) (2Q26)	(10.1) (4Q25)	(8.7) (4Q25)	(7.9) (2Q26)	(6.8) (2Q26)	(10.5) (3Q26)
Unemployment rate (% , max) ²	8.4 (2Q26)	9.3 (2Q26)	7.1 (1Q26)	7.1 (4Q26)	10.4 (1Q27)	5.0 (3Q25)	5.6 (1Q26)
House price index (% , start-to-trough) ¹	(27.2) (4Q26)	(15.8) (4Q25)	(34.4) (3Q27)	(30.5) (4Q26)	(14.0) (2Q27)	(13.2) (2Q27)	2.0 (1Q25)
Inflation rate (YoY % change, max) ³	10.1 (2Q25)	4.9 (4Q25)	3.6 (1Q26)	3.8 (4Q25)	7.6 (2Q25)	3.7 (2Q25)	7.9 (4Q25)
Central bank policy rate (% , max) ²	5.5 (1Q25)	5.5 (1Q25)	5.9 (1Q25)	3.5 (3Q25)	4.2 (1Q25)	5.6 (1Q25)	12.1 (3Q25)

- 1 Cumulative change to the lowest level of the series during the 20-quarter projection.
- 2 The highest projected unemployment or policy interest rate in the scenario. For mainland China, the rate shown is the Loan Prime Rate.
- 3 The highest projected year-on-year percentage change in inflation in the scenario.

Downside 2 scenario 2024–2028 (as at 4Q23)

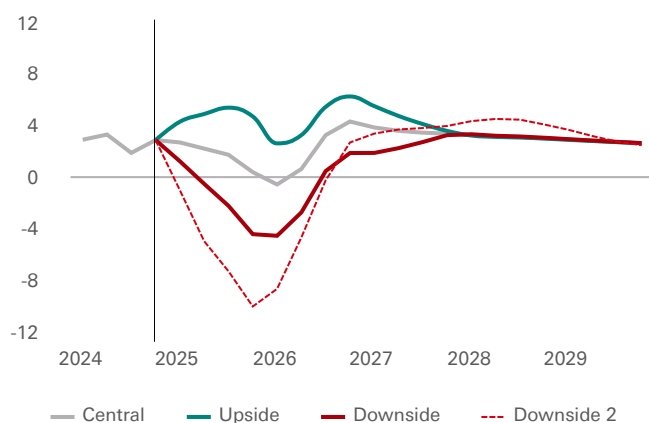
	UK	US	Hong Kong	Mainland China	France	UAE	Mexico
GDP level (% , start-to-trough) ¹	(8.8) (2Q25)	(4.6) (1Q25)	(8.2) (1Q25)	(6.4) (1Q25)	(6.6) (1Q25)	(4.9) (2Q25)	(8.1) (2Q25)
Unemployment rate (% , max) ²	8.4 (2Q25)	9.3 (2Q25)	6.4 (4Q24)	7.0 (4Q25)	10.2 (4Q25)	4.3 (3Q24)	4.9 (2Q25)
House price index (% , start-to-trough) ¹	(30.2) (4Q25)	(14.7) (4Q24)	(32.8) (3Q26)	(25.5) (4Q25)	(14.5) (2Q26)	(2.9) (4Q25)	1.2 (1Q24)
Inflation rate (YoY % change, max) ³	10.1 (2Q24)	4.8 (2Q24)	4.1 (3Q24)	4.1 (4Q24)	8.6 (2Q24)	3.5 (2Q24)	7.0 (4Q24)
Central bank policy rate (% , max) ²	6.0 (1Q24)	6.1 (1Q24)	6.4 (1Q24)	4.1 (3Q24)	5.2 (1Q24)	6.1 (1Q24)	12.7 (3Q24)

- 1 Cumulative change to the lowest level of the series during the 20-quarter projection.
- 2 The highest projected unemployment or policy interest rate in the scenario. For mainland China, rate shown is the Loan Prime Rate. In prior periods, including the 4Q23 disclosure, the reference rate shown for mainland China was the Lending Rate.
- 3 The highest projected year-on-year percentage change in inflation in the scenario.

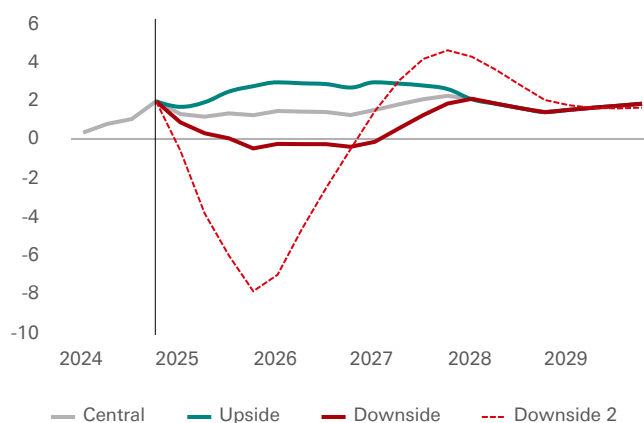
Risk review

The following graphs show the historical and forecasted GDP growth rate for the various economic scenarios in our four largest markets.

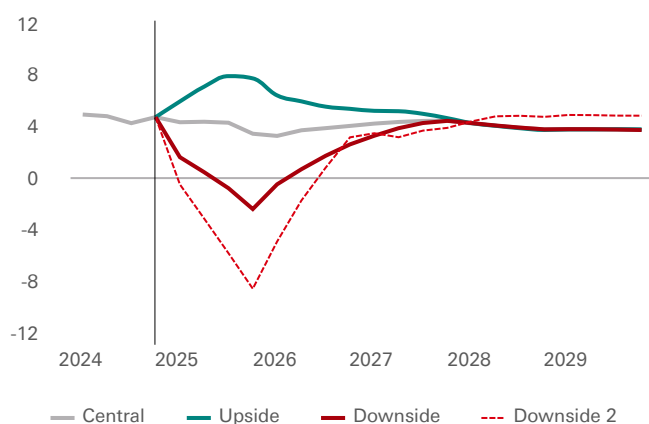
Hong Kong



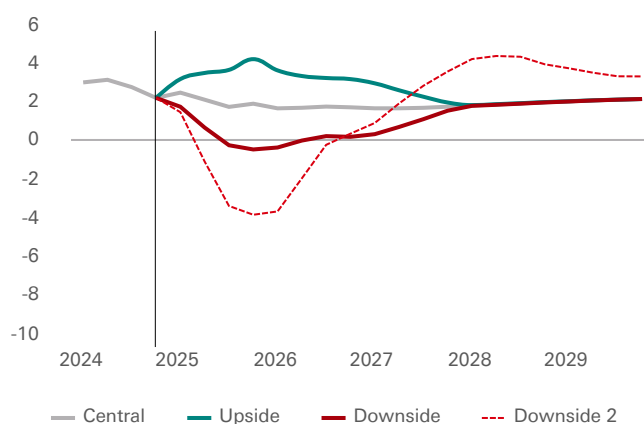
UK



Mainland China



US



Scenario weighting

Scenario weightings are calibrated to probabilities that are determined with reference to consensus forecast probability distributions. Management may then choose to vary weights if they assess that the calibration lags more recent events, or does not reflect their view of the distribution of economic and geopolitical risk. Management's view of the scenarios and the probability distribution takes into consideration the relationship of the consensus scenario to both internal and external assessments of risk.

In assessing the economic environment and the level of risk and uncertainty, management has considered both global and country-specific factors.

In the fourth quarter of 2024, key considerations around uncertainty focused on:

- US import tariffs and bilateral tariff escalations globally, and the impact on trade and manufacturing supply chains;
- the extent and success of mainland China in deploying fiscal and monetary support to secure economic growth and underpin a recovery in the real estate market;
- prospects for recovery in the Hong Kong residential property market;
- the implications of changes to monetary policy expectations on growth and employment;
- estimation and forecast uncertainty for UK unemployment given ongoing methodology updates at the Office for National Statistics; and

- risks of an asset price correction given elevated valuations across different asset classes.

Although these factors are significant, management assessed that following the tariff-based adjustment, the Central scenario reflected the most likely future economic outcome and that outer scenarios were sufficiently well calibrated to address the crystallisation of more severe risks.

This led management to assign scenario probabilities that are aligned to the standard scenario probability calibration framework in all major markets. The Central scenario was assigned a 75% probability weighting in our major markets. The consensus Upside scenario was assigned a 10% weighting, and the consensus Downside scenario was given 10%. The Downside 2 was assigned a 5% weighting.

In support of the decision, it was noted that the effect of higher tariffs would be most negative in mainland China and Hong Kong, as it would limit trade growth (a significant growth driver in 2024) substantially and lead to weaker domestic demand. The adjustment to the Central scenario reflected this assumption.

In the UK, tariffs have a small direct impact on GDP growth forecasts in the Central scenario, but indirect effects would be larger through weaker trade and lower global growth. The outlook also remains weak given the only partially offsetting impacts from measures announced in the 2024-25 Budget and higher US interest rates.

For the US, the Central scenario reflects expectations that economic growth will slow in 2025 as households and businesses adjust to higher inflation, lower labour supply and elevated interest rates.

The impact from tariffs is minimal for the UAE, as trade with the US is small, but it is assumed to be affected through secondary channels, including a stronger US dollar and higher interest rates. It was also observed that geopolitical risks have remained high since the outbreak of conflict in the Middle East, but economic and market impacts have been limited and oil production remains unaffected. Escalation risks were assessed to be consistent with the probabilities assigned to the Downside scenario.

Management concluded that Mexico is likely to be one of the most heavily affected countries from US tariff policies and that the impacts are reflected in the scenarios. GDP growth forecasts in the Central

scenario are lower than in previous periods, and inflation and interest rates are higher, in part due to an expected depreciation of the Mexican peso.

In France, recent domestic political uncertainty is the main factor weighing on reduced growth prospects, and as with other European markets, there are also assumed to be negative impacts stemming from higher US tariffs.

The following tables describe the probabilities assigned in each scenario.

Scenario weightings, %

	Standard weights	UK	US	Hong Kong	Mainland China	Canada	France	UAE	Mexico
4Q24									
Upside scenario	10	10	10	10	10	10	10	10	10
Central scenario	75	75	75	75	75	75	75	75	75
Downside scenario	10	10	10	10	10	10	10	10	10
Downside 2 scenario	5	5	5	5	5	5	5	5	5
4Q23									
Upside scenario	10	10	10	10	10	10	10	10	10
Central scenario	75	75	75	75	75	75	75	75	75
Downside scenario	10	10	10	10	10	10	10	10	10
Downside 2 scenario	5	5	5	5	5	5	5	5	5

At 31 December 2024, the consensus Upside and Central scenarios for all markets had a combined weighting of 85%, unchanged as at 31 December 2023. Weightings assigned to downside scenarios also remained unchanged.

Critical estimates and judgements

The calculation of ECL under IFRS 9 involved significant judgements, assumptions and estimates at 31 December 2024. These included:

- the selection and configuration of economic scenarios, given the constant change in economic conditions and distribution of economic risks; and
- estimating the economic effects of those scenarios on ECL, where similar observable historical conditions cannot be captured by the credit risk models.

How economic scenarios are reflected in ECL calculations

Models are used to reflect economic scenarios in ECL estimates. As described above, modelled assumptions and linkages based on historical information could not alone produce relevant information under the conditions experienced in 2024, and management judgemental adjustments were still required to support modelled outcomes.

We have developed globally consistent methodologies for the application of forward economic guidance into the calculation of ECL for wholesale and retail credit risk. These standard approaches are described below, followed by the management judgemental adjustments made, including those to reflect the circumstances experienced in 2024.

For our wholesale portfolios, a global methodology is used for the estimation of the term structure of probability of default ('PD') and loss given default ('LGD'). For PDs, we consider the correlation of forward economic guidance to default rates for a particular industry in a country. For LGD calculations, we consider the correlation of forward economic guidance to collateral values and realisation rates for a particular country and industry. PDs and LGDs are estimated for the entire term structure of each instrument.

For impaired loans, allowance for ECL estimates are derived based on discounted cash flow ('DCF') calculations for internal forward-looking scenarios specific to individual borrower circumstances (see page 359). Probability-weighted outcomes are applied, and depending on materiality and status of the borrower, the number of scenarios considered will change. Where relevant for the case being assessed, forward economic guidance is incorporated as part of these scenarios.

LGD-driven proxy and modelled estimates are used for certain less material cases.

For our retail portfolios, the models are predominantly based on historical observations and correlations with default rates and collateral values.

For PD, the impact of economic scenarios is modelled for each portfolio, using historical relationships between default rates and macroeconomic variables. These are included within IFRS 9 ECL estimates using either economic response models or models that contain internal, external and macroeconomic variables. The macroeconomic impact on PD is modelled over the period equal to the remaining maturity of the assets.

For LGD, the impact is modelled for mortgage portfolios by forecasting future loan-to-value profiles for the remaining maturity of the asset, using national level house price index forecasts and applying the corresponding LGD expectation relative to the updated forecast collateral values.

For unsecured retail portfolios historically observed recovery rates are leveraged to measure loss. For both mortgages and unsecured, a limited number of portfolios utilise a macroeconomic dependent stressed LGD applied to the Downside 2 scenario.

Management judgemental adjustments

In the context of IFRS 9, management judgemental adjustments are typically short-term increases or decreases to the modelled allowance for ECL at either a customer, segment or portfolio level where management believes allowances do not sufficiently reflect the credit risk/expected credit losses at the reporting date. These can relate to risks or uncertainties that are not reflected in the models and/or to any late-breaking events with significant uncertainty, subject to management review and challenge.

This includes refining model inputs and outputs and using adjustments to ECL based on management judgement and quantitative analysis for impacts that are difficult to model.

The effects of management judgemental adjustments are considered for both balances and allowance for ECL when determining whether or not a significant increase in credit risk has occurred and is allocated to a stage where appropriate. This is in accordance with the internal adjustments framework.

Risk review

Management judgemental adjustments are reviewed under the governance process for IFRS 9 (as detailed in the section 'Credit risk management' on page 139). Review and challenge focuses on the rationale and quantum of the adjustments with a further review carried out by the second line of defence where significant. For some management judgemental adjustments, internal frameworks establish the conditions under which these adjustments should no longer be required and as such are considered as part of the governance process. This internal governance process allows management judgemental adjustments to be reviewed regularly and, where possible, to reduce the reliance on these through model recalibration or redevelopment, as appropriate.

The drivers of management judgemental adjustments continue to evolve with the economic environment and as new risks emerge.

In addition to management judgemental adjustments there are also 'Other adjustments', which are made to address process limitations and data/model deficiencies and can also include, where appropriate, the impact of new models where governance has sufficiently

progressed to allow an accurate estimate of ECL allowance to be incorporated into the total reported ECL.

'Management judgemental adjustments' and 'Other adjustments' constitute the total value of adjustments to modelled allowance for ECL. For the wholesale portfolio, defaulted exposures are assessed individually and management judgemental adjustments are made only to the performing portfolio.

At 31 December 2024, there was a \$0.6bn reduction in management judgemental adjustments compared with 31 December 2023. This was driven by retail due to reductions in economic uncertainty, primarily in the UK and Asia, and model redevelopments which captured macro-economic risks more effectively.

Management judgemental adjustments made in estimating the scenario-weighted reported allowance for ECL at 31 December 2024 are set out in the following table.

Management judgemental adjustments to ECL at 31 December 2024¹

	Retail \$bn	Wholesale ² \$bn	Total \$bn
Modelled ECL (A)³	2.6	2.0	4.6
Banks, sovereigns, government entities and low-risk counterparties		0.0	0.0
Corporate lending adjustments		0.1	0.1
Inflation related adjustments	0.0		0.0
Other credit judgements	0.0		0.0
Total management judgemental adjustments (B)⁴	0.0	0.1	0.1
Other adjustments (C)⁵	(0.0)	0.1	0.1
Final ECL (A + B + C)⁶	2.6	2.2	4.8

Management judgemental adjustments to ECL at 31 December 2023^{1,7}

	Retail \$bn	Wholesale ² \$bn	Total \$bn
Modelled ECL (A) ³	2.6	2.4	5.0
Banks, sovereigns, government entities and low-risk counterparties		0.0	0.0
Corporate lending adjustments		0.1	0.1
Inflation-related adjustments	0.1		0.1
Other credit judgements	0.5		0.5
Total management judgemental adjustments (B) ⁴	0.6	0.1	0.7
Other adjustments (C) ⁵	(0.0)	0.0	0.0
Final ECL (A + B + C) ⁶	3.2	2.5	5.7

1 Management judgemental adjustments presented in the table reflect increases or (decreases) to allowance for ECL, respectively.

2 The wholesale portfolio corresponds to adjustments to the performing portfolio (stage 1 and stage 2).

3 (A) refers to probability-weighted allowance for ECL before any adjustments are applied.

4 (B) refers to adjustments that are applied where management believes allowance for ECL does not sufficiently reflect the credit risk/expected credit losses of any given portfolio at the reporting date. These can relate to risks or uncertainties that are not reflected in the model and/or to any late-breaking events.

5 (C) refers to adjustments to allowance for ECL made to address process limitations and data/model deficiencies and can also include where appropriate, the impact of new models where governance has sufficiently progressed to allow an accurate estimate of ECL allowance to be incorporated into the total reported ECL.

6 As presented within our internal credit risk governance (see page 139).

7 31 December 2023 includes the Canada, Argentina, Armenia and Oman businesses and retail banking operations in France.

Management judgemental adjustments at 31 December 2024 were an increase to allowance for ECL of \$0.1bn for the wholesale portfolio and \$0.0bn for the retail portfolio.

At 31 December 2024, wholesale management judgemental adjustments were an increase to allowance for ECL of \$0.1bn (31 December 2023: \$0.1bn increase). These were mainly to corporate exposures to reflect heightened uncertainty in specific sectors and geographies, including offsetting adjustments to the real estate sector in mainland China, Hong Kong and the US, and adjustments to exposures to the automotive and industrial sectors in Germany.

At 31 December 2024, retail management judgemental adjustments to allowance for ECL were \$0.0bn (31 December 2023 \$0.6bn). The reduction in adjustments compared with 31 December 2023 for inflation-related adjustments was primarily due to the reduction of inflation related risk in the UK and the sale of the Canadian banking business. Other credit judgements decreased due to reductions in

economic uncertainty, primarily in the UK and Asia, and model redevelopments which captured macro-economic risks more effectively.

Economic scenarios sensitivity analysis of ECL estimates

Management considered the sensitivity of the ECL outcome against the economic forecasts as part of the ECL governance process by recalculating the allowance for ECL under each scenario described above for selected portfolios, applying a 100% weighting to each scenario in turn. The weighting is reflected in both the determination of a significant increase in credit risk and the measurement of the resulting allowances.

The allowance for ECL calculated for the Upside and Downside scenarios should not be taken to represent the upper and lower limits of possible ECL outcomes. The impact of defaults that might occur in the future under different economic scenarios is captured by recalculating allowances for loans at the balance sheet date.

There is a particularly high degree of estimation uncertainty in numbers representing tail risk scenarios when assigned a 100% weighting.

For wholesale credit risk exposures, the sensitivity analysis excludes allowance for ECL and financial instruments related to defaulted (stage 3) obligors. The measurement of stage 3 ECL is relatively more sensitive to credit factors specific to the obligor than future economic scenarios, and therefore the effects of macroeconomic factors are not necessarily the key consideration when performing individual assessments of allowances for obligors in default. Loans to defaulted obligors are a small portion of the overall wholesale lending exposure, even if representing the majority of the allowance for ECL. Due to the range and specificity of the credit factors to which the ECL is sensitive, it is not possible to provide a meaningful alternative sensitivity analysis for a consistent set of risks across all defaulted obligors.

For retail mortgage exposures the sensitivity analysis includes allowance for ECL for defaulted obligors of loans and advances. This

is because the retail ECL for secured mortgage portfolios, including loans in all stages, is sensitive to macroeconomic variables.

Wholesale and retail sensitivity

The wholesale and retail sensitivity tables present the 100% weighted results. These exclude portfolios held by the insurance business and small portfolios, and as such cannot be directly compared with personal and wholesale lending presented in other credit risk tables. In both the wholesale and retail analysis, the comparative period results for Downside 2 scenarios are also not directly comparable with the current period, because they reflect different risks relative to the consensus scenarios for the period end.

The wholesale and retail sensitivity analysis is stated inclusive of management judgemental adjustments, as appropriate to each scenario.

For both retail and wholesale portfolios, the gross carrying amount of financial instruments are the same under each scenario. For exposures with similar risk profile and product characteristics, the sensitivity impact is therefore largely the result of changes in macroeconomic assumptions.

Wholesale analysis

IFRS 9 ECL sensitivity to future economic conditions^{1,2,3}

	Reported Gross carrying amount ⁴	Reported allowance for ECL	Consensus Central scenario allowance for ECL	Consensus Upside scenario allowance for ECL	Consensus Downside scenario allowance for ECL	Downside 2 scenario allowance for ECL
By geography at 31 Dec 2024	\$m	\$m	\$m	\$m	\$m	\$m
UK	432,160	717	667	526	850	2,389
US	202,888	216	201	205	247	461
Hong Kong	450,966	659	616	465	906	1,496
Mainland China	137,960	178	141	84	329	886
Mexico	34,713	69	61	46	86	302
UAE	58,909	51	49	40	58	120
France	184,591	82	80	69	97	125
Other geographies ⁵	455,823	234	216	176	304	774
Total	1,958,010	2,205	2,031	1,612	2,877	6,555
of which:						
Stage 1	1,830,264	689	632	494	797	803
Stage 2	127,746	1,516	1,399	1,118	2,080	5,751
By geography at 31 Dec 2023						
UK	426,427	820	754	599	1,041	2,487
US	191,104	215	199	189	268	441
Hong Kong	447,480	609	566	433	807	1,393
Mainland China	129,945	258	217	142	414	945
Canada ⁵	84,092	89	75	56	107	487
Mexico	30,159	60	56	46	73	226
UAE	52,074	32	32	30	34	40
France	178,827	98	102	90	124	141
Other geographies ^{5,7}	450,271	325	298	245	410	882
Total	1,990,378	2,507	2,301	1,829	3,278	7,043
of which:						
Stage 1	1,820,843	754	702	553	860	854
Stage 2	169,535	1,753	1,599	1,276	2,418	6,189

- 1 Allowance for ECL sensitivity includes off-balance sheet financial instruments. These are subject to significant measurement uncertainty.
- 2 Includes low credit-risk financial instruments such as debt instruments at FVOCI, which have high carrying amounts but low ECL under all the above scenarios.
- 3 Excludes defaulted obligors. For a detailed breakdown of performing and non-performing wholesale portfolio exposures, see page 170.
- 4 Staging refers only to probability-weighted/reported gross carrying amount. Stage allocation of gross exposures varies by scenario, with higher allocation to stage 2 under the Downside 2 scenario.
- 5 Includes small portfolios that use less complex modelling approaches and are not sensitive to macroeconomic changes.
- 6 Classified as held for sale at 31 December 2023.
- 7 Includes the Argentina and Armenia businesses, which were sold in 2024.

Risk review

At 31 December 2024, the highest level of 100% scenario-weighted allowance for ECL was observed in the UK and Hong Kong under the Downside 2 scenario, driven primarily by a larger exposure to those geographies, namely in the real estate sector. In relation to the underlying exposure, mainland China and Mexico have the higher Downside 2 ECL coverage, mostly due to the relatively larger proportion of higher risk exposures in those geographies.

Compared with 31 December 2023, the Downside 2 ECL impact reduced by \$0.5bn mostly due to the sale of the Canada business while observing offsetting impacts driven by updates to our forward economic scenarios.

In the wholesale portfolio, off-balance sheet financial instruments have a lower likelihood to be fully converted to a funded exposure at the point of default, and consequently the sensitivity of the allowance for ECL is lower in relation to its nominal amount, when compared with an on-balance sheet exposure with a similar risk profile.

Retail analysis

IFRS 9 ECL sensitivity to future economic conditions¹

By geography at 31 Dec 2024	Reported gross carrying amount \$m	Reported allowance for ECL \$m	Consensus Central scenario allowance for ECL \$m	Consensus Upside scenario allowance for ECL \$m	Consensus Downside scenario allowance for ECL \$m	Downside 2 scenario allowance for ECL \$m
UK						
Mortgages	163,541	126	117	107	132	288
Credit cards	7,415	280	275	265	276	447
Other	8,249	241	233	217	243	351
Mexico						
Mortgages	7,482	165	162	155	168	215
Credit cards	2,227	337	333	330	338	423
Other	3,722	419	416	413	422	593
Hong Kong						
Mortgages	106,866	5	5	4	5	10
Credit cards	9,419	293	275	268	300	770
Other	6,210	106	102	101	105	249
UAE						
Mortgages	1,993	8	8	8	8	8
Credit cards	536	31	31	31	31	35
Other	688	17	17	17	17	19
US						
Mortgages	16,965	6	6	6	6	8
Credit cards	193	15	14	14	15	17
Other geographies						
Mortgages	51,064	131	127	124	136	180
Credit cards	3,500	162	159	156	164	223
Other	2,292	72	72	69	73	93
Total	392,361	2,413	2,351	2,285	2,440	3,928
of which: mortgages	347,910	440	425	405	456	708
Stage 1	311,875	51	47	43	58	129
Stage 2	33,761	126	117	107	129	275
Stage 3	2,274	263	261	255	269	304
of which: credit cards	23,290	1,116	1,086	1,064	1,124	1,915
Stage 1	19,915	276	267	258	284	701
Stage 2	3,107	655	634	621	656	1,027
Stage 3	267	185	185	185	185	188
of which: others	21,161	856	839	816	860	1,305
Stage 1	18,574	216	204	193	217	532
Stage 2	2,005	360	355	343	363	483
Stage 3	583	279	279	279	279	290

IFRS 9 ECL sensitivity to future economic conditions^{1,2}

By geography at 31 Dec 2023	Reported gross carrying amount \$m	Reported allowance for ECL \$m	Consensus Central scenario allowance for ECL \$m	Consensus Upside scenario allowance for ECL \$m	Consensus Downside scenario allowance for ECL \$m	Downside 2 scenario allowance for ECL \$m
UK						
Mortgages	161,127	189	180	172	201	334
Credit cards	7,582	344	340	302	353	486
Other	8,183	341	333	273	383	515
Mexico						
Mortgages	8,666	188	180	150	235	363
Credit cards	2,445	295	286	206	376	489
Other	4,529	513	503	426	600	731
Hong Kong						
Mortgages	106,136	2	2	1	3	5
Credit cards	9,128	287	239	214	395	887
Other	6,269	109	100	88	124	256
UAE						
Mortgages	2,001	25	25	25	25	25
Credit cards	471	24	24	22	25	32
Other	721	20	20	19	21	28
France						
Mortgages	20,589	50	50	50	51	51
Other	1,328	44	44	43	45	48
US						
Mortgages	14,385	8	4	3	4	10
Credit cards	204	15	15	10	15	16
Canada						
Mortgages	25,464	67	65	64	70	99
Credit cards	338	13	13	12	16	15
Other	1,368	13	13	12	14	33
Other geographies						
Mortgages	55,368	152	149	144	158	198
Credit cards	3,655	173	166	151	202	291
Other	2,416	91	86	83	95	137
Total	442,373	2,962	2,835	2,471	3,411	5,049
of which: mortgages	393,736	681	655	609	747	1,085
Stage 1	347,874	101	92	77	145	303
Stage 2	43,451	264	249	225	280	429
Stage 3	2,412	316	314	307	322	352
of which: credit cards	23,822	1,150	1,082	918	1,381	2,217
Stage 1	18,557	249	232	180	329	604
Stage 2	4,953	707	657	546	859	1,415
Stage 3	312	193	193	192	194	197
of which: others	24,815	1,131	1,098	944	1,283	1,748
Stage 1	19,551	218	205	151	272	501
Stage 2	4,542	540	519	423	636	868
Stage 3	722	373	373	370	375	379

1 Allowance for ECL sensitivities exclude portfolios utilising less complex modelling approaches.

2 Included balances and allowance for ECL which had been reclassified from 'loans and advances to customers' to 'assets held for sale' in the balance sheet at 31 December 2023. This also included any balances and allowance for ECL which continued to be reported as personal lending in 'loans and advances to customers' that are in accordance with the basis of inclusion for retail sensitivity analysis. This includes the Canada, Argentina businesses and retail banking operations in France.

At 31 December 2024, the most significant level of allowance for ECL sensitivity was observed in the UK, Mexico and Hong Kong. Mortgages reflected the lowest level of allowance for ECL sensitivity across most markets given the significant levels of collateral relative to the exposure values. Credit cards and other unsecured lending across stages 1 and 2 are more sensitive to economic forecasts and therefore reflected the highest level of allowance for ECL sensitivity during 2024.

There was a reduction in the total sensitivity for ECL allowance in all scenarios compared with 31 December 2023, due to banking portfolio sales, reduction of management judgemental adjustments, model redevelopments and scenario evolution.

There is limited sensitivity in credit cards and other unsecured lending in stage 3 as levels of loss on defaulted exposures remain consistent through various economic conditions. The Downside 2 scenario is from the tail of the economic distribution where allowance for ECL is more sensitive based on historical experience and includes a macroeconomic-dependent stressed LGD for a limited number of portfolios.

The reported gross carrying amount by stage is representative of the weighted scenario allowance for ECL. The allowance for ECL sensitivity to the other scenarios includes changes in allowance for ECL due to the levels of loss and the migration of additional lending balances in or out of stage 2.

Group ECL sensitivity results

The allowance for ECL of the scenarios and management judgemental adjustments is highly sensitive to movements in economic forecasts. Based upon the sensitivity tables presented above, if the Group allowance

for ECL balance was estimated solely on the basis of the Central scenario, Downside scenario or the Downside 2 scenario at 31 December 2024, it would increase/(decrease) as presented in the below table.

Total Group ECL at 31 December 2024

	Retail ¹ \$bn	Wholesale ¹ \$bn
Reported allowance for ECL	2.4	2.2
Scenarios		
100% Consensus Central scenario	(0.1)	(0.2)
100% Consensus Upside scenario	(0.1)	(0.6)
100% Consensus Downside scenario	0.0	0.7
100% Downside 2 scenario	1.5	4.3
Total Group ECL at 31 December 2023		
Reported allowance for ECL	3.0	2.5
Scenarios		
100% Consensus Central scenario	(0.1)	(0.2)
100% Consensus Upside scenario	(0.5)	(0.7)
100% Consensus Downside scenario	0.4	0.8
100% Downside 2 scenario	2.1	4.5

1 On the same basis as retail and wholesale sensitivity analysis.

At 31 December 2024, the Group allowance for ECL decreased in the retail portfolio by \$0.6bn and decreased by \$0.3bn in the wholesale portfolio, compared with 31 December 2023.

There was also a reduction in allowance for ECL sensitivity across all scenarios within the retail and wholesale portfolios since 31 December 2023, primarily as a result of the sale of our Canada banking business, the sale of our retail banking operations in France, and various other business sales during the first half of 2024.

For the wholesale portfolio this was the main driver of the decrease in Downside 2 ECL sensitivity.

For the retail portfolios the ECL sensitivity decrease across all scenarios including the Downside 2 was also primarily due to the reduction of management judgemental adjustments, model redevelopments and scenario evolution.

Reconciliation from reported exposure and ECL to sensitised exposure and weighted ECL

	Wholesale		Retail		Total	
	Gross carrying/ nominal amount \$m	Allowance for ECL \$m	Gross carrying/ nominal amount \$m	Allowance for ECL \$m	Gross carrying/ nominal amount \$m	Allowance for ECL \$m
Included in sensitivity analysis	1,958,010	(2,205)	392,361	(2,413)	2,350,371	(4,618)
- Exclusions from sensitivity as described in the section above ¹	20,409	(5,419)	309,178	(124)	329,587	(5,543)
- Debt instruments measured at fair value through other comprehensive income ²	(346,124)	54	—	—	(346,124)	54
- Performance guarantees ²	(92,722)	311	—	—	(92,722)	311
- Other financial assets at amortised cost not presented as wholesale or personal lending, including held for sale ²	(568,668)	141	(130)	—	(568,798)	141
- Other ³	5,978	(441)	498	(9)	6,476	(450)
As reported in the Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector at 31 Dec 2024	976,883	(7,559)	701,907	(2,546)	1,678,790	(10,105)
Other financial assets at amortised cost					828,580	(92)
Total reported in the Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector at 31 Dec 2024					2,507,370	(10,197)

Reconciliation from reported exposure and ECL to sensitised exposure and weighted ECL (continued)

	Wholesale		Retail		Total	
	Gross carrying/ nominal amount \$m	Allowance for ECL \$m	Gross carrying/ nominal amount \$m	Allowance for ECL \$m	Gross carrying/ nominal amount \$m	Allowance for ECL \$m
Included in sensitivity analysis	1,990,378	(2,507)	442,373	(2,962)	2,432,751	(5,469)
– Exclusions from sensitivity as described in the section above ¹	17,024	(6,237)	308,569	(93)	325,593	(6,330)
– Debt instruments measured at fair value through other comprehensive income ²	(302,348)	97	—	—	(302,348)	97
– Performance guarantees ²	(93,312)	35	—	—	(93,312)	35
– Other financial assets at amortised cost not presented as wholesale or personal lending, including held for sale ²	(579,534)	93	(41,129)	174	(620,663)	267
– Other ³	2,704	(84)	(4,175)	(11)	(1,471)	(95)
As reported in the Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector at 31 Dec 2023	1,034,912	(8,603)	705,638	(2,892)	1,740,550	(11,495)
Other financial assets at amortised cost					960,271	(422)
Total reported in the Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector at 31 Dec 2023					2,700,821	(11,917)

1 Comprises wholesale defaulted obligors, retail portfolios utilising less complex modelling approaches, private banking and insurance.

2 The sensitivity analysis includes certain items reported in Other assets at amortised cost, which are not allocated to an industry in the credit tables. It also includes FVOCI and performance guarantees, which are presented separately in the credit tables.

3 Includes FX and other operational variances.

Reconciliations of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees

The following disclosure provides a reconciliation by stage of the Group's gross carrying/nominal amount and allowances for loans and advances to banks and customers, including loan commitments and financial guarantees.

In addition, a reconciliation by stage of the Group's gross carrying amount and allowances for loans and advances to banks and customers and a reconciliation by stage of the Group's nominal amount and allowances for loan commitments and financial guarantees, were included in this section following adoption of the recommendations of the third report from The Taskforce on Disclosures about Expected Credit Losses ('DECL').

Movements are calculated on a quarterly basis and therefore fully capture stage movements between quarters. If movements were calculated on a year-to-date basis they would only reflect the opening and closing position of the financial instrument.

The transfers of financial instruments represents the impact of stage transfers upon the gross carrying/nominal amount and associated allowance for ECL.

The net remeasurement of ECL arising from transfer of stage represents the increase or decrease due to these transfers, for example, moving from a 12-month (stage 1) to a lifetime (stage 2) ECL measurement basis. Net remeasurement excludes the underlying customer risk rating ('CRR')/probability of default ('PD') movements of the financial instruments transferring stage. This is captured, along with other credit quality movements in the 'changes to risk parameters – credit quality' line item.

Changes in 'Net new and further lending/repayments' represents the impact from volume movements within the Group's lending portfolio and includes 'New financial assets originated or purchased', 'assets derecognised (including final repayments)' and 'changes to risk parameters – further lending/repayment'.

Risk review

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees

(Audited)

	Non-credit impaired				Credit impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI			
	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2024	1,496,805	(1,300)	153,084	(3,102)	20,799	(7,063)	85	(30)	1,670,773	(11,495)
Transfers of financial instruments:										
	(19,629)	(1,259)	6,652	2,302	12,977	(1,043)				
– transfers from stage 1 to stage 2	(116,211)	419	116,211	(419)						
– transfers from stage 2 to stage 1	98,731	(1,627)	(98,731)	1,627						
– transfers to stage 3	(2,799)	16	(12,230)	1,321	15,029	(1,337)				
– transfers from stage 3	650	(67)	1,402	(227)	(2,052)	294				
Net remeasurement of ECL arising from transfer of stage		959		(831)		(144)				(16)
Changes due to modifications not derecognised					(25)				(25)	
Net new and further lending/repayments	87,833	(168)	(37,731)	589	(5,246)	1,689	7	(7)	44,863	2,103
Changes to risk parameters – credit quality		363		(1,773)		(3,945)		(11)		(5,366)
Changes to models used for ECL calculation		68		(4)		(20)				44
Assets written off					(4,459)	4,459			(4,459)	4,459
Credit-related modifications that resulted in derecognition										
Foreign exchange and others ^{1, 2, 3}	(75,322)	105	(6,107)	145	(223)	(81)	1	(3)	(81,651)	166
At 31 Dec 2024	1,489,687	(1,232)	115,898	(2,674)	23,823	(6,148)	93	(51)	1,629,501	(10,105)
ECL income statement change for the period		1,222		(2,019)		(2,420)		(18)		(3,235)
Recoveries										260
Others										(158)
Total ECL income statement change for the period										(3,133)

- Total includes \$3.7bn of gross carrying loans and advances to customers and banks, which were classified to assets held for sale, and a corresponding allowance for ECL of \$46m, reflecting business disposals as disclosed in Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.
- Total includes \$35.3bn of nominal amount and \$21m of corresponding allowance for ECL related to derecognition of loan commitments and financial guarantees following the sale of our banking business in Canada during 2024.
- Total includes \$2.7bn of nominal amount related to derecognition of loan commitments and financial guarantees following the sale of our banking business in Argentina during 2024.

	At 31 Dec 2024		12 months ended 31 Dec 2024
	Gross carrying/nominal amount	Allowance for ECL	ECL charge
	\$m	\$m	\$m
As above	1,629,501	(10,105)	(3,133)
Other financial assets measured at amortised cost	828,580	(92)	(114)
Non-trading reverse purchase agreement commitments	49,289		
Performance and other guarantees not considered for IFRS 9			(173)
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/Summary consolidated income statement	2,507,370	(10,197)	(3,420)
Debt instruments measured at FVOCI	346,124	(54)	6
Total allowance for ECL/total income statement ECL change for the period	n/a	(10,251)	(3,414)

As shown in the previous table, the allowance for ECL for loans and advances to customers and banks and relevant loan commitments and financial guarantees decreased \$1,390m during the period from \$11,495m at 31 December 2023 to \$10,105m at 31 December 2024.

This decrease was driven by:

– \$4,459m of assets written off;

- \$2,103m relating to volume movements, which included the allowance for ECL associated with new originations, assets derecognised and further lending/repayment;
- foreign exchange and other movements of \$166m; and
- \$44m of changes to models used for ECL calculation.

These were partly offset by:

- \$5,366m relating to credit quality changes, including the credit quality impact of financial instruments transferring between stages; and
- \$16m relating to the net remeasurement impact of stage transfers.

The ECL charge for the period of \$3,235m presented in the previous table consisted of \$5,366m relating to credit quality changes,

including the credit quality impact of financial instruments transferring between stages and \$16m relating to the net remeasurement impact of stage transfers.

This was partly offset by \$2,103m relating to underlying net book volume movement and \$44m in changes to models used for ECL calculation.

Summary views of the movement in wholesale and personal lending are presented on pages 173 and 185.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees

(Audited)

	Non-credit impaired				Credit impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI			
	Gross exposure	Allowance/provision for ECL	Gross exposure	Allowance/provision for ECL	Gross exposure	Allowance/provision for ECL	Gross exposure	Allowance/provision for ECL	Gross exposure	Allowance/provision for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2023	1,433,643	(1,257)	177,223	(3,710)	21,207	(6,949)	129	(38)	1,632,202	(11,954)
Transfers of financial instruments:	(18,948)	(1,048)	10,286	2,228	8,662	(1,180)	—	—	—	—
– transfers from stage 1 to stage 2	(150,728)	442	150,728	(442)	—	—	—	—	—	—
– transfers from stage 2 to stage 1	133,079	(1,467)	(133,079)	1,467	—	—	—	—	—	—
– transfers to stage 3	(1,986)	23	(8,600)	1,379	10,586	(1,402)	—	—	—	—
– transfers from stage 3	687	(46)	1,237	(176)	(1,924)	222	—	—	—	—
Net remeasurement of ECL arising from transfer of stage	—	917	—	(973)	—	(124)	—	—	—	(180)
Net new and further lending/repayments	77,693	(185)	(36,795)	661	(4,956)	1,117	(36)	3	35,906	1,596
Changes to risk parameters – credit quality	—	307	—	(1,262)	—	(3,896)	—	21	—	(4,830)
Changes to models used for ECL calculation	—	(22)	—	46	—	7	—	—	—	31
Assets written off	—	—	—	—	(3,922)	3,922	—	—	(3,922)	3,922
Credit-related modifications that resulted in derecognition	—	—	—	—	(119)	95	—	—	(119)	95
Foreign exchange and others ¹	4,417	(12)	2,370	(92)	(73)	(55)	(8)	(16)	6,706	(175)
At 31 Dec 2023	1,496,805	(1,300)	153,084	(3,102)	20,799	(7,063)	85	(30)	1,670,773	(11,495)
ECL income statement change for the period		1,017		(1,528)		(2,896)		24		(3,383)
Recoveries										268
Others										(195)
Total ECL income statement change for the period										(3,310)

1 Total includes \$7.7bn of gross carrying loans and advances to customers and banks, which were classified to assets held for sale, and a corresponding allowance for ECL of \$70m, reflecting business disposals as disclosed in Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.

(Audited)

	At 31 Dec 2023		12 months ended
	Gross carrying/nominal amount	Allowance for ECL	ECL charge
	\$m	\$m	\$m
As above	1,670,773	(11,495)	(3,310)
Other financial assets measured at amortised cost	960,271	(422)	(35)
Non-trading reverse purchase agreement commitments	69,777	—	—
Performance and other guarantees not considered for IFRS 9	—	—	(44)
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/Summary consolidated income statement	2,700,821	(11,917)	(3,389)
Debt instruments measured at FVOCI	302,348	(97)	(58)
Total allowance for ECL/total income statement ECL change for the period	n/a	(12,014)	(3,447)

Risk review

Reconciliation of changes in gross carrying amount and allowances for loans and advances to banks and customers

	Non-credit impaired				Credit impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI			
	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m
At 1 Jan 2024	920,863	(1,140)	122,307	(2,967)	19,275	(6,952)	81	(30)	1,062,526	(11,089)
Transfers of financial instruments:	(19,794)	(1,227)	7,344	2,259	12,450	(1,032)	—	—	—	—
– transfers from stage 1 to stage 2	(90,611)	404	90,611	(404)	—	—	—	—	—	—
– transfers from stage 2 to stage 1	72,935	(1,580)	(72,935)	1,580	—	—	—	—	—	—
– transfers to stage 3	(2,559)	16	(11,512)	1,310	14,071	(1,326)	—	—	—	—
– transfers from stage 3	441	(67)	1,180	(227)	(1,621)	294	—	—	—	—
Net remeasurement of ECL arising from transfer of stage	—	932	—	(801)	—	(144)	—	—	—	(13)
Changes due to modifications not derecognised	—	—	—	—	(25)	—	—	—	(25)	—
Net new and further lending/ repayments	52,439	(161)	(33,154)	570	(4,535)	1,606	7	(7)	14,757	2,008
Changes to risk parameters – credit quality	—	361	—	(1,724)	—	(3,873)	—	(11)	—	(5,247)
Changes to models used for ECL calculation	—	66	—	(18)	—	(20)	—	—	—	28
Assets written off	—	—	—	—	(4,459)	4,459	—	—	(4,459)	4,459
Credit-related modifications that resulted in derecognition	—	—	—	—	—	—	—	—	—	—
Foreign exchange and others ¹	(27,236)	82	(3,051)	133	(89)	(86)	2	(3)	(30,374)	126
At 31 Dec 2024	926,272	(1,087)	93,446	(2,548)	22,617	(6,042)	90	(51)	1,042,425	(9,728)
ECL income statement change for the period		1,198		(1,973)		(2,431)		(18)		(3,224)
Recoveries										260
Others										(161)
Total ECL income statement change for the period										(3,125)

1 Total includes \$3.7bn of gross carrying loans and advances to customers and banks, which were classified to assets held for sale, and a corresponding allowance for ECL of \$46m, reflecting business disposals as disclosed in Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.

Reconciliation of changes in gross carrying amount and allowances for loans and advances to banks and customers (continued)

	Non-credit impaired				Credit impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI			
	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m	Gross carrying amount \$m	Allowance for ECL \$m
At 1 Jan 2023	879,023	(1,109)	140,816	(3,518)	19,586	(6,851)	129	(38)	1,039,554	(11,516)
Transfers of financial instruments:	(19,276)	(980)	11,250	2,154	8,026	(1,174)	—	—	—	—
– transfers from stage 1 to stage 2	(108,758)	423	108,758	(423)	—	—	—	—	—	—
– transfers from stage 2 to stage 1	90,655	(1,382)	(90,655)	1,382	—	—	—	—	—	—
– transfers to stage 3	(1,692)	22	(7,975)	1,367	9,667	(1,389)	—	—	—	—
– transfers from stage 3	519	(43)	1,122	(172)	(1,641)	215	—	—	—	—
Net remeasurement of ECL arising from transfer of stage	—	859	—	(934)	—	(118)	—	—	—	(193)
Net new and further lending/ repayments	55,024	(210)	(32,069)	685	(4,233)	1,026	(40)	3	18,682	1,504
Changes to risk parameters – credit quality	—	311	—	(1,292)	—	(3,804)	—	21	—	(4,764)
Changes to models used for ECL calculation	—	(17)	—	28	—	7	—	—	—	18
Assets written off	—	—	—	—	(3,922)	3,922	—	—	(3,922)	3,922
Credit-related modifications that resulted in derecognition	—	—	—	—	(119)	95	—	—	(119)	95
Foreign exchange and others ¹	6,092	6	2,310	(90)	(63)	(55)	(8)	(16)	8,331	(155)
At 31 Dec 2023	920,863	(1,140)	122,307	(2,967)	19,275	(6,952)	81	(30)	1,062,526	(11,089)
ECL income statement change for the period		943		(1,513)		(2,889)		24		(3,435)
Recoveries										268
Others										(203)
Total ECL income statement change for the period										(3,370)

1 Total includes \$7.7bn of gross carrying loans and advances to customers and banks, which were classified to assets held for sale, and a corresponding allowance for ECL of \$70m, reflecting business disposals as disclosed in Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.

Reconciliation of changes in nominal amount and allowances for loan commitments and financial guarantees

	Non-credit impaired				Credit impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI		Total	
	Nominal amount	Allowance for ECL	Nominal amount	Allowance for ECL	Nominal amount	Allowance for ECL	Nominal amount	Allowance for ECL	Nominal amount	Allowance for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2024	575,942	(160)	30,777	(135)	1,524	(111)	4	—	608,247	(406)
Transfers of financial instruments:	165	(32)	(692)	43	527	(11)	—	—	—	—
– transfers from stage 1 to stage 2	(25,600)	15	25,600	(15)	—	—	—	—	—	—
– transfers from stage 2 to stage 1	25,796	(47)	(25,796)	47	—	—	—	—	—	—
– transfers to stage 3	(240)	—	(718)	11	958	(11)	—	—	—	—
– transfers from stage 3	209	—	222	—	(431)	—	—	—	—	—
Net remeasurement of ECL arising from transfer of stage	—	27	—	(30)	—	—	—	—	—	(3)
Net new and further lending/repayments	35,394	(7)	(4,577)	19	(711)	83	—	—	30,106	95
Changes to risk parameters – credit quality	—	2	—	(49)	—	(72)	—	—	—	(119)
Changes to models used for ECL calculation	—	2	—	14	—	—	—	—	—	16
Foreign exchange and others ^{1,2}	(48,086)	23	(3,056)	12	(134)	5	(1)	—	(51,277)	40
At 31 Dec 2024	563,415	(145)	22,452	(126)	1,206	(106)	3	—	587,076	(377)
ECL income statement change for the period		24		(46)		11		—		(11)
Recoveries										—
Others										3
Total ECL income statement change for the period										(8)

1 Total includes \$35.3bn of nominal amount and \$21 m of corresponding allowance for ECL related to derecognition of loan commitments and financial guarantees following the sale of our banking business in Canada during 2024.

2 Total includes \$2.7bn of nominal amount related to derecognition of loan commitments and financial guarantees following the sale of our banking business in Argentina during 2024.

Reconciliation of changes in nominal amount and allowances for loan commitments and financial guarantees

	Non-credit impaired				Credit impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI		Total	
	Nominal amount	Allowance for ECL	Nominal amount	Allowance for ECL	Nominal amount	Allowance for ECL	Nominal amount	Allowance for ECL	Nominal amount	Allowance for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2023	554,620	(148)	36,407	(192)	1,621	(98)	—	—	592,648	(438)
Transfers of financial instruments:	328	(68)	(964)	74	636	(6)	—	—	—	—
– transfers from stage 1 to stage 2	(41,970)	19	41,970	(19)	—	—	—	—	—	—
– transfers from stage 2 to stage 1	42,424	(85)	(42,424)	85	—	—	—	—	—	—
– transfers to stage 3	(294)	1	(625)	12	919	(13)	—	—	—	—
– transfers from stage 3	168	(3)	115	(4)	(283)	7	—	—	—	—
Net remeasurement of ECL arising from transfer of stage	—	58	—	(39)	—	(6)	—	—	—	13
Net new and further lending/repayments	22,669	25	(4,726)	(24)	(723)	91	4	—	17,224	92
Changes to risk parameters – credit quality	—	(4)	—	30	—	(92)	—	—	—	(66)
Changes to models used for ECL calculation	—	(5)	—	18	—	—	—	—	—	13
Foreign exchange and others	(1,675)	(18)	60	(2)	(10)	—	—	—	(1,625)	(20)
At 31 Dec 2023	575,942	(160)	30,777	(135)	1,524	(111)	4	—	608,247	(406)
ECL income statement change for the period		74		(15)		(7)		—		52
Recoveries										—
Others										8
Total ECL income statement change for the period										60

Credit quality

Credit quality of financial instruments

(Audited)

We assess the credit quality of all financial instruments that are subject to credit risk. The credit quality of financial instruments is a point-in-time assessment of PD, whereas stages 1 and 2 are determined based on relative deterioration of credit quality since initial recognition for the majority of portfolios. Accordingly, for non-credit-impaired financial instruments, there is no direct relationship between the credit quality assessment and stages 1 and 2, although typically the lower credit quality bands exhibit a higher proportion in stage 2.

The five credit quality classifications provided below each encompass a range of granular internal credit rating grades assigned to wholesale and personal lending businesses and the external ratings attributed by external agencies to debt securities, as shown in the table on page 139.

Distribution of financial instruments by credit quality at 31 December 2024

(Audited)

	Gross carrying/notional amount						Allowance for ECL/ other credit provisions	Net
	Strong \$m	Good \$m	Satisfactory \$m	Sub- standard \$m	Credit impaired \$m	Total \$m		
In-scope for IFRS 9 ECL								
Loans and advances to customers held at amortised cost	515,266	193,080	186,416	22,906	22,705	940,373	(9,715)	930,658
– personal	360,317	53,595	27,774	1,979	3,560	447,225	(2,524)	444,701
– corporate and commercial	114,504	118,785	138,705	20,224	18,466	410,684	(6,755)	403,929
– non-bank financial institutions	40,445	20,700	19,937	703	679	82,464	(436)	82,028
Loans and advances to banks held at amortised cost	92,621	4,255	5,040	134	2	102,052	(13)	102,039
Cash and balances at central banks	266,713	949	12	–	–	267,674	–	267,674
Hong Kong Government certificates of indebtedness	42,293	–	–	–	–	42,293	–	42,293
Reverse repurchase agreements – non-trading	155,831	70,877	25,799	42	–	252,549	–	252,549
Financial investments	146,970	3,681	3,331	–	–	153,982	(9)	153,973
Assets held for sale	2,425	458	367	1	22	3,273	(4)	3,269
Other assets	88,338	9,735	10,151	454	131	108,809	(79)	108,730
– endorsements and acceptances	2,101	2,663	3,090	243	10	8,107	(14)	8,093
– accrued income and other	86,237	7,072	7,061	211	121	100,702	(65)	100,637
Debt instruments measured at fair value through other comprehensive income ¹	336,313	9,448	7,768	380	–	353,909	(54)	353,855
Out-of-scope for IFRS 9 ECL								
Trading assets	119,546	21,951	15,804	2,300	47	159,648	–	159,648
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	53,282	11,862	4,390	231	11	69,776	–	69,776
Derivatives	224,870	34,124	9,373	258	12	268,637	–	268,637
Assets held for sale	3,019	–	–	–	–	3,019	–	3,019
Total gross carrying amount on balance sheet	2,047,487	360,420	268,451	26,706	22,930	2,725,994	(9,874)	2,716,120
Percentage of total credit quality (%)	75.1	13.2	9.9	1.0	0.8	100		
Loan and other credit-related commitments	400,120	131,396	77,220	9,670	961	619,367	(348)	619,019
Financial guarantees	7,365	4,263	4,399	723	248	16,998	(29)	16,969
In-scope: Irrevocable loan commitments and financial guarantees	407,485	135,659	81,619	10,393	1,209	636,365	(377)	635,988
Loan and other credit-related commitments	96,952	76,340	65,619	2,847	453	242,211	–	242,211
Performance and other guarantees	39,940	32,956	17,339	1,671	817	92,723	(312)	92,411
Out-of-scope: Revocable loan commitments and non-financial guarantees	136,892	109,296	82,958	4,518	1,270	334,934	(312)	334,622

1 For the purposes of this disclosure, gross carrying amount is defined as the amortised cost of a financial asset before adjusting for any loss allowance. As such, the gross carrying amount of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

Distribution of financial instruments by credit quality at 31 December 2023

(Audited)

	Gross carrying/notional amount						Allowance for ECL/ other credit provisions	Net
	Strong \$m	Good \$m	Satisfactory \$m	Sub- standard \$m	Credit impaired \$m	Total \$m		
In-scope for IFRS 9 ECL								
Loans and advances to customers held at amortised cost	497,665	206,476	197,582	28,532	19,354	949,609	(11,074)	938,535
– personal	346,562	62,656	32,314	2,485	3,505	447,522	(2,867)	444,655
– corporate and commercial	118,123	123,713	145,249	25,531	15,039	427,655	(7,803)	419,852
– non-bank financial institutions	32,980	20,107	20,019	516	810	74,432	(404)	74,028
Loans and advances to banks held at amortised cost	101,057	4,640	6,363	855	2	112,917	(15)	112,902
Cash and balances at central banks	284,723	1,068	77	—	—	285,868	—	285,868
Hong Kong Government certificates of indebtedness	42,024	—	—	—	—	42,024	—	42,024
Reverse repurchase agreements – non-trading	170,494	46,884	34,206	633	—	252,217	—	252,217
Financial investments	143,333	3,814	1,137	62	—	148,346	(20)	148,326
Assets held for sale	68,501	16,403	14,812	2,939	531	103,186	(324)	102,862
Other assets	106,184	11,982	9,965	366	133	128,630	(78)	128,552
– endorsements and acceptances	2,405	2,666	2,707	161	18	7,957	(18)	7,939
– accrued income and other	103,779	9,316	7,258	205	115	120,673	(60)	120,613
Debt instruments measured at fair value through other comprehensive income ¹	288,959	12,037	7,897	805	5	309,703	(97)	309,606
Out-of-scope for IFRS 9 ECL								
Trading assets	122,695	20,595	20,746	1,326	135	165,497	—	165,497
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	52,649	11,517	4,733	84	6	68,989	—	68,989
Derivatives	196,098	27,377	6,041	187	11	229,714	—	229,714
Assets held for sale	12,495	—	—	—	—	12,495	—	12,495
Total gross carrying amount on balance sheet	2,086,877	362,793	303,559	35,789	20,177	2,809,195	(11,608)	2,797,587
Percentage of total credit quality (%)	74.3	12.9	10.8	1.3	0.7	100		
Loan and other credit-related commitments	436,359	142,500	73,230	7,782	1,144	661,015	(367)	660,648
Financial guarantees	7,700	4,146	4,080	699	384	17,009	(39)	16,970
In-scope: Irrevocable loan commitments and financial guarantees	444,059	146,646	77,310	8,481	1,528	678,024	(406)	677,618
Loan and other credit-related commitments	92,509	77,891	61,462	3,896	377	236,135	—	236,135
Performance and other guarantees	39,784	32,231	19,445	1,853	964	94,277	(145)	94,132
Out-of-scope: Revocable loan commitments and non-financial guarantees	132,293	110,122	80,907	5,749	1,341	330,412	(145)	330,267

1 For the purposes of this disclosure, gross carrying amount is defined as the amortised cost of a financial asset before adjusting for any loss allowance. As such, the gross carrying amount of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

Risk review

Distribution of financial instruments to which the impairment requirements in IFRS 9 are applied, by credit quality and stage allocation (Audited)

	Gross carrying/notional amount						Allowance for ECL	Net
	Strong \$m	Good \$m	Satisfactory \$m	Sub-standard \$m	Credit impaired \$m	Total \$m		
Loans and advances to customers at amortised cost	515,266	193,080	186,416	22,906	22,705	940,373	(9,715)	930,658
– stage 1	498,415	170,420	150,818	4,767	–	824,420	(1,078)	823,342
– stage 2	16,851	22,660	35,598	18,139	–	93,248	(2,546)	90,702
– stage 3	–	–	–	–	22,615	22,615	(6,040)	16,575
– POCI	–	–	–	–	90	90	(51)	39
Loans and advances to banks at amortised cost	92,621	4,255	5,040	134	2	102,052	(13)	102,039
– stage 1	92,528	4,226	4,981	117	–	101,852	(9)	101,843
– stage 2	93	29	59	17	–	198	(2)	196
– stage 3	–	–	–	–	2	2	(2)	–
– POCI	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	702,570	85,700	39,660	497	153	828,580	(92)	828,488
– stage 1	702,373	85,032	38,977	239	–	826,621	(64)	826,557
– stage 2	197	668	683	258	–	1,806	(5)	1,801
– stage 3	–	–	–	–	153	153	(23)	130
– POCI	–	–	–	–	–	–	–	–
Loan and other credit-related commitments	400,120	131,396	77,220	9,670	961	619,367	(348)	619,019
– stage 1	398,779	125,956	67,949	4,547	–	597,231	(137)	597,094
– stage 2	1,341	5,440	9,271	5,123	–	21,175	(121)	21,054
– stage 3	–	–	–	–	958	958	(90)	868
– POCI	–	–	–	–	3	3	–	3
Financial guarantees	7,365	4,263	4,399	723	248	16,998	(29)	16,969
– stage 1	7,352	4,192	3,625	184	–	15,353	(8)	15,345
– stage 2	13	71	774	539	–	1,397	(5)	1,392
– stage 3	–	–	–	–	248	248	(16)	232
– POCI	–	–	–	–	–	–	–	–
At 31 Dec 2024	1,717,942	418,694	312,735	33,930	24,069	2,507,370	(10,197)	2,497,173
Debt instruments at FVOCI ¹								
– stage 1	336,264	9,448	7,290	–	–	353,002	(31)	352,971
– stage 2	49	–	478	380	–	907	(23)	884
– stage 3	–	–	–	–	–	–	–	–
– POCI	–	–	–	–	–	–	–	–
At 31 Dec 2024	336,313	9,448	7,768	380	–	353,909	(54)	353,855
Loans and advances to customers at amortised cost	497,665	206,476	197,582	28,532	19,354	949,609	(11,074)	938,535
– stage 1	478,422	177,410	147,940	5,612	–	809,384	(1,130)	808,254
– stage 2	19,243	29,066	49,642	22,920	–	120,871	(2,964)	117,907
– stage 3	–	–	–	–	19,273	19,273	(6,950)	12,323
– POCI	–	–	–	–	81	81	(30)	51
Loans and advances to banks at amortised cost	101,057	4,640	6,363	855	2	112,917	(15)	112,902
– stage 1	101,011	4,631	5,550	287	–	111,479	(10)	111,469
– stage 2	46	9	813	568	–	1,436	(3)	1,433
– stage 3	–	–	–	–	2	2	(2)	–
– POCI	–	–	–	–	–	–	–	–
Other financial assets measured at amortised cost	815,259	80,151	60,197	4,000	664	960,271	(422)	959,849
– stage 1	814,776	78,486	53,095	516	–	946,873	(109)	946,764
– stage 2	483	1,665	7,102	3,484	–	12,734	(132)	12,602
– stage 3	–	–	–	–	664	664	(181)	483
– POCI	–	–	–	–	–	–	–	–
Loan and other credit-related commitments	436,359	142,500	73,230	7,782	1,144	661,015	(367)	660,648
– stage 1	432,017	135,192	61,213	2,527	–	630,949	(153)	630,796
– stage 2	4,342	7,308	12,017	5,255	–	28,922	(128)	28,794
– stage 3	–	–	–	–	1,140	1,140	(86)	1,054
– POCI	–	–	–	–	4	4	–	4
Financial guarantees	7,700	4,146	4,080	699	384	17,009	(39)	16,970
– stage 1	7,497	3,943	3,204	102	–	14,746	(7)	14,739
– stage 2	203	203	876	597	–	1,879	(7)	1,872
– stage 3	–	–	–	–	384	384	(25)	359
– POCI	–	–	–	–	–	–	–	–
At 31 Dec 2023	1,858,040	437,913	341,452	41,868	21,548	2,700,821	(11,917)	2,688,904
Debt instruments at FVOCI ¹								
– stage 1	288,909	12,037	7,579	–	–	308,525	(37)	308,488
– stage 2	50	–	318	805	–	1,173	(59)	1,114
– stage 3	–	–	–	–	5	5	(1)	4
– POCI	–	–	–	–	–	–	–	–
At 31 Dec 2023	288,959	12,037	7,897	805	5	309,703	(97)	309,606

1 For the purposes of this disclosure, gross carrying amount is defined as the amortised cost of a financial asset before adjusting for any loss allowance. As such, the gross carrying amount of debt instruments at FVOCI as presented above will not reconcile to the balance sheet as it excludes fair value gains and losses.

Credit-impaired loans

(Audited)

We determine that a financial instrument is credit impaired and in stage 3 by considering relevant objective evidence, primarily whether:

- contractual payments of either principal or interest are past due for more than 90 days;
- there are other indications that the borrower is unlikely to pay, such as when a concession has been granted to the borrower for economic or legal reasons relating to the borrower's financial condition; and
- the loan is otherwise considered to be in default. If such unlikelihood to pay is not identified at an earlier stage, it is deemed to occur when an exposure is 90 days past due. Therefore, the

definitions of credit impaired and default are aligned as far as possible so that stage 3 represents all loans that are considered defaulted or otherwise credit impaired.

Forbearance

The following table shows the gross carrying amount and allowance for ECL of the Group's holdings of forbore loans and advances to customers by industry sector and by stages.

- A summary of our current policies and practices for forbearance is set out in 'Credit risk management' on page 139.

Forborne loans and advances to customers at amortised cost by stage allocation

	Performing forbore		Non-performing forbore		Total forbore	
	Stage 2 \$m	Stage 3 \$m	POCI \$m	Total \$m		
Gross carrying amount						
Personal	545	1,424	—			1,969
– first lien residential mortgages	266	1,040	—			1,306
– second lien residential mortgages	1	3	—			4
– guaranteed loans in respect of residential property	32	7	—			39
– other personal lending which is secured	—	7	—			7
– credit cards	86	87	—			173
– other personal lending which is unsecured	147	280	—			427
– motor vehicle finance	13	—	—			13
Wholesale	4,325	7,542	85			11,952
– corporate and commercial	4,247	7,351	85			11,683
– non-bank financial institutions	78	191	—			269
At 31 Dec 2024	4,870	8,966	85			13,921
Allowance for ECL						
Personal	(73)	(305)	—			(378)
– first lien residential mortgages	(12)	(148)	—			(160)
– second lien residential mortgages	—	—	—			—
– guaranteed loans in respect of residential property	(1)	(1)	—			(2)
– other personal lending which is secured	—	(2)	—			(2)
– credit cards	(17)	(45)	—			(62)
– other personal lending which is unsecured	(38)	(109)	—			(147)
– motor vehicle finance	(5)	—	—			(5)
Wholesale	(461)	(2,008)	(51)			(2,520)
– corporate and commercial	(460)	(1,972)	(51)			(2,483)
– non-bank financial institutions	(1)	(36)	—			(37)
At 31 Dec 2024	(534)	(2,313)	(51)			(2,898)
Gross carrying amount						
Personal	816	1,282	—			2,098
– first lien residential mortgages	530	815	—			1,345
– second lien residential mortgages	1	8	—			9
– guaranteed loans in respect of residential property	24	20	—			44
– other personal lending which is secured	1	6	—			7
– credit cards	96	83	—			179
– other personal lending which is unsecured	155	349	—			504
– motor vehicle finance	9	1	—			10
Wholesale	5,848	5,505	68			11,421
– corporate and commercial	5,778	5,459	68			11,305
– non-bank financial institutions	70	46	—			116
At 31 Dec 2023	6,664	6,787	68			13,519
Allowance for ECL						
Personal	(113)	(307)	—			(420)
– first lien residential mortgages	(50)	(113)	—			(163)
– second lien residential mortgages	—	(3)	—			(3)
– guaranteed loans in respect of residential property	—	(2)	—			(2)
– other personal lending which is secured	—	(1)	—			(1)
– credit cards	(17)	(46)	—			(63)
– other personal lending which is unsecured	(43)	(142)	—			(185)
– motor vehicle finance	(3)	—	—			(3)
Wholesale	(259)	(1,932)	(28)			(2,219)
– corporate and commercial	(257)	(1,920)	(28)			(2,205)
– non-bank financial institutions	(2)	(12)	—			(14)
At 31 Dec 2023	(372)	(2,239)	(28)			(2,639)

Risk review

Forborne loans and advances to customers by legal entities

	HSBC UK Bank plc \$m	HSBC Bank plc \$m	The Hongkong and Shanghai Banking Corporation Limited \$m	HSBC Bank Middle East Limited \$m	HSBC North America Holdings Inc. \$m	Grupo Financiero HSBC, S.A. de C.V. \$m	Other trading entities \$m	Total \$m
Gross carrying amount								
Performing forborne	1,251	1,506	1,073	10	787	201	42	4,870
Non-performing forborne	2,231	1,578	3,698	460	464	355	265	9,051
At 31 Dec 2024	3,482	3,084	4,771	470	1,251	556	307	13,921
Allowance for ECL								
Performing forborne	(101)	(36)	(296)	(1)	(52)	(48)	—	(534)
Non-performing forborne	(393)	(464)	(943)	(196)	(71)	(127)	(170)	(2,364)
At 31 Dec 2024	(494)	(500)	(1,239)	(197)	(123)	(175)	(170)	(2,898)
Gross carrying amount								
Performing forborne	1,478	2,081	1,574	31	954	503	43	6,664
Non-performing forborne	1,936	1,199	2,250	471	430	233	336	6,855
At 31 Dec 2023	3,414	3,280	3,824	502	1,384	736	379	13,519
Allowance for ECL								
Performing forborne	(75)	(25)	(142)	(1)	(43)	(84)	(2)	(372)
Non-performing forborne	(289)	(400)	(986)	(225)	(74)	(126)	(167)	(2,267)
At 31 Dec 2023	(364)	(425)	(1,128)	(226)	(117)	(210)	(169)	(2,639)

Wholesale lending

This section presents further disclosures related to wholesale lending. It provides details of the main legal entities, countries and customer classification that are driving the change observed in wholesale loans and advances to banks and customers, with the impact of foreign exchange separately identified.

This section also provides reconciliations of the opening 1 January 2024 to 31 December 2024 closing gross carrying/nominal amounts and the associated allowance for ECL. Further granularity is also provided by stage, with data for our main legal entities presented for gross loans and advances to banks and customers, loan and other credit-related commitments and financial guarantees.

At 31 December 2024, wholesale lending for gross loans and advances to banks and customers of \$595.2bn decreased by \$19.8bn on a reported basis, compared with 31 December 2023. Excluding adverse foreign exchange movements of \$16.3bn, total wholesale lending decreased by \$3.5bn.

On a constant currency basis, the wholesale loans and advances to customers grew by \$3.0bn, mainly driven by an increase in non-bank financial institutions (up \$9.6bn), partly offset by a decrease in corporate and commercial lending (down \$6.6bn).

The increase in non-bank financial institutions of \$9.6bn was largely driven by growth in balances in HSBC Bank plc (up \$4.2bn), in our legal entities in Asia (up \$2.2bn), in the US (up \$1.2bn), in HSBC UK (up \$1.0bn) and in the Middle East (up \$0.8bn).

The decrease in corporate and commercial balances of \$6.6bn, mainly in our legal entities in the US (down \$2.9bn) and in Asia (down \$2.4bn), was driven by repayments, including in 'real estate and construction' and in HSBC Bank plc (down \$0.7bn). Additionally, there was a decrease of \$0.5bn from the sale of our business in Argentina.

On a constant currency basis, gross loans and advances to banks decreased by \$6.5bn, mainly driven by lower central bank balances and money market lending balances in our legal entities in Asia (down \$9.1bn) and a decrease of \$0.6bn from the sale of our business in Argentina. This was partly offset by higher balances in our legal entities in the Middle East (up \$3.6bn).

The decrease in stage 2 exposures on a constant currency basis (down \$19.5bn) was mainly driven by maturities, repayments and new downgrades to stage 3 exposures, primarily in Asia.

On a constant currency basis, stage 3 gross loans and advances to customers increased by \$3.7bn, primarily driven by corporate and commercial exposure (up \$3.8bn) driven by defaults in commercial real estate lending in Hong Kong, which are generally well collateralised. There was a decrease in the associated allowance for ECL due to write-offs of heavily-impaired exposures.

At 31 December 2024, the write-offs attributable to wholesale lending increased by \$0.3bn to \$2.9bn, compared with 31 December 2023.

The allowance for ECL attributable to loans and advances to banks and customers of \$7.2bn at 31 December 2024 decreased by \$1.0bn from \$8.2bn at 31 December 2023. This included adverse foreign exchange movements of \$0.2bn.

On a constant currency basis, the allowance for ECL attributable to corporate and commercial loans and advances decreased by \$0.8bn, largely due to the write-offs of heavily-impaired exposures in 'real estate and construction', mainly in Hong Kong. The allowance for ECL attributable to loans and advances to non-bank financial institutions remained broadly stable.

On a reported basis, loan commitments and financial guarantees of \$381.7bn decreased by \$38.2bn compared with 31 December 2023. Excluding adverse foreign exchange movements of \$14.0bn, financial nominal amounts decreased by \$14.8bn, and corporate and commercial nominal amounts decreased by \$9.4bn.

The allowance for ECL attributable to loan commitments and financial guarantees at 31 December 2024 remained unchanged at \$0.4bn.

The table below provides a breakdown by industry sector and stage of the Group's gross carrying amount and allowances for ECL for wholesale loans and advances to banks and customers. Counterparties or exposures are classified when presenting comparable economic characteristics, or engaged in similar activities so that their collective ability to meet contractual obligations is uniformly affected by changes in economic, political or other conditions. Therefore, the industry classification does not adhere to Nomenclature des Activités Économiques dans la Communauté Européenne ('NACE'), which is applicable to other financial regulatory reporting.

Total wholesale lending for loans and advances to banks and customers by stage distribution

	Gross carrying amount					Allowance for ECL				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Corporate and commercial	340,987	51,231	18,376	90	410,684	(463)	(1,358)	(4,883)	(51)	(6,755)
– agriculture, forestry and fishing	5,437	1,314	282	–	7,033	(14)	(34)	(46)	–	(94)
– mining and quarrying	6,811	463	318	–	7,592	(6)	(7)	(32)	–	(45)
– manufacturing	70,987	10,250	1,466	21	82,724	(83)	(172)	(618)	(20)	(893)
– electricity, gas, steam and air-conditioning supply	15,277	971	209	–	16,457	(14)	(23)	(85)	–	(122)
– water supply, sewerage, waste management and remediation	2,530	388	43	–	2,961	(4)	(4)	(16)	–	(24)
– real estate and construction	63,794	17,320	8,887	62	90,063	(90)	(666)	(1,811)	(31)	(2,598)
– of which: commercial real estate	49,994	14,720	7,558	61	72,333	(67)	(604)	(1,355)	(29)	(2,055)
– wholesale and retail trade, repair of motor vehicles and motorcycles	66,977	8,125	2,725	3	77,830	(67)	(117)	(1,188)	–	(1,372)
– transportation and storage	18,589	3,637	417	–	22,643	(15)	(74)	(232)	–	(321)
– accommodation and food	11,406	1,718	1,610	–	14,734	(30)	(55)	(214)	–	(299)
– publishing, audiovisual and broadcasting	18,181	1,416	229	–	19,826	(42)	(55)	(61)	–	(158)
– professional, scientific and technical activities	23,044	2,436	644	4	26,128	(29)	(49)	(188)	–	(266)
– administrative and support services	17,671	1,707	739	–	20,117	(26)	(40)	(254)	–	(320)
– public administration and defence, compulsory social security	64	–	–	–	64	–	–	–	–	–
– education	1,361	192	43	–	1,596	(4)	(7)	(16)	–	(27)
– health and care	3,357	489	184	–	4,030	(8)	(18)	(25)	–	(51)
– arts, entertainment and recreation	1,817	171	78	–	2,066	(5)	(4)	(26)	–	(35)
– other services	6,470	491	327	–	7,288	(24)	(20)	(66)	–	(110)
– activities of households	582	7	–	–	589	–	–	–	–	–
– extra-territorial organisations and bodies activities	118	–	–	–	118	–	–	–	–	–
– government	6,495	123	175	–	6,793	(2)	–	(5)	–	(7)
– asset-backed securities	19	13	–	–	32	–	(13)	–	–	(13)
Non-bank financial institutions	79,687	2,098	679	–	82,464	(45)	(30)	(361)	–	(436)
Loans and advances to banks	101,852	198	2	–	102,052	(9)	(2)	(2)	–	(13)
At 31 Dec 2024	522,526	53,527	19,057	90	595,200	(517)	(1,390)	(5,246)	(51)	(7,204)
By legal entity										
HSBC UK Bank plc	81,630	12,772	3,356	–	97,758	(197)	(403)	(603)	–	(1,203)
HSBC Bank plc ¹	85,022	5,843	2,305	47	93,217	(54)	(111)	(752)	(22)	(939)
The Hongkong and Shanghai Banking Corporation Limited	279,535	27,078	11,483	39	318,135	(170)	(677)	(2,999)	(28)	(3,874)
HSBC Bank Middle East Limited	26,359	951	848	4	28,162	(20)	(6)	(463)	(1)	(490)
HSBC North America Holdings Inc.	30,107	4,665	503	–	35,275	(31)	(141)	(121)	–	(293)
Grupo Financiero HSBC, S.A. de C.V.	11,957	1,703	230	–	13,890	(35)	(48)	(128)	–	(211)
Other trading entities ¹	7,840	515	332	–	8,687	(10)	(4)	(180)	–	(194)
Holding companies, shared service centres and intra-Group eliminations	76	–	–	–	76	–	–	–	–	–
At 31 Dec 2024	522,526	53,527	19,057	90	595,200	(517)	(1,390)	(5,246)	(51)	(7,204)

1 At 31 December 2023, Other trading entities included gross carrying amount of \$1,792m related to Private Banking entities that were reclassified to HSBC Bank plc to continue the process of simplifying our structure in 2024 and gross carrying amount of \$1,169m related to our business in Argentina which was sold on 6 December 2024.

Total wholesale lending for loans and other credit-related commitments and financial guarantees to banks and customers by stage distribution¹

	Nominal amount					Allowance for ECL				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Corporate and commercial	241,249	18,685	1,033	3	260,970	(118)	(121)	(98)	–	(337)
Financial	118,430	2,196	87	–	120,713	(10)	(5)	(3)	–	(18)
At 31 Dec 2024	359,679	20,881	1,120	3	381,683	(128)	(126)	(101)	–	(355)
By legal entity										
HSBC UK Bank plc	37,848	4,540	445	–	42,833	(27)	(36)	(57)	–	(120)
HSBC Bank plc	144,941	6,118	256	3	151,318	(21)	(30)	(21)	–	(72)
The Hongkong and Shanghai Banking Corporation Limited	72,860	3,973	99	–	76,932	(54)	(32)	(6)	–	(92)
HSBC Bank Middle East Limited	8,879	329	35	–	9,243	(5)	(1)	(10)	–	(16)
HSBC North America Holdings Inc.	91,314	5,723	226	–	97,263	(20)	(26)	(5)	–	(51)
HSBC Bank Canada	–	–	–	–	–	–	–	–	–	–
Grupo Financiero HSBC, S.A. de C.V.	2,334	53	–	–	2,387	(1)	(1)	–	–	(2)
Other trading entities	1,503	145	59	–	1,707	–	–	(2)	–	(2)
At 31 Dec 2024	359,679	20,881	1,120	3	381,683	(128)	(126)	(101)	–	(355)

1 Included in loans and other credit-related commitments and financial guarantees is \$49bn relating to unsettled reverse repurchase agreements, which once drawn are classified as 'Reverse repurchase agreements – non-trading'.

Risk review

Total wholesale lending for loans and advances to banks and customers by stage distribution (continued)

	Gross carrying amount					Allowance for ECL				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Corporate and commercial	342,878	69,738	14,958	81	427,655	(499)	(1,500)	(5,774)	(30)	(7,803)
– agriculture, forestry and fishing	5,207	1,662	312	—	7,181	(13)	(53)	(64)	—	(130)
– mining and quarrying	6,260	638	325	—	7,223	(7)	(11)	(83)	—	(101)
– manufacturing	69,690	13,744	1,877	22	85,333	(89)	(194)	(839)	(21)	(1,143)
– electricity, gas, steam and air-conditioning supply	12,817	1,283	255	—	14,355	(14)	(17)	(88)	—	(119)
– water supply, sewerage, waste management and remediation	2,753	407	102	—	3,262	(5)	(7)	(51)	—	(63)
– real estate and construction	73,701	21,871	5,835	48	101,455	(96)	(629)	(2,554)	(7)	(3,286)
– of which: commercial real estate	59,883	19,107	4,552	47	83,589	(73)	(603)	(2,091)	(7)	(2,774)
– wholesale and retail trade, repair of motor vehicles and motorcycles	66,083	10,676	2,358	4	79,121	(80)	(127)	(1,132)	(2)	(1,341)
– transportation and storage	17,117	3,894	445	—	21,456	(18)	(52)	(160)	—	(230)
– accommodation and food	9,681	5,135	1,058	—	15,874	(27)	(118)	(112)	—	(257)
– publishing, audiovisual and broadcasting	17,455	2,066	210	—	19,731	(42)	(81)	(50)	—	(173)
– professional, scientific and technical activities	22,686	3,327	733	7	26,753	(32)	(63)	(306)	—	(401)
– administrative and support services	19,055	2,551	597	—	22,203	(31)	(63)	(174)	—	(268)
– public administration and defence, compulsory social security	1,037	5	—	—	1,042	—	—	—	—	—
– education	1,137	277	46	—	1,460	(3)	(8)	(4)	—	(15)
– health and care	3,245	808	183	—	4,236	(9)	(21)	(26)	—	(56)
– arts, entertainment and recreation	1,666	196	99	—	1,961	(5)	(6)	(31)	—	(42)
– other services	7,065	972	318	—	8,355	(26)	(37)	(90)	—	(153)
– activities of households	684	10	—	—	694	—	—	—	—	—
– extra-territorial organisations and bodies activities	100	1	—	—	101	—	—	—	—	—
– government	5,420	202	205	—	5,827	(2)	—	(10)	—	(12)
– asset-backed securities	19	13	—	—	32	—	(13)	—	—	(13)
Non-bank financial institutions	69,972	3,650	810	—	74,432	(52)	(30)	(322)	—	(404)
Loans and advances to banks	111,479	1,436	2	—	112,917	(10)	(3)	(2)	—	(15)
At 31 Dec 2023	524,329	74,824	15,770	81	615,004	(561)	(1,533)	(6,098)	(30)	(8,222)
By legal entity										
HSBC UK Bank plc	76,793	18,735	3,769	—	99,297	(213)	(474)	(593)	—	(1,280)
HSBC Bank plc	82,025	8,452	2,673	40	93,190	(69)	(138)	(1,035)	(7)	(1,249)
The Hongkong and Shanghai Banking Corporation Limited	287,876	37,402	7,077	38	332,393	(185)	(696)	(3,349)	(21)	(4,251)
HSBC Bank Middle East Limited	21,927	1,598	894	3	24,422	(17)	(11)	(571)	(2)	(601)
HSBC North America Holdings Inc.	30,797	5,712	583	—	37,092	(24)	(145)	(127)	—	(296)
Grupo Financiero HSBC, S.A. de C.V.	13,714	1,186	382	—	15,282	(39)	(56)	(231)	—	(326)
Other trading entities	11,164	1,739	392	—	13,295	(14)	(13)	(192)	—	(219)
Holding companies, shared service centres and intra-Group eliminations	33	—	—	—	33	—	—	—	—	—
At 31 Dec 2023	524,329	74,824	15,770	81	615,004	(561)	(1,533)	(6,098)	(30)	(8,222)

Total wholesale lending for loans and other credit-related commitments and financial guarantees by stage distribution¹ (continued)

	Nominal amount					Allowance for ECL				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Corporate and commercial	256,367	22,218	1,066	4	279,655	(126)	(125)	(107)	—	(358)
Financial	135,039	5,111	103	—	140,253	(11)	(10)	(2)	—	(23)
At 31 Dec 2023	391,406	27,329	1,169	4	419,908	(137)	(135)	(109)	—	(381)
By legal entity										
HSBC UK Bank plc	31,982	5,760	350	—	38,092	(31)	(32)	(56)	—	(119)
HSBC Bank plc	148,980	9,466	310	4	158,760	(20)	(27)	(27)	—	(74)
The Hongkong and Shanghai Banking Corporation Limited	70,436	3,975	79	—	74,490	(59)	(39)	(16)	—	(114)
HSBC Bank Middle East Limited	6,944	323	56	—	7,323	(4)	(1)	(3)	—	(8)
HSBC North America Holdings Inc.	101,067	5,103	248	—	106,418	(14)	(27)	(1)	—	(42)
HSBC Bank Canada	28,156	2,461	66	—	30,683	(8)	(8)	(3)	—	(19)
Grupo Financiero HSBC, S.A. de C.V.	2,092	34	—	—	2,126	(1)	—	—	—	(1)
Other trading entities	1,749	207	60	—	2,016	—	(1)	(3)	—	(4)
At 31 Dec 2023	391,406	27,329	1,169	4	419,908	(137)	(135)	(109)	—	(381)

¹ Included in loans and other credit-related commitments and financial guarantees is \$70bn relating to unsettled reverse repurchase agreements, which once drawn are classified as 'Reverse repurchase agreements – non-trading'.

Wholesale lending – reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees

(Audited)

	Non-credit impaired				Credit impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI			
	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2024	845,982	(698)	102,129	(1,668)	16,939	(6,207)	85	(30)	965,135	(8,603)
Transfers of financial instruments:	(17,606)	(214)	6,997	825	10,609	(611)	–	–	–	–
– transfers from stage 1 to stage 2	(70,991)	173	70,991	(173)	–	–	–	–	–	–
– transfers from stage 2 to stage 1	55,182	(380)	(55,182)	380	–	–	–	–	–	–
– transfers to stage 3	(2,056)	7	(9,515)	636	11,571	(643)	–	–	–	–
– transfers from stage 3	259	(14)	703	(18)	(962)	32	–	–	–	–
Net remeasurement of ECL arising from transfer of stage	–	214	–	(226)	–	(12)	–	–	–	(24)
Net new and further lending/repayments	58,044	(151)	(29,842)	311	(4,450)	1,219	7	(7)	23,759	1,372
Change to risk parameters – credit quality	–	112	–	(899)	–	(2,508)	–	(11)	–	(3,306)
Changes to models used for ECL calculation	–	39	–	105	–	–	–	–	–	144
Assets written off	–	–	–	–	(2,925)	2,925	–	–	(2,925)	2,925
Credit-related modifications that resulted in derecognition	–	–	–	–	–	–	–	–	–	–
Foreign exchange and others ^{1 2 3}	(53,384)	53	(4,996)	36	4	(153)	1	(3)	(58,375)	(67)
At 31 Dec 2024	833,036	(645)	74,288	(1,516)	20,177	(5,347)	93	(51)	927,594	(7,559)
ECL income statement change for the period		214		(709)		(1,301)		(18)		(1,814)
Recoveries										40
Others										(126)
Total ECL income statement change for the period										(1,900)

1 Total includes \$2.9bn of gross carrying loans and advances to customers and banks, which were classified to assets held for sale during the year, and a corresponding allowance for ECL of \$23m, reflecting business disposals as disclosed in Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.

2 Total includes \$28.9bn of nominal amount and \$20m of corresponding allowance for ECL related to derecognition of loan commitments and financial guarantees following the sale of our banking business in Canada during 2024.

3 Total includes \$0.3bn of nominal amount related to derecognition of loan commitments and financial guarantees following the sale of our banking business in Argentina during 2024.

As shown in the above table, the allowance for ECL for loans and advances to customers and banks and relevant loan commitments and financial guarantees decreased by \$1,044m during the period from \$8,603m at 31 December 2023 to \$7,559m at 31 December 2024.

This decrease was driven by:

- \$2,925m of assets written off;
- \$1,372m relating to volume movements, which included the allowance for ECL associated with new originations, assets derecognised and further lending/repayments; and
- \$144m relating to changes to models used for ECL calculation.

These were partly offset by:

- \$3,306m relating to credit quality changes, including the credit quality impact of financial instruments transferring between stages;
- foreign exchange and other movements of \$67m; and
- \$24m relating to the net remeasurement impact of stage transfers.

The ECL charge for the period of \$1,814m presented in the previous table consisted of \$3,306m relating to credit quality changes, including the credit quality impact of financial instruments transferring between stages and \$24m relating to the net remeasurement impact of stage transfers. This was partly offset by \$1,372m relating to underlying net book volume movement and \$144m in changes to models used for ECL calculation.

During the period, there was a net transfer between stage 1 and stage 2 of \$15,809m gross carrying/nominal amounts. It was primarily driven by our entities in Asia (\$12,878m), mainly due to deterioration in the real estate and construction sectors, and in our main entity in the US (\$1,986m) and Mexico (\$1,805m), partly offset by improvements in the economic outlook that led to upgrades to stage 1 exposures, primarily in our legal entities in the UK(\$3,077m).

A summary of basis of preparation is available on page 161.

Risk review

Wholesale lending – reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees

(Audited)

	Non-credit impaired				Credit impaired				Total	
	Stage 1		Stage 2		Stage 3		POCI			
	Gross carrying/nominal amount \$m	Allowance for ECL \$m	Gross carrying/nominal amount \$m	Allowance for ECL \$m	Gross carrying/nominal amount \$m	Allowance for ECL \$m	Gross carrying/nominal amount \$m	Allowance for ECL \$m	Gross carrying/nominal amount \$m	Allowance for ECL \$m
At 1 Jan 2023	830,322	(670)	124,660	(2,205)	17,068	(6,144)	129	(38)	972,179	(9,057)
Transfers of financial instruments:	(16,804)	(429)	10,247	1,141	6,557	(712)	—	—	—	—
– transfers from stage 1 to stage 2	(93,511)	172	93,511	(172)	—	—	—	—	—	—
– transfers from stage 2 to stage 1	77,772	(605)	(77,772)	605	—	—	—	—	—	—
– transfers to stage 3	(1,444)	20	(6,255)	765	7,699	(785)	—	—	—	—
– transfers from stage 3	379	(16)	763	(57)	(1,142)	73	—	—	—	—
Net remeasurement of ECL arising from transfer of stage	—	354	—	(294)	—	(45)	—	—	—	15
Net new and further lending/repayments	43,282	(138)	(32,082)	311	(3,787)	973	(36)	3	7,377	1,149
Changes to risk parameters – credit quality	—	203	—	(621)	—	(2,941)	—	21	—	(3,338)
Changes to models used for ECL calculation	—	(9)	—	25	—	—	—	—	—	16
Assets written off	—	—	—	—	(2,596)	2,596	—	—	(2,596)	2,596
Credit-related modifications that resulted in derecognition	—	—	—	—	(119)	95	—	—	(119)	95
Foreign exchange and others ¹	(10,818)	(9)	(696)	(25)	(184)	(29)	(8)	(16)	(11,706)	(79)
At 31 Dec 2023	845,982	(698)	102,129	(1,668)	16,939	(6,207)	85	(30)	965,135	(8,603)
ECL income statement change for the period	—	410	—	(579)	—	(2,013)	—	24	—	(2,158)
Recoveries	—	—	—	—	—	—	—	—	—	42
Others	—	—	—	—	—	—	—	—	—	(203)
Total ECL income statement change for the period	—	—	—	—	—	—	—	—	—	(2,319)

1 Total includes \$13.5bn of gross carrying loans and advances to customers and banks, which were classified to assets held for sale during the year, and a corresponding allowance for ECL of \$61m, reflecting business disposals as disclosed in Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.

Wholesale lending – distribution of financial instruments to which the impairment requirements of IFRS 9 are applied by credit quality

	Gross carrying amount						Allowance for ECL \$m	Net \$m
	Strong \$m	Good \$m	Satisfactory \$m	Sub-standard \$m	Credit impaired \$m	Total \$m		
By legal entity								
HSBC UK Bank plc	21,548	30,317	36,450	6,087	3,356	97,758	(1,203)	96,555
HSBC Bank plc	42,189	21,755	24,150	2,771	2,352	93,217	(939)	92,278
The Hongkong and Shanghai Banking Corporation Limited	157,900	69,084	71,651	7,978	11,522	318,135	(3,874)	314,261
HSBC Bank Middle East Limited	15,854	4,263	6,927	266	852	28,162	(490)	27,672
HSBC North America Holdings Inc.	6,095	11,726	13,967	2,984	503	35,275	(293)	34,982
Grupo Financiero HSBC, S.A. de C.V.	1,476	5,523	5,974	687	230	13,890	(211)	13,679
Other trading entities	2,432	1,072	4,563	288	332	8,687	(194)	8,493
Holding companies, shared service centres and intra-Group eliminations	76	—	—	—	—	76	—	76
At 31 Dec 2024	247,570	143,740	163,682	21,061	19,147	595,200	(7,204)	587,996
Percentage of total credit quality (%)	41.6	24.2	27.5	3.5	3.2	100.0		
By legal entity								
HSBC UK Bank plc	20,777	30,245	36,206	8,300	3,769	99,297	(1,280)	98,017
HSBC Bank plc	41,149	20,962	24,164	4,202	2,713	93,190	(1,249)	91,941
The Hongkong and Shanghai Banking Corporation Limited	165,255	72,683	78,566	8,774	7,115	332,393	(4,251)	328,142
HSBC Bank Middle East Limited	13,660	3,082	6,270	513	897	24,422	(601)	23,821
HSBC North America Holdings Inc.	6,244	13,668	13,094	3,503	583	37,092	(296)	36,796
Grupo Financiero HSBC, S.A. de C.V.	1,853	6,543	5,882	622	382	15,282	(326)	14,956
Other trading entities	3,189	1,277	7,449	988	392	13,295	(219)	13,076
Holding companies, shared service centres and intra-Group eliminations	33	—	—	—	—	33	—	33
At 31 Dec 2023	252,160	148,460	171,631	26,902	15,851	615,004	(8,222)	606,782
Percentage of total credit quality (%)	41.0	24.1	27.9	4.4	2.6	100.0		

Our risk rating system facilitates the internal ratings-based approach under the Basel framework adopted by the Group to support calculation of our minimum credit regulatory capital requirement. The credit quality classifications can be found on page 139.

Wholesale lending – credit risk profile by obligor grade for loans and advances at amortised cost

	Basel one-year PD range %	Gross carrying amount					Allowance for ECL					ECL coverage %	Mapped external rating
		Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	POCI \$m	Total \$m	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	POCI \$m	Total \$m		
Corporate and commercial		340,987	51,231	18,376	90	410,684	(463)	(1,358)	(4,883)	(51)	(6,755)	1.6	
- CRR 1	0.000 to 0.053	32,564	121	—	—	32,685	(3)	(5)	—	—	(8)	—	AA- and above
- CRR 2	0.054 to 0.169	79,350	2,469	—	—	81,819	(25)	(15)	—	—	(40)	—	A+ to A-
- CRR 3	0.170 to 0.740	111,229	7,556	—	—	118,785	(103)	(72)	—	—	(175)	0.1	BBB+ to BBB-
- CRR 4	0.741 to 1.927	73,050	12,591	—	—	85,641	(144)	(99)	—	—	(243)	0.3	BB+ to BB-
- CRR 5	1.928 to 4.914	40,391	12,673	—	—	53,064	(158)	(159)	—	—	(317)	0.6	BB- to B
- CRR 6	4.915 to 8.860	2,491	7,436	—	—	9,927	(16)	(190)	—	—	(206)	2.1	B-
- CRR 7	8.861 to 15.000	1,370	3,735	—	—	5,105	(7)	(172)	—	—	(179)	3.5	CCC+
- CRR 8	15.001 to 99.999	542	4,650	—	—	5,192	(7)	(646)	—	—	(653)	12.6	CCC to C
- CRR 9/10	100.000	—	—	18,376	90	18,466	—	—	(4,883)	(51)	(4,934)	26.7	D
Non-bank financial institutions		79,687	2,098	679	—	82,464	(45)	(30)	(361)	—	(436)	0.5	
- CRR 1	0.000 to 0.053	19,516	191	—	—	19,707	(1)	(1)	—	—	(2)	—	AA- and above
- CRR 2	0.054 to 0.169	20,572	166	—	—	20,738	(5)	—	—	—	(5)	—	A+ to A-
- CRR 3	0.170 to 0.740	20,370	330	—	—	20,700	(12)	(3)	—	—	(15)	0.1	BBB+ to BBB-
- CRR 4	0.741 to 1.927	12,987	502	—	—	13,489	(16)	(2)	—	—	(18)	0.1	BB+ to BB-
- CRR 5	1.928 to 4.914	6,058	390	—	—	6,448	(11)	(6)	—	—	(17)	0.3	BB- to B
- CRR 6	4.915 to 8.860	48	319	—	—	367	—	(8)	—	—	(8)	2.2	B-
- CRR 7	8.861 to 15.000	63	79	—	—	142	—	(1)	—	—	(1)	0.7	CCC+
- CRR 8	15.001 to 99.999	73	121	—	—	194	—	(9)	—	—	(9)	4.6	CCC to C
- CRR 9/10	100.000	—	—	679	—	679	—	—	(361)	—	(361)	53.2	D
Banks		101,852	198	2	—	102,052	(9)	(2)	(2)	—	(13)	—	
- CRR 1	0.000 to 0.053	79,213	53	—	—	79,266	(3)	—	—	—	(3)	—	AA- and above
- CRR 2	0.054 to 0.169	13,315	40	—	—	13,355	(2)	—	—	—	(2)	—	A+ to A-
- CRR 3	0.170 to 0.740	4,226	29	—	—	4,255	(2)	—	—	—	(2)	—	BBB+ to BBB-
- CRR 4	0.741 to 1.927	3,275	12	—	—	3,287	(1)	—	—	—	(1)	—	BB+ to BB-
- CRR 5	1.928 to 4.914	1,706	47	—	—	1,753	(1)	(1)	—	—	(2)	0.1	BB- to B
- CRR 6	4.915 to 8.860	10	1	—	—	11	—	—	—	—	—	—	B-
- CRR 7	8.861 to 15.000	107	13	—	—	120	—	—	—	—	—	—	CCC+
- CRR 8	15.001 to 99.999	—	3	—	—	3	—	(1)	—	—	(1)	33.3	CCC to C
- CRR 9/10	100.000	—	—	2	—	2	—	—	(2)	—	(2)	100.0	D
At 31 Dec 2024		522,526	53,527	19,057	90	595,200	(517)	(1,390)	(5,246)	(51)	(7,204)	1.2	

Risk review

Wholesale lending – credit risk profile by obligor grade for loans and advances at amortised cost (continued)

	Basel one-year PD range %	Gross carrying amount					Allowance for ECL					ECL coverage %	Mapped external rating
		Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	POCI \$m	Total \$m	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	POCI \$m	Total \$m		
Corporate and commercial		342,878	69,738	14,958	81	427,655	(499)	(1,500)	(5,774)	(30)	(7,803)	1.8	
– CRR 1	0.000 to 0.053	34,097	715	—	—	34,812	(4)	(3)	—	—	(7)	—	AA- and above
– CRR 2	0.054 to 0.169	81,131	2,180	—	—	83,311	(23)	(14)	—	—	(37)	—	A+ to A-
– CRR 3	0.170 to 0.740	112,322	11,391	—	—	123,713	(106)	(87)	—	—	(193)	0.2	BBB+ to BBB-
– CRR 4	0.741 to 1.927	72,654	16,904	—	—	89,558	(156)	(130)	—	—	(286)	0.3	BB+ to BB-
– CRR 5	1.928 to 4.914	37,631	18,060	—	—	55,691	(169)	(240)	—	—	(409)	0.7	BB- to B
– CRR 6	4.915 to 8.860	2,675	7,341	—	—	10,016	(24)	(176)	—	—	(200)	2.0	B-
– CRR 7	8.861 to 15.000	1,031	6,319	—	—	7,350	(10)	(246)	—	—	(256)	3.5	CCC+
– CRR 8 ¹	15.001 to 99.999	1,337	6,828	—	—	8,165	(7)	(604)	—	—	(611)	7.5	CCC to C
– CRR 9/10	100.000	—	—	14,958	81	15,039	—	—	(5,774)	(30)	(5,804)	38.6	D
Non-bank financial institutions		69,972	3,650	810	—	74,432	(52)	(30)	(322)	—	(404)	0.5	
– CRR 1	0.000 to 0.053	15,475	211	—	—	15,686	(2)	—	—	—	(2)	—	AA- and above
– CRR 2	0.054 to 0.169	16,920	374	—	—	17,294	(6)	(2)	—	—	(8)	—	A+ to A-
– CRR 3	0.170 to 0.740	19,195	912	—	—	20,107	(10)	(4)	—	—	(14)	0.1	BBB+ to BBB-
– CRR 4	0.741 to 1.927	11,480	1,032	—	—	12,512	(19)	(5)	—	—	(24)	0.2	BB+ to BB-
– CRR 5	1.928 to 4.914	6,635	872	—	—	7,507	(9)	(15)	—	—	(24)	0.3	BB- to B
– CRR 6	4.915 to 8.860	232	116	—	—	348	(6)	(1)	—	—	(7)	2.0	B-
– CRR 7	8.861 to 15.000	25	93	—	—	118	—	(2)	—	—	(2)	1.7	CCC+
– CRR 8	15.001 to 99.999	10	40	—	—	50	—	(1)	—	—	(1)	2.0	CCC to C
– CRR 9/10	100.000	—	—	810	—	810	—	—	(322)	—	(322)	39.8	D
Banks		111,479	1,436	2	—	112,917	(10)	(3)	(2)	—	(15)	—	
– CRR 1	0.000 to 0.053	89,112	10	—	—	89,122	(4)	—	—	—	(4)	—	AA- and above
– CRR 2	0.054 to 0.169	11,899	36	—	—	11,935	(2)	—	—	—	(2)	—	A+ to A-
– CRR 3	0.170 to 0.740	4,631	9	—	—	4,640	(1)	—	—	—	(1)	—	BBB+ to BBB-
– CRR 4	0.741 to 1.927	2,488	58	—	—	2,546	(1)	—	—	—	(1)	—	BB+ to BB-
– CRR 5	1.928 to 4.914	3,062	755	—	—	3,817	(2)	(1)	—	—	(3)	0.1	BB- to B
– CRR 6	4.915 to 8.860	22	20	—	—	42	—	—	—	—	—	—	B-
– CRR 7	8.861 to 15.000	1	—	—	—	1	—	—	—	—	—	—	CCC+
– CRR 8	15.001 to 99.999	264	548	—	—	812	—	(2)	—	—	(2)	0.2	CCC to C
– CRR 9/10	100.000	—	—	2	—	2	—	—	(2)	—	(2)	100.0	D
At 31 Dec 2023		524,329	74,824	15,770	81	615,004	(561)	(1,533)	(6,098)	(30)	(8,222)	1.3	

1 Corporate and commercial lending reported in CRR 8 for stage 1 includes \$782m related to the UK Bounce Back Loan Scheme with immaterial allowances for ECL.

Wholesale lending – credit risk profile by obligor grade for loan and other credit-related commitments and financial guarantees

	Basel one-year PD range %	Nominal amount					Allowance for ECL					ECL coverage %	Mapped external rating
		Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	POCI \$m	Total \$m	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	POCI \$m	Total \$m		
Loan and other credit-related commitments		345,742	19,495	872	3	366,112	(120)	(121)	(85)	—	(326)	0.1	
– CRR 1	0.000 to 0.053	92,090	89	—	—	92,179	(3)	—	—	—	(3)	—	AA- and above
– CRR 2	0.054 to 0.169	92,967	1,009	—	—	93,976	(12)	(2)	—	—	(14)	—	A+ to A-
– CRR 3	0.170 to 0.740	97,876	5,051	—	—	102,927	(38)	(15)	—	—	(53)	0.1	BBB+ to BBB-
– CRR 4	0.741 to 1.927	40,135	4,349	—	—	44,484	(28)	(22)	—	—	(50)	0.1	BB+ to BB-
– CRR 5	1.928 to 4.914	18,581	3,976	—	—	22,557	(26)	(22)	—	—	(48)	0.2	BB- to B
– CRR 6	4.915 to 8.860	1,828	2,297	—	—	4,125	(4)	(22)	—	—	(26)	0.6	B-
– CRR 7	8.861 to 15.000	1,378	678	—	—	2,056	(1)	(12)	—	—	(13)	0.6	CCC+
– CRR 8	15.001 to 99.999	887	2,046	—	—	2,933	(8)	(26)	—	—	(34)	1.2	CCC to C
– CRR 9/10	100.000	—	—	872	3	875	—	—	(85)	—	(85)	9.7	D
Financial guarantees		13,937	1,386	248	—	15,571	(8)	(5)	(16)	—	(29)	0.2	
– CRR 1	0.000 to 0.053	1,895	1	—	—	1,896	—	—	—	—	—	—	AA- and above
– CRR 2	0.054 to 0.169	4,326	12	—	—	4,338	(1)	—	—	—	(1)	—	A+ to A-
– CRR 3	0.170 to 0.740	4,137	71	—	—	4,208	(2)	—	—	—	(2)	—	BBB+ to BBB-
– CRR 4	0.741 to 1.927	2,106	286	—	—	2,392	(3)	—	—	—	(3)	0.1	BB+ to BB-
– CRR 5	1.928 to 4.914	1,295	478	—	—	1,773	(2)	(1)	—	—	(3)	0.2	BB- to B
– CRR 6	4.915 to 8.860	162	232	—	—	394	—	(1)	—	—	(1)	0.3	B-
– CRR 7	8.861 to 15.000	5	128	—	—	133	—	(2)	—	—	(2)	1.5	CCC+
– CRR 8	15.001 to 99.999	11	178	—	—	189	—	(1)	—	—	(1)	0.5	CCC to C
– CRR 9/10	100.000	—	—	248	—	248	—	—	(16)	—	(16)	6.5	D
At 31 Dec 2024		359,679	20,881	1,120	3	381,683	(128)	(126)	(101)	—	(355)	0.1	

Wholesale lending – credit risk profile by obligor grade for loan and other credit-related commitments and financial guarantees (continued)

	Basel one-year PD range %	Nominal amount					Allowance for ECL					ECL coverage %	Mapped external rating
		Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	POCI \$m	Total \$m	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	POCI \$m	Total \$m		
Loan and other credit-related commitments		377,766	25,463	785	4	404,018	(130)	(128)	(84)	—	(342)	0.1	
– CRR 1	0.000 to 0.053	65,730	1,676	—	—	67,406	(5)	(1)	—	—	(6)	—	AA- and above
– CRR 2	0.054 to 0.169	152,224	2,490	—	—	154,714	(13)	(6)	—	—	(19)	—	A+ to A-
– CRR 3	0.170 to 0.740	105,569	6,044	—	—	111,613	(46)	(24)	—	—	(70)	0.1	BBB+ to BBB-
– CRR 4	0.741 to 1.927	38,102	4,751	—	—	42,853	(33)	(20)	—	—	(53)	0.1	BB+ to BB-
– CRR 5	1.928 to 4.914	14,054	5,367	—	—	19,421	(28)	(31)	—	—	(59)	0.3	BB- to B
– CRR 6	4.915 to 8.860	1,170	2,453	—	—	3,623	(4)	(15)	—	—	(19)	0.5	B-
– CRR 7	8.861 to 15.000	780	848	—	—	1,628	(1)	(10)	—	—	(11)	0.7	CCC+
– CRR 8	15.001 to 99.999	137	1,834	—	—	1,971	—	(21)	—	—	(21)	1.1	CCC to C
– CRR 9/10	100.000	—	—	785	4	789	—	—	(84)	—	(84)	10.6	D
Financial guarantees		13,640	1,866	384	—	15,890	(7)	(7)	(25)	—	(39)	0.2	
– CRR 1	0.000 to 0.053	2,553	1	—	—	2,554	—	—	—	—	—	—	AA- and above
– CRR 2	0.054 to 0.169	4,212	202	—	—	4,414	(1)	—	—	—	(1)	—	A+ to A-
– CRR 3	0.170 to 0.740	3,584	202	—	—	3,786	(2)	—	—	—	(2)	0.1	BBB+ to BBB-
– CRR 4	0.741 to 1.927	1,932	407	—	—	2,339	(2)	(1)	—	—	(3)	0.1	BB+ to BB-
– CRR 5	1.928 to 4.914	1,266	455	—	—	1,721	(2)	(2)	—	—	(4)	0.2	BB- to B
– CRR 6	4.915 to 8.860	91	387	—	—	478	—	(1)	—	—	(1)	0.2	B-
– CRR 7	8.861 to 15.000	1	76	—	—	77	—	—	—	—	—	—	CCC+
– CRR 8	15.001 to 99.999	1	136	—	—	137	—	(3)	—	—	(3)	2.2	CCC to C
– CRR 9/10	100.000	—	—	384	—	384	—	—	(25)	—	(25)	6.5	D
At 31 Dec 2023		391,406	27,329	1,169	4	419,908	(137)	(135)	(109)	—	(381)	0.1	

Commercial real estate

Commercial real estate ('CRE') lending includes the financing of corporate, institutional and high net worth customers who are investing primarily in income-producing assets and, to a lesser extent, in their construction and development. The portfolio has larger concentrations in Hong Kong, the UK and mainland China.

Our global exposure is centred largely on cities with economic, political or cultural significance. In more developed markets, our exposure mainly comprises the financing of investment assets, the redevelopment of existing stock and the augmentation of both commercial and residential markets to support economic and

population growth. In less developed commercial real estate markets, our exposures comprise lending for development assets on relatively short tenors with a particular focus on supporting larger, better-capitalised developers involved in residential construction or assets supporting economic expansion.

Excluding favourable foreign exchange movements of \$1.1bn, commercial real estate lending decreased by \$10.1bn, mainly from \$6.4bn in our entities in Hong Kong due to loan repayments and write-offs.

Commercial real estate lending to customers

									of which:			
	HSBC UK Bank plc \$m	HSBC Bank plc \$m	The Hongkong and Shanghai Banking Corporation Limited \$m	HSBC Bank Middle East Limited \$m	HSBC North America Holdings Inc. \$m	Grupo Financiero HSBC, S.A. de C.V. \$m	Other trading entities \$m	Total \$m	UK \$m	Hong Kong \$m	of which: Hong Kong exposure to mainland China borrowers \$m	
Gross loans and advances												
Stage 1	9,394	3,285	34,337	1,136	1,420	380	42	49,994	9,758	22,643	22,132	
Stage 2	4,052	313	9,103	—	1,184	67	1	14,720	4,112	7,619	6,515	
Stage 3	492	213	6,451	117	240	22	23	7,558	492	5,967	4,554	
POCI	—	43	18	—	—	—	—	61	43	18	—	
At 31 Dec 2024	13,938	3,854	49,909	1,253	2,844	469	66	72,333	14,405	36,247	33,201	
– of which: forbore loans	502	54	3,087	116	273	19	23	4,074	545	2,729		
Allowance for ECL	(203)	(72)	(1,627)	(23)	(103)	(8)	(19)	(2,055)	(227)	(1,418)	(405)	

Risk review

Commercial real estate lending to customers (continued)

	HSBC UK Bank plc	HSBC Bank plc	The Hongkong and Shanghai Banking Corporation Limited	HSBC Bank Middle East Limited	HSBC North America Holdings Inc.	Grupo Financiero HSBC, S.A. de C.V.	Other trading entities	Total	of which:		
									UK	Hong Kong	of which: Hong Kong excluding exposure to mainland China borrowers
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Gross loans and advances											
Stage 1	10,304	4,218	41,307	1,126	1,803	685	440	59,883	10,790	28,846	27,560
Stage 2	3,262	400	13,229	189	1,956	70	1	19,107	3,294	10,375	8,681
Stage 3	444	184	3,570	145	166	25	18	4,552	470	3,226	576
POCI	—	32	15	—	—	—	—	47	32	15	—
At 31 Dec 2023	14,010	4,834	58,121	1,460	3,925	780	459	83,589	14,586	42,462	36,817
– of which: forbore loans	461	69	2,454	126	433	52	—	3,595	519	2,227	
Allowance for ECL	(148)	(49)	(2,399)	(55)	(98)	(15)	(10)	(2,774)	(172)	(2,149)	(296)

Commercial real estate gross loans and advances to customers by global business

	HSBC UK Bank plc	HSBC Bank plc	The Hongkong and Shanghai Banking Corporation Limited	HSBC Bank Middle East Limited	HSBC North America Holdings Inc.	Grupo Financiero HSBC, S.A. de C.V.	Other trading entities	of which:		
								Total	UK	Hong Kong
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Wealth and Personal Banking ¹	325	273	37	—	2	—	—	637	469	37
Commercial Banking	13,613	2,757	33,551	695	2,842	469	66	53,993	13,640	24,473
Global Banking and Markets	—	824	16,183	558	—	—	—	17,565	296	11,599
Corporate Centre	—	—	138	—	—	—	—	138	—	138
At 31 Dec 2024	13,938	3,854	49,909	1,253	2,844	469	66	72,333	14,405	36,247
Wealth and Personal Banking ¹	409	377	66	—	2	—	423	1,277	409	66
Commercial Banking	13,601	3,322	37,826	733	3,923	780	36	60,221	13,686	27,811
Global Banking and Markets	—	1,135	20,066	727	—	—	—	21,928	491	14,444
Corporate Centre	—	—	163	—	—	—	—	163	—	141
At 31 Dec 2023	14,010	4,834	58,121	1,460	3,925	780	459	83,589	14,586	42,462

1 Comprised exclusively by exposures in Global Private Banking.

Commercial real estate gross loans and advances to customers by credit quality

									of which:			
	HSBC UK Bank plc	HSBC Bank plc	The Hongkong and Shanghai Banking Corporation Limited	HSBC Bank Middle East Limited	HSBC North America Holdings Inc.	Grupo Financiero HSBC, S.A. de C.V.	Other trading entities	Total	UK	Hong Kong	of which: Hong Kong excluding exposure to mainland China borrowers	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
Strong	4,663	739	9,106	137	—	18	42	14,705	4,875	4,522	4,484	
Good	2,098	1,430	16,113	407	566	111	—	20,725	2,107	10,421	9,754	
Satisfactory	5,770	1,312	13,556	592	1,423	283	—	22,936	5,948	10,850	10,716	
Sub-standard	915	117	4,665	—	615	35	1	6,348	940	4,469	3,693	
Credit impaired	492	256	6,469	117	240	22	23	7,619	535	5,985	4,554	
At 31 Dec 2024	13,938	3,854	49,909	1,253	2,844	469	66	72,333	14,405	36,247	33,201	
Strong	3,940	740	12,394	255	25	65	16	17,435	4,191	6,527	6,118	
Good	2,555	2,054	17,777	246	781	130	18	23,561	2,592	12,004	11,262	
Satisfactory	6,370	1,642	19,509	634	1,691	500	407	30,753	6,575	16,290	15,759	
Sub-standard	701	182	4,856	180	1,262	60	—	7,241	726	4,400	3,102	
Credit impaired	444	216	3,585	145	166	25	18	4,599	502	3,241	576	
At 31 Dec 2023	14,010	4,834	58,121	1,460	3,925	780	459	83,589	14,586	42,462	36,817	

The Hong Kong CRE portfolio (excluding exposure to mainland China borrowers) saw negative credit migration in 2024 as a result of higher interest rates, high inventory levels and weak demand. This was predominantly driven by a deterioration in the secured portfolio as borrowers sought payment deferrals to accommodate debt serviceability challenges.

Secured exposures account for 54% of the total portfolio (31 December 2023: 54%), with collateral values regularly updated in line with our existing practice. The trend of loan right-sizing and borrower deleveraging within the secured portfolio has supported good collateral coverage levels that continue to provide headroom in the event of a further softening of property valuations. As at 31 December 2024, the weighted average LTV:

- of performing exposures rated 'sub-standard' was 46% (31 December 2023: 54%);
- of 'credit impaired' exposures was 58% (31 December 2023: 71%). This has driven relatively low levels of stage 3 allowance for ECL. The reduction in LTV reflects the significantly smaller 'credit impaired' portfolio at 31 December 2023.

The unsecured portfolio remained stable in size and quality, with limited levels of default and close to 90% rated Strong or Good. Unsecured exposures are typically granted to strong, listed Hong Kong CRE developers, which commonly are members of conglomerate groups with diverse cashflows. We continue to closely

assess and manage the risk in the portfolio, including through portfolio reviews and stress testing. Vulnerable borrowers, including those with debt serviceability challenges and higher LTV levels, are subject to heightened monitoring and management.

Market conditions remain challenging, particularly for commercial property as a result of continued weakness in demand. The performance of the residential market remains mixed, with some initial improvement in sentiment and transaction levels observed in the fourth quarter of 2024, driven by a further easing of real estate regulatory policies in October and improved end-user affordability as prices and interest rates fell. Nevertheless, property price pressure is likely to persist in the near term and until economic conditions and sentiment improve. Given the more uncertain interest rate outlook, we expect broader market fundamentals to remain subdued and challenges in this sector to continue.

Refinance risk in commercial real estate

Commercial real estate lending tends to require the repayment of a significant proportion of the principal at maturity. Typically, a customer will arrange repayment through the acquisition of a new loan to settle the existing debt. Refinance risk is the risk that a customer, being unable to repay the debt on maturity, fails to refinance it at commercial terms. We monitor our commercial real estate portfolio closely, assessing indicators for signs of potential issues with refinancing.

Maturity analysis commercial real estate gross loans and advances to customers

									of which:		
	HSBC UK Bank plc	HSBC Bank plc	The Hongkong and Shanghai Banking Corporation Limited	HSBC Bank Middle East Limited	HSBC North America Holdings Inc.	Grupo Financiero HSBC, S.A. de C.V.	Other trading entities	Total	UK	Hong Kong	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
< 1 year	3,488	846	22,244	455	1,084	111	20	28,248	3,826	18,204	
1–2 years	3,303	876	11,213	162	603	142	6	16,305	3,373	7,196	
2–5 years	6,634	1,600	14,079	447	1,145	143	40	24,088	6,685	9,254	
> 5 years	513	532	2,373	189	12	73	—	3,692	521	1,593	
At 31 Dec 2024	13,938	3,854	49,909	1,253	2,844	469	66	72,333	14,405	36,247	
< 1 year	3,553	1,496	25,427	396	1,472	619	437	33,400	3,950	19,887	
1–2 years	4,514	474	14,144	175	623	60	2	19,992	4,571	10,923	
2–5 years	5,411	2,149	16,052	441	1,814	71	3	25,941	5,520	9,885	
> 5 years	532	715	2,498	448	16	30	17	4,256	545	1,767	
At 31 Dec 2023	14,010	4,834	58,121	1,460	3,925	780	459	83,589	14,586	42,462	

Risk review

The following table presents the Group's exposure to borrowers classified in the commercial real estate sector where the ultimate parent is based in mainland China, as well as all commercial real estate exposures booked on mainland China balance sheets. In addition to CRE as defined in our primary CRE disclosure above, this table includes financing provided to a corporate or financial entity for

the purchase or financing of a property which supports the overall operations of the business. This provides a more comprehensive view of our mainland China CRE exposures. The exposures at 31 December 2024 are split by country/territory and credit quality including allowances for ECL by stage.

Mainland China commercial real estate

(Audited)

	Hong Kong	Mainland China	Rest of the Group	Total
	\$m	\$m	\$m	\$m
Loans and advances to customers ¹	3,161	3,694	303	7,158
Guarantees issued and others ²	80	16	5	101
Total mainland China commercial real estate exposure at 31 Dec 2024	3,241	3,710	308	7,259
Distribution of mainland China commercial real estate exposure by credit quality				
Strong	118	1,817	109	2,044
Good	578	595	1	1,174
Satisfactory	196	899	49	1,144
Sub-standard	777	136	149	1,062
Credit impaired	1,572	263	—	1,835
At 31 Dec 2024	3,241	3,710	308	7,259
Allowance for ECL by credit quality				
Strong	—	(4)	—	(4)
Good	—	(3)	—	(3)
Satisfactory	—	(13)	—	(13)
Sub-standard	(261)	(30)	(17)	(308)
Credit impaired	(749)	(81)	—	(830)
At 31 Dec 2024	(1,010)	(131)	(17)	(1,158)
Allowance for ECL by stage distribution				
Stage 1	—	(9)	—	(9)
Stage 2	(261)	(41)	(17)	(319)
Stage 3	(743)	(81)	—	(824)
POCI	(6)	—	—	(6)
At 31 Dec 2024	(1,010)	(131)	(17)	(1,158)
ECL coverage %				
	31.2	3.5	5.5	16.0
Loans and advances to customers ¹	6,033	4,917	839	11,789
Guarantees issued and others ²	255	66	37	358
Total mainland China commercial real estate exposure at 31 Dec 2023	6,288	4,983	876	12,147
Distribution of mainland China commercial real estate exposure by credit quality				
Strong	781	1,723	6	2,510
Good	604	953	421	1,978
Satisfactory	679	1,704	261	2,644
Sub-standard	1,298	327	188	1,813
Credit impaired	2,926	276	—	3,202
At 31 Dec 2023	6,288	4,983	876	12,147
Allowance for ECL by credit quality				
Strong	—	(3)	—	(3)
Good	—	(5)	(1)	(6)
Satisfactory	(3)	(27)	—	(30)
Sub-standard	(66)	(87)	(16)	(169)
Credit impaired	(1,726)	(125)	—	(1,851)
At 31 Dec 2023	(1,795)	(247)	(17)	(2,059)
Allowance for ECL by stage distribution				
Stage 1	—	(10)	—	(10)
Stage 2	(69)	(112)	(17)	(198)
Stage 3	(1,726)	(125)	—	(1,851)
At 31 Dec 2023	(1,795)	(247)	(17)	(2,059)
ECL coverage %				
	28.5	5.0	1.9	17.0

1 Amounts represent gross carrying amount.

2 Amounts represent nominal amount for guarantees and other contingent liabilities.

(Unaudited)

The mainland China commercial real estate portfolio continues to face challenges as market fundamentals remain weak and refinancing risks continue. The portfolio remains closely managed, with reductions in exposures driven by a combination of de-risking measures, repayments by performing customers and write-offs in the 'credit impaired' category.

The portfolio of mainland China CRE loans booked in Hong Kong remains relatively higher risk, with allowances for ECL substantially against unsecured exposures. For secured exposures, allowances for ECL are minimal, reflecting the nature and value of the security held.

Approximately half of the performing exposure in the mainland China CRE portfolio booked in Hong Kong is lending to state-owned enterprises and relatively strong privately-owned enterprises. This is reflected in the relatively low allowances for ECL in this part of the portfolio.

Mainland China real estate market activity remains depressed with continued weakness in underlying buyer demand for housing. Various government stimulus measures were introduced in 2024 to underpin market confidence. Despite some early signs of price stabilisation in certain cities, these measures have not yet triggered a meaningful recovery in transaction levels. Financing conditions and liquidity for borrowers operating in the real estate sector therefore remains constrained, particularly for privately-owned enterprises. A market recovery is likely to be protracted and contingent on further government support.

The Group has additional exposures to mainland China commercial real estate as a result of lending to multinational corporates booked outside of mainland China, which is not incorporated in the table above.

Collateral and other credit enhancements

(Audited)

Although collateral can be an important mitigant of credit risk, it is the Group's practice to lend on the basis of the customer's ability to meet their obligations out of cash flow resources rather than placing primary reliance on collateral and other credit risk enhancements. Depending on the customer's standing and the type of product, facilities may be provided without any collateral or other credit enhancements. For other lending, a charge over collateral is obtained and considered in determining the credit decision and pricing. In the event of default, the Group may utilise the collateral as a source of repayment.

Depending on its form, collateral can have a significant financial effect in mitigating our exposure to credit risk. Where there is sufficient collateral, an expected credit loss is not recognised. This is the case for reverse repurchase agreements and for certain loans and advances to customers where the loan to value ('LTV') is very low.

Mitigants may include a charge on borrowers' specific assets, such as real estate or financial instruments. Other credit risk mitigants include short positions in securities and financial assets held as part of linked insurance/investment contracts where the risk is predominantly borne by the policyholder. Additionally, risk may be managed by employing other types of collateral and credit risk enhancements, such as second charges, other liens and unsupported guarantees. Guarantees are normally taken from corporates and export credit agencies. Corporates would normally provide guarantees as part of a parent/subsidiary relationship and span a number of credit grades. The export credit agencies will normally be investment grade.

Certain credit mitigants are used strategically in portfolio management activities. While single name concentrations arise in portfolios managed by Global Banking and Corporate Banking, it is only in Global Banking that their size requires the use of portfolio level credit mitigants. Across Global Banking, risk limits and utilisations, maturity

profiles and risk quality are monitored and managed proactively. This process is key to the setting of risk appetite for these larger, more complex, geographically distributed customer groups. While the principal form of risk management continues to be at the point of exposure origination, through the lending decision-making process, Global Banking also utilises loan sales and credit default swap ('CDS') hedges to manage concentrations and reduce risk.

These transactions are the responsibility of a dedicated Global Banking portfolio management team. Hedging activity is carried out within agreed credit parameters, and is subject to market risk limits and a robust governance structure. Where applicable, CDSs are entered into directly with a central clearing house counterparty. Otherwise, the Group's exposure to CDS protection providers is diversified among mainly banking counterparties with strong credit ratings.

CDS mitigants are held at portfolio level and are not included in the expected credit loss calculations. CDS mitigants are not reported in the following tables.

Collateral on loans and advances

Collateral held is analysed separately for commercial real estate and for other corporate, commercial and financial (non-bank) lending. The following tables include off-balance sheet loan commitments, primarily undrawn credit lines.

The collateral measured in the following tables consists of fixed first charges on real estate, and charges over cash and marketable financial instruments. The values in the tables represent the expected market value on an open market basis, actual values realised are a function of market conditions. No adjustment has been made to the collateral for any expected costs of recovery. Marketable securities are measured at their fair value.

Other types of collateral, such as unsupported guarantees and floating charges over the assets of a customer's business, are not measured in the following tables. While such mitigants have value, often providing rights in insolvency, their assignable value is not sufficiently certain and they are therefore assigned no value for disclosure purposes.

The LTV ratios presented are calculated by directly associating loans and advances with the collateral that individually and uniquely supports each facility. When collateral assets are shared by multiple loans and advances, whether specifically or, more generally, by way of an all monies charge, the collateral value is pro-rated across the loans and advances protected by the collateral.

For credit-impaired loans, the collateral values cannot be directly compared with impairment allowances recognised. The LTV figures use open market values with no adjustments, actual values realised are a function of market conditions. Impairment allowances are calculated on a different basis, by considering other cash flows and adjusting collateral values for costs of realising collateral as explained further on page 359.

Commercial real estate loans and advances

The value of commercial real estate collateral is determined by using a combination of external and internal valuations and physical inspections. For commercial real estate, 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.

In Hong Kong, market practice is typically for lending to major property companies to be either secured by guarantees or unsecured. In Europe, facilities of a working capital nature are generally not secured by a first fixed charge, and are therefore disclosed as not collateralised.

Risk review

Wholesale lending – commercial real estate loans and advances to customers including loan commitments by level of collateral for key countries/territories (by stage)

(Audited)

	Gross carrying/nominal amount					ECL coverage				
	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	POCI \$m	Total \$m	Stage 1 %	Stage 2 %	Stage 3 %	POCI %	Total %
Not collateralised	36,168	4,709	1,704	—	42,581	0.1	9.0	47.5	—	3.0
Fully collateralised by LTV ratio	37,090	11,909	5,254	—	54,253	0.1	1.7	7.8	—	1.2
– less than 50%	20,522	5,154	2,413	—	28,089	0.1	1.7	5.7	—	0.9
– 51% to 75%	11,392	3,840	1,691	—	16,923	0.1	2.2	7.6	—	1.3
– 76% to 90%	2,554	2,277	767	—	5,598	0.1	0.9	12.5	—	2.1
– 91% to 100%	2,622	638	383	—	3,643	0.2	2.3	12.3	—	1.8
Partially collateralised (A): LTV > 100%	2,119	698	815	64	3,696	0.2	2.8	19.7	45.8	5.8
– collateral value on A	1,255	457	570	29	2,311					
Total at 31 Dec 2024	75,377	17,316	7,773	64	100,530	0.1	3.8	17.7	45.8	2.1
of which: UK										
Not collateralised	4,487	1,890	127	—	6,504	0.4	3.8	27.8	—	1.9
Fully collateralised by LTV ratio	9,139	3,194	305	—	12,638	0.2	1.1	8.2	—	0.6
– less than 50%	2,903	761	160	—	3,824	0.2	1.5	8.0	—	0.8
– 51% to 75%	4,202	1,693	69	—	5,964	0.2	1.2	12.0	—	0.6
– 76% to 90%	1,173	732	24	—	1,929	0.1	0.4	10.2	—	0.3
– 91% to 100%	861	8	52	—	921	0.1	7.7	2.7	—	0.3
Partially collateralised (B): LTV > 100%	503	565	119	46	1,233	0.2	2.9	21.1	48.6	5.3
– collateral value on B	296	350	69	26	741					
Total UK at 31 Dec 2024	14,129	5,649	551	46	20,375	0.2	2.2	15.5	48.6	1.3
of which: Hong Kong										
Not collateralised	16,380	2,312	1,404	—	20,096	—	14.3	47.9	—	5.0
Fully collateralised by LTV ratio	17,115	6,045	4,127	—	27,287	0.1	1.4	5.8	—	1.2
– less than 50%	12,935	3,589	2,102	—	18,626	0.1	1.3	3.8	—	0.7
– 51% to 75%	3,534	1,059	1,243	—	5,836	0.1	2.2	6.2	—	1.8
– 76% to 90%	336	1,050	654	—	2,040	0.1	1.1	11.8	—	4.4
– 91% to 100%	310	347	128	—	785	—	0.5	2.4	—	0.6
Partially collateralised (C): LTV > 100%	185	62	562	18	827	—	1.9	17.6	38.1	12.9
– collateral value on C	119	41	397	3	560					
Total Hong Kong at 31 Dec 2024	33,680	8,419	6,093	18	48,210	—	4.9	16.6	38.1	3.0
Not collateralised	36,754	5,128	2,543	—	44,425	0.1	3.9	72.4	—	4.7
Fully collateralised by LTV ratio	46,212	15,177	1,963	—	63,352	0.1	2.5	12.0	—	1.0
– less than 50%	24,391	7,413	574	—	32,378	0.1	1.9	13.1	—	0.7
– 51% to 75%	16,086	5,240	657	—	21,983	0.1	3.1	9.3	—	1.1
– 76% to 90%	3,140	1,437	454	—	5,031	0.1	3.5	11.8	—	2.1
– 91% to 100%	2,595	1,087	278	—	3,960	0.2	2.3	16.6	—	1.9
Partially collateralised (A): LTV > 100%	7,075	1,487	156	50	8,768	0.1	1.8	30.2	14.5	1.0
– collateral value on A	4,004	1,061	115	26	5,206					
Total at 31 Dec 2023	90,041	21,792	4,662	50	116,545	0.1	2.8	45.6	14.5	2.4
of which: UK										
Not collateralised	4,644	1,288	97	—	6,029	0.4	2.0	12.4	—	0.9
Fully collateralised by LTV ratio	9,762	2,512	295	—	12,569	0.1	1.3	13.9	—	0.7
– less than 50%	3,514	507	51	—	4,072	0.1	1.9	21.6	—	0.6
– 51% to 75%	4,826	1,418	103	—	6,347	0.1	1.1	16.4	—	0.6
– 76% to 90%	749	292	80	—	1,121	0.1	1.3	14.9	—	1.5
– 91% to 100%	673	295	61	—	1,029	0.1	1.6	1.9	—	0.6
Partially collateralised (B): LTV > 100%	1,580	239	82	35	1,936	0.1	1.1	34.2	20.7	2.0
– collateral value on B	524	171	62	17	774					
Total UK at 31 Dec 2023	15,986	4,039	474	35	20,534	0.2	1.5	17.1	20.7	0.9
of which: Hong Kong										
Not collateralised	16,889	2,323	2,215	—	21,427	—	6.5	78.7	—	8.8
Fully collateralised by LTV ratio	20,783	8,447	989	—	30,219	—	2.1	5.0	—	0.8
– less than 50%	15,425	5,604	294	—	21,323	—	1.5	1.4	—	0.5
– 51% to 75%	4,102	2,140	312	—	6,554	0.1	3.8	2.1	—	1.4
– 76% to 90%	657	619	315	—	1,591	0.1	1.8	8.0	—	2.3
– 91% to 100%	599	84	68	—	751	—	0.1	20.5	—	1.9
Partially collateralised (C): LTV > 100%	1,770	616	52	15	2,453	—	0.8	24.5	—	0.7
– collateral value on C	1,569	535	39	8	2,151					
Total Hong Kong at 31 Dec 2023	39,442	11,386	3,256	15	54,099	—	2.9	55.5	—	4.0

Other corporate, commercial and financial (non-bank) loans and advances

Other corporate, commercial and financial (non-bank) loans are analysed separately in the following table, which focuses on the countries/territories containing the majority of our loans and advances balances. For financing activities in other corporate and commercial lending, collateral value is not strongly correlated to principal repayment performance.

Collateral values are generally refreshed when an obligor's general credit performance deteriorates and we have to assess the likely performance of secondary sources of repayment should it prove necessary to rely on them.

Wholesale lending – other corporate, commercial and financial (non-bank) loans and advances including loan commitments by level of collateral for key countries/territories (by stage)

(Audited)

	Gross carrying/nominal amount					ECL coverage				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
	\$m	\$m	\$m	\$m	\$m	%	%	%	%	%
Not collateralised	713,028	62,844	6,870	5	782,747	0.1	0.9	41.5	14.2	0.5
Fully collateralised by LTV ratio	87,488	11,992	3,394	21	102,895	0.1	2.0	8.0	98.1	0.6
– less than 50%	39,432	4,360	1,703	–	45,495	0.1	1.6	6.9	–	0.5
– 51% to 75%	20,169	4,643	778	21	25,611	0.1	2.8	12.0	98.1	1.0
– 76% to 90%	9,016	1,515	512	–	11,043	0.1	1.6	7.1	–	0.6
– 91% to 100%	18,871	1,474	401	–	20,746	–	0.8	6.3	–	0.2
Partially collateralised (A): LTV > 100%	51,536	5,772	2,411	3	59,722	0.1	0.8	34.3	7.0	1.5
– collateral value on A	22,800	2,519	1,162	1	26,482					
Total at 31 Dec 2024	852,052	80,608	12,675	29	945,364	0.1	1.1	31.2	72.8	0.6
of which: UK										
Not collateralised	134,075	10,822	2,661	4	147,562	0.1	2.5	32.4	–	0.9
Fully collateralised by LTV ratio	24,552	3,046	968	–	28,566	0.1	2.4	5.8	–	0.6
– less than 50%	9,183	1,288	473	–	10,944	0.1	2.2	2.8	–	0.5
– 51% to 75%	7,544	1,216	244	–	9,004	0.1	2.7	7.0	–	0.7
– 76% to 90%	2,942	367	129	–	3,438	0.1	2.3	15.3	–	0.9
– 91% to 100%	4,883	175	122	–	5,180	0.1	2.1	5.3	–	0.3
Partially collateralised (B): LTV > 100%	7,016	1,055	395	–	8,466	0.2	1.3	10.8	–	0.8
– collateral value on B	3,832	581	252	–	4,665					
Total UK at 31 Dec 2024	165,643	14,923	4,024	4	184,594	0.1	2.4	23.9	–	0.8
of which: Hong Kong										
Not collateralised	117,849	6,389	1,313	–	125,551	–	0.6	58.1	–	0.7
Fully collateralised by LTV ratio	28,291	5,866	1,877	21	36,055	0.1	2.1	5.3	98.1	0.7
– less than 50%	14,500	1,774	903	–	17,177	0.1	1.4	5.1	–	0.5
– 51% to 75%	7,331	2,766	449	21	10,567	0.1	3.0	8.3	98.1	1.4
– 76% to 90%	2,896	752	372	–	4,020	0.1	1.9	3.6	–	0.7
– 91% to 100%	3,564	574	153	–	4,291	–	0.3	1.7	–	0.1
Partially collateralised (C): LTV > 100%	17,125	1,535	1,048	–	19,708	–	0.4	46.8	–	2.6
– collateral value on C	6,741	627	639	–	8,007					
Total Hong Kong at 31 Dec 2024	163,265	13,790	4,238	21	181,314	–	1.2	31.9	98.1	0.9
Not collateralised	672,142	76,261	7,702	8	756,113	0.1	0.9	40.0	6.8	0.6
Fully collateralised by LTV ratio	113,339	19,747	2,629	23	135,738	0.1	1.4	10.7	89.8	0.5
– less than 50%	42,953	7,069	1,168	–	51,190	0.1	1.5	11.8	–	0.5
– 51% to 75%	24,011	8,222	887	–	33,120	0.1	1.3	6.4	–	0.6
– 76% to 90%	10,194	2,531	421	23	13,169	0.1	1.6	10.3	90.6	0.9
– 91% to 100%	36,181	1,925	153	–	38,259	–	1.1	27.6	–	0.2
Partially collateralised (A): LTV > 100%	53,686	9,019	2,233	3	64,941	0.1	0.7	32.2	38.4	1.3
– collateral value on A	24,505	4,266	993	1	29,765					
Total at 31 Dec 2023	839,167	105,027	12,564	34	956,792	0.1	1.0	32.5	67.1	0.6
of which: UK										
Not collateralised	117,824	20,401	3,423	–	141,648	0.2	1.9	23.2	–	1.0
Fully collateralised by LTV ratio	22,217	5,912	1,162	–	29,291	0.1	1.7	3.7	–	0.6
– less than 50%	7,385	2,340	601	–	10,326	0.1	1.2	1.3	–	0.5
– 51% to 75%	6,966	2,292	434	–	9,692	0.1	1.7	3.6	–	0.7
– 76% to 90%	2,256	809	106	–	3,171	0.2	2.5	15.8	–	1.3
– 91% to 100%	5,610	471	21	–	6,102	0.1	2.1	14.5	–	0.3
Partially collateralised (B): LTV > 100%	6,335	1,732	299	–	8,366	0.2	1.8	18.4	–	1.2
– collateral value on B	3,508	1,080	175	–	4,763					
Total UK at 31 Dec 2023	146,376	28,045	4,884	–	179,305	0.2	1.8	18.3	–	0.9
of which: Hong Kong										
Not collateralised	114,025	7,523	906	–	122,454	–	0.4	57.5	–	0.5
Fully collateralised by LTV ratio	32,857	8,918	877	22	42,674	0.1	1.3	6.6	94.7	0.5
– less than 50%	16,175	2,898	230	–	19,303	0.1	1.4	11.8	–	0.4
– 51% to 75%	9,461	4,515	336	–	14,312	0.1	1.2	3.1	–	0.5
– 76% to 90%	4,245	863	253	22	5,383	0.1	1.8	2.0	94.7	0.9
– 91% to 100%	2,976	642	58	–	3,676	–	0.4	27.0	–	0.5
Partially collateralised (C): LTV > 100%	16,152	2,887	704	–	19,743	–	0.6	30.2	–	1.2
– collateral value on C	6,619	1,306	318	–	8,243					
Total Hong Kong at 31 Dec 2023	163,034	19,328	2,487	22	184,871	0.1	0.8	31.8	94.7	0.6

Other credit risk exposures

In addition to collateralised lending, other credit enhancements are employed and methods used to mitigate credit risk arising from financial assets. These are summarised below:

- Some securities issued by governments, banks and other financial institutions benefit from additional credit enhancements provided by government guarantees that cover the assets.
- Debt securities issued by banks and financial institutions include asset-backed securities ('ABSs') and similar instruments, which are supported by underlying pools of financial assets. Credit risk associated with ABSs is reduced through the purchase of credit default swap ('CDS') protection.
- Trading loans and advances mainly consist of reverse repos and stock borrowing, which are by their nature collateralised.
- Cash collateral is posted to satisfy margin requirements. There is limited credit risk on cash collateral posted since in the event of default of the counterparty this would be set off against the related liability.

▣ Collateral accepted as security that the Group is permitted to sell or repledge under these arrangements is described on page 400 of the financial statements.

The Group's maximum exposure to credit risk includes financial guarantees and similar contracts granted, as well as loan and other credit-related commitments. Depending on the terms of the arrangement, we may use additional credit mitigation if a guarantee is called upon or a loan commitment is drawn and subsequently defaults.

▣ For further information on these arrangements, see Note 32 on the financial statements.

Derivatives

We participate in transactions exposing us to counterparty credit risk. Counterparty credit risk is the risk of financial loss if the counterparty to a transaction defaults before satisfactorily settling it. It arises principally from over-the-counter ('OTC') derivatives and securities financing transactions and is calculated in both the trading and non-trading books. Transactions vary in value by reference to a market factor such as an interest rate, exchange rate or asset price.

The counterparty risk from derivative transactions is taken into account when reporting the fair value of derivative positions. The adjustment to the fair value is known as the credit valuation adjustment ('CVA').

▣ For an analysis of CVAs, see Note 12 on the financial statements.

The following table reflects by risk type the fair values and gross notional contract amounts of derivatives cleared through an exchange, central counterparty or non-central counterparty.

Notional contract amounts and fair values of derivatives

	2024			2023		
	Notional amount	Fair value		Notional amount	Fair value	
		Assets	Liabilities		Assets	Liabilities
	\$m	\$m	\$m	\$m	\$m	\$m
Total OTC derivatives	29,273,397	368,938	367,759	24,551,539	337,066	343,098
– total OTC derivatives cleared by central counterparties	13,484,581	111,974	113,091	11,130,785	116,520	118,796
– total OTC derivatives not cleared by central counterparties	15,788,816	256,964	254,668	13,420,754	220,546	224,302
Total exchange traded derivatives	1,267,685	12,445	9,435	1,111,247	9,134	8,159
Gross	30,541,082	381,383	377,194	25,662,786	346,200	351,258
Offset		(112,746)	(112,746)		(116,486)	(116,486)
At 31 Dec		268,637	264,448		229,714	234,772

▣ The purposes for which HSBC uses derivatives are described in Note 15 on the financial statements.

The International Swaps and Derivatives Association ('ISDA') master agreement is our preferred agreement for documenting derivatives activity. It is common, and our preferred practice, for the parties involved in a derivative transaction to execute a credit support annex ('CSA') in conjunction with the ISDA master agreement. Under a CSA, collateral is passed between the parties to mitigate the counterparty risk inherent in outstanding positions. The majority of our CSAs are with financial institutional clients.

We manage the counterparty exposure on our OTC derivative contracts by using collateral agreements with counterparties and netting agreements. Currently, we do not actively manage our general OTC derivative counterparty exposure in the credit markets, although we may manage individual exposures in certain circumstances.

We place strict policy restrictions on collateral types and as a consequence the types of collateral received and pledged are, by value, highly liquid and of a strong quality, being predominantly cash.

Where a collateral type is required to be approved outside the collateral policy, approval is required from a committee of senior representatives from Markets, Legal and Risk.

▣ See Note 31 on the financial statements for details regarding legally enforceable right of offset in the event of counterparty default and collateral received in respect of derivatives.

Personal lending

This section presents further disclosures related to personal lending. It provides details of the main legal entities, countries and products that are driving the change observed in personal gross loans and advances to customers, with the impact of foreign exchange separately identified. Additionally, Hong Kong and UK mortgage book loan to value ('LTV') data is provided.

This section also provides reconciliations of the opening 1 January 2024 to 31 December 2024 closing gross carrying/nominal amounts and associated allowance for ECL by product. Further product granularity is also provided by stage, with data for our main legal entities presented for gross loans and advances to customers, loan and other credit-related commitments and financial guarantees.

At 31 December 2024, total personal lending for gross loans and advances to customers of \$447.2bn decreased by \$0.3bn on a reported basis, compared with 31 December 2023. This decrease included adverse foreign exchange movements of \$9.9bn. On a constant currency basis, the increase of \$9.6bn was driven by growth in mortgages (up \$7.5bn) and other personal lending (up \$2.1bn).

On a constant currency basis, mortgage lending gross balances increased by \$7.5bn to \$361.3bn at 31 December 2024. Mortgages grew in our main legal entities in the UK (up \$4.5bn), in the US (up \$2.7bn), Australia (up \$1.3bn) and Mexico (up \$0.3bn). These increases were partly offset by a \$1.2bn decrease in China, mainly due to loan repayments.

On a constant currency basis, other personal lending balances at 31 December 2024 increased by \$2.1bn compared with 31 December 2023. This included an increase in our entities in Europe (up \$1.1bn), in our entities in Asia (up \$1.0bn) and in Mexico (up \$0.3bn). This was partly offset by the sale of our business in Argentina (down \$0.3bn).

Total personal lending gross carrying amounts in stage 2 decreased by \$7.6bn compared with 31 December 2023. Excluding adverse foreign exchange movements of \$1.1bn, the decrease of \$6.5bn was driven by a reduction in credit judgements, primarily in the UK.

At 31 December 2024, the write-offs attributable to personal lending increased by \$0.2bn to \$1.5bn, compared with 31 December 2023.

At 31 December 2024, the allowance for ECL attributable to personal lending, excluding off-balance sheet loan commitments and guarantees, decreased by \$0.3bn to \$2.5bn, compared with

31 December 2023. This decrease included favourable foreign exchange movements of \$0.2bn.

On a constant currency basis, the allowance for ECL attributable to other personal lending of \$2.1bn decreased by \$0.1bn compared with 31 December 2023. This net release was driven by resilient performance and a reduction in credit judgements in the UK. The allowance for ECL attributable to mortgages of \$0.5bn remained unchanged compared with 31 December 2023.

The quality of both our Hong Kong and UK mortgage books remained strong, with low levels of impairment allowances. The average LTV ratio on new mortgage lending in Hong Kong was 67%, compared with an estimated 63% for the overall mortgage portfolio. The average LTV ratio on new lending in the UK was 69%, compared with an estimated 53% for the overall mortgage portfolio.

Total personal lending for loans and advances to customers at amortised cost by stage distribution

	Gross carrying amount				Allowance for ECL			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
By portfolio								
First lien residential mortgages	324,703	34,177	2,450	361,330	(59)	(130)	(284)	(473)
– of which: interest-only (including offset)	21,155	2,457	103	23,715	(3)	(10)	(17)	(30)
– affordability (including US adjustable rate mortgages)	16,628	386	243	17,257	(2)	(2)	(7)	(11)
Other personal lending	79,043	5,742	1,110	85,895	(511)	(1,028)	(512)	(2,051)
– second lien residential mortgages	366	10	19	395	–	–	(2)	(2)
– guaranteed loans in respect of residential property	6,492	186	20	6,698	(2)	(2)	(5)	(9)
– other personal lending which is secured	30,564	478	138	31,180	(12)	(4)	(15)	(31)
– credit cards	21,611	2,991	313	24,915	(268)	(660)	(199)	(1,127)
– other personal lending which is unsecured	18,198	1,864	598	20,660	(214)	(345)	(279)	(838)
– motor vehicle finance	1,812	213	22	2,047	(15)	(17)	(12)	(44)
At 31 Dec 2024	403,746	39,919	3,560	447,225	(570)	(1,158)	(796)	(2,524)
By legal entity								
HSBC UK Bank plc	152,338	31,325	1,075	184,738	(148)	(307)	(211)	(666)
HSBC Bank plc ¹	23,501	1,198	324	25,023	(17)	(24)	(99)	(140)
The Hongkong and Shanghai Banking Corporation Limited	191,614	5,519	1,170	198,303	(174)	(385)	(164)	(723)
HSBC Bank Middle East Limited	3,678	158	40	3,876	(14)	(29)	(30)	(73)
HSBC North America Holdings Inc.	20,851	497	327	21,675	(4)	(12)	(11)	(27)
Grupo Financiero HSBC, S.A. de C.V.	11,016	1,172	620	12,808	(207)	(400)	(279)	(886)
Other trading entities ¹	748	50	4	802	(6)	(1)	(2)	(9)
At 31 Dec 2024	403,746	39,919	3,560	447,225	(570)	(1,158)	(796)	(2,524)

1 At 31 December 2023, 'Other trading entities' included gross carrying amount of \$9,079m and allowances for ECL of \$23m related to Private Banking entities that were reclassified to HSBC Bank plc to continue the process of simplifying our structure.

Total personal lending for loans and other credit-related commitments and financial guarantees by stage distribution

	Nominal amount				Allowance for ECL			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
HSBC UK Bank plc	51,078	442	47	51,567	(6)	–	(3)	(9)
HSBC Bank plc	1,605	7	2	1,614	–	–	–	–
The Hongkong and Shanghai Banking Corporation Limited	189,737	1,165	35	190,937	(4)	–	(2)	(6)
HSBC Bank Middle East Limited	2,452	7	–	2,459	–	–	–	–
HSBC North America Holdings Inc.	3,707	68	2	3,777	–	–	–	–
HSBC Bank Canada	–	–	–	–	–	–	–	–
Grupo Financiero HSBC, S.A. de C.V.	3,892	–	–	3,892	(7)	–	–	(7)
Other trading entities	434	2	–	436	–	–	–	–
At 31 Dec 2024	252,905	1,691	86	254,682	(17)	–	(5)	(22)

Risk review

Total personal lending for loans and advances to customers at amortised cost by stage distribution (continued)

	Gross carrying amount				Allowance for ECL			
	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	Total \$m	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	Total \$m
By portfolio								
First lien residential mortgages	320,410	38,287	2,212	360,909	(102)	(200)	(269)	(571)
– of which: interest-only (including offset)	21,895	2,923	139	24,957	(4)	(27)	(31)	(62)
– affordability (including US adjustable rate mortgages)	14,380	381	291	15,052	(3)	(1)	(10)	(14)
Other personal lending	76,124	9,196	1,293	86,613	(477)	(1,234)	(585)	(2,296)
– second lien residential mortgages	317	58	21	396	—	(3)	(5)	(8)
– guaranteed loans in respect of residential property	8,001	502	90	8,593	(1)	(5)	(14)	(20)
– other personal lending which is secured	28,900	424	157	29,481	(13)	(5)	(24)	(42)
– credit cards	19,909	4,419	352	24,680	(236)	(697)	(203)	(1,136)
– other personal lending which is unsecured	17,010	3,582	659	21,251	(212)	(505)	(331)	(1,048)
– motor vehicle finance	1,987	211	14	2,212	(15)	(19)	(8)	(42)
At 31 Dec 2023	396,534	47,483	3,505	447,522	(579)	(1,434)	(854)	(2,867)
By legal entity								
HSBC UK Bank plc	146,354	35,190	1,218	182,762	(152)	(490)	(255)	(897)
HSBC Bank plc	14,598	1,747	273	16,618	(24)	(22)	(91)	(137)
The Hongkong and Shanghai Banking Corporation Limited	191,382	7,741	948	200,071	(165)	(402)	(162)	(729)
HSBC Bank Middle East Limited	3,335	397	47	3,779	(19)	(33)	(36)	(88)
HSBC North America Holdings Inc.	18,096	553	364	19,013	(5)	(14)	(16)	(35)
Grupo Financiero HSBC, S.A. de C.V.	12,717	1,740	536	14,993	(197)	(463)	(273)	(933)
Other trading entities	10,052	115	119	10,286	(17)	(10)	(21)	(48)
At 31 Dec 2023	396,534	47,483	3,505	447,522	(579)	(1,434)	(854)	(2,867)

Total personal lending for loans and other credit-related commitments and financial guarantees by stage distribution (continued)

	Nominal amount				Allowance for ECL			
	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	Total \$m	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	Total \$m
HSBC UK Bank plc	52,093	734	88	52,915	(11)	—	(2)	(13)
HSBC Bank plc	1,630	36	4	1,670	—	—	—	—
The Hongkong and Shanghai Banking Corporation Limited	181,967	2,479	223	184,669	(3)	—	—	(3)
HSBC Bank Middle East Limited	1,978	7	1	1,986	—	—	—	—
HSBC North America Holdings Inc.	3,695	72	8	3,775	—	—	—	—
HSBC Bank Canada	6,610	113	30	6,753	—	—	—	—
Grupo Financiero HSBC, S.A. de C.V.	4,308	—	—	4,308	(8)	—	—	(8)
Other trading entities	2,008	31	1	2,040	(1)	—	—	(1)
At 31 Dec 2023	254,289	3,472	355	258,116	(23)	—	(2)	(25)

Exposure to UK interest-only mortgage loans

The following information is presented for HSBC branded interest-only mortgage loans. This excludes offset mortgages in first direct and private banking mortgages.

At the end of 2024, the average LTV ratio of the interest-only mortgage loans was 44% (2023: 44%), and 99% (2023: 97%) had an LTV ratio of 75% or less.

Of the interest-only mortgage loans that expired in 2022, 82% were repaid within 12 months of expiry with a total of 97% being repaid within 24 months of expiry. For those expired during 2023, 83% were repaid within 12 months of expiry.

At 31 December 2024, interest-only mortgage loan exposures were \$15.2bn (2023: \$15.2bn) and the maturity profile was as follows:

UK interest-only mortgage loans

	\$m
Expired interest-only mortgage loans	128
Interest-only mortgage loans by maturity	
– 2025	165
– 2026	247
– 2027	366
– 2028	515
– 2029–2033	2,728
– post-2033	11,100
At 31 Dec 2024	15,249

UK interest-only mortgage loans (continued)

	\$m
Expired interest-only mortgage loans	141
Interest-only mortgage loans by maturity	
– 2024	141
– 2025	242
– 2026	315
– 2027	436
– 2028–2032	2,919
– post-2032	11,010
At 31 Dec 2023	15,204

Exposure to offset mortgage in first direct

The offset mortgage in first direct is no longer on sale and is only available for existing offset mortgage customers. It works by grouping together the customer's mortgage, savings and current accounts to offset their credit and debit balances against their mortgage exposure. At 31 December 2024, exposures were worth a total \$4.1bn with an average LTV ratio of 28% (2023: \$5.0bn exposure and 29% LTV ratio).

Reconciliations of changes in personal lending gross carrying/nominal amount and allowances for loans and advances to customers including loan commitments and financial guarantees

The following disclosure provides a reconciliation by stage of the Group's personal lending gross carrying/nominal amount and allowances for loans and advances to customers, including loan commitments and financial guarantees.

In addition, three reconciliations by stage of the Group's gross carrying/nominal amount and allowances for first lien mortgages, credit cards and other personal lending, including loan commitments and financial guarantees, have been included following the adoption of the recommendations of the DECL Taskforce's third report since 2023.

Personal lending – reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to customers including loan commitments and financial guarantees

(Audited)

	Non-credit impaired				Credit impaired			
	Stage 1		Stage 2		Stage 3		Total	
	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2024	650,823	(602)	50,955	(1,434)	3,860	(856)	705,638	(2,892)
Transfers of financial instruments:	(2,023)	(1,045)	(345)	1,477	2,368	(432)	–	–
– transfers from stage 1 to stage 2	(45,220)	246	45,220	(246)	–	–	–	–
– transfers from stage 2 to stage 1	43,549	(1,247)	(43,549)	1,247	–	–	–	–
– transfers to stage 3	(743)	9	(2,715)	685	3,458	(694)	–	–
– transfers from stage 3	391	(53)	699	(209)	(1,090)	262	–	–
Net remeasurement of ECL arising from transfer of stage	–	745	–	(605)	–	(132)	–	8
Changes due to modifications not derecognised	–	–	–	–	(25)	–	(25)	–
Net new and further lending/repayments	29,789	(17)	(7,889)	278	(796)	470	21,104	731
Change to risk parameters – credit quality	–	251	–	(874)	–	(1,437)	–	(2,060)
Changes to models used for ECL calculation	–	29	–	(109)	–	(20)	–	(100)
Assets written off	–	–	–	–	(1,534)	1,534	(1,534)	1,534
Foreign exchange and others ^{1,2,3}	(21,938)	52	(1,111)	109	(227)	72	(23,276)	233
At 31 Dec 2024	656,651	(587)	41,610	(1,158)	3,646	(801)	701,907	(2,546)
ECL income statement change for the period		1,008		(1,310)		(1,119)		(1,421)
Recoveries								220
Others								(32)
Total ECL income statement change for the period								(1,233)

- Total includes \$0.8bn of gross carrying loans and advances to customers, which were classified to assets held for sale, and a corresponding allowance for ECL of \$23m, reflecting business disposals, as disclosed in Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.
- Total includes \$6.4bn of nominal amount and \$1m of corresponding allowance for ECL related to derecognition of loan commitments and financial guarantees following the sale of our banking business in Canada during 2024.
- Total includes \$2.4bn of nominal amount related to derecognition of loan commitments and financial guarantees following the sale of our banking business in Argentina during 2024.

As shown in the above table, the allowance for ECL for loans and advances to customers and relevant loan commitments and financial guarantees decreased by \$346m during the period from \$2,892m at 31 December 2023 to \$2,546m at 31 December 2024.

Risk review

This decrease was driven by:

- \$1,534m of assets written off;
- \$731m relating to volume movements, which included the allowance for ECL associated with new originations, assets derecognised and further lending/repayment;
- foreign exchange and other movements of \$233m; and
- \$8m relating to the net remeasurement impact of stage transfers.

These were partly offset by:

- \$2,060m relating to credit quality changes, including the credit quality impact of financial instruments transferring between stages; and
- \$100m of changes to models used for ECL calculation.

The ECL charge for the period of \$1,421m presented in the above table consisted of \$2,060m relating to credit quality changes, including the credit quality impact of financial instruments transferring between stages, and \$100m relating to changes to models used for the calculation of ECL. This was partly offset by \$731m relating to underlying net book volume movements and \$8m relating to the net remeasurement impact of stage transfer.

During the period, there was a net transfer between stage 1 and stage 2 of \$1,671m gross carrying/nominal amounts. This increase was mainly driven by HSBC UK (\$3,410m) due to mortgages portfolio and Mexico (\$860m) due to a slight deterioration in unsecured lending portfolio, partly offset by Hong Kong (\$2,983m) due to improvement in credit cards and other unsecured lending portfolio.

■ A summary of basis of preparation is available on page 161.

Personal lending – reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to customers including loan commitments and financial guarantees

(Audited)

	Non-credit impaired				Credit impaired			Total	
	Stage 1		Stage 2		Stage 3		Total		
	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	
At 1 Jan 2023	603,321	(587)	52,563	(1,505)	4,139	(805)	660,023	(2,897)	
Transfers of financial instruments:	(2,144)	(619)	39	1,087	2,105	(468)	—	—	
– transfers from stage 1 to stage 2	(57,217)	270	57,217	(270)	—	—	—	—	
– transfers from stage 2 to stage 1	55,307	(862)	(55,307)	862	—	—	—	—	
– transfers to stage 3	(542)	3	(2,345)	614	2,887	(617)	—	—	
– transfers from stage 3	308	(30)	474	(119)	(782)	149	—	—	
Net remeasurement of ECL arising from transfer of stage	—	563	—	(679)	—	(79)	—	(195)	
Net new and further lending/repayments	34,411	(47)	(4,713)	350	(1,169)	144	28,529	447	
Change to risk parameters – credit quality	—	104	—	(641)	—	(955)	—	(1,492)	
Changes to models used for ECL calculation	—	(13)	—	21	—	7	—	15	
Assets written off	—	—	—	—	(1,326)	1,326	(1,326)	1,326	
Foreign exchange and others ^{1,2}	15,235	(3)	3,066	(67)	111	(26)	18,412	(96)	
At 31 Dec 2023	650,823	(602)	50,955	(1,434)	3,860	(856)	705,638	(2,892)	
ECL income statement change for the period		607		(949)		(883)		(1,225)	
Recoveries								226	
Others								8	
Total ECL income statement change for the period								(991)	

- 1 Total includes \$7.8bn of gross carrying loans and advances and a corresponding allowance for ECL of \$11m, due to the retention of certain balances previously classified as assets held for sale of our retail banking operations in France. For further details, see Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.
- 2 Total includes \$2.0bn of gross carrying loans and advances to customers, which were classified to assets held for sale, and a corresponding allowance for ECL of \$20m, reflecting business disposals, as disclosed in Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.

First lien residential mortgages – reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to customers including loan commitments and financial guarantees

	Non-credit impaired				Credit impaired			
	Stage 1		Stage 2		Stage 3		Total	
	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2024	340,764	(109)	38,513	(202)	2,258	(264)	381,535	(575)
Transfers of financial instruments:	(3,561)	(232)	2,694	232	867	—	—	—
– transfers from stage 1 to stage 2	(33,524)	23	33,524	(23)	—	—	—	—
– transfers from stage 2 to stage 1	30,113	(244)	(30,113)	244	—	—	—	—
– transfers to stage 3	(290)	6	(1,127)	90	1,417	(96)	—	—
– transfers from stage 3	140	(17)	410	(79)	(550)	96	—	—
Net remeasurement of ECL arising from transfer of stage	—	163	—	(152)	—	(30)	—	(19)
Changes due to modifications not derecognised	—	—	—	—	—	—	—	—
Net new and further lending/repayments	14,008	20	(6,336)	26	(523)	33	7,149	79
Change to risk parameters – credit quality	—	115	—	(73)	—	(103)	—	(61)
Changes to models used for ECL calculation	—	(8)	—	29	—	1	—	22
Assets written off	—	—	—	—	(63)	63	(63)	63
Foreign exchange and others	(6,535)	(7)	(530)	10	(65)	15	(7,130)	18
At 31 Dec 2024	344,676	(58)	34,341	(130)	2,474	(285)	381,491	(473)
ECL income statement change for the period		290		(170)		(99)		21
Recoveries								7
Others								(1)
Total ECL income statement change for the period								27
At 1 Jan 2023	317,666	(74)	40,048	(231)	2,230	(270)	359,944	(575)
Transfers of financial instruments:	(1,182)	(109)	421	138	761	(29)	—	—
– transfers from stage 1 to stage 2	(41,207)	28	41,207	(28)	—	—	—	—
– transfers from stage 2 to stage 1	40,164	(117)	(40,164)	117	—	—	—	—
– transfers to stage 3	(354)	1	(958)	100	1,312	(101)	—	—
– transfers from stage 3	215	(21)	336	(51)	(551)	72	—	—
Net remeasurement of ECL arising from transfer of stage	—	72	—	(79)	—	(67)	—	(74)
Net new and further lending/repayments	15,447	(3)	(3,939)	22	(751)	322	10,757	341
Change to risk parameters – credit quality	—	16	—	(67)	—	(269)	—	(320)
Changes to models used for ECL calculation	—	(2)	—	28	—	—	—	26
Assets written off	—	—	—	—	(53)	53	(53)	53
Foreign exchange and others	8,833	(9)	1,983	(13)	71	(4)	10,887	(26)
At 31 Dec 2023	340,764	(109)	38,513	(202)	2,258	(264)	381,535	(575)
ECL income statement change for the period		83		(96)		(14)		(27)
Recoveries								10
Others								13
Total ECL income statement change for the period								(4)

Risk review

Credit cards – reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to customers including loan commitments

	Non-credit impaired				Credit impaired			
	Stage 1		Stage 2		Stage 3		Total	
	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2024	153,292	(253)	6,547	(698)	450	(144)	160,289	(1,095)
Transfers of financial instruments:	796	(453)	(1,469)	717	673	(264)	—	—
– transfers from stage 1 to stage 2	(6,427)	129	6,427	(129)	—	—	—	—
– transfers from stage 2 to stage 1	7,255	(569)	(7,255)	569	—	—	—	—
– transfers to stage 3	(179)	2	(765)	327	944	(329)	—	—
– transfers from stage 3	147	(15)	124	(50)	(271)	65	—	—
Net remeasurement of ECL arising from transfer of stage	—	280	—	(256)	—	(45)	—	(21)
Changes due to modifications not derecognised	—	—	—	—	(2)	—	(2)	—
Net new and further lending/repayments	9,604	18	(1,122)	127	(1)	194	8,481	339
Change to risk parameters – credit quality	—	79	—	(476)	—	(694)	—	(1,091)
Changes to models used for ECL calculation	—	22	—	(122)	—	1	—	(99)
Assets written off	—	—	—	—	(736)	736	(736)	736
Foreign exchange and others ¹	(7,380)	27	(196)	50	(41)	17	(7,617)	94
At 31 Dec 2024	156,312	(280)	3,760	(658)	343	(199)	160,415	(1,137)
ECL income statement change for the period		399		(727)		(544)		(872)
Recoveries								106
Others								(10)
Total ECL income statement change for the period								(776)

1 Total includes \$4.5bn of nominal amount related to derecognition of loan commitments and financial guarantees following the sale of our banking business in Canada and our business in Argentina during 2024.

	Non-credit impaired				Credit impaired			
	Stage 1		Stage 2		Stage 3		Total	
	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2023	140,519	(244)	6,747	(777)	353	(160)	147,619	(1,181)
Transfers of financial instruments:	199	(292)	(848)	496	649	(204)	—	—
– transfers from stage 1 to stage 2	(7,855)	102	7,855	(102)	—	—	—	—
– transfers from stage 2 to stage 1	8,124	(391)	(8,124)	391	—	—	—	—
– transfers to stage 3	(82)	1	(621)	227	703	(228)	—	—
– transfers from stage 3	12	(4)	42	(20)	(54)	24	—	—
Net remeasurement of ECL arising from transfer of stage	—	185	—	(301)	—	(5)	—	(121)
Net new and further lending/repayments	13,206	27	621	169	12	(41)	13,839	155
Change to risk parameters – credit quality	—	82	—	(281)	—	(301)	—	(500)
Changes to models used for ECL calculation	—	(9)	—	15	—	1	—	7
Assets written off	—	—	—	—	(571)	571	(571)	571
Foreign exchange and others	(632)	(2)	27	(19)	7	(5)	(598)	(26)
At 31 Dec 2023	153,292	(253)	6,547	(698)	450	(144)	160,289	(1,095)
ECL income statement change for the period		285		(398)		(346)		(459)
Recoveries								108
Others								(200)
Total ECL income statement change for the period								(551)

Other personal lending – reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to customers including loan commitments and financial guarantees

	Non-credit impaired				Credit impaired			
	Stage 1		Stage 2		Stage 3		Total	
	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2024	156,767	(240)	5,895	(534)	1,152	(448)	163,814	(1,222)
Transfers of financial instruments:	742	(360)	(1,570)	528	828	(168)	—	—
– transfers from stage 1 to stage 2	(5,269)	94	5,269	(94)	—	—	—	—
– transfers from stage 2 to stage 1	6,181	(434)	(6,181)	434	—	—	—	—
– transfers to stage 3	(274)	1	(823)	268	1,097	(269)	—	—
– transfers from stage 3	104	(21)	165	(80)	(269)	101	—	—
Net remeasurement of ECL arising from transfer of stage	—	302	—	(197)	—	(57)	—	48
Changes due to modifications not derecognised	—	—	—	—	(23)	—	(23)	—
Net new and further lending/repayments	6,177	(55)	(431)	125	(272)	243	5,474	313
Change to risk parameters – credit quality	—	57	—	(325)	—	(640)	—	(908)
Changes to models used for ECL calculation	—	15	—	(16)	—	(22)	—	(23)
Assets written off	—	—	—	—	(735)	735	(735)	735
Foreign exchange and others ^{1,2}	(8,023)	32	(385)	49	(121)	40	(8,529)	121
At 31 Dec 2024	155,663	(249)	3,509	(370)	829	(317)	160,001	(936)
ECL income statement change for the period		319		(413)		(476)		(570)
Recoveries								107
Others								(21)
Total ECL income statement change for the period								(484)

- Total includes \$0.3bn of gross carrying loans and advances, which were classified to assets held for sale, and a corresponding allowance for ECL of \$10m, reflecting business disposals, as disclosed in Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.
- Total includes \$4.4bn of nominal amount related to derecognition of loan commitments and financial guarantees following the sale of our banking business in Canada during 2024.

	Non-credit impaired				Credit impaired			
	Stage 1		Stage 2		Stage 3		Total	
	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL	Gross carrying/nominal amount	Allowance for ECL
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2023	145,136	(269)	5,768	(497)	1,556	(375)	152,460	(1,141)
Transfers of financial instruments:	(1,161)	(218)	466	453	695	(235)	—	—
– transfers from stage 1 to stage 2	(8,155)	140	8,155	(140)	—	—	—	—
– transfers from stage 2 to stage 1	7,019	(354)	(7,019)	354	—	—	—	—
– transfers to stage 3	(106)	1	(766)	287	872	(288)	—	—
– transfers from stage 3	81	(5)	96	(48)	(177)	53	—	—
Net remeasurement of ECL arising from transfer of stage	—	306	—	(299)	—	(7)	—	—
Net new and further lending/repayments	5,758	(71)	(1,395)	159	(430)	(137)	3,933	(49)
Change to risk parameters – credit quality	—	6	—	(293)	—	(385)	—	(672)
Changes to models used for ECL calculation	—	(2)	—	(22)	—	6	—	(18)
Assets written off	—	—	—	—	(702)	702	(702)	702
Foreign exchange and others ¹	7,034	8	1,056	(35)	33	(17)	8,123	(44)
At 31 Dec 2023	156,767	(240)	5,895	(534)	1,152	(448)	163,814	(1,222)
ECL income statement change for the period		239		(455)		(523)		(739)
Recoveries								108
Others								195
Total ECL income statement change for the period								(436)

- Total includes \$7.2bn of gross carrying loans and advances and a corresponding allowance for ECL of \$10m, due to the retention of certain balances previously classified as assets held for sale of our retail banking operations in France. For further details, see Note 23 'Assets held for sale and liabilities of disposal groups held for sale' on page 411.

Risk review

Personal lending – credit risk profile by internal PD band for loans and advances to customers at amortised cost

	PD range ^{1,2} %	Gross carrying amount				Allowance for ECL				ECL coverage %
		Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	Total \$m	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	Total \$m	
First lien residential mortgages		324,703	34,177	2,450	361,330	(59)	(130)	(284)	(473)	0.1
– Band 1	0.000 to 0.250	234,451	1,820	—	236,271	(15)	(4)	—	(19)	—
– Band 2	0.251 to 0.500	64,340	11,816	—	76,156	(10)	(9)	—	(19)	—
– Band 3	0.501 to 1.500	22,005	14,631	—	36,636	(16)	(25)	—	(41)	0.1
– Band 4	1.501 to 5.000	3,668	3,990	—	7,658	(17)	(27)	—	(44)	0.6
– Band 5	5.001 to 20.000	117	1,178	—	1,295	—	(13)	—	(13)	1.0
– Band 6	20.001 to 99.999	122	742	—	864	(1)	(52)	—	(53)	6.1
– Band 7	100.000	—	—	2,450	2,450	—	—	(284)	(284)	11.6
Credit cards		21,611	2,991	313	24,915	(268)	(660)	(199)	(1,127)	4.5
– Band 1	0.000 to 0.250	10,051	1	—	10,052	(26)	—	—	(26)	0.3
– Band 2	0.251 to 0.500	2,340	4	—	2,344	(15)	(1)	—	(16)	0.7
– Band 3	0.501 to 1.500	5,113	23	—	5,136	(72)	(5)	—	(77)	1.5
– Band 4	1.501 to 5.000	3,847	1,013	—	4,860	(123)	(103)	—	(226)	4.7
– Band 5	5.001 to 20.000	260	1,526	—	1,786	(32)	(263)	—	(295)	16.5
– Band 6	20.001 to 99.999	—	424	—	424	—	(288)	—	(288)	67.9
– Band 7	100.000	—	—	313	313	—	—	(199)	(199)	63.6
Other personal lending		57,432	2,751	797	60,980	(243)	(368)	(313)	(924)	1.5
– Band 1	0.000 to 0.250	29,124	19	—	29,143	(30)	—	—	(30)	0.1
– Band 2	0.251 to 0.500	6,109	242	—	6,351	(9)	(1)	—	(10)	0.2
– Band 3	0.501 to 1.500	11,702	121	—	11,823	(37)	(3)	—	(40)	0.3
– Band 4	1.501 to 5.000	9,006	660	—	9,666	(95)	(25)	—	(120)	1.2
– Band 5	5.001 to 20.000	1,433	1,076	—	2,509	(70)	(111)	—	(181)	7.2
– Band 6	20.001 to 99.999	58	633	—	691	(2)	(228)	—	(230)	33.3
– Band 7	100.000	—	—	797	797	—	—	(313)	(313)	39.3
At 31 Dec 2024		403,746	39,919	3,560	447,225	(570)	(1,158)	(796)	(2,524)	0.6
First lien residential mortgages		320,410	38,287	2,212	360,909	(102)	(200)	(269)	(571)	0.2
– Band 1	0.000 to 0.250	229,188	3,174	—	232,362	(16)	(14)	—	(30)	—
– Band 2	0.251 to 0.500	54,891	12,266	—	67,157	(11)	(17)	—	(28)	—
– Band 3	0.501 to 1.500	28,159	16,140	—	44,299	(22)	(49)	—	(71)	0.2
– Band 4	1.501 to 5.000	7,451	4,559	—	12,010	(52)	(30)	—	(82)	0.7
– Band 5	5.001 to 20.000	599	1,097	—	1,696	—	(11)	—	(11)	0.6
– Band 6	20.001 to 99.999	122	1,051	—	1,173	(1)	(79)	—	(80)	6.8
– Band 7	100.000	—	—	2,212	2,212	—	—	(269)	(269)	12.2
Credit cards		19,909	4,419	352	24,680	(236)	(697)	(203)	(1,136)	4.6
– Band 1	0.000 to 0.250	9,490	1	—	9,491	(32)	—	—	(32)	0.3
– Band 2	0.251 to 0.500	2,481	6	—	2,487	(21)	(1)	—	(22)	0.9
– Band 3	0.501 to 1.500	4,799	294	—	5,093	(56)	(17)	—	(73)	1.4
– Band 4	1.501 to 5.000	2,787	2,291	—	5,078	(93)	(158)	—	(251)	4.9
– Band 5	5.001 to 20.000	352	1,374	—	1,726	(34)	(258)	—	(292)	16.9
– Band 6	20.001 to 99.999	—	453	—	453	—	(263)	—	(263)	58.1
– Band 7	100	—	—	352	352	—	—	(203)	(203)	57.7
Other personal lending		56,215	4,777	941	61,933	(241)	(537)	(382)	(1,160)	1.9
– Band 1	0.000 to 0.250	28,115	30	—	28,145	(34)	(1)	—	(35)	0.1
– Band 2	0.251 to 0.500	6,634	286	—	6,920	(11)	(1)	—	(12)	0.2
– Band 3	0.501 to 1.500	12,935	329	—	13,264	(61)	(9)	—	(70)	0.5
– Band 4	1.501 to 5.000	7,215	1,447	—	8,662	(79)	(46)	—	(125)	1.4
– Band 5	5.001 to 20.000	1,137	2,005	—	3,142	(55)	(199)	—	(254)	8.1
– Band 6	20.001 to 99.999	179	680	—	859	(1)	(281)	—	(282)	32.8
– Band 7	100.000	—	—	941	941	—	—	(382)	(382)	40.6
At 31 Dec 2023		396,534	47,483	3,505	447,522	(579)	(1,434)	(854)	(2,867)	0.6

1 12-month point in time adjusted for multiple economic scenarios.

2 PD bands do not consider the impact of any management judgemental adjustments on stage or allowances for ECL including the impact of new models not yet formally implemented. For a list of management judgemental adjustments see page 155.

Personal lending – credit risk profile by internal PD band for loan and other credit-related commitments and financial guarantees

	PD range ¹ %	Nominal amount				Allowance for ECL				ECL coverage %
		Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	Total \$m	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	Total \$m	
Loan and other credit-related commitments		251,489	1,680	86	253,255	(17)	—	(5)	(22)	—
– Band 1	0.000 to 0.250	199,314	65	—	199,379	(9)	—	—	(9)	—
– Band 2	0.251 to 0.500	14,409	178	—	14,587	(2)	—	—	(2)	—
– Band 3	0.501 to 1.500	28,081	389	—	28,470	(1)	—	—	(1)	—
– Band 4	1.501 to 5.000	8,431	463	—	8,894	(3)	—	—	(3)	—
– Band 5	5.001 to 20.000	800	484	—	1,284	(2)	—	—	(2)	0.2
– Band 6	20.001 to 99.999	454	101	—	555	—	—	—	—	—
– Band 7	100.000	—	—	86	86	—	—	(5)	(5)	5.8
Financial guarantees		1,416	11	—	1,427	—	—	—	—	—
– Band 1	0.000 to 0.250	743	—	—	743	—	—	—	—	—
– Band 2	0.251 to 0.500	389	—	—	389	—	—	—	—	—
– Band 3	0.501 to 1.500	55	—	—	55	—	—	—	—	—
– Band 4	1.501 to 5.000	220	—	—	220	—	—	—	—	—
– Band 5	5.001 to 20.000	3	11	—	14	—	—	—	—	—
– Band 6	20.001 to 99.999	6	—	—	6	—	—	—	—	—
– Band 7	100.000	—	—	—	—	—	—	—	—	—
At 31 Dec 2024		252,905	1,691	86	254,682	(17)	—	(5)	(22)	—
Loan and other credit-related commitments		253,183	3,459	355	256,997	(23)	—	(2)	(25)	—
– Band 1	0.000 to 0.250	196,201	114	—	196,315	(15)	—	—	(15)	—
– Band 2	0.251 to 0.500	17,861	63	—	17,924	(1)	—	—	(1)	—
– Band 3	0.501 to 1.500	29,623	1,262	—	30,885	(1)	—	—	(1)	—
– Band 4	1.501 to 5.000	8,550	1,334	—	9,884	(4)	—	—	(4)	—
– Band 5	5.001 to 20.000	508	564	—	1,072	(2)	—	—	(2)	0.2
– Band 6	20.001 to 99.999	440	122	—	562	—	—	—	—	—
– Band 7	100.000	—	—	355	355	—	—	(2)	(2)	0.6
Financial guarantees		1,106	13	—	1,119	—	—	—	—	—
– Band 1	0.000 to 0.250	348	—	—	348	—	—	—	—	—
– Band 2	0.251 to 0.500	386	—	—	386	—	—	—	—	—
– Band 3	0.501 to 1.500	359	1	—	360	—	—	—	—	—
– Band 4	1.501 to 5.000	3	—	—	3	—	—	—	—	—
– Band 5	5.001 to 20.000	2	12	—	14	—	—	—	—	—
– Band 6	20.001 to 99.999	8	—	—	8	—	—	—	—	—
– Band 7	100.000	—	—	—	—	—	—	—	—	—
At 31 Dec 2023		254,289	3,472	355	258,116	(23)	—	(2)	(25)	—

1 12-month point in time adjusted for multiple economic scenarios.

Collateral on loans and advances

(Audited)

The following table provides a quantification of the value of fixed charges we hold over specific assets where we have a history of enforcing, and are able to enforce, collateral in satisfying a debt in the event of the borrower failing to meet its contractual obligations, and where the collateral is cash or can be realised by sale in an

established market. The collateral valuation excludes any adjustments for obtaining and selling the collateral and, in particular, loans shown as not collateralised or partially collateralised may also benefit from other forms of credit mitigants.

Personal lending – residential mortgage loans including loan commitments by level of collateral for key countries/territories by stage

(Audited)

	Gross carrying/nominal amount				ECL coverage			
	Stage 1 \$m	Stage 2 \$m	Stage 3 \$m	Total \$m	Stage 1 %	Stage 2 %	Stage 3 %	Total %
Fully collateralised by LTV ratio	332,641	34,203	2,371	369,215	—	0.4	10.0	0.1
– less than 50%	141,331	18,076	1,238	160,645	—	0.2	7.6	0.1
– 51% to 70%	111,963	11,507	698	124,168	—	0.4	11.2	0.1
– 71% to 80%	39,374	3,040	242	42,656	—	0.7	13.1	0.1
– 81% to 90%	25,514	1,264	131	26,909	—	0.9	15.0	0.1
– 91% to 100%	14,459	316	62	14,837	—	1.8	22.4	0.1
Partially collateralised (A): LTV > 100%	12,031	139	103	12,273	—	3.2	46.2	0.4
– collateral value on A	11,274	126	70	11,470				
Total at 31 Dec 2024	344,672	34,342	2,474	381,488	—	0.4	11.5	0.1
of which: UK								
Fully collateralised by LTV ratio	151,264	30,574	747	182,585	—	0.2	8.5	0.1
– less than 50%	62,753	16,689	445	79,887	—	0.1	6.9	0.1
– 51% to 70%	50,374	10,456	206	61,036	—	0.2	9.7	0.1
– 71% to 80%	20,552	2,423	64	23,039	—	0.4	12.1	0.1
– 81% to 90%	15,965	939	23	16,927	—	0.6	13.0	0.1
– 91% to 100%	1,620	67	9	1,696	—	0.7	16.7	0.1
Partially collateralised (B): LTV > 100%	146	15	5	166	—	1.0	27.7	0.9
– collateral value on B	109	12	4	125				
Total UK at 31 Dec 2024	151,410	30,589	752	182,751	—	0.2	8.6	0.1
of which: Hong Kong								
Fully collateralised	95,751	756	138	96,645	—	—	1.3	—
– less than 50%	38,894	372	79	39,345	—	—	0.4	—
– 51% to 70%	30,088	227	31	30,346	—	—	0.4	—
– 71% to 80%	6,783	47	11	6,841	—	—	5.1	—
– 81% to 90%	7,602	42	9	7,653	—	0.2	1.1	—
– 91% to 100%	12,384	68	8	12,460	—	0.1	8.8	—
Partially collateralised (C): LTV > 100%	11,744	103	14	11,861	—	0.2	19.1	—
– collateral value on C	11,034	96	12	11,142				
Total Hong Kong at 31 Dec 2024	107,495	859	152	108,506	—	0.1	2.9	—
Fully collateralised by LTV ratio	331,279	38,378	2,129	371,786	—	0.5	10.1	0.1
– less than 50%	140,992	19,715	1,165	161,872	—	0.3	7.1	0.1
– 51% to 70%	113,043	12,636	568	126,247	—	0.6	10.9	0.1
– 71% to 80%	37,866	4,111	229	42,206	—	0.9	15.2	0.2
– 81% to 90%	23,278	1,499	109	24,886	—	1.2	17.3	0.2
– 91% to 100%	16,100	417	58	16,575	—	1.6	28.9	0.2
Partially collateralised (A): LTV > 100%	9,529	136	129	9,794	—	3.4	42.0	0.6
– collateral value on A	8,968	123	104	9,195				
Total at 31 Dec 2023	340,808	38,514	2,258	381,580	—	0.5	11.9	0.1
of which: UK								
Fully collateralised by LTV ratio	146,739	33,597	759	181,095	—	0.3	9.7	0.1
– less than 50%	60,403	17,629	458	78,490	—	0.2	7.9	0.1
– 51% to 70%	49,945	11,248	207	61,400	—	0.4	9.4	0.1
– 71% to 80%	20,293	3,275	61	23,629	—	0.6	13.4	0.1
– 81% to 90%	12,946	1,161	18	14,125	—	0.8	17.5	0.1
– 91% to 100%	3,152	284	15	3,451	—	1.0	41.6	0.3
Partially collateralised (B): LTV > 100%	317	19	27	363	0.1	1.7	17.5	1.4
– collateral value on B	244	15	22	281				
Total UK at 31 Dec 2023	147,056	33,616	786	181,458	—	0.3	9.9	0.1
of which: Hong Kong								
Fully collateralised by LTV ratio	97,414	1,354	93	98,861	—	—	0.3	—
– less than 50%	41,903	831	66	42,800	—	—	0.1	—
– 51% to 70%	29,762	330	15	30,107	—	—	0.5	—
– 71% to 80%	5,260	48	2	5,310	—	0.1	0.4	—
– 81% to 90%	8,161	61	4	8,226	—	0.1	1.9	—
– 91% to 100%	12,328	84	6	12,418	—	0.3	1.8	—
Partially collateralised (C): LTV > 100%	8,973	86	4	9,063	—	0.9	7.8	—
– collateral value on C	8,535	81	4	8,620				
Total Hong Kong at 31 Dec 2023	106,387	1,440	97	107,924	—	0.1	0.7	—

Supplementary information

Wholesale lending – loans and advances to customers at amortised cost by country/territory

	Gross carrying amount				Allowance for ECL			
	Corporate and commercial \$m	of which: real estate and construction ¹ \$m	Non-bank financial institutions \$m	Total \$m	Corporate and commercial \$m	of which: real estate and construction ¹ \$m	Non-bank financial institutions \$m	Total \$m
UK	102,245	17,540	21,771	124,016	(1,412)	(289)	(234)	(1,646)
– of which: HSBC UK Bank plc (ring-fenced bank)	79,833	16,722	10,268	90,101	(1,146)	(260)	(54)	(1,200)
– of which: HSBC Bank plc (non-ring-fenced bank)	22,412	818	11,503	33,915	(266)	(29)	(180)	(446)
– of which: Other trading entities	–	–	–	–	–	–	–	–
France	25,950	3,986	7,222	33,172	(257)	(42)	(9)	(266)
Germany	6,256	264	421	6,677	(153)	–	–	(153)
Hong Kong	118,332	42,042	17,846	136,178	(2,922)	(1,494)	(112)	(3,034)
Australia	12,532	4,509	2,931	15,463	(30)	(3)	–	(30)
India	12,540	2,581	6,425	18,965	(45)	(5)	(6)	(51)
Indonesia	3,132	184	356	3,488	(109)	(44)	–	(109)
Mainland China	29,930	5,326	8,044	37,974	(222)	(117)	(6)	(228)
Malaysia	5,773	1,067	278	6,051	(40)	(10)	–	(40)
Singapore	17,267	3,266	1,830	19,097	(234)	(80)	(1)	(235)
Taiwan	3,848	60	–	3,848	–	–	–	–
Egypt	777	32	51	828	(115)	(20)	–	(115)
UAE	13,278	1,809	1,589	14,867	(408)	(258)	–	(408)
US	24,084	4,028	10,348	34,432	(246)	(106)	(47)	(293)
Mexico	10,318	525	1,407	11,725	(201)	(9)	(11)	(212)
Other	24,422	2,844	1,945	26,367	(361)	(121)	(10)	(371)
At 31 Dec 2024	410,684	90,063	82,464	493,148	(6,755)	(2,598)	(436)	(7,191)
UK	105,536	17,852	18,343	123,879	(1,451)	(246)	(231)	(1,682)
– of which: HSBC UK Bank plc (ring-fenced bank)	80,248	17,060	9,372	89,620	(1,212)	(212)	(66)	(1,278)
– of which: HSBC Bank plc (non-ring-fenced bank)	24,791	792	8,971	33,762	(240)	(34)	(165)	(405)
– of which: Other trading entities	497	–	–	497	1	–	–	1
France	27,017	4,796	5,701	32,718	(636)	(53)	(18)	(654)
Germany	6,667	240	632	7,299	(74)	–	–	(74)
Hong Kong	125,340	48,594	19,319	144,659	(3,099)	(2,147)	(57)	(3,156)
Australia	12,685	4,443	1,564	14,249	(49)	(1)	–	(49)
India	10,856	2,083	5,315	16,171	(47)	(7)	(4)	(51)
Indonesia	3,100	162	411	3,511	(136)	(58)	–	(136)
Mainland China	28,655	6,709	7,775	36,430	(313)	(212)	(11)	(324)
Malaysia	5,797	1,137	258	6,055	(69)	(15)	–	(69)
Singapore	15,845	3,458	948	16,793	(321)	(40)	(1)	(322)
Taiwan	4,512	30	81	4,593	–	–	–	–
Egypt	899	45	86	985	(128)	(10)	(1)	(129)
UAE	13,740	1,979	823	14,563	(543)	(296)	–	(543)
US	26,993	5,143	9,155	36,148	(239)	(101)	(58)	(297)
Mexico	11,326	865	1,349	12,675	(320)	(19)	(5)	(325)
Other	28,687	3,919	2,672	31,359	(378)	(81)	(18)	(396)
At 31 Dec 2023	427,655	101,455	74,432	502,087	(7,803)	(3,286)	(404)	(8,207)

1 Real estate lending within this disclosure corresponds solely to the industry of the borrower. Commercial real estate on page 177 includes borrowers in multiple industries investing in income-producing assets and, to a lesser extent, their construction and development.

Risk review

Personal lending – loans and advances to customers at amortised cost by country/territory

	Gross carrying amount				Allowance for ECL			
	First lien residential mortgages	Other personal	of which: credit cards	Total	First lien residential mortgages	Other personal	of which: credit cards	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
UK	170,809	21,426	8,016	192,235	(139)	(540)	(284)	(679)
– of which: HSBC UK Bank plc (ring-fenced bank)	166,709	18,029	7,933	184,738	(132)	(534)	(283)	(666)
– of which: HSBC Bank plc (non-ring-fenced bank)	4,100	3,397	83	7,497	(7)	(6)	(1)	(13)
– of which: Other trading entities	–	–	–	–	–	–	–	–
France ¹	377	6,601	1	6,978	(12)	(12)	–	(24)
Germany	–	–	–	–	–	–	–	–
Hong Kong	107,759	31,676	10,165	139,435	(5)	(421)	(291)	(426)
Australia	22,154	407	372	22,561	(7)	(9)	(8)	(16)
India	1,984	865	265	2,849	(3)	(18)	(14)	(21)
Indonesia	46	323	142	369	(3)	(11)	(6)	(14)
Mainland China	6,087	771	227	6,858	(12)	(42)	(33)	(54)
Malaysia	3,252	1,198	938	4,450	(23)	(62)	(36)	(85)
Singapore	5,802	6,653	571	12,455	–	(56)	(28)	(56)
Taiwan	5,788	1,424	340	7,212	–	(15)	(4)	(15)
Egypt	–	321	89	321	–	(1)	–	(1)
UAE	2,082	1,338	543	3,420	(3)	(55)	(31)	(58)
US	21,021	653	195	21,674	(12)	(16)	(14)	(28)
Mexico	7,488	5,320	2,242	12,808	(167)	(719)	(339)	(886)
Other	6,681	6,919	809	13,600	(87)	(74)	(39)	(161)
At 31 Dec 2024	361,330	85,895	24,915	447,225	(473)	(2,051)	(1,127)	(2,524)
UK	168,469	19,503	8,056	187,972	(209)	(697)	(339)	(906)
– of which: HSBC UK Bank plc (ring-fenced bank)	164,878	17,884	7,975	182,762	(205)	(692)	(336)	(897)
– of which: HSBC Bank plc (non-ring-fenced bank)	3,226	141	81	3,367	(3)	(5)	(2)	(8)
– of which: Other trading entities	365	1,478	–	1,843	(1)	–	(1)	(1)
France ¹	436	7,476	1	7,912	(13)	(8)	–	(21)
Germany	–	165	–	165	–	–	–	–
Hong Kong	107,182	31,248	9,663	138,430	(2)	(417)	(286)	(419)
Australia	23,001	446	396	23,447	(5)	(19)	(18)	(24)
India	1,537	680	185	2,217	(4)	(16)	(12)	(20)
Indonesia	58	288	137	346	(2)	(11)	(7)	(13)
Mainland China	7,503	754	287	8,257	(3)	(49)	(39)	(52)
Malaysia	2,313	2,115	882	4,428	(23)	(87)	(36)	(110)
Singapore	8,151	5,589	521	13,740	–	(38)	(17)	(38)
Taiwan	5,607	1,370	309	6,977	–	(17)	(4)	(17)
Egypt	–	341	89	341	–	(1)	(1)	(1)
UAE	1,957	1,325	440	3,282	(10)	(62)	(24)	(72)
US	18,340	673	199	19,013	(15)	(19)	(14)	(34)
Mexico	8,778	6,215	2,465	14,993	(176)	(757)	(297)	(933)
Other	7,577	8,425	1,050	16,002	(109)	(98)	(42)	(207)
At 31 Dec 2023	360,909	86,613	24,680	447,522	(571)	(2,296)	(1,136)	(2,867)

1 Included in other personal lending at 31 December 2024 is \$6,562m (31 December 2023: \$7,424m) guaranteed by Crédit Logement.

Summary of financial instruments to which the impairment requirements in IFRS 9 are applied – by global business

	Gross carrying/nominal amount					Allowance for ECL				
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
WPB ¹	569,548	39,984	3,717	—	613,249	(596)	(1,166)	(811)	—	(2,573)
CMB	436,536	44,223	16,912	48	497,719	(446)	(1,020)	(4,713)	(29)	(6,208)
GBM	674,730	10,676	2,116	42	687,564	(106)	(331)	(524)	(22)	(983)
Corporate Centre ¹	72,079	369	25	—	72,473	(3)	(36)	(17)	—	(56)
Total gross carrying amount on-balance sheet at 31 Dec 2024	1,752,893	95,252	22,770	90	1,871,005	(1,151)	(2,553)	(6,065)	(51)	(9,820)
WPB	252,695	1,674	84	—	254,453	(17)	—	(9)	—	(26)
CMB	132,703	13,879	896	—	147,478	(97)	(92)	(86)	—	(275)
GBM	226,995	7,019	226	3	234,243	(31)	(34)	(11)	—	(76)
Corporate Centre	191	—	—	—	191	—	—	—	—	—
Total nominal amount off-balance sheet at 31 Dec 2024	612,584	22,572	1,206	3	636,365	(145)	(126)	(106)	—	(377)
WPB	142,388	339	—	—	142,727	(14)	(2)	—	—	(16)
CMB	103,406	323	—	—	103,729	(7)	(2)	—	—	(9)
GBM	97,422	149	—	—	97,571	(9)	—	—	—	(9)
Corporate Centre	2,028	69	—	—	2,097	(1)	(19)	—	—	(20)
Debt instruments measured at FVOCI at 31 Dec 2024	345,244	880	—	—	346,124	(31)	(23)	—	—	(54)
WPB	630,661	54,069	4,233	—	688,963	(621)	(1,551)	(977)	—	(3,149)
CMB	464,893	66,688	12,698	49	544,328	(508)	(1,336)	(4,995)	(23)	(6,862)
GBM	696,377	14,247	3,002	32	713,658	(119)	(199)	(1,161)	(7)	(1,486)
Corporate Centre	75,805	37	6	—	75,848	(1)	(13)	—	—	(14)
Total gross carrying amount on-balance sheet at 31 Dec 2023	1,867,736	135,041	19,939	81	2,022,797	(1,249)	(3,099)	(7,133)	(30)	(11,511)
WPB	253,333	3,811	333	—	257,477	(22)	—	(2)	—	(24)
CMB	142,206	16,238	877	—	159,321	(100)	(101)	(102)	—	(303)
GBM	250,007	10,752	314	4	261,077	(38)	(34)	(7)	—	(79)
Corporate Centre	149	—	—	—	149	—	—	—	—	—
Total nominal amount off-balance sheet at 31 Dec 2023	645,695	30,801	1,524	4	678,024	(160)	(135)	(111)	—	(406)
WPB	124,747	406	—	—	125,153	(14)	(17)	—	—	(31)
CMB	86,021	405	—	—	86,426	(9)	(18)	—	—	(27)
GBM	88,229	173	1	—	88,403	(13)	(6)	(1)	—	(20)
Corporate Centre	2,201	165	—	—	2,366	(1)	(18)	—	—	(19)
Debt instruments measured at FVOCI at 31 Dec 2023	301,198	1,149	1	—	302,348	(37)	(59)	(1)	—	(97)

1 With effect from 1 January 2024, following the sale of our retail banking business in France, we have prospectively reclassified the \$7.4bn portfolio of retained loans from WPB to Corporate Centre.

Risk review

Loans and advances to customers and banks – other supplementary information

	Gross carrying amount	of which: stage 3 and POCI	Allowance for ECL	of which: stage 3 and POCI	Change in ECL	Write-offs	Recoveries
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
First lien residential mortgages	361,330	2,450	(473)	(284)	33	(63)	7
– second lien residential mortgages	395	19	(2)	(2)	6	–	1
– guaranteed loans in respect of residential property	6,698	20	(9)	(5)	3	(7)	–
– other personal lending which is secured	31,180	138	(31)	(15)	5	(3)	–
– credit cards	24,915	313	(1,127)	(199)	(804)	(736)	106
– other personal lending which is unsecured	20,660	598	(838)	(279)	(484)	(699)	103
– motor vehicle finance	2,047	22	(44)	(12)	(38)	(26)	3
Other personal lending	85,895	1,110	(2,051)	(512)	(1,312)	(1,471)	213
Personal lending	447,225	3,560	(2,524)	(796)	(1,279)	(1,534)	220
– agriculture, forestry and fishing	7,033	282	(94)	(46)	4	(10)	1
– mining and quarrying	7,592	318	(45)	(32)	29	(26)	–
– manufacturing	82,724	1,487	(893)	(638)	(170)	(403)	3
– electricity, gas, steam and air-conditioning supply	16,457	209	(122)	(85)	–	–	–
– water supply, sewerage, waste management and remediation	2,961	43	(24)	(16)	2	(40)	–
– real estate and construction	90,063	8,949	(2,598)	(1,842)	(812)	(1,554)	12
– wholesale and retail trade, repair of motor vehicles and motorcycles	77,830	2,728	(1,372)	(1,188)	(369)	(337)	8
– transportation and storage	22,643	417	(321)	(232)	(104)	(20)	1
– accommodation and food	14,734	1,610	(299)	(214)	(81)	(27)	–
– publishing, audiovisual and broadcasting	19,826	229	(158)	(61)	(79)	(75)	2
– professional, scientific and technical activities	26,128	648	(266)	(188)	(132)	(174)	1
– administrative and support services	20,117	739	(320)	(254)	(39)	(88)	1
– public administration and defence, compulsory social security	64	–	–	–	–	–	–
– education	1,596	43	(27)	(16)	(16)	(3)	–
– health and care	4,030	184	(51)	(25)	(3)	(12)	1
– arts, entertainment and recreation	2,066	78	(35)	(26)	(19)	(22)	–
– other services	7,288	327	(110)	(66)	(82)	(115)	10
– activities of households	589	–	–	–	–	–	–
– extra-territorial organisations and bodies activities	118	–	–	–	–	–	–
– government	6,793	175	(7)	(5)	6	–	–
– asset-backed securities	32	–	(13)	–	1	–	–
Corporate and commercial	410,684	18,466	(6,755)	(4,934)	(1,864)	(2,906)	40
Non-bank financial institutions	82,464	679	(436)	(361)	(59)	(19)	–
Wholesale lending	493,148	19,145	(7,191)	(5,295)	(1,923)	(2,925)	40
Loans and advances to customers	940,373	22,705	(9,715)	(6,091)	(3,202)	(4,459)	260
Loans and advances to banks	102,052	2	(13)	(2)	(1)	–	–
At 31 Dec 2024	1,042,425	22,707	(9,728)	(6,093)	(3,203)	(4,459)	260

Loans and advances to customers and banks – other supplementary information (continued)

	Gross carrying amount	of which: stage 3 and POCI	Allowance for ECL	of which: stage 3 and POCI	Change in ECL	Write-offs	Recoveries
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
First lien residential mortgages	360,909	2,212	(571)	(269)	(10)	(53)	10
– second lien residential mortgages	396	21	(8)	(5)	(1)	(1)	2
– guaranteed loans in respect of residential property	8,593	90	(20)	(14)	2	(8)	2
– other personal lending which is secured	29,481	157	(42)	(24)	8	(2)	2
– credit cards	24,680	352	(1,136)	(203)	(577)	(571)	108
– other personal lending which is unsecured	21,251	659	(1,048)	(331)	(380)	(663)	99
– motor vehicle finance	2,212	14	(42)	(8)	(61)	(28)	3
Other personal lending	86,613	1,293	(2,296)	(585)	(1,009)	(1,273)	216
Personal lending	447,522	3,505	(2,867)	(854)	(1,019)	(1,326)	226
– agriculture, forestry and fishing	7,181	312	(130)	(64)	(21)	(9)	—
– mining and quarrying	7,223	325	(101)	(83)	27	(49)	—
– manufacturing	85,333	1,899	(1,143)	(860)	(355)	(273)	11
– electricity, gas, steam and air-conditioning supply	14,355	255	(119)	(88)	(26)	(10)	—
– water supply, sewerage, waste management and remediation	3,262	102	(63)	(51)	(44)	(2)	—
– real estate and construction	101,455	5,883	(3,286)	(2,561)	(1,358)	(1,191)	6
– wholesale and retail trade, repair of motor vehicles and motorcycles	79,121	2,362	(1,341)	(1,134)	(124)	(447)	12
– transportation and storage	21,456	445	(230)	(160)	(87)	(42)	—
– accommodation and food	15,874	1,058	(257)	(112)	(33)	(26)	—
– publishing, audiovisual and broadcasting	19,731	210	(173)	(50)	(106)	(73)	—
– professional, scientific and technical activities	26,753	740	(401)	(306)	(262)	(110)	1
– administrative and support services	22,203	597	(268)	(174)	39	(137)	—
– public administration and defence, compulsory social security	1,042	—	—	—	—	—	—
– education	1,460	46	(15)	(4)	(1)	(22)	—
– health and care	4,236	183	(56)	(26)	40	(7)	—
– arts, entertainment and recreation	1,961	99	(42)	(31)	15	(8)	—
– other services	8,355	318	(153)	(90)	22	(181)	12
– activities of households	694	—	—	—	—	—	—
– extra-territorial organisations and bodies activities	101	—	—	—	—	—	—
– government	5,827	205	(12)	(10)	(15)	—	—
– asset-backed securities	32	—	(13)	—	—	—	—
Corporate and commercial	427,655	15,039	(7,803)	(5,804)	(2,289)	(2,587)	42
Non-bank financial institutions	74,432	810	(404)	(322)	(168)	(9)	—
Wholesale lending	502,087	15,849	(8,207)	(6,126)	(2,457)	(2,596)	42
Loans and advances to customers	949,609	19,354	(11,074)	(6,980)	(3,476)	(3,922)	268
Loans and advances to banks	112,917	2	(15)	(2)	53	—	—
At 31 Dec 2023	1,062,526	19,356	(11,089)	(6,982)	(3,423)	(3,922)	268

HSBC Holdings

(Audited)

Credit risk in HSBC Holdings primarily arises from transactions with Group subsidiaries.

In HSBC Holdings, the maximum exposure to credit risk arises from two components:

- financial assets on the balance sheet, where maximum exposure equals the carrying amount (see page 350); and
- financial guarantees and other guarantees, where the maximum exposure is the maximum that we would have to pay if the guarantees were called upon (see Note 33).

In the case of our derivative asset balances (see page 350), there is a legally enforceable right of offset in the event of counterparty default and where, as a result, there is a net exposure for credit risk purposes. However, as there is no intention to settle these balances

on a net basis under normal circumstances, they do not qualify for net presentation for accounting purposes. These offsets also include collateral received in cash and other financial assets.

The total offset relating to our derivative asset balances was \$3.0bn at 31 December 2024 (2023: \$3.0bn).

The credit quality of loans and advances and financial investments, both of which consist of intra-Group lending and US Treasury bills and bonds, is assessed as 'strong', with 100% of the exposure being neither past due nor impaired (2023: 100%). For further details of credit quality classification, see page 140.

Treasury risk

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Overview

Treasury risk is the risk of having insufficient capital, liquidity or funding resources to meet financial obligations and satisfy regulatory requirements, including 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.

Treasury risk arises from changes to the respective resources and risk profiles driven by customer behaviour, management decisions or the external environment.

Approach and policy

(Audited)

Our objective in the management of treasury risk is to maintain appropriate levels of capital, liquidity, funding, foreign exchange and market risk to support our business strategy, and meet our regulatory and stress testing-related requirements.

Our approach to treasury management is driven by our strategic and organisational requirements, and considers the regulatory, economic and commercial environment. We aim to maintain a strong capital and 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.

Our policy is underpinned by our risk management framework. The risk management framework incorporates a number of measures aligned to our assessment of risks for both internal and regulatory purposes. These risks include credit, market, operational, pensions, structural and transactional foreign exchange risk, and interest rate risk in the banking book.

For further details, refer to our Pillar 3 Disclosures at 31 December 2024.

Treasury risk management

Key developments in 2024

- The Group continues to benefit from a healthy capital, liquidity and funding position.
- The Board approved a fourth interim dividend for full year 2023, paid in April 2024. For the full year 2024, the Board approved three interim dividends, which were paid in June, September and December 2024. A fourth interim dividend has also been announced with these results. We announced a total of \$11bn of share buy-backs during 2024.
- On 1 January 2024, HSBC Continental Europe completed the sale of its retail banking operations in France.
- On 28 March 2024, HSBC completed the sale of HSBC Bank Canada to the Royal Bank of Canada. The associated gain on sale of \$4.8bn, including the recycling of related reserves, added approximately 0.8 percentage points to our CET1 ratio in 1Q24. The Board approved a special dividend of \$0.21 per share, paid in June 2024 alongside the first interim dividend.

- On 6 December 2024, HSBC completed the sale of HSBC Argentina to Grupo Financiero Galicia recognising a loss on disposal of \$1bn. In addition, \$5.2bn of FX and other reserve losses were recycled to the income statement on completion. The sale had an immaterial capital impact.
 - The Bank continues its delivery efforts against regulatory commitments, including enhancements to regulatory reporting and the implementation of prudential policy changes across the jurisdictions in which we operate. We continue to assess the impact of Basel 3.1, following the PRA announcement to delay the implementation until 1 January 2027, and expect a modest benefit to our CET1 ratio.
 - We have made significant progress in improving our recovery and resolution capabilities in line with the Group's preferred resolution strategy and regulatory expectations, including the Bank of England's ('BoE') Resolvability Assessment Framework ('RAF').
 - We further stabilised our banking net interest income through increasing both the size and duration of our structural hedge.
- For quantitative disclosures on capital ratios, own funds and risk-weighted assets ('RWAs'), see pages 204 to 205. For quantitative disclosures on liquidity and funding metrics, see pages 208 to 209. For quantitative disclosures on interest rate risk in the banking book, see pages 212 to 214.

Governance and structure

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 and Reward. Insurance risk is owned by the Chief Executive Officer for Global Insurance.

Capital risk, liquidity risk, interest rate risk in the banking book, structural foreign exchange risk and transactional foreign exchange risk are the responsibility of the Group Operating Committee and the Group Risk Committee ('GRC'). Global Treasury actively manages these risks on an ongoing basis, supported by the Holdings Asset and Liability Management Committee ('ALCO') and local ALCOs, overseen by Treasury Risk Management and Risk Management Meetings.

Pension risk is overseen by a network of local and regional pension risk management meetings. The Global Pensions Financial Risk Management Meeting provides oversight of all pension plans sponsored by HSBC globally and is chaired by the accountable risk steward. Insurance risk is overseen by the Global Insurance Risk Management Meeting, chaired by the Chief Risk and Compliance Officer for Global Insurance.

Capital, liquidity and funding risk management processes

Assessment and risk appetite

Our capital management approach is underpinned by a Global Capital Risk policy and supporting frameworks for recovery and resolution planning and stress testing. The policy sets out our approach to determining key capital risk appetites including CET1, total capital, minimum requirements for own funds and eligible liabilities ('MREL'), the leverage ratio and double leverage. Our internal capital adequacy assessment process ('ICAAP') is an assessment of the Group's capital position, outlining both regulatory and internal capital resources and requirements resulting from HSBC's business model, strategy, risk profile and management, performance and planning, risks to capital, and the implications of stress testing. Our assessment of capital adequacy is driven by an assessment of risks. These risks include credit, market, operational, pensions, insurance, structural foreign exchange, interest rate risk in the banking book and group risk. Climate risk is also considered as part of the ICAAP, and we are continuing to develop our approach. The Group's ICAAP supports the

determination of the consolidated capital risk appetite and target ratios, as well as enables the assessment and determination of capital requirements by regulators. Subsidiaries prepare ICAAPs in line with global guidance, while considering their local regulatory regimes to determine their own risk appetites and ratios.

HSBC Holdings is the provider of MREL to its subsidiaries, including equity and non-equity capital. These investments are funded by HSBC Holdings' own equity capital and MREL-eligible debt. 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. In line with our 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 these resolution groups.

HSBC Holdings seeks to maintain a prudent balance between the composition of its capital and its investments in subsidiaries.

As a matter of long-standing policy, the holding company group retains a substantial holdings capital buffer comprising cash and other high-quality liquid assets, which at 31 December 2024 was in excess of \$20bn, our target operating level.

We aim to ensure that management has oversight of our liquidity and funding risks at Group and entity level through governance arrangements, in line with our risk management framework. We manage liquidity and funding risk at an operating entity level in accordance with globally consistent policies, procedures and reporting standards. This ensures that obligations can be met in a timely manner, in the jurisdiction where they fall due.

Operating entities are required to meet internal minimum requirements and any applicable regulatory requirements at all times.

These requirements are assessed through our internal liquidity adequacy assessment process ('ILAAP'), which ensures that operating entities have strategies, policies, processes and systems for the identification, measurement, management and monitoring of liquidity risk over an appropriate set of time horizons, including intra-day. The ILAAP informs the setting of risk appetite. It also assesses the capability to manage liquidity and funding effectively in each major entity. These metrics are set and managed locally but are subject to global review and challenge to ensure consistency of approach and application of the Group's policies and controls.

Planning and performance

Capital and RWA plans form part of the annual financial resource plan that is approved by the Board. Capital and RWA forecasts are submitted to the Group Executive Committee on a monthly basis, and capital and RWAs are monitored and managed against the plan. The responsibility for global capital allocation principles rests with the Group Chief Financial Officer, supported by the Group Capital Management Meeting. This is a specialist forum addressing capital management, reporting into Holdings ALCO.

Through our internal governance processes, we seek to strengthen discipline over our investment and capital allocation decisions, and to ensure that returns on investment meet management's objectives. The Group allocates financial resources to businesses and entities to support the execution of our strategy and to meet their regulatory and economic capital needs. We evaluate and manage business returns by using a return on average tangible equity measure and a related economic profit measure.

Funding and liquidity plans also form part of the financial resource plan that is approved by the Board. The Board-level appetite measures are the liquidity coverage ratio ('LCR') and net stable funding ratio ('NSFR'), together with an internal liquidity metric, at entity level. In addition, we use a wider set of measures to manage an appropriate funding and liquidity profile, including legal entity depositor concentration limits, intra-day liquidity, forward-looking funding assessments and other key measures.

Risks to capital and liquidity

Outside the stress testing framework, other risks may be identified that have the potential to affect our RWAs, capital and/or liquidity position. Downside and upside scenarios are assessed against our management objectives, and mitigating actions are assigned as necessary. We closely monitor future regulatory developments and continue to evaluate the impact of these upon our capital and liquidity requirements, particularly those related to the UK's implementation of the outstanding measures to be implemented from the Basel III reforms ('Basel 3.1').

Regulatory developments

The Prudential Regulation Authority ('PRA') published the second part of its near-final rules on the UK's implementation of Basel 3.1 on 12 September 2024. On 17 January 2025, the PRA revised the implementation date to 1 January 2027 to allow greater clarity regarding implementation in the United States. The Risk Weighted Asset ('RWA') output floor is now subject to a three-year transitional provision, ensuring that the date for full implementation remains 1 January 2030. We continue to assess the impact of Basel 3.1 standards on our capital, including the recent release of more beneficial PRA near-final rules, developments in the US and associated implementation challenges (including data provision). We expect that the impact on our CET1 ratio at 1 January 2027 will be a modest benefit.

Regulatory reporting processes and controls

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

While this programme continues, there may be further impacts on some of our regulatory ratios, such as the CET1, LCR and NSFR, as we implement recommended changes and continue to enhance our controls across the process.

Stress testing and recovery and resolution planning

The Group uses stress testing to inform management of the capital and liquidity needed to withstand internal and external shocks, including a global economic downturn or a systems failure. Stress testing results are also used to inform risk mitigation actions, input into global business performance through tangible equity allocation, and recovery and resolution planning, as well as to re-evaluate business plans where analysis shows capital, liquidity and/or returns do not meet their target.

In addition to a range of internal stress tests, we are subject to supervisory stress testing in many jurisdictions. These include the exercises of the Bank of England ('BoE'), the US Federal Reserve Board, the European Banking Authority, the European Central Bank and the Hong Kong Monetary Authority. The results of regulatory stress testing and our internal stress tests are used when assessing our internal capital and liquidity requirements through the ICAAP and ILAAP. The outcomes of stress testing exercises carried out by the PRA and other regulators feed into the setting of regulatory minimum ratios and buffers.

We maintain recovery plans for the Group and material entities, which set out potential options management could take in a range of stress scenarios that could result in a breach of capital or liquidity buffers.

The Group recovery plan sets out the framework and governance arrangements to support restoring HSBC to a stable and viable position, and so lowering the probability of failure from either idiosyncratic company-specific stress or systemic market-wide issues. Our material entities' recovery plans provide detailed actions that management would consider taking in a stress scenario should their positions deteriorate and threaten to breach risk appetite and regulatory minimum levels. This is to help ensure that HSBC entities can stabilise their financial position and recover from financial losses in a stress environment.

The Group has capabilities, resources and arrangements in place to address the unlikely event that HSBC might not be recoverable and would therefore need to be resolved by regulators. In August 2024, the Group and the Bank of England ('BoE') publicly disclosed the status of HSBC's progress against the BoE's Resolvability Assessment Framework ('RAF'). The BoE acknowledged the significant progress made by HSBC in enhancing its resolvability capabilities.

Overall, our recovery and resolution planning helps safeguard the Group's financial and operational stability. HSBC has a programme of continuous improvement to maintain and enhance its recovery and resolution capabilities, designed to meet the BoE's expectations and RAF requirements.

Measurement of interest rate risk in the banking book processes

Assessment and risk appetite

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

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

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

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

Banking net interest income sensitivity

BNII sensitivity captures the risk to earnings generated from the Banking Book from changes in market implied interest rates over a 12-month period using static rolling balance sheet assumptions.

The static rolling balance sheet assumptions are in place to ensure that IRRBB management actions are focused on risks which can be managed within Treasury. A notable exception to this is related to the price sensitivity of certain interest bearing non-maturity deposits, where we apply dynamic assumptions to ensure we capture any potential margin widening or compression over the corresponding shock horizon and rate scenario.

Economic value of equity sensitivity

EVE measures the present value of our banking book assets and liabilities excluding equity, based on a run-off balance sheet. EVE sensitivity measures the impact to EVE from a movement in interest rates, including the assumed term profile of non-maturing deposits having adjusted for stability and price sensitivity. It is measured and reported as part of our internal risk metrics, regulatory rules (including the Supervisory Outlier Test) and Pillar 3 disclosures.

Further details of HSBC's risk management of interest rate risk in the banking book can be found in the Group's Pillar 3 Disclosures at 31 December 2024.

Other Group risks

Non-trading book foreign exchange exposures

Structural foreign exchange exposures

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

Exchange differences on structural exposures are recognised in other comprehensive income. We use the US dollar as our presentation currency in our consolidated financial statements because the US dollar and currencies linked to it form the major currency bloc in which we transact and fund our business. Therefore, our consolidated balance sheet is affected by exchange differences between the US dollar and all the non-US dollar functional currencies of underlying foreign operations.

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.

For further details of our structural foreign exchange exposures, see page 211.

Transactional foreign exchange exposures

Transactional foreign exchange risk arises primarily from day-to-day transactions in the banking book generating profit and loss or fair value through other comprehensive income reserves in a currency other than the reporting currency of the operating entity. Transactional foreign exchange exposure generated through profit and loss is periodically transferred to Markets and Securities Services 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 approved appetite.

HSBC Holdings risk management

As a financial services holding company, HSBC Holdings has limited market risk activities. Its activities predominantly involve maintaining sufficient capital resources to support the Group's diverse activities; allocating these capital resources across the Group's businesses; earning dividend and interest income on its investments in the businesses; payment of operating expenses; providing dividend payments to its equity shareholders and interest payments to providers of debt capital; and maintaining a supply of short-term liquid assets for deployment under extraordinary circumstances.

The main market risks to which HSBC Holdings is exposed are banking book interest rate risk and foreign currency risk. Exposure to these risks arises from short-term cash balances, funding positions held, loans to subsidiaries, investments in long-term financial assets, financial liabilities including debt capital issued, and structural foreign exchange hedges. In addition, the impacts of the American Depository Receipts in Grupo Financiero Galicia received as part of the purchase consideration for HSBC Argentina are recognised by HSBC Holdings. The objective of HSBC Holdings' market risk management strategy is to manage volatility in capital resources, cash flows and distributable reserves that could be caused by movements in market parameters. Market risk for HSBC Holdings is monitored by Holdings ALCO in accordance with its risk appetite statement.

HSBC Holdings uses interest rate swaps and cross-currency interest rate swaps to manage the interest rate risk and foreign currency risk arising from its long-term debt issues. It also uses forward foreign exchange contracts to manage its structural foreign exchange exposures.

■ For quantitative disclosures on HSBC Holdings' interest rate risk in the banking book see page 215.

Pension risk management processes

Our global pensions strategy is to move from defined benefit to defined contribution plans, where local law allows and it is considered competitive to do so. Our most material defined benefit plans have been closed to new entrants for many years, and the majority (including the largest plan in the UK) are also closed to future accrual.

In defined contribution pension plans, the contributions that HSBC is required to make are known, while the ultimate pension benefit will vary, typically with investment returns achieved by investment choices made by the employee. While the market risk to HSBC of defined contribution plans is low, the Group is still exposed to operational and reputational risk.

In defined benefit pension plans, the level of pension benefit is known. Therefore, the level of contributions required by HSBC will vary due to a number of risks, including:

- investments delivering a return below the level required to provide the projected plan benefits;
- the prevailing economic environment leading to corporate failures, thus triggering write-downs in asset values (both equity and debt);
- a change in either interest rates or inflation expectations, causing an increase in the value of plan liabilities; and
- plan members living longer than expected (known as longevity risk).

Pension risk is assessed using an economic capital model that takes into account potential variations in these factors. The impact of these variations on both pension assets and pension liabilities is assessed using a one-in-200-year stress test. Scenario analysis and other stress tests are also used to support pension risk management, including the review of de-risking opportunities.

To fund the benefits associated with defined benefit plans, sponsoring Group companies, and in some instances employees, make regular contributions in accordance with advice from actuaries and in consultation with the plan's fiduciaries where relevant. These contributions are normally set to ensure that there are sufficient funds to meet the cost of the accruing benefits for the future service of active members. However, higher contributions are required when plan assets are considered insufficient to cover the existing pension liabilities. Contribution rates are typically revised annually or once every three years, depending on the plan.

The defined benefit plans invest contributions in a range of investments designed to limit the risk of assets failing to meet a plan's liabilities. Any changes in expected returns from the investments may also change future contribution requirements. In pursuit of these long-term objectives, an overall target allocation is established between asset classes of the defined benefit plan. In addition, each permitted asset class has its own benchmarks, such as stock-market or property valuation indices or liability characteristics. The benchmarks are reviewed at least once every three to five years and more frequently if required by local legislation or circumstances. The process generally involves an extensive asset and liability review.

In addition, some of the Group's pension plans hold longevity swap contracts. These arrangements provide long-term protection to the relevant plans against costs resulting from pensioners or their dependants living longer than initially expected. The most sizeable plan to do this is the HSBC Bank (UK) Pension Scheme, which holds longevity swaps covering approximately 50% of the plan's pensioner liabilities.

Capital risk in 2024

Capital overview

Capital and liquidity adequacy metrics

	At	
	31 Dec 2024	31 Dec 2023
Risk-weighted assets ('RWAs') (\$bn)		
Credit risk	657.9	683.9
Counterparty credit risk	37.7	35.5
Market risk	36.2	37.5
Operational risk	106.5	97.2
Total RWAs	838.3	854.1
Capital on a transitional basis (\$bn)		
Common equity tier 1 capital	124.9	126.5
Tier 1 capital	144.1	144.2
Total capital	172.4	171.2
Capital ratios on a transitional basis (%)		
Common equity tier 1 ratio	14.9	14.8
Tier 1 ratio	17.2	16.9
Total capital ratio	20.6	20.0
Capital on an end point basis (\$bn)		
Common equity tier 1 ('CET1') capital	124.9	126.5
Tier 1 capital	144.1	144.2
Total capital	168.5	167.1
Capital ratios on an end point basis (%)		
Common equity tier 1 ratio	14.9	14.8
Tier 1 ratio	17.2	16.9
Total capital ratio	20.1	19.6
Liquidity coverage ratio ('LCR')		
Total high-quality liquid assets (\$bn)	649.2	647.5
Total net cash outflow (\$bn)	470.7	477.1
LCR (%) ¹	138	136
Net stable funding ratio ('NSFR')^{1,2}		
Total available stable funding (\$bn)	1,523.4	1,601.9
Total required stable funding (\$bn)	1,064.5	1,162.3
NSFR (%)	143	138

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

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

References to EU regulations and directives (including technical standards) should, as applicable, be read as references to the UK's version of such regulation or directive, as onshored into UK law under the European Union (Withdrawal) Act 2018, and as may be subsequently amended under UK law.

Capital figures and ratios in the previous table are calculated in accordance with the regulatory requirements of the Capital Requirements Regulation and Directive, the CRR II regulation and the Prudential Regulation Authority ('PRA') Rulebook ('CRR II').

The table presents them under the transitional arrangements in CRR II for capital instruments and after their expiry, known as the end point.

Regulatory numbers and ratios are presented 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 may restate in subsequent periods.

Own funds disclosure

(Audited)

Ref*	At	
	31 Dec 2024 \$m	31 Dec 2023 \$m
Common equity tier 1 capital: instruments and reserves		
1	22,378	22,964
	– ordinary shares	22,964
2	138,959	135,614
3	(8,410)	(7,195)
5	3,960	3,917
5a	7,184	10,568
6	164,071	165,868
28	(39,160)	(39,367)
29	124,911	126,501
36	19,286	17,732
43	(70)	(70)
44	19,216	17,662
45	144,127	144,163
51	29,334	28,148
57	(1,075)	(1,107)
58	28,259	27,041
59	172,386	171,204

* The references identify lines prescribed in the PRA template, which are applicable and where there is a value.

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

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

- a 0.9 percentage point increase, excluding foreign exchange fluctuations, was primarily driven by a reduction in RWAs through strategic transactions, and the gain on disposal of our Canadian banking business adjusted for the \$0.21 per share special dividend;
- a 0.9 percentage point reduction excluding foreign exchange fluctuations, owing to higher RWAs mainly driven by organic balance sheet growth and credit migrations excluding strategic transactions;

- a 0.4 percentage point increase from capital generation, mainly through regulatory profits and other reserves less dividends and share buy-backs; and
- a 0.3 percentage point decrease from the adverse impact of regulatory deductions and foreign exchange fluctuations on our RWAs and capital.

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

Risk-weighted assets

RWAs by global business

	WPB \$bn	CMB \$bn	GBM \$bn	Corporate Centre \$bn	Total RWAs \$bn
Credit risk	143.3	299.7	132.6	82.3	657.9
Counterparty credit risk	0.7	0.2	35.2	1.6	37.7
Market risk	1.1	0.9	27.1	7.1	36.2
Operational risk ¹	36.0	37.1	37.0	(3.6)	106.5
At 31 Dec 2024²	181.1	337.9	231.9	87.4	838.3
At 31 Dec 2023	192.9	354.5	218.5	88.2	854.1

1 Operational risk RWAs for HSBC Bank Canada are excluded post the PRA waiver permission granted in October 2024.

2 RWAs balance at 31 December 2024 includes HSBC Argentina operational risk RWAs due to the averaging calculation and will roll off over future reporting cycles.

Risk review

RWAs by legal entities¹

	HSBC UK Bank plc	HSBC Bank plc	The Hongkong and Shanghai Banking Corporation Limited	HSBC Bank Middle East Limited	HSBC North America Holdings Inc	HSBC Bank Canada ³	Grupo Financiero HSBC, S.A. de C.V.	Other trading entities ⁴	Holding companies, shared service centres and intra-Group eliminations	Total RWAs
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
Credit risk	117.2	71.8	314.3	19.3	60.7	—	23.7	40.7	10.2	657.9
Counterparty credit risk	0.3	19.7	10.9	0.6	3.4	—	0.6	2.2	—	37.7
Market risk ²	0.2	26.1	23.0	2.1	2.7	—	0.5	1.3	1.5	36.2
Operational risk ³	20.6	20.0	54.6	4.6	7.6	—	4.9	6.5	(12.3)	106.5
At 31 Dec 2024	138.3	137.6	402.8	26.6	74.4	—	29.7	50.7	(0.6)	838.3
At 31 Dec 2023	129.2	131.5	396.7	24.3	72.2	31.9	32.6	59.6	6.7	854.1

1 Balances are on a third-party Group consolidated basis.

2 Market risk RWAs are non-additive across the legal entities due to diversification effects within the Group.

3 Operational risk RWAs for HSBC Bank Canada are excluded post the PRA waiver permission granted in October 2024.

4 RWAs balance at 31 December 2024 includes HSBC Argentina operational risk RWAs due to the averaging calculation and will roll off over future reporting cycles.

RWA movement by global business by key driver

	Credit risk, counterparty credit risk and operational risk						Market risk	Total RWAs
	WPB	CMB	GBM	Corporate Centre				
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn		
RWAs at 1 Jan 2024	191.6	353.5	196.3	75.2	37.5	854.1		
Asset size	11.1	17.3	13.9	2.6	4.5	49.4		
Asset quality	1.7	5.4	(0.9)	0.1	—	6.3		
Model updates	3.2	0.7	3.5	—	—	7.4		
Methodology and policy	(8.9)	(3.2)	0.2	2.8	0.2	(8.9)		
Acquisitions and disposals ¹	(12.3)	(26.1)	(3.7)	0.3	(6.0)	(47.8)		
Foreign exchange movements ²	(6.4)	(10.6)	(4.5)	(0.7)	—	(22.2)		
Total RWA movement	(11.6)	(16.5)	8.5	5.1	(1.3)	(15.8)		
RWAs at 31 Dec 2024³	180.0	337.0	204.8	80.3	36.2	838.3		

1 Balance includes operational risk RWAs for HSBC Bank Canada post the PRA waiver permission granted in October 2024.

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

3 RWAs balance at 31 December 2024 includes HSBC Argentina operational risk RWAs due to the averaging calculation and will roll off over future reporting cycles.

RWA movement by legal entities by key driver¹

	Credit risk, counterparty credit risk and operational risk										Market risk	Total RWAs
	HSBC UK Bank plc	HSBC Bank plc	The Hongkong and Shanghai Banking Corporation Limited	HSBC Bank Middle East Limited	HSBC North America Holdings Inc	HSBC Bank Canada ²	Grupo Financiero HSBC, S.A. de C.V.	Other trading entities ⁴	Holding companies, shared service centres and intra-Group eliminations			
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn		
RWAs at 1 Jan 2024	129.0	108.8	369.3	21.5	69.6	31.1	31.9	58.0	(2.6)	37.5	854.1	
Asset size	10.2	4.3	15.5	2.5	0.6	—	2.3	11.0	(1.5)	4.5	49.4	
Asset quality	1.9	0.5	6.2	(0.8)	0.5	—	—	(2.0)	—	—	6.3	
Model updates	0.1	0.8	5.3	0.7	0.4	—	—	0.1	—	—	7.4	
Methodology and policy	(0.6)	4.5	(11.5)	0.7	0.7	—	—	(4.6)	1.7	0.2	(8.9)	
Acquisitions and disposals ²	—	(3.9)	0.1	—	—	(30.5)	—	(7.8)	0.3	(6.0)	(47.8)	
Foreign exchange movements ³	(2.5)	(3.5)	(5.1)	(0.1)	(0.1)	(0.6)	(5.0)	(5.3)	—	—	(22.2)	
Total RWA movement	9.1	2.7	10.5	3.0	2.1	(31.1)	(2.7)	(8.6)	0.5	(1.3)	(15.8)	
RWAs at 31 Dec 2024	138.1	111.5	379.8	24.5	71.7	—	29.2	49.4	(2.1)	36.2	838.3	

1 Balances are on a third-party Group consolidated basis.

2 Balance includes operational risk RWAs for HSBC Bank Canada post the PRA waiver permission granted in October 2024.

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

4 RWAs balance at 31 December 2024 includes HSBC Argentina operational risk RWAs due to the averaging calculation and will roll off over future reporting cycles.

RWAs decreased by \$15.8bn during the year, mainly due to strategic disposals of \$47.8bn and foreign currency translation differences of \$22.2bn, which were partly offset by asset size movements of \$49.4bn.

Asset size

Asset size RWAs increased by \$49.4bn, including a \$14.6bn rise in operational risk RWAs driven by an increase in average income.

CMB RWAs rose by \$17.3bn, including a \$6.4bn increase in operational risk RWAs, and additional RWAs contributed by an increase in corporate lending, mainly in HSBC UK Bank plc and higher sovereign exposures in Other trading entities and Asia.

GBM RWAs increased by \$13.9bn, mainly reflecting an increase in operational risk RWAs of \$5.5bn, higher securities financing exposures in HSBC Bank plc, and mark-to-market movements and organic growth in counterparty credit risk, mainly in Asia. Further RWA increases were due to higher sovereign exposures in Asia and Other trading entities.

WPB RWAs increased by \$11.1bn, including a \$4.2bn rise in operational risk RWAs, and due to retail mortgage growth in the US and HSBC UK Bank plc, and higher sovereign exposures in Other trading entities and Asia.

Corporate Centre RWAs increased by \$2.6bn, primarily due to lending growth in SAB, reflected in Other trading entities.

Market risk RWAs increased by \$4.5bn, which was mainly attributed to an increase in stressed value at risk due to higher sensitivities to interest rate shocks under the stress scenario, and the higher

incremental risk charge due to increased positions, mainly in Asia and HSBC Bank plc.

Asset quality

The \$6.3bn rise in RWAs was mainly due to unfavourable credit migrations in Asia, including in the Hong Kong commercial real estate sector, which was partly offset by favourable credit risk migrations in Sri Lanka and Other trading entities. A further RWA increase in HSBC UK Bank plc was mainly attributed to changes in the loan-to-value mix of our mortgages portfolio.

Model updates

The \$7.4bn RWAs increase mainly followed a revision to the definition of default in our PD models for exposures to financial institutions, and an increase in the post-model adjustments for the Hong Kong models.

Methodology and policy

The \$8.9bn decrease in RWAs largely reflected a \$7.5bn fall due to regulatory changes related to the risk-weighting of residential mortgages in Hong Kong. Credit risk parameter refinements, mainly in Asia, further contributed to the fall in RWAs.

Acquisitions and disposals

RWAs decreased by \$47.8bn, predominantly from the disposal of our banking business in Canada, including operational risk RWAs post the PRA waiver permission granted in October 2024, the sale of our business in Argentina and the sale of our retail banking operations in France.

Leverage ratio

	At	
	31 Dec 2024	31 Dec 2023
	\$bn	\$bn
Tier 1 capital (leverage)	144.1	144.2
Total leverage ratio exposure	2,571.1	2,574.8
	%	%
Leverage ratio	5.6	5.6

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

At 31 December 2024, our UK minimum leverage ratio requirement of 3.25% was supplemented by a leverage ratio buffer of 0.9%, which consists of an additional leverage ratio buffer of 0.7% and a countercyclical leverage ratio buffer of 0.2%. These buffers translated into capital values of \$18.0bn and \$5.1bn respectively.

Regulatory transitional arrangements for IFRS 9 'Financial Instruments'

We have adopted the regulatory transitional arrangements of the Capital Requirements Regulation for IFRS 9, including paragraph four of article 473a. These allow banks to add back to their capital base a proportion of the impact that IFRS 9 has upon their loan loss allowances. Our capital and ratios are presented under these arrangements throughout the tables in this section, including the end point figures.

Pillar 3 disclosure requirements

Pillar 3 of the Basel regulatory framework is related to market discipline and aims to make financial services firms more transparent by requiring publication of wide-ranging information on their risks, capital and management.

For further details, see our Pillar 3 Disclosures at 31 December 2024, which is expected to be published on or around 19 February 2025 at www.hsbc.com/investors.

Liquidity and funding risk in 2024

Liquidity metrics

At 31 December 2024, all of the Group's material operating entities were above the required regulatory minimum liquidity and funding levels. Each entity maintains sufficient unencumbered liquid assets to comply with local and regulatory requirements. Each entity maintains a sufficient stable funding profile and is assessed using the NSFR or other appropriate metrics.

In addition to regulatory metrics, we use a wide set of measures to manage our liquidity and funding profile.

Risk review

The Group liquidity and funding position on an average basis is analysed in the following sections.

Operating entities' liquidity

	At 31 Dec 2024			
	LCR ¹ %	HQLA \$bn	Net outflows \$bn	NSFR ¹ %
HSBC UK Bank plc (ring-fenced bank) ²	190	117	61	154
HSBC Bank plc (non-ring-fenced bank) ³	148	138	93	115
The Hongkong and Shanghai Banking Corporation – Hong Kong branch ⁴	191	145	76	124
HSBC Singapore ⁵	287	32	11	184
Hang Seng Bank	299	57	19	174
HSBC Bank China	191	27	14	147
HSBC Bank USA	167	80	48	127
HSBC Continental Europe	149	82	55	139
HSBC Bank Middle East Ltd – UAE branch	251	14	6	151
HSBC Canada	–	–	–	–
HSBC Mexico	164	9	6	125

	At 31 Dec 2023			
HSBC UK Bank plc (ring-fenced bank) ²	201	118	59	158
HSBC Bank plc (non-ring-fenced bank) ³	148	132	89	116
The Hongkong and Shanghai Banking Corporation – Hong Kong branch ⁴	192	147	77	127
HSBC Singapore ⁵	292	26	9	174
Hang Seng Bank	254	52	21	163
HSBC Bank China	170	24	14	139
HSBC Bank USA	172	82	48	131
HSBC Continental Europe	158	83	52	137
HSBC Bank Middle East Ltd – UAE branch	281	13	5	163
HSBC Canada	164	21	13	129
HSBC Mexico	149	8	5	124

- The LCR and NSFR ratios presented in the above table are based on average values. The LCR is the average of the preceding 12 months. The NSFR is the average of the preceding four quarters.
- HSBC UK Bank plc refers to the HSBC UK liquidity group, which comprises five legal entities: HSBC UK Bank plc, Marks and Spencer Financial Services plc, HSBC Private Bank (UK) Ltd, HSBC Innovation Bank Limited and HSBC Trust Company (UK) Limited, managed as a single operating entity, in line with the application of UK liquidity regulation as agreed with the PRA.
- HSBC Bank plc includes overseas branches and special purpose entities consolidated by HSBC for financial statements purposes.
- The Hongkong and Shanghai Banking Corporation – Hong Kong branch represents the material activities of The Hongkong and Shanghai Banking Corporation Limited. It is monitored and controlled for liquidity and funding risk purposes as a stand-alone operating entity.
- HSBC Singapore includes HSBC Bank Singapore Limited and The Hongkong and Shanghai Banking Corporation – Singapore branch. Liquidity and funding risk is monitored and controlled at country level in line with the local regulator's approval.

Consolidated liquidity metrics

Net stable funding ratio

We manage funding risk based on the PRA's NSFR rules. The Group's NSFR at 31 December 2024, calculated from the average of the four preceding quarters, was 143%.

	At ^{1,2}		
	31 Dec 2024 \$bn	30 Jun 2024 \$bn	31 Dec 2023 \$bn
Total available stable funding (\$bn)	1,523	1,544	1,602
Total required stable funding (\$bn)	1,064	1,115	1,162
NSFR ratio (%)	143	138	138

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

Liquidity coverage ratio

At 31 December 2024, the average high-quality liquid assets ('HQLA') held at entity level amounted to \$790bn (31 December 2023: \$795bn). The Group consolidation methodology includes a deduction to reflect the impact of limitations in the transferability of entity liquidity around the Group. That resulted in an adjustment of \$141bn to LCR HQLA and \$6bn to LCR inflows on an average basis.

We enhanced our liquidity consolidation process in 2Q24 by revising the provisions that addressed historical limitations. As Group LCR is reported on an average basis, the benefits of these changes have incrementally increased our LCR by circa 3% during the year by reducing net outflows. This reduction was partly offset by an organic increase in outflows, mostly in Asia, resulting in a net 2% increase of our LCR compared with year ended 31 December 2023.

	At ¹		
	31 Dec 2024	30 Jun 2024	31 Dec 2023
	\$bn	\$bn	\$bn
High-quality liquid assets (in entities)	790	780	795
Group LCR HQLA	649	646	648
Net outflows	471	472	477
Liquidity coverage ratio (%)	138	137	136
Adjustment for transfer restrictions ²	(147)	(141)	(154)

- Group LCR numbers above are based on average values. The LCR is the average of the preceding 12 months.
- This includes adjustments made to high-quality liquid assets and inflows in entities to reflect liquidity transfer restrictions.

Liquid assets

After the \$141bn deduction, the average Group LCR HQLA of \$649bn (31 December 2023: \$648bn) was held in a range of asset classes and currencies. Of these, 95% were eligible as level 1 (31 December 2023: 97%).

The following tables reflect the composition of the average liquidity pool by asset type and currency at 31 December 2024.

Liquidity pool by asset type¹

	Liquidity pool			
	\$bn	Cash \$bn	Level 1 ² \$bn	Level 2 ² \$bn
Cash and balance at central bank	266	266	—	—
Central and local government bonds	352	—	326	26
Regional government public sector entities	2	—	2	—
International organisation and multilateral developments banks	18	—	18	—
Covered bonds	8	—	2	6
Other	3	—	1	2
Total at 31 Dec 2024	649	266	349	34
Total at 31 Dec 2023	648	310	317	21

- Group liquid assets numbers are based on average values.
- As defined in EU regulations, level 1 assets means 'assets of extremely high liquidity and credit quality', and level 2 assets means 'assets of high liquidity and credit quality'.

Liquidity pool by currency¹

	\$	£	€	HK\$	Other	Total
	\$bn	\$bn	\$bn	\$bn	\$bn	\$bn
Liquidity pool at 31 Dec 2024	196	170	113	47	123	649
Liquidity pool at 31 Dec 2023	184	173	112	51	128	648

- Group liquid assets numbers are based on average values.

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.

The following 'Funding sources' and 'Funding uses' tables provide a view of how our consolidated balance sheet is funded. In practice, all the principal operating entities are required to manage liquidity and funding risk on a stand-alone basis.

The tables analyse our consolidated balance sheet according to the assets that primarily arise from operating activities and the sources of funding primarily supporting these activities. Assets and liabilities that do not arise from operating activities are presented as a net balancing source or deployment of funds.

Funding sources

(Audited)

	2024	2023
	\$m	\$m
Customer accounts	1,654,955	1,611,647
Deposits by banks	73,997	73,163
Repurchase agreements – non-trading	180,880	172,100
Debt securities in issue	105,785	93,917
Cash collateral, margin, settlement accounts and items in course of transmission to other banks	82,732	92,550
Liabilities of disposal groups held for sale	29,011	108,406
Subordinated liabilities	25,958	24,954
Financial liabilities designated at fair value	138,727	141,426
Insurance contract liabilities	107,629	120,851
Trading liabilities	65,982	73,150
– repos	14,806	12,198
– stock lending	3,525	3,322
– other trading liabilities	47,651	57,630
Total equity	192,273	192,610
Other balance sheet liabilities	359,119	333,903
At 31 Dec	3,017,048	3,038,677

Funding uses

(Audited)

	2024	2023
	\$m	\$m
Loans and advances to customers	930,658	938,535
Loans and advances to banks	102,039	112,902
Reverse repurchase agreements – non-trading	252,549	252,217
Cash collateral, margin, settlement accounts and items in course of collection from other banks	78,538	96,253
Assets held for sale	27,234	114,134
Trading assets	314,842	289,159
– reverse repos	16,823	16,575
– stock borrowing	8,374	14,609
– other trading assets	289,645	257,975
Financial investments	493,166	442,763
Cash and balances with central banks	267,674	285,868
Other balance sheet assets	550,348	506,846
At 31 Dec	3,017,048	3,038,677

Wholesale term debt maturity profile

The maturity profile of our wholesale term debt obligations is set out in the following table. The balances in the table are not directly comparable with those in the consolidated balance sheet because the table presents gross cash flows relating to principal payments and not the balance sheet carrying value, which includes debt securities and subordinated liabilities measured at fair value.

Wholesale funding cash flows payable by HSBC under financial liabilities by remaining contractual maturities¹

	Due not more than 1 month	Due over 1 month but not more than 3 months	Due over 3 months but not more than 6 months	Due over 6 months but not more than 9 months	Due over 9 months but not more than 1 year	Due over 1 year but not more than 2 years	Due over 2 years but not more than 5 years	Due over 5 years	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Debt securities issued	14,260	15,011	13,841	10,235	11,644	29,639	62,434	53,814	210,878
– unsecured CDs and CP	5,346	7,803	10,495	6,623	6,829	662	1,787	1,598	41,143
– unsecured senior MTNs	7,528	3,351	1,014	1,269	2,736	21,593	47,236	42,899	127,626
– unsecured senior structured notes	874	1,826	2,258	1,457	1,526	6,055	9,160	6,520	29,676
– secured covered bonds	—	—	—	—	—	—	1,254	—	1,254
– secured asset-backed commercial paper	488	—	—	—	—	—	—	—	488
– secured ABS	24	47	67	64	61	664	520	864	2,311
– others	—	1,984	7	822	492	665	2,477	1,933	8,380
Subordinated liabilities	—	—	1,737	1,030	—	892	2,694	30,349	36,702
– subordinated debt securities	—	—	1,737	1,030	—	892	2,694	29,471	35,824
– preferred securities	—	—	—	—	—	—	—	878	878
At 31 Dec 2024	14,260	15,011	15,578	11,265	11,644	30,531	65,128	84,163	247,580
Debt securities issued	17,620	9,798	14,284	13,226	12,226	20,882	64,010	50,045	202,091
– unsecured CDs and CP	6,400	6,777	7,601	6,429	6,513	1,179	1,073	925	36,897
– unsecured senior MTNs	8,190	1,160	4,365	3,627	3,267	12,903	54,984	41,007	129,503
– unsecured senior structured notes	2,307	1,491	1,617	2,513	1,978	2,924	2,793	5,910	21,533
– secured covered bonds	—	—	—	—	—	—	1,275	—	1,275
– secured asset-backed commercial paper	426	—	—	—	—	—	—	—	426
– secured ABS	22	44	62	58	55	188	861	539	1,829
– others	275	326	639	599	413	3,688	3,024	1,664	10,628
Subordinated liabilities	—	2,013	—	—	—	3,358	4,282	27,234	36,887
– subordinated debt securities	—	2,000	—	—	—	3,358	4,282	25,441	35,081
– preferred securities	—	13	—	—	—	—	—	1,793	1,806
At 31 Dec 2023	17,620	11,811	14,284	13,226	12,226	24,240	68,292	77,279	238,978

1 Excludes financial liabilities of disposal groups.

Structural foreign exchange risk in 2024

Structural foreign exchange exposures represent net assets or capital investments in subsidiaries, branches, joint arrangements or associates, together with any associated hedges, the functional currencies of which are currencies other than the US dollar. Exchange differences on structural exposures are usually recognised in 'other comprehensive income'.

Net structural foreign exchange exposures

Currency of structural exposure	2024					
	Net investment in foreign operations (excl non-controlling interest)	Net investment hedges	Structural foreign exchange exposures (pre-economic hedges)	Economic hedges – structural FX hedges ¹	Economic hedges – equity securities (AT1) ²	Net structural foreign exchange exposures
	\$m	\$m	\$m	\$m	\$m	\$m
Hong Kong dollars	40,106	(5,841)	34,265	(9,861)	–	24,404
Pounds sterling	46,462	(15,024)	31,438	–	(1,254)	30,184
Chinese renminbi	35,032	(4,725)	30,307	(1,080)	–	29,227
Euros	17,391	(2,013)	15,378	–	(1,297)	14,081
Canadian dollars	43	–	43	–	–	43
Indian rupees	7,056	(1,973)	5,083	–	–	5,083
Mexican pesos	3,991	–	3,991	–	–	3,991
Saudi riyals	4,675	–	4,675	–	–	4,675
UAE dirhams	5,264	(893)	4,371	(2,543)	–	1,828
Malaysian ringgit	3,036	–	3,036	–	–	3,036
Singapore dollars	2,405	–	2,405	1,092	(1,089)	2,408
Australian dollars	2,126	–	2,126	–	–	2,126
Taiwanese dollars	2,199	(1,015)	1,184	–	–	1,184
Indonesian rupiah	1,541	(533)	1,008	–	–	1,008
Swiss francs	1,096	(541)	555	–	–	555
Korean won	1,204	(756)	448	–	–	448
Thai baht	976	(460)	516	–	–	516
Egyptian pound	891	–	891	–	–	891
Qatari rial	728	(97)	631	(299)	–	332
Argentinian peso	–	–	–	–	–	–
Vietnamese dong	769	–	769	–	–	769
Others, each less than \$700m	4,327	(463)	3,864	–	–	3,864
At 31 Dec	181,318	(34,334)	146,984	(12,691)	(3,640)	130,653
	2023					
Hong Kong dollars	39,014	(5,792)	33,222	(7,979)	–	25,243
Pounds sterling	46,661	(16,415)	30,246	–	(1,275)	28,971
Chinese renminbi	33,809	(3,299)	30,510	(1,066)	–	29,444
Euros	15,673	(515)	15,158	–	(1,384)	13,774
Canadian dollars	5,418	(1,076)	4,342	–	–	4,342
Indian rupees	6,286	(2,110)	4,176	–	–	4,176
Mexican pesos	4,883	–	4,883	–	–	4,883
Saudi riyals	4,312	–	4,312	–	–	4,312
UAE dirhams	4,995	(613)	4,382	(2,761)	–	1,621
Malaysian ringgit	2,754	–	2,754	–	–	2,754
Singapore dollars	2,345	(224)	2,121	–	–	2,121
Australian dollars	2,362	–	2,362	–	–	2,362
Taiwanese dollars	2,212	(1,127)	1,085	–	–	1,085
Indonesian rupiah	1,535	(512)	1,023	–	–	1,023
Swiss francs	1,191	(526)	665	–	–	665
Korean won	1,354	(864)	490	–	–	490
Thai baht	1,022	–	1,022	–	–	1,022
Egyptian pound	959	–	959	–	–	959
Qatari rial	834	(215)	619	(299)	–	320
Argentinian peso	794	–	794	–	–	794
Vietnamese dong	872	–	872	–	–	872
Others, each less than \$700m	4,386	(487)	3,899	–	–	3,899
At 31 Dec	183,671	(33,775)	149,896	(12,105)	(2,659)	135,132

- 1 Represents hedges that do not qualify as net investment hedges for accounting purposes. The SGD position represents the hedge against our SGD AT1 issuance.
- 2 Represents foreign currency-denominated preference share and AT1 instruments. These are accounted for at historical cost under IFRS Accounting Standards and do not qualify as net investment hedges for accounting purposes. The gain or loss arising from changes in the US dollar value of these instruments is recognised on redemption in retained earnings.

▣ For a definition of structural foreign exchange exposures, see page 202.

Interest rate risk in the banking book in 2024

Banking net interest income sensitivity

Banking NII Sensitivity analyses the sensitivity of our banking net interest income to interest rate shocks. This metric, which was introduced in our Annual Report and Accounts 2023, includes the sensitivity arising from the use of banking book liabilities to fund trading assets, as well as the currency impacts of vanilla foreign exchange swaps to optimise cash management across the Group. Banking NII Sensitivity is therefore a more comprehensive measure than NII Sensitivity which was disclosed previously and is aligned with the presentation of banking net interest income as an alternative performance measure intended to approximate the Group's banking revenue that is directly impacted by changes in interest rates. The following tables set out the assessed impact to a hypothetical base case projection of our banking NII under an immediate shock of 100bps to the current market-implied path of interest rates across all currencies on 31 December 2024 (effects in the first, second and third years). For example, Year 3 shows the impact of an immediate rate shock on the banking NII projected for the third year.

The sensitivities shown represent a hypothetical simulation of the base case banking NII, assuming a static balance sheet (specifically no assumed migration from current account to term deposits), and no management actions from Global Treasury. This also incorporates the effect of interest rate behaviouralisation, hypothetical managed rate product pricing assumptions, prepayment of mortgages and deposit stability. The sensitivity calculations exclude pensions, insurance exposures, and our interest in associates.

The sensitivity analysis performed in the case of a down-shock does not include floors to market rates, and it does not include floors on

some wholesale assets and liabilities. However, floors have been maintained for deposits and loans to customers where this is contractual or where negative rates would not be applied.

As the market and policy rates move, the degree to which these changes are passed on to customers will vary based on a number of factors, including the absolute level of market rates, regulatory and contractual frameworks, and competitive dynamics. To aid comparability between markets, we have simplified the basis of preparation for our disclosure and have used a 50% pass-on assumption for major entities on certain interest-bearing deposits. Our asset pass-on assumptions are largely in line with our contractual agreements or established market practice, which typically results in a significant portion of interest rate changes being passed on.

An immediate interest rate rise of 100bps would increase projected banking NII by \$2.1bn. An immediate interest rate fall of 100bps would decrease projected banking NII by \$2.9bn.

The sensitivity of banking NII for 12 months as at 31 December 2024 decreased by \$0.7bn in the plus 100bps parallel shock and by \$0.5bn in the minus 100bps parallel shock, when compared with 31 December 2023. The decline in sensitivities is primarily due to an increase in stabilisation activities in line with our strategy.

For further details of measurement of interest rate risk in the banking book, see page 202.

Banking NII sensitivity to an instantaneous change in yield curves (12 months) – Year 1 sensitivity by currency

	Currency					Total \$m
	\$ \$m	HK\$ \$m	£ \$m	€ \$m	Other \$m	
Change in Jan 2025 to Dec 2025 (based on balance sheet at 31 Dec 2024)						
+100bps parallel	572	220	219	301	821	2,133
-100bps parallel	(862)	(403)	(353)	(314)	(954)	(2,886)
Change in Jan 2024 to Dec 2024 (based on balance sheet at 31 Dec 2023)						
+100bps parallel	343	411	496	285	1,297	2,832
-100bps parallel	(494)	(493)	(602)	(304)	(1,460)	(3,353)

Banking NII sensitivity to an instantaneous down 100bps parallel change in yield curves – Year 2 and Year 3 sensitivity by currency

	Currency					Total \$m
	\$ \$m	HK\$ \$m	£ \$m	€ \$m	Other \$m	
Change in banking NII (based on balance sheet at 31 Dec 2024)						
Year 2 (Jan 2026 to Dec 2026)	(1,226)	(509)	(563)	(444)	(1,333)	(4,075)
Year 3 (Jan 2027 to Dec 2027)	(1,531)	(550)	(1,022)	(504)	(1,449)	(5,056)
Change in banking NII (based on balance sheet at 31 Dec 2023)						
Year 2 (Jan 2025 to Dec 2025)	(1,015)	(693)	(938)	(333)	(1,798)	(4,777)
Year 3 (Jan 2026 to Dec 2026)	(1,289)	(761)	(1,439)	(405)	(1,926)	(5,820)

Non-trading portfolios

Value at risk of non-trading portfolios

Non-trading portfolios comprise of positions that primarily arise from the interest rate management of our retail and wholesale banking assets and liabilities, financial investments measured at fair value through other comprehensive income ('FVOCI') or at amortised cost, and certain exposures arising from our insurance operations.

Value at risk ('VaR') of non-trading portfolios is a technique for estimating potential losses on risk positions 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 integrated into the market risk management of non-trading portfolios to have a complete picture of risk, complementing risk sensitivity analysis.

From 1Q24, we adopted a methodology change to measure non-trading VaR over a 10-day holding period as opposed to 1 day in order to better reflect longer average time horizons in the management of non-trading portfolios compared with trading portfolios.

Comparative data at 31 December 2023 has been restated on a 10-day basis accordingly, using a scalar approach that results in restated numbers being approximately three times higher than previously reported 1-day basis numbers.

Our models are predominantly based on historical simulation that incorporates the following features:

- historical market rates and prices, which are calculated with reference to interest rates, credit spreads and the associated volatilities;
- potential market movements that are calculated with reference to data from the past two years; and
- calculations to a 99% confidence level and using a 10-day holding period.

Although a valuable guide to risk, VaR is used for non-trading portfolios with awareness of its limitations. For example:

- The use of historical data as a proxy for estimating future market moves may not encompass all potential market events, particularly those that are extreme in nature. As the model is calibrated on the last 500 business days, it does not adjust instantaneously to a change in market regime.

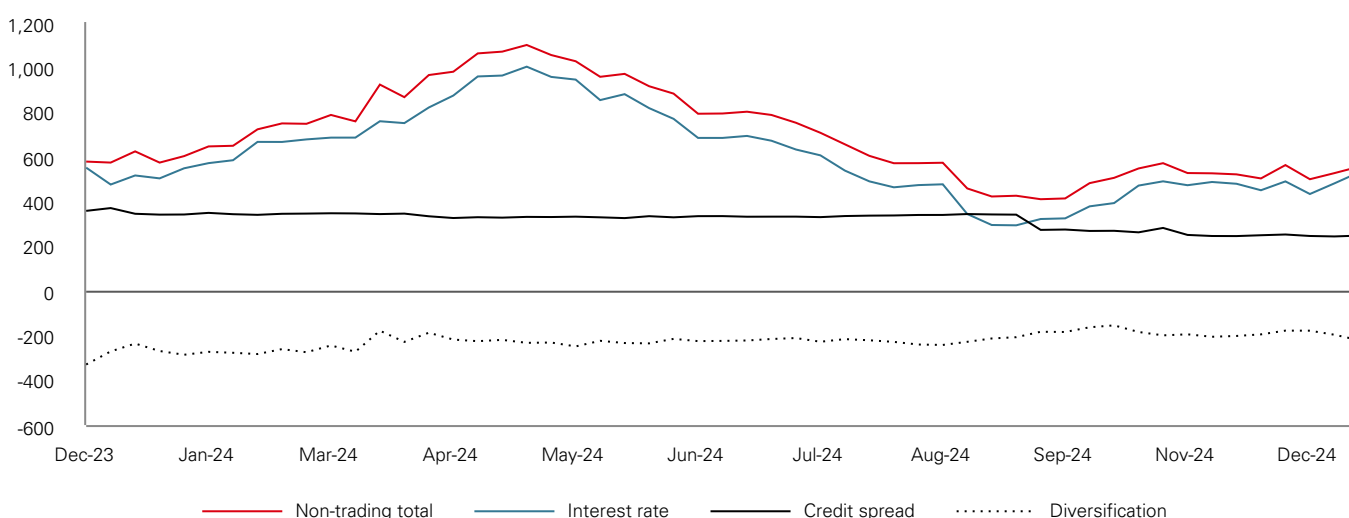
- The use of a 10-day holding period for risk management purposes of non-trading books is only an indication of exposure and not indicative of the time period required to hedge or liquidate positions.
- The use of a 99% confidence level by definition does not take into account losses that might occur beyond this level of confidence.

Non-trading VaR includes non-trading financial instruments held in portfolios managed by Global Treasury. The management of interest rate risk in the banking book is described further in 'Banking net interest income sensitivity' on page 212.

The interest rate risk on the fixed-rate securities issued by HSBC Holdings is not included in the Group non-trading VaR. The management of this risk is described on page 215. Non-trading VaR also excludes the equity risk on securities held at fair value and non-trading book foreign exchange risk.

The daily levels of total non-trading VaR in 2024 are set out in the graph below.

Weekly VaR (non-trading portfolios), 99% 10 day (\$m)



The Group non-trading VaR for 2024 is shown in the table below.

Non-trading VaR, 99% 10 day

(Audited)

	Interest rate \$m	Credit spread \$m	Portfolio diversification ¹ \$m	Total ² \$m
Balance at 31 Dec 2024	528.4	246.1	(220.7)	553.8
Average	603.7	315.1	(222.9)	695.8
Maximum	1,000.6	369.1	—	1,097.6
Minimum	292.1	242.4	—	408.7
Balance at 31 Dec 2023	549.6	356.7	(329.5)	576.7
Average	494.0	266.1	(201.6)	558.6
Maximum	638.6	368.0	—	709.4
Minimum	344.0	174.5	—	401.5

1 Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types – such as interest rate and credit spreads – together in one portfolio. It is measured as the difference between the sum of the VaR by individual risk type and the combined total VaR. A negative number represents the benefit of portfolio diversification. As the maximum and minimum occurs on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for these measures.

2 The total VaR is non-additive across risk types due to diversification effects.

The VaR for non-trading activity decreased by \$23m from \$577m at 31 December 2023 to \$554m at 31 December 2024 due to the 2022 inflation-driven stress period dropping out of our two-year historical scenario window, decreasing the volatility calibrated by the model during the second half of the year, largely offset by an increase in the duration risk of Global Treasury's portfolios. Prior to this change in calibration, non-trading VaR peaked at \$1,097m during May 2024, driven by an increase in the duration of Global Treasury's portfolios,

higher market yields and more volatile historical scenarios from March 2022. The average portfolio diversification effect between interest rate and credit spread exposure remained broadly stable. Non-trading VaR is managed and controlled through a limit approved by the Group Chief Risk and Compliance Officer for HSBC Holdings. The limit was rescaled higher to reflect the change in the basis of preparation detailed above.

Sensitivity of capital and reserves

Global Treasury maintains a portfolio of high-quality liquid assets for contingent liquidity and NII stabilisation purposes, which is in part accounted for under a hold-to-collect-and-sell business model. This hold-to-collect-and-sell portfolio, together with any associated derivatives in designated hedge accounting relationships, is accounted for at fair value through other comprehensive income and has an impact on CET1. The portfolio represents the vast majority of

our hold-to-collect-and-sell capital risk and is risk managed with a variety of tools, including risk sensitivities and value at risk measures.

The table below measures the sensitivity of the value of this portfolio to an instantaneous 100 basis point increase in interest rates, based on the risk sensitivity of a shift in value for a 1 basis point ('bps') parallel movement in interest rates.

Sensitivity of hold-to-collect-and-sell reserves to interest rate movements

	\$m
At 31 Dec 2024	
+100 basis point parallel move in all yield curves	(3,433)
As a percentage of total shareholders' equity	(1.86)%
At 31 Dec 2023	
+100 basis point parallel move in all yield curves	(2,264)
As a percentage of total shareholders' equity	(1.22)%

The increase in the sensitivity of the portfolio during 2024 was mainly driven by an increase in NII stabilisation hedging in line with our strategy. While this hedging has increased the capital sensitivity of the portfolio it has the effect of further dampening the volatility of our banking NII over time and through the cycle. The figures in the table above do not take into account the effects of interest rate convexity. The portfolio mostly comprises vanilla sovereign bonds in a variety of currencies and the primary risk is interest rate duration risk, although the portfolio also generates asset swap, credit spread and asset spread risks that are managed within appetite as part of our risk management framework. A minus 100bps shock would lead to an approximately symmetrical gain.

Alongside our monitoring of the hold-to-collect-and-sell reserve sensitivity, we also monitor the sensitivity of reported cash flow hedging reserves to interest rate movements on a yearly basis by

assessing the expected reduction in valuation of cash flow hedges due to parallel movements of plus or minus 100bps in all yield curves.

The following table details the sensitivity of our cash flow hedging reserves to the stipulated movements in yield curves at the year end. The sensitivities are indicative and based on simplified scenarios. We apply flooring on negative rates in the minus 100bps scenario in this assessment. The effect of this flooring is immaterial at the end of 2024.

The sensitivity of the cash flow hedging reserve increased compared with 31 December 2023. The increase was mainly driven by our NII stabilisation activity. Our exposure to fixed rate pound sterling hedges continued to be the largest in size and in terms of year-on-year increase. Hong Kong dollar and euro hedges contributed the majority of the rest of the increase in exposure.

Sensitivity of cash flow hedging reported reserves to interest rate movements

	\$m
At 31 Dec 2024	
+100 basis point parallel move in all yield curves	(4,496)
As a percentage of total shareholders' equity	(2.43)%
-100 basis point parallel move in all yield curves	4,500
As a percentage of total shareholders' equity	2.43%
At 31 Dec 2023	
+100 basis point parallel move in all yield curves	(3,436)
As a percentage of total shareholders' equity	(1.85)%
-100 basis point parallel move in all yield curves	3,474
As a percentage of total shareholders' equity	1.87%

Third-party assets in Markets Treasury

Third-party assets in Markets Treasury increased by 2% compared with 31 December 2023. The net increase of \$19bn is partly reflective of higher commercial surpluses during the year, with the increase of \$69bn in 'Financial Investments' and the decrease of

\$17bn in 'Cash and balances at central banks' largely driven by NII stabilisation activity. Additionally, a decrease of \$22bn in 'Other' is attributed to the disposal of HSBC Bank Canada assets previously classified as held for sale.

Third-party assets in Markets Treasury

	2024 \$m	2023 \$m
Cash and balances at central banks	261,284	278,289
Trading assets	163	238
Loans and advances:		
– to banks	66,518	78,667
– to customers	743	1,083
Reverse repurchase agreements	47,812	45,419
Financial investments	465,123	396,259
Other	12,232	34,651
At 31 Dec	853,875	834,606

Defined benefit pension plans

Market risk arises within our defined benefit pension plans to the extent that the obligations of the plans are not fully matched by assets with determinable cash flows.

For details of our defined benefit plans, including asset allocation, see Note 5 on the financial statements, and for pension risk management, see page 203.

Additional market risk measures applicable only to the parent company

HSBC Holdings monitors and manages foreign exchange risk and interest rate risk. In order to manage interest rate risk, HSBC Holdings uses the projected sensitivity of its NII to future changes in yield curves.

Foreign exchange risk

HSBC Holdings' foreign exchange exposures derive almost entirely from the execution of structural foreign exchange hedges on behalf of the Group. At 31 December 2024, HSBC Holdings had forward foreign exchange contracts of \$33.9bn (2023: \$33.8bn) to manage the Group's structural foreign exchange exposures.

For further details of our structural foreign exchange exposures, see page 211.

Sensitivity of banking net interest income

HSBC Holdings monitors banking NII sensitivity in the first, second and third years. Banking NII sensitivity includes the impact of AT1 instruments as well as vanilla foreign exchange swaps to optimise cash management. For 2024, we have changed the HSBC Holdings disclosure from NII sensitivity to banking NII sensitivity to reflect our internal management of interest rate sensitivity, aligned to the Group approach (see page 212). Comparative data for the financial year ended 31 December 2023 have been re-presented accordingly.

These sensitivities assume that any issuance where HSBC Holdings has an option to redeem at a future call date is called at that date.

The tables below set out the effect on HSBC Holdings' future banking NII of an immediate shock of +/-100bps to the current market-implied path of interest rates across all currencies on 31 December 2024.

The banking NII sensitivities shown are indicative and based on simplified scenarios. An immediate interest rate rise of 100bps would decrease projected banking NII for the 12 months to 31 December 2025 by \$156m. Conversely, an immediate fall of 100bps would increase projected banking NII for the 12 months to 31 December 2025 by \$156m.

Overall the banking NII sensitivity is mainly driven by interest rate sensitive liabilities funding equity (non-interest bearing) investments in subsidiaries.

Banking NII sensitivity to an instantaneous change in yield curves (12 months) – Year 1 sensitivity by currency

	\$ \$m	HK\$ \$m	£ \$m	€ \$m	Other \$m	Total \$m
Change in Jan 2025 to Dec 2025 (based on balance sheet at 31 Dec 2024)						
+100bps parallel	(194)	—	31	7	—	(156)
-100bps parallel	194	—	(31)	(7)	—	156
Change in Jan 2024 to Dec 2024 (based on balance sheet at 31 Dec 2023)						
+100bps parallel	(228)	—	34	8	(1)	(187)
-100bps parallel	228	—	(34)	(8)	1	187

Banking NII sensitivity to an instantaneous down 100bps parallel change in yield curves – Year 2 and Year 3 sensitivity by currency

	\$ \$m	HK\$ \$m	£ \$m	€ \$m	Other \$m	Total \$m
Change in banking NII (based on balance sheet at 31 Dec 2024)						
Year 2 (Jan 2026 to Dec 2026)	182	—	(36)	(24)	—	122
Year 3 (Jan 2027 to Dec 2027)	192	—	(28)	(27)	—	137
Change in banking NII (based on balance sheet at 31 Dec 2023)						
Year 2 (Jan 2025 to Dec 2025)	194	—	(47)	(8)	(1)	138
Year 3 (Jan 2026 to Dec 2026)	194	—	(44)	(29)	(3)	118

The figures represent hypothetical movements in banking NII based on projected yield curve scenarios, HSBC Holdings' current interest rate risk profile and assumed changes to that profile during the next three years.

The sensitivities represent our assessment of the change to a hypothetical base case based on a static balance sheet assumption, and do not take into account the effect of actions that could be taken to mitigate this interest rate risk.

Market risk

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Overview

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. 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 further details of market risk in non-trading portfolios, see page 212 of the Annual Report and Accounts 2024.

Market risk management

Key developments in 2024

There were no material changes to our policies and practices for the management of market risk in 2024.

Governance and structure

The following diagram summarises the main business areas where trading market risks reside and the market risk measures used to monitor and limit exposures.

Risk types	Trading risk
	<ul style="list-style-type: none"> – Foreign exchange and commodities – Interest rates – Credit spreads – Equities
Global business	GBM
Risk measure	Value at risk Sensitivity Stress testing

The objective of our risk management policies and measurement techniques is to manage and control market risk exposures to optimise return on risk while maintaining a market profile consistent with our established risk appetite.

Market risk is managed and controlled through limits approved by the Group Chief Risk and Compliance Officer. These limits are allocated across business lines and to the Group’s legal entities. Each major operating entity has an independent market risk management and control sub-function, which is responsible for measuring, monitoring and reporting market risk exposures against limits on a daily basis. Each operating entity is required to assess the market risks arising in its business and to transfer them either to its local Markets and Securities Services or Markets Treasury unit for management, or to separate books managed under the supervision of the local ALCO. The Traded Risk function enforces the controls around trading in permissible instruments approved for each site as well as changes that follow the approval of new products. Traded Risk also restricts trading in the more complex derivative products to only those offices with appropriate levels of product expertise and control systems.

Key risk management processes

Monitoring and limiting market risk exposures

Our objective is to manage and control market risk exposures while maintaining a market profile consistent with our risk appetite.

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

Sensitivity analysis

Sensitivity analysis measures the impact of movements in individual market factors on specific instruments or portfolios, including interest rates, foreign exchange rates and equity prices. We use sensitivity measures to monitor the market risk positions within each risk type. Granular sensitivity limits are set for trading desks with consideration of market liquidity, customer demand and capital constraints, among other factors.

Value at risk

(Audited)

VaR is a technique for estimating potential losses on risk positions 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 integrated into market risk management and calculated for all trading positions regardless of how we capitalise them. Where we do not calculate VaR explicitly, we use alternative tools as summarised in the ‘Stress testing’ section below.

Our models are predominantly based on historical simulation that incorporates the following features:

- historical market rates and prices, which are calculated with reference to foreign exchange rates, commodity prices, interest rates, equity prices and the associated volatilities;
- potential market movements that are calculated with reference to data from the past two years; and
- calculations to a 99% confidence level and using a one-day holding period.

The models also incorporate the effect of option features on the underlying exposures. The nature of the VaR models means that an increase in observed market volatility will lead to an increase in VaR 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 market moves may not encompass all potential market events, particularly those that 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 the close of business and therefore does not reflect intra-day exposures.

Risk not in VaR framework

The risks not in VaR ('RNIV') framework captures and capitalises material market risks that are not adequately covered in the VaR model.

Risk factors are reviewed on a regular basis and are either incorporated directly into the VaR models, where possible, or quantified through either 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 but excluded from the VaR measure used for regulatory back-testing.

Stress-type RNIVs include a deal contingent derivatives capital charge to capture risk for these transactions and a de-peg risk measure to capture risk to pegged and heavily-managed currencies.

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, although plausible, 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.

Back-testing

We routinely validate the accuracy of our VaR models by back-testing the VaR metric against both actual and hypothetical profit and loss. Hypothetical profit and loss excludes non-modelled items such as fees, commissions and revenue related to 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 therefore not necessarily 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 set levels of our Group entity hierarchy.

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

Market risk in 2024

The past year had a busy political agenda, with the November US election being the main event. Geopolitics remained prominent amid ongoing tensions in the Middle East and the Russia-Ukraine war. Major central banks began their easing cycles in 2024, with the US Federal Reserve cutting its policy rate by 1% since September, while the ECB and some other European central banks implemented rate cuts starting in June. In contrast, the Bank of Japan raised its overnight rate in March, ending a prolonged period of negative interest rates and ceasing yield curve control.

Throughout the year, government bond yields generally trended upward, except during the third quarter, largely driven by volatile inflation figures and shifting central bank expectations. In Europe, the yield spread between France and Germany widened amid uncertainties surrounding French fiscal policy following local legislative elections. Global equities reached multiple record highs in the US and Europe, buoyed by strong corporate earnings and positive sentiment in the technology sector. Global markets rebounded from a short period of volatility in August, triggered by the unwinding of carry trades due to rising Japanese government bond yields, US recession concerns, and equity market valuations.

In foreign exchange markets, the trend of a strengthening US dollar continued against most developed and emerging market currencies. The euro approached parity with the US dollar, while the yen weakened to multi-decade lows. Credit markets performed positively throughout the year, with a more pronounced tightening of high-yield credit spreads compared with investment-grade spreads, despite a broad widening of spreads in August.

We continued to manage market risk prudently during 2024. Sensitivity exposures and VaR remained within appetite as the business pursued its core market-making activity in support of our customers. Market risk was managed using a complementary set of risk measures and limits, including stress testing and scenario analysis.

Trading portfolios

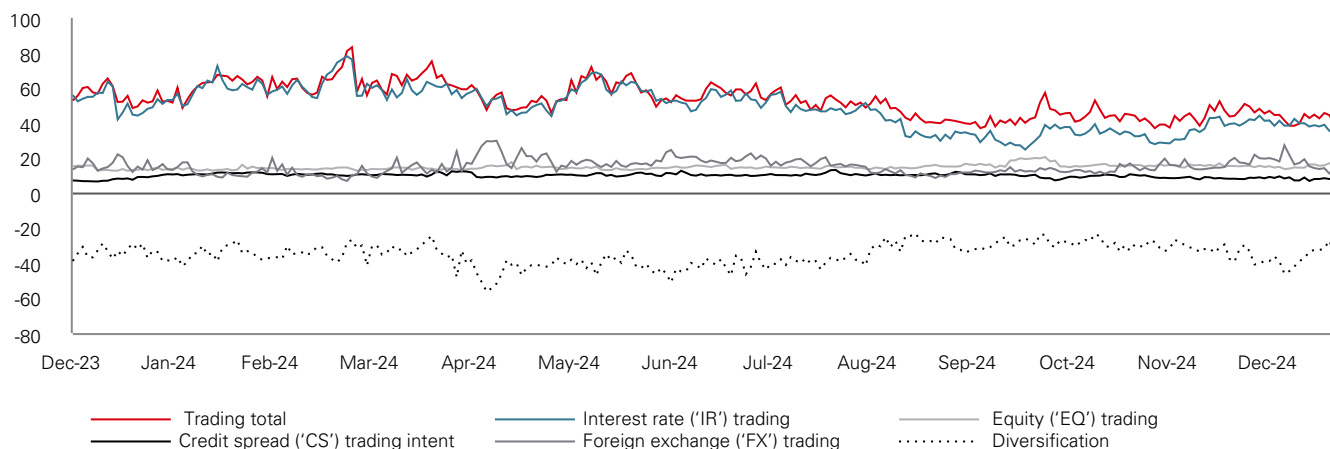
Value at risk of the trading portfolios

Trading VaR predominantly resides within the Markets and Securities Services business. As of 31 December 2024, Trading VaR stood at \$38.3m, down from \$52.8m as of 31 December 2023. At the end of December 2024, Trading VaR was mainly driven by exposures to interest rate risk factors from the Global Debt Markets and Global Foreign Exchange business lines to facilitate client-driven activity. Trading VaR peaked in March 2024 due to the sensitivity of the trading book to interest rates movements, coupled with relatively large interest rate shocks captured in the VaR scenario window. VaR reduced in the second half of 2024, mainly as a result of some volatile scenarios rolling off the VaR scenario window.

Risk review

The daily levels of total trading VaR during 2024 are set out in the graph below.

Daily VaR (trading portfolios), 99% 1 day (\$m)



The Group trading VaR for the year is shown in the table below.

Trading VaR, 99% 1 day¹

(Audited)

	Foreign exchange and commodity \$m	Interest rate \$m	Equity \$m	Credit spread \$m	Portfolio diversification ² \$m	Total ³ \$m
Balance at 31 Dec 2024	14.6	34.9	16.3	8.2	(35.7)	38.3
Average	15.2	48.3	14.8	9.9	(35.1)	53.1
Maximum	29.8	78.1	20.5	13.1		83.3
Minimum	6.9	24.8	12.7	6.6		37.0
Balance at 31 Dec 2023	13.4	55.9	15.2	7.2	(38.9)	52.8
Average	16.2	53.9	19.0	11.6	(40.8)	59.8
Maximum	24.6	86.0	27.8	16.5		98.2
Minimum	9.3	25.5	13.4	6.6		34.4

1 Trading portfolios comprise positions arising from the market-making and warehousing of customer-derived positions.

2 Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types – such as interest rate, equity and foreign exchange – together in one portfolio. It is measured as the difference between the sum of the VaR by individual risk type and the combined total VaR. A negative number represents the benefit of portfolio diversification. As the maximum and minimum occurs on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for these measures.

3 The total VaR is non-additive across risk types due to diversification effects.

The table below shows trading VaR at a 99% confidence level compared with trading VaR at a 95% confidence level at 31 December 2024. This comparison facilitates the benchmarking of the trading VaR, which can be stated at different confidence levels, with financial institution peers. The 95% VaR is unaudited.

Comparison of trading VaR, 99% 1 day vs trading VaR, 95% 1 day

	Trading VaR, 99% 1 day \$m	Trading VaR, 95% 1 day \$m
Balance at 31 Dec 2024	38.3	23.4
Average	53.1	33.0
Maximum	83.3	48.9
Minimum	37.0	22.0
Balance at 31 Dec 2023	52.8	35.3
Average	59.8	36.8
Maximum	98.2	53.3
Minimum	34.4	21.0

Market risk balance sheet linkages

The following balance sheet lines in the Group's consolidated position are subject to market risk:

Trading assets and liabilities

The Group's trading assets and liabilities are in almost all cases originated by GBM. Other than a limited number of exceptions, these

assets and liabilities are treated as traded risk for the purposes of market risk management. The exceptions primarily arise in Global Banking where the short-term acquisition and disposal of assets are linked to other non-trading-related activities such as loan origination.

Derivative assets and liabilities

We undertake derivative activity for three primary purposes: to create risk management solutions for clients, to manage the portfolio risks arising from client business, and to manage and hedge our own risks. Most of our derivative exposures arise from sales and trading activities within GBM. The assets and liabilities included in trading

VaR give rise to a large proportion of the income included in net income from financial instruments held for trading or managed on a fair value basis. Adjustments to trading income such as valuation adjustments are not measured by the trading VaR model.

■ For information on the accounting policies applied to financial instruments at fair value, see Note 1.2 on the financial statements.

Climate risk TCFD

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Overview

Our climate risk approach 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 the 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, 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 ambition or failing to meet external expectations related to net zero; 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.

The tables below provide an overview of the climate risk drivers and thematic issues considered within HSBC's climate risk approach.

Climate risk – risk drivers

		Details	Potential impacts	Time horizons
Physical	Acute	Increased frequency and severity of weather events causing disruption to business operations.	<ul style="list-style-type: none"> – Decreased real estate values or stranded assets. – Decreased household income and wealth. – Increased costs of legal and compliance. – Increased public scrutiny. – Decreased profitability. – Lower asset performance. 	Short term Medium term Long term
	Chronic	Longer-term shifts in climate patterns (e.g. sustained higher temperatures, sea level rise, shifting monsoons or chronic heat waves).		
Transition	Policy and legal	Mandates on, and regulation of products and services and/or policy support for low-carbon alternatives. Litigation from parties who have suffered loss and damage from climate impacts.		
	Technology	Replacement of existing products with lower emissions options.		
	End-demand (market)	Changing consumer demand from individuals and corporates.		
	Reputational	Increased scrutiny following a change in stakeholder perceptions of climate-related action or inaction.		

Approach

We recognise that the physical impacts of climate change and the transition to a net zero economy can create significant financial risks for companies, investors and the financial system. HSBC may be affected by climate risks either directly or indirectly through our relationships with customers, which could result in both financial and non-financial impacts.

Our climate risk approach aims to effectively manage the material climate risks that could impact our operations, financial performance and stability, and reputation. It is informed by the evolving expectations of our regulators.

We continue to develop our approach and climate risk capabilities across our businesses, by prioritising sectors, portfolios and counterparties with the highest impacts, and recognise that this is a long-term iterative process. This includes increasing coverage and incorporating more mature data, climate analytics, frameworks and tools, and responding to emerging industry best practice and climate-related regulations.

This also necessitates reflecting on how climate risk continues to evolve in the real world, and improving how we embed climate risk factors into strategic planning, transactions and decision making across our businesses. For example, our mergers and acquisitions process considers potential climate and sustainability-related targets, net zero transition plans and climate strategy, and how this relates to HSBC.

Our climate risk approach is aligned to our Group-wide risk management framework and three lines of defence model, which sets out how we identify, assess and manage our risks. For further details of the three lines of defence framework, see page 129.

Risk review

Climate risk – thematic issues

Net zero alignment risk	Net zero ambition risk	Failing to set or adapt our net zero ambition and broader business strategy in alignment with key stakeholder expectations, latest scientific understanding and commercial objectives.
	Net zero execution risk	Failing to meet our net zero ambition due to taking insufficient or ineffective actions, or due to the actions of clients, suppliers and other stakeholders or due to other external factors.
	Net zero reporting risk	Failing to report emissions baselines and targets, and performance against these accurately due to data, methodology and model limitations.
Risk of greenwashing	Firm	Making inaccurate, unclear, misleading or unsubstantiated claims in relation to our sustainability commitments and targets, as well as the reporting of our performance towards them.
	Product	Making inaccurate, unclear, misleading or unsubstantiated claims in relation to products or services offered to clients that have stated sustainability objectives, characteristics, impacts or features.
	Client	Making inaccurate, unclear, misleading or unsubstantiated claims as a consequence of our relationships with clients or transactions we undertake with them, where their sustainability commitments or related performance are misrepresented or are not aligned to our own commitments.

Our annual climate risk materiality assessment helps us to understand how climate risk may impact HSBC’s risk taxonomy. The assessment considers short-term (up to 2026), medium-term (2027-2035) and long-term (2036-2050) periods. The table below provides a summary of how climate risk may impact a subset of HSBC’s principal risks.

In addition to this assessment, we also consider climate risk in our emerging risk reporting and scenario analysis (for further details, see ‘Top and emerging risks’ on page 39).

Climate risk drivers	Credit risk	Traded risk	Reputational risk ¹	Regulatory compliance risk ¹	Resilience risk	Other financial and non-financial risk types
Physical risk	◆	◆			◆	◆
Transition risk	◆	◆	◆	◆	◆	◆

1 Our climate risk approach identifies thematic issues such as net zero alignment risk and the risk of greenwashing, which are most likely to materialise in the form of reputational, regulatory compliance and litigation risks.

Climate risk management

Key developments in 2024

Our climate risk programme continues to support the development of our climate risk management capabilities. The following outlines key developments in 2024:

- We have started to enhance our approach to managing net zero alignment risk in our wholesale portfolio, through developing portfolio steering capabilities and revenue assessments.
- We enhanced our approach to assessing the impact of climate change on capital, focusing on credit, market and operational risk.
- We enhanced our internal climate scenario analysis, including through improvements to input data and models (e.g. for the power and utilities sector). For further details of scenario analysis, see page 223.
- We enhanced our approach to managing and mitigating the risk of greenwashing.
- We developed climate risk guidelines for relationship managers to further embed climate risk considerations into credit risk assessments.

While we have made progress, further work remains, including the need to develop additional metrics and tools to measure our exposure to climate-related risks.

Governance and structure

The Board takes overall supervisory responsibility for our ESG strategy, overseeing executive management in developing the approach, execution and associated reporting.

The Group Chief Risk and Compliance Officer is the senior manager responsible for the management of climate risk under the UK Senior Managers Regime, holding overall accountability for the Group’s climate risk programme.

The Sustainability Working Group, established in 4Q24, oversees and provides guidance on the Group-wide medium and longer-term sustainability strategy.

The ESG Committee has oversight of ESG strategy, policy, material commitments and external disclosure. It is co-chaired by the Group CEO and the Group Chief Sustainability Officer.

The Group Reputational Risk Committee provides recommendations and advice on significant reputational risk matters with impacts across the Group.

The Environmental Risk Steering Meeting (formerly the Environmental Risk Oversight Forum) provides oversight of environmental risk and the risk of greenwashing. Equivalent forums have been established at a regional level.

The Group Risk Management Meeting and the Group Risk Committee receive regular updates on our climate risk profile and the progress of our climate risk programme.

■ For further details of the Group’s ESG governance structure, see page 74.

Risk appetite

Our climate risk appetite forms part of the Group’s risk appetite statement and supports the business in delivering our net zero ambition effectively and sustainably.

Our climate risk appetite statement is approved and overseen by the Board. Climate risk indicators are reported on a quarterly basis for oversight by the Group Risk Management Meeting and the Group Risk Committee.

Policies, processes and controls

We continue to integrate climate risk into policies, processes and controls across many areas of our organisation, and we will continue to update these as our climate risk management capabilities mature over time.

■ For further details of how we manage climate risk across our global businesses, see page 60.

Embedding our climate risk approach

The table below provides further details of how we have embedded the management of climate risk across key risk types. For further details of our internal scenario analysis, see 'Insights from climate scenario analysis' on page 223.

Risk type	Our approach
Wholesale credit risk	<p>We have metrics in place to monitor the exposure of our wholesale corporate lending portfolio to six high transition risk sectors, as shown in the below table. As at 31 December 2024, the overall exposure to the six high transition risk sectors was 18% of total gross carrying amount of wholesale loans and advances. These disclosures cover the whole of the value chain of the sector. The sector classifications are based on internal HSBC definitions and can be judgemental in nature. We use publicly available data as well as internal data to determine the appropriate sector. The classification of our clients into sectors is performed with inputs from subject matter experts. The sector classifications are subject to the remediation of ongoing data quality challenges and continuous improvement of our ongoing processes. The data will continue to be enhanced and refined in future years.</p> <p>Our relationship managers engage with our key wholesale customers, including those in higher transition risk sectors, through a transition engagement questionnaire ('TEQ'). In 2024, the TEQ was expanded to cover all geographies. The TEQ helps to gather information and assess our wholesale customers' business model alignment to a net zero transition and their exposure to physical and transition risks. We use the responses to the questionnaire to risk-assess our key wholesale customers.</p> <p>Our credit policies require that relationship managers comment on climate risk factors in credit applications for new money requests and annual credit reviews. Our credit policies also require manual credit risk rating overrides if climate is deemed to have a material impact on credit risk under 12 months if not already captured under the original credit risk rating.</p> <p>Key developments to our framework in 2024 included the expansion of the TEQ, as set out above, and additionally the development of climate risk guidelines for relationship managers to further embed climate risk considerations into credit risk assessments.</p> <p>Key challenges for further embedding climate risk into credit risk management relate to the availability of adequate physical risk data to assess impacts on our wholesale customers.</p>

Wholesale loan exposure to high transition risk sectors at 31 December 2024

	Units	Automotive	Chemicals	Construction, Contracting & Building Materials ⁵	Metals and mining	Oil and gas	Power and utilities	Total 2024
Wholesale loan exposure as a proportion of total wholesale loans and advances ^{1,2,3,4}	%	4	2	3	2	3	4	18

- Percentages shown in the table also include green and other sustainable finance loans, which support the transition to the net zero economy. The methodology for quantifying our exposure to high transition risk sectors and the transition risk metrics will evolve over time as more data becomes available and is incorporated in our risk management systems and processes. We are aiming to develop the appropriate systems, data and processes to provide enhanced disclosures in future years.
- Counterparties are allocated to the high transition risk sectors via a two-step approach. Firstly, where the main business of a group of connected counterparties is in a high transition risk sector, all lending to the group is included in one high transition risk sector irrespective of the sector of each individual obligor within the group. Secondly, where the main business of a group of connected counterparties is not in a high transition risk sector, only lending to individual obligors in the high transition risk sectors is included. The main business of a group of connected counterparties is identified by the industry that generates the majority of revenue within a group. Customer revenue data utilised during this allocation process is the most recent readily available and will not always align to our own reporting period.
- The six high transition risk sectors make up 18% of total gross carrying amount of wholesale loans and advances to banks and customers of \$596bn. Amounts include assets held for sale.
- The sectors used to monitor the wholesale corporate lending portfolio set out in the table are different to the scope of sectors we focus on for financed emissions targets and reporting. The latter focus on the most carbon-emissive sectors, and the parts of the value chain where we believe the majority of emissions are produced to help reduce double counting. These sectors are set out within 'Financed emissions' section on page 48.
- Construction, Contracting & Building Materials has been renamed from Construction & Building Materials. The name has been revised to clarify that parties who build assets for end clients, investors and landowners, which should be included in this sector for their associated construction risks.

Retail credit risk	<p>Climate risk may impact retail credit risk through an increase in credit losses on our global retail mortgage portfolio, primarily due to the impact of physical risk. Our current climate assessment, in line with last year's assessment, indicates that our retail mortgage portfolio remains resilient to climate risk, with impact severity muted at a portfolio level given that our book has diversified property locations, with insurance coverage being a key loan covenant. Our retail credit risk mortgage policy requires that every mortgage market conducts an annual review of their climate risk management framework, to ensure they remain fit for purpose. Within our mortgage portfolios, properties or areas with potentially heightened physical risk are identified and assessed locally with exposure monitored using risk indicators. A reduction in property value, higher insurance costs and insurance availability are potential future negative financial impacts for properties with higher physical risk.</p>
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UK retail mortgage book

The UK is our largest mortgage market, and as of November 2024, made up 46.7% of our global mortgage portfolio. Our ESG Data Pack includes our climate risk exposures for this portfolio across regions. The maturity profile of the UK mortgage book shows that the average remaining contractual term in the UK is 21.8 years. However, with some customers undertaking refinancing options during this term, the average term of the mortgage can be reduced to between five and eight years. This means our strategic approach to climate risk considers both present day risk and long-term forward-looking risk, given that customers may choose to remain with us over the lifespan of the loan. Please see the result of our climate scenario analysis on page 226.

Physical risk

For the UK mortgage book, flood data is sourced from a third-party data provider, and considers the UK only, covering present day risk from tidal, river and surface water/flash flooding baselined to 2021. A flood risk rating score of 0-100 is provided with 100 being highest risk. Flood risk scores are based on the average annual loss generated using flood hazard frequency, flood depths and based on the probability of flooding events occurring. For the UK mortgage book, flood data is available for 93.7% of the mortgage book of which 0.9% is at a very high risk of flooding, with 2.7% of the book at a high risk of flooding. Geographically, by lending balances, our highest risk exposures are the Greater London and South-East regions. During 2024 we changed our flood risk classification of very high risk to align to the provider's flood score bands. The postcode data used in the regional flood table has also been refined to incorporate a more granular approach. This has helped to aid the regional allocation and as a result the 2023 data has been restated to reflect this.

Risk review

Risk type	Our approach										
Retail credit risk (continued)	<p>Transition risk</p> <p>We monitor the energy performance certificate ('EPC') ratings of individual properties from A (highest efficiency) through to G (least efficient) as EPCs are commonly used as an indicator of transition risk in the UK mortgage book. All UK rental properties must have a minimum EPC rating of E. It is broadly expected that the rental market will need to transition all rented properties to an EPC rating of C by 2030. We track EPC ratings for both owner occupied ('OO') and buy to let ('BTL'), which are 96.6% of the portfolio and 3.4% of the portfolio by lending value, respectively. The EPC profile is broadly improving (to higher bands) but is evolving slowly, and the pace is dependent on regulation. Where we do not hold a current EPC, we have included expired EPCs for 2024. EPCs are a reliable proxy as energy efficiency ratings gradually improve over time.</p> <p>UK residential mortgages tenor (remaining mortgage term by balance (\$m)) as at 31 December 2024¹</p> <table border="1"> <thead> <tr> <th>Tenor</th> <th>Remaining mortgage balance (\$m)</th> </tr> </thead> <tbody> <tr> <td><1 year</td> <td>357</td> </tr> <tr> <td>1 to 5 years</td> <td>3,589</td> </tr> <tr> <td>>5 years</td> <td>159,452</td> </tr> <tr> <td>Weighted average of remaining mortgage term (years)</td> <td>21.8</td> </tr> </tbody> </table> <p>There has been an increase observed across the market in the number of people seeking new mortgages of up to 35 years or more due to rising house prices, higher interest rates and cost of living challenges although the average life of an HSBC mortgage loan is approximately between five and eight years due to refinancing. Despite this, our strategic approach to climate risk considers present day and long-term risk given customers may remain on our book for the whole loan term.</p> <p>■ For further details of flood risk and the EPC breakdown of our UK retail mortgage portfolio, see our ESG Data Pack at www.hsbc.com/esg.</p> <p>¹ The table includes instances where individual properties have multiple associated accounts and mortgage balances. These are aggregated to a property level and the longest term remaining is taken as the tenor. UK mortgage balances presented here are not directly reconcilable to other tables in the document due to differences in the basis of preparation.</p>	Tenor	Remaining mortgage balance (\$m)	<1 year	357	1 to 5 years	3,589	>5 years	159,452	Weighted average of remaining mortgage term (years)	21.8
Tenor	Remaining mortgage balance (\$m)										
<1 year	357										
1 to 5 years	3,589										
>5 years	159,452										
Weighted average of remaining mortgage term (years)	21.8										
Treasury risk	<p>Climate risk may impact Treasury risk through increased regulatory requirements and from changes to customer behaviours, which may result in increased deposit outflows.</p> <p>As part of our ICAAP, we assess the impact of climate change on capital, focusing on credit risk, market risk and operational risk and perform sensitivity analysis on our Internal Capital Planning Buffer.</p> <p>As part of our ILAAP, we assess how climate risk could impact the Group liquidity position. As part of our Internal Climate Scenario Analysis ('ICSA'), we have developed an exploratory scenario to understand the impact of a potential greenwashing event on our deposits. For further details, please see page 224.</p> <p>In October 2024 we published our Green Financing Framework, in alignment with the International Capital Market Association Green Bond Principles. This framework promotes transparency, forming part of our sustainability strategy and helping to further our aim of supporting our clients in transitioning to a net zero future.</p> <p>Pension risk</p> <p>Climate risk could result in additional costs within our defined benefit pension plans, due to changes in the pension plans' investment performance or through having to meet evolving regulatory requirements.</p> <p>Our global policies on the oversight of pension investments explicitly reflect climate considerations. Training has been provided to local management on how to consider ESG risks in pension investments. We also conduct an annual exercise to estimate the exposure of our largest pension plans to climate risk.</p> <p>Insurance risk</p> <p>Climate risk could result in losses on our insurance assets due to changes in macroeconomic parameters. We develop an annual plan to support the management of climate risk. This plan includes enhancing our stress test modelling capabilities to assess the solvency resilience of our insurance entities under prescribed climate scenarios.</p>										
Traded risk	<p>Climate risk may result in trading losses due to increases in market volatility and widening spreads from the macro and microeconomic impacts of transition and physical risk.</p> <p>We have implemented climate risk limits in global and regional trading mandates to monitor exposure to climate-sensitive sectors and countries across different asset classes in the Markets and Securities Services ('MSS') business.</p> <p>Our market risk policies include specific climate risk control requirements, which ensure that our climate risk limits and utilisations are monitored in the same way as market and traded credit risk exposures.</p> <p>We conduct monthly stress testing to understand the vulnerabilities of our trading portfolio to various climate scenarios, which are refined on an annual basis, with the results reported to global and regional senior management.</p>										
Reputational risk	<p>We manage the reputational impact of climate risk through our broader reputational risk framework, supported by our sustainability risk policies and metrics.</p> <p>Our sustainability risk policies form part of our broader risk management framework and are important mechanisms for managing risks, including delivering our net zero ambition. Our thermal coal phase-out and energy policies aim to drive down greenhouse gas emissions while supporting a just transition.</p> <p>Our global network of sustainability risk managers provides local policy guidance to relationship managers for the oversight of policy compliance, and in support of implementation across our wholesale banking activities. For further details of our sustainability risk policies, see page 61.</p> <p>We have developed risk appetite metrics to monitor our performance against our financed emissions targets. For further details of our targets, see page 52.</p>										
Regulatory compliance risk	<p>Regulatory Compliance is responsible for the oversight and management of climate-related risks that could cause breaches of our regulatory duties to customers and inappropriate market conduct. We have updated our policies to incorporate considerations for ESG and climate risks, particularly in relation to new and ongoing product management, sales outcomes, and product marketing.</p> <p>To support our key policies, we have also enhanced the underlying control frameworks and processes. This includes the integration of greenwashing risk and controls considerations in the design of new products and changes to them, as well as in relation to marketing materials. From a product sales perspective, we have established key control principles, encompassing the sales journey design, training and competence, supervision, sales quality, and governance.</p> <p>We operate an ESG and climate risk working group tasked with tracking and monitoring the integration of ESG and climate risk stewardship across our operations. This group also monitors regulatory and legislative developments related to the ESG and climate agenda.</p>										

Risk type	Our approach
Resilience risk	<p>Resilience risks may potentially crystallise through physical climate risk impacts to our buildings supporting service provision, or through physical and/or transition disruption to our third-party supply chain relationships.</p> <p>We have developed metrics to assess how physical risk may impact our critical properties and to monitor progress against our own operations' net zero ambitions.</p> <p>Our resilience risk policies are subject to continuous improvement to remain relevant to evolving climate risks.</p>
Model risk	<p>Model risk in the ESG context refers to the uncertainties and complexities inherent in the modelling of the financial impact translation of climate-related changes and scenarios.</p> <p>Climate risk models are used for climate scenario analysis, risk management, and emissions reporting among other use cases. Climate risk modelling is at a nascent stage, with challenges – including limitations in data availability, consistency and quality – shared across the industry.</p> <p>We have developed model risk procedures that set out the minimum control requirements for identifying, measuring and managing model risk for climate-related models. All the identified climate-related models are subject to HSBC's model lifecycle controls and policy.</p>
Financial reporting risk	<p>Climate risk impacts financial reporting risk through increased reporting requirements.</p> <p>The scope of financial reporting risk includes oversight of the accuracy and completeness of ESG and climate reporting. Our risk appetite statement states that HSBC has no appetite for material errors in ESG disclosures in our key markets, balanced with the evolving requirements and data availability.</p> <p>In addition, our internal controls incorporate requirements for addressing the risk of misstatement in ESG and climate reporting. To support this, a framework is used to provide guidance on control implementation over ESG and climate reporting and disclosures, which includes areas such as process and data governance, and risk assessment.</p>

Challenges

Key challenges include:

- the diverse range of internal and external data sources and data structures needed for climate-related reporting, which introduces data accuracy and reliability risks;
- data limitations on customer assets and supply chains, and methodology gaps, which hinder our ability to assess physical risks accurately;
- industry-wide data gaps on customer emissions and transition plan and methodology gaps, which limit our ability to assess transition risks accurately; and
- limitations in our management of net zero alignment risk due to known and unknown factors, including the limited accuracy and reliability of data, emerging methodologies, and the need to develop new tools to better inform decision making.

Insights from climate scenario analysis

Climate scenario analysis supports our strategy by assessing our potential exposures to risks and vulnerabilities under a range of climate scenarios. It is one of the key tools used to support the evaluation of portfolios in line with our net zero ambition.

The scenarios developed for climate scenario analysis are designed to examine HSBC's financial performance and capital resilience across a wide range of potential climate outcomes. They are sufficiently diverse to enable HSBC's key physical and transition risk vulnerabilities to be explored. For further details about these risks, see 'Overview under Climate risk' on page 219.

The analysis supports our approach to supporting our clients in the transition to net zero through assessing, where available, client level financial and credit risk metrics, and identifying where further analysis and climate risk focus is required.

From a risk management perspective, it enhances our understanding of the various transition and global warming pathways that may unfold and their plausibility, and informs how we manage implications to credit risk and revenues.

To meet our global regulatory needs, we produced several climate stress tests for regulators around the world, including the Hong Kong Monetary Authority ('HKMA'). We continue to enhance our climate scenario analysis exercises so that we can have a more comprehensive understanding of climate headwinds, risks and opportunities to support our strategic planning, actions and risk management.

Use of climate scenario outputs to support how we assess our climate resilience

As we navigate the transition to net zero, climate scenario analysis is used to support core banking processes such as client-facing activities, finance activities and risk management.

From a financial and capital planning perspective, we use climate scenario analysis to support the Group's internal capital adequacy assessment process ('ICAAP') to understand the amount of capital the Group should hold to meet identified climate risks, including integration of climate impacts into the Group's internal stress testing exercises. In addition, it informs strategic planning by providing insights on the size and timing of financial impacts, and IFRS 9 loss provisioning to ensure climate risks are adequately provisioned for in our balance sheet, such as expected credit losses ('ECL').

Climate scenario analysis also supports portfolio steering frameworks set up to help shape our Global Businesses strategy to meet net zero ambitions. Portfolio steering has been developed to enable the Group to manage sector portfolios in line with its net zero by 2050 ambition, while managing risks and capturing commercial opportunities. This enables HSBC to manage financed emissions within our appetite at portfolio level.

Climate scenario analysis supports the Group to assess the impact of our net zero ambitions on our revenue and profitability to help strengthen our understanding of business model risk, and supports building the organisation's awareness of climate change risk, informing our climate risk appetite.

Our climate scenarios

Our 2024 scenarios considered the key regions in which we operate and were designed to assess the impact on our balance sheet across three distinct periods: short term up to 2026; medium term from 2027 to 2035; and long term from 2036 to 2050.

Building on prior years, the 2024 climate scenario analysis exercise benefited from new scenarios, including: the introduction of a new Below 2 Degrees scenario that is aligned with the Paris Agreement goal of limiting global warming to below 2 degrees by the end of the century; and a bespoke near-term Severe Climate Stress scenario; and from updated climate scenario assumptions, which include increased sector and geographical granularity for all scenarios.

The 2024 climate scenarios range from a combination of highest physical risk to highest transition risk as follows:

Risk review

- Downside Physical Risk scenario: with significant global warming and physical risk events, assumes climate action is limited to currently implemented governmental policies, new decarbonisation policies fail to get introduced and global warming continues.
- Severe Climate Stress scenario: a near term disorderly climate action, triggered by unprecedented global weather events that lead to a short, sharp economic recession. In this scenario, extreme physical events pivot the public view on climate and the transition to net zero accelerates. This extreme stress scenario is used to test HSBC’s capital resilience to extreme and very unlikely events, combining downside climate and macroeconomic risks with a horizon ending in 2030.
- Current Commitments scenario: assumes a slower-than-required transition to a net zero economy, reflective of the current pace of transition, which assumes that climate action is limited to current governmental committed policies, including already implemented actions. This scenario helps us determine the actions we need to take to reach our net zero ambition while operating in a world that is not on a net zero by 2050 pathway.
- Below 2 Degrees scenario: a Paris Agreement-aligned scenario where net zero is achieved, but beyond the 2050 scenario horizon, as it assumes an orderly and gradual rise in the stringency of climate policies over time.
- Delayed Transition Risk scenario: in which action is delayed until 2030 but is then stringent and rapid enough to meet net zero by 2050, accentuating disorderly transition risks.

We have chosen these scenarios to provide a holistic view that supplements the Group’s current and future strategic thinking. The 2024 climate scenarios are underpinned by well-established industry bodies such as the Network for Greening Finance Phase IV, the Intergovernmental Panel on Climate Change (‘IPCC’) and International Energy Agency (‘IEA’), which are further enriched for additional granularity, ensuring consistency with industry-recognised work and reflecting the latest climate policy and economic outlook.

Characteristics of our scenarios

		← +Physical Risk Transition Risk+ →									
		Downside Physical Risk		Severe Climate Stress	Current Commitments	Below 2 Degrees	Delayed Transition Risk				
Scenario outcomes	Rise in global temperatures by 2100 (vs pre-industrial levels)	4.2°C		N/A	2.4°C		1.7°C		1.6°C		
	End of horizon	2050		2030	2050	2050		2050			
Underlying assumptions based on global averages	Global climate actions	Implemented policies only		Rapid & disorderly transition	All currently pledged policies	Gradually rising stringency of policies		Rapid & disorderly transition			
	Assumed pace of technology change and adoption	Slow change		Accelerated progress	Limited progress	Moderate change		Accelerates from 2030			
	Assumed socioeconomic impact	Very high		Very high	Moderate	High		Very high			
	Assumed carbon price (\$/tCO₂)	2030	2050	2030	2030	2050	2030	2050	2030	2050	
		9	8	326	30	78	46	136	30	558	
Scenario risk characteristics	Climate risk	Physical	▲ Higher	▲ Higher	▲ Higher	▲ Moderate	▼ Lower	▼ Lower	▼ Lower	▼ Lower	
		Transition	▼ Lower	▲ Higher	▲ Higher	▲ Moderate	▲ Moderate	▲ Higher	▲ Higher	▲ Higher	

Group outputs and our methodology

Climate scenario analysis allows us to model how different potential climate pathways may impact the resilience of our customers and our portfolios.

Our models continue to incorporate a range of climate-specific metrics that could potentially impact our customers, including expected production volumes, revenue, costs and capital expenditure.

We assess how these metrics interplay with economic factors, such as carbon prices, which represent the cost effects of climate-related policies that aim to discourage carbon-emitting activities and encourage low-carbon solutions. The expected result of higher carbon prices is a reduction in emissions as high-emission activities become uneconomical.

We analyse how climate risks impact principal risk types within our organisation, including credit and traded risks, non-financial risks and pension risk. While the following sections focus primarily on credit risk, we also set out how we continue to enhance and embed impacts from traded risk, pension risk and non-financial risks.

For our wholesale lending portfolio, the scope of our 2024 analysis prioritised high-emitting sectors, and we focused on delving deeper into a selection of high transition risk sectors. We have enhanced our climate models for the power and utilities and automotive sectors, while regional deep dives focused on select high risk and material sectors. The financial metrics used in our models included credit rating and client cashflow impacts to derive ECLs and risk-weighted assets (‘RWAs’), emissions and balance sheet impacts.

For our retail mortgage portfolio, our analysis focused on key regions and physical risk factors, including property locations, perils and insurance coverage.

The internal climate scenario analysis exercise showed that losses are influenced by their exposure to a variety of climate risks under different climate scenarios.

When assessing our long-term scenarios, climate-related losses are expected to remain minimal in the short term and likely to increase in the medium and longer time horizon, driven by the transition to a net zero economy and greater physical risk impacts.

Under the defined climate scenarios, transition risk impacts are predominantly driven by credit risk losses and are expected to create a drag on the Group’s profitability across all scenarios. In the Below 2 Degrees scenario, we expect to see an increase in projected credit losses that materialise in the medium term if early action to transition to net zero is taken. Credit losses are projected to increase in the medium to long term if the transition to net zero is delayed, which was underlined within the Delayed Transition scenario, where climate action begins later and is therefore expected to be more rapid and disruptive for our customers who will have less time to restructure their business models and reduce their carbon emissions.

The risks and opportunities will need to be carefully balanced, and by building a more climate-resilient balance sheet, we can reduce impairment risks and improve longer-term stability.

Increased lending opportunities exist during an accelerated transition period such as those expected in the Below 2 Degrees, Delayed

Transition Risk and Severe Climate Stress scenarios, noting that these scenarios also experience the risk of heightened impairments in the latter stages of their time horizons.

Modelling limitations

We continue to look for ways of enhancing our methodology to improve the effectiveness of our climate scenario analysis by incorporating lessons learnt from previous exercises and feedback from key stakeholders, including regulators. There are industry-wide limitations, particularly on data availability, although our models are designed to produce outputs that can support our assessment of the level of our climate resilience.

Climate scenario analysis requires considerable amounts of data and we are continuing to enhance coverage of our exposures. Where data is only available for a subset of our counterparties, we extrapolate the results observed where available to the wider population or dataset. We do not capture the second order impacts of climate risk exposures within our modelling approach, such as impacts on our counterparties from their supply chains.

For a broad overview of the models that we use for our climate scenario analysis, as well as graphs that show how global carbon prices and carbon emissions will differ under our climate scenarios, see our ESG Data Pack at www.hsbc.com/esg.

How climate change is impacting our wholesale lending portfolio

The 2024 climate scenario analysis exercise was designed to examine the climate risks and vulnerabilities of corporate counterparties across high transition risk sectors under climate scenarios of varying severity. Specifically, we measured the modelled effect on our projected ECL change over the short-, medium- and long-term horizons under each scenario. This was compared to a counterfactual scenario that excludes climate change impacts to isolate the climate only changes in ECL.

Counterparty specific analysis was conducted for those corporates where transition risk is elevated either from an overall sectoral perspective or in response to specific jurisdictional policies, which require HSBC to respond to regulatory requirements. This analysis was conducted to generate more granular counterparty-specific insights relative to previous exercises.

The impact on our wholesale portfolios is demonstrated by the table below, which shows the size of exposures by sector in 2024 and the cumulative change in ECL compared with a counterfactual scenario (expressed as a multiple). The size of our exposure in each sector is represented by our exposure at default ('EAD') relative to one another.

Under the Current Commitments scenario, our modelled outputs predict that ECL will not be more than 25% higher than the counterfactual scenario for any of the assessed sectors. The highest impacts are seen in the chemicals, construction and building materials, power and utilities and agriculture and soft commodities sectors. Greater climate risks would crystallise in the Below 2 Degrees scenario with its gradually increasing transition to net zero, driven by pockets of customers in higher-emitting sectors that are continuously exposed to larger climate-related losses.

The analysis shows credit risk losses continue to be driven by counterparties in certain high transition risk sectors where the Group's largest exposures are concentrated, such as construction and building materials, chemicals, and power and utilities sectors. In these sectors we have counterparties, such as steel or cement manufacturers who have high emissions in their processes and in their downstream or upstream value chains, who may also experience cost pressures due to carbon-tax pass-through rates. Furthermore, harder to abate sectors contain a high proportion of customers without climate transition plans.

We have continued to incorporate information from our customers' transition plans to consider how our clients and their sectors will be impacted. For the oil and gas sector, we see counterparties having

relatively lower projected climate-related losses on a consistent basis, which is highly dependent on the assumption of continued government support and commitment to the execution of their complex transition plans.

In the case of the Severe Climate Stress scenario, we observed that impacts would be more severe and focused than other climate scenarios in the short- to medium-term. These impacts were driven by the underlying severity of the scenario, particularly due to the sharp increase in stricter climate policies and therefore carbon prices that adversely affect the debt servicing capabilities of companies, and acute extreme weather events.

We have the opportunity to ease potential negative impacts as transition risks increase, by supporting our customers to diversify into more renewable and greener revenue streams and invest in emission-reducing technologies.

Impact on wholesale lending portfolios

Wholesale sectors	Exposure at default (EAD) ³ 2023	ECL increase ^{1,2}			
		Climate Scenarios			
		Current Commitments	Below 2 Degrees		
		Peak ⁴	Short term	Medium term	Long term
Conglomerates and industrials	●				
Chemicals	●				
Construction, contracting and building materials	●				
Power and utilities	●				
Oil and gas	●				
Automotive	●				
Land transport and logistics	●				
Agriculture & soft commodities	●				
Metals and mining	●				
Aviation	●				
Marine	●				

- 1 Increase in cumulative ECL compared with counterfactual over short-, medium- and long-term time horizons, expressed as a multiple.
- 2 Values in the key represent the multiplier of increase in ECL, i.e. <1.1 equates to less than 10% increase over the counterfactual (or equivalent proxy which is most representative of baseline for the sector).
- 3 The size of the bubbles is a visual representation of the portfolios, in terms of EAD, relative to one another.
- 4 The peak multiplier reflects the maximum increase in ECL for the Current Commitments scenario over the forecasted scenario time horizon.

Lower Impact	<1.1x	<1.25x	<1.5x	<1.75x	<2.25x	<2.75x	Higher Impact
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How climate change is impacting our retail mortgage portfolio

As part of our 2024 climate scenario analysis exercise, we completed a detailed climate risk assessment for the UK, US, Singapore and Malaysia. In our 2023 exercise we also assessed Hong Kong, Australia and mainland China. Our coverage represented 91% of the balances in our global retail mortgage portfolio, across the two exercises. For our Hong Kong portfolio, we completed a short- and long-term scenario analysis exercise during late 2023 and early 2024 at the request of the HKMA.

Our analysis shows that over the longer term, we expect minimal losses to materialise when considering the Current Commitments scenario. Although the severity of climate perils is expected to worsen over time, our overall losses remain low under a severe Downside Physical Risk scenario.

Risk review

In 2024, we continued to develop our approach to assess impacts from severe acute physical risk events with an exploratory new near-term Severe Climate Stress scenario.

Within all scenarios, loss impacts are assessed by considering borrowers' ability and willingness to service their debts, including customers' affordability incorporating increased debt servicing costs and the impact on property valuation.

When quantifying impacts from climate events, insurance availability is a key mitigation of loss. Our scenario analysis methodology was enriched further in 2024 by enhancing insurance availability and assumptions related to insurance premium costs. This approach has been benchmarked with the insurance industry, based on a calculation of average annualised loss.

When assessing impacts from climate risk, we note that there are several limitations as mentioned previously. Specifically for our retail mortgage portfolio, these limitations include:

- Lack of historical experience and limited benchmark data, especially around loss quantification, there is strong reliance on external peril models and vulnerability assumptions.
- Accuracy of peril projection data relies upon the exact coordinates of a property. The geocoding process can lead to inaccurate results for some properties where address data is incomplete or in regions where geocoding services are less accurate.
- Additionally, a key assumption in quantifying the impacts from perils is the level of resilience a particular building archetype has, for example age of construction, material or relevant building standards. This information is often limited, and assumptions are made.

Projected peril risk

Perils are assessed that are material to each region and where we have the external peril data available.

Flooding has the potential to be the peril having the largest impact on our portfolio. When assessing the risk in the portfolio we assess both the inherent and residual risks. An inherent view considers property location, whereas the residual risk incorporates the resilience a particular building has to the peril impacts. The inherent flood risk is shown below, and outlines the percentage of properties and their corresponding flood depths predicted in a 1-in-100 year event.

In 2024, we provided further granularity in our flood risk table by reporting the proportion of properties that we would expect to be at no risk of flooding during a 1-in-100 year severity flood event. In the 2024 exercise under the Baseline flood risk 1-in-100 year event for the UK, 92.1% of properties have no forecasted flood risk (2023: 92.4%), as such c.8% of properties are situated in areas that could be exposed to varying severities of flooding, however there are often mitigating factors, such as the floor level of a building, that reduce risk.

The table below outlines the flood depths that the properties would be exposed to under different climate scenarios.

Exposure to flooding (%)¹

Markets	Flood depth (metres)	Climate Scenarios		
		Baseline flood risk	Current	Downside
		1-in-100 year event ^{2,3}	Commitments	Physical Risk
		2024	2050	2050
UK	0	92.1	91.5	91.6
	0-0.5	7.8	8.3	5.2
	0.5-1.5	0.1	0.2	2.8
	>1.5	0	0	0.4
Hong Kong ⁴	0	67.9	64.0	64.0
	0-0.5	16.9	17.0	15.5
	0.5-1.5	15.1	18.9	20.4
	>1.5	0.1	0.1	0.1

- 1 Severe flood events include river and surface flooding and coastal inundation. The table compares 2050 snapshots under the Current Commitments and Downside Physical Risk scenarios with a baseline view in 2024. We do expect to see changes to our flood depth distributions as climate risk data is refreshed.
- 2 Baseline flood risk is the flood risk for a 1-in-100 year event, based on current peril data.
- 3 2024 relates to the year in which the assessment was conducted. The baseline data is based on the mortgage portfolio as at 31 December 2023 and 2022, for the UK and Hong Kong respectively.
- 4 In 2022, 94% of properties in Hong Kong (where HSBC provides mortgages) are apartments located on the second floor or above. For properties located in areas exposed to flooding, direct damages would be mitigated against, with only common ground floor areas potentially impacted.

Through our climate scenario analysis, we recognise acute impacts are more severe than long-term chronic impacts. We observed this when assessing the outputs under the Severe Climate Stress scenario, which focuses on prescribed physical risk events rather than recognising the probabilistic nature of these perils, which are considered very unlikely by 2030. Overall, our retail mortgage portfolio remains resilient to climate risk and impact severity is muted at portfolio levels as our book has diversified property locations with insurance coverage being a key loan covenant.



How climate change is impacting our commercial real estate portfolios

In our climate scenario analysis exercise, we assess our commercial real estate ('CRE') customers' vulnerability to various perils, including flooding and cyclonic wind exposures. Our CRE portfolio is globally diversified with larger concentrations in Hong Kong, the UK, France and the US. In our 2024 exercise we carried out a detailed assessment of our UK portfolio. In addition, we performed a bespoke assessment of our Hong Kong portfolio via the HKMA climate scenario analysis exercise.

Geographical location is a key determinant in our exposure to potential physical risk events, which can lead to higher ECLs due to the cost of repairing damage as well as the longer-term impacts on property valuations. These can lead to higher defaults and consequential losses in areas where physical risk events are gradually increasing in frequency and severity.

The table below shows the proportion of our CRE portfolio exposed to specific physical perils in our key markets.

Exposure to peril (%)¹

Market	Exposure at default (EAD) ² 2023	Coastal inundation	Cyclone wind ³	Surface		
				water flooding	Riverine flooding	Forest Fires
Hong Kong		1	100	12	10	2
UK		17	0	9	8	0

- 1 Proportion of our CRE portfolio exposed to specific physical perils in the Downside Physical Risk scenario as at 2050.
- 2 The size of the bubbles is a visual representation of the portfolios, in terms of EAD, relative to one another.
- 3 Assumes all properties are impacted by some damage due to extreme wind, but the intensity of impact is very insignificant and highly muted in some regions, represented by (~0%) exposure to this peril.

As assessed through our internal climate scenario analysis exercise, impacts on our UK portfolio are largely driven by chronic physical risk, related mainly to coastal and tidal river flooding due to a rise in sea level. The UK analysis explored acute weather events, such as extreme rainfall accompanied with storm winds that may lead to further property damage and business disruption.

We assessed the impacts on transition risk for the UK portfolio, mainly focused on the impact of retrofitting costs on property valuations due to meet minimum energy performance certificate ('EPC') requirements for properties having low energy efficiency.

Sensitivity analysis has been conducted on EPC upgrade costs that would be higher in a faster transition scenario due to the accelerated pace of upgrades. In the Below 2 Degrees scenario, we assume actions where non-domestic properties are required to achieve an EPC rating of B by 2040. To meet these minimum standards, counterparties in our portfolio would potentially need to retrofit their properties or risk having stranded assets with a material valuation haircut.

The table below demonstrates the impact on our CRE portfolio for specific markets, including the three biggest markets – Hong Kong, the UK and the US. This shows the increase in cumulative ECL over different time horizons, under each scenario, compared with a counterfactual scenario (expressed as a multiple).

Impact on our commercial real estate portfolio

Climate Scenarios	ECL increase ^{1,2}				
	Short-term	Medium-term	Long-term		
Below 2 Degrees					
Downside Physical Risk					
Lower Impact	<1.1x	<1.25x	<1.5x	<1.75x	<2.25x
				<2.75x	Higher Impact

- 1 Increase in cumulative ECL compared with counterfactual over short, medium and long-term time horizons, expressed as a multiple.
- 2 Values in the key represent the multiplier of increase in ECL, i.e. <1.1 equates to less than 10% increase over the counterfactual which excludes climate change impacts.

Geographically, our most significant exposure is in Hong Kong, which was assessed in a bespoke exercise. This region has material physical risk exposure to wind and flooding due to strong tropical cyclones. However, in the HKMA exercise, a large proportion of CRE exposures were not materially impacted, with less than 0.5% of properties suffering from damage greater than 3% of their asset values per year. The properties are protected from cyclonic winds and flooding due to high building standards, high elevation, and protection from coastal defences in this region, such as rainstorm impacts being muted due to the positive impact of new drainage tunnels and tanks in the city.

Overall, and in line with our assessment in prior years, our analysis shows our commercial real estate portfolio remains resilient to climate risk. Under our Below 2 Degrees scenario, impact severity is muted at the portfolio level as our counterparties have diversified property portfolios with insurance coverage being a key loan covenant. Under the Downside Physical Risk scenario, the impacts were observed to be heightened due to significant global weather events. We also observed impacts in the Severe Climate Stress scenario are more significant, which were driven by coastal inundation and flooding events.

Our CRE modelling is subject to similar limitations as our retail mortgage climate models in regard to lack of historical data, reliance on exact building co-ordinates and information on building resilience.

How we assess climate risk impacts on other risk types

We use climate scenario analysis to assess the impacts on other risks including traded risk, sovereign credit risk, pension risk and non-financial risks.

In 2024 for traded risk, we explored the potential fair value impacts of climate risks on our trading and banking portfolios across multiple scenarios, covering physical and transition risk climate drivers, and capturing short and long-term impacts. The analysis considered all relevant asset classes including interest rates, exchange rates, credit and equities, with market shocks capturing the impact of abrupt increases in carbon prices or physical risk perils resulting in structural economic impacts that affect the productivity of high-risk sectors at a country level.

For sovereign credit risk we continued to assess the impacts of climate risks on sovereign debt under the different climate scenarios.

For pension risk we modelled balance sheet and income statement projections for the main defined benefit pension plans. This year's exercise focused on assessing the impact of a severe physical risk shock using the Severe Climate Stress scenario.

For non-financial risk we assessed the potential impacts of a misstatement in our ESG and climate-related reporting and disclosures. For regulatory compliance risk, we assessed the potential impacts of greenwashing in the manufacturing and marketing of ESG funds and in the marketing of sustainability-linked bonds. For resilience risk, we assessed the potential impacts on our critical real estate from climate change, including temperature extremes, drought, water stress, wildfire, tropical cyclones and flooding.

Understanding the resilience of our properties

Climate change poses a physical risk to the buildings that we occupy, potentially impacting our operational resilience. This includes our offices, retail branches and data centres, both in terms of loss and damage, and business interruption.

We measure the impacts of climate and weather events on our buildings on an ongoing basis using historical, current and scenario-modelled forecast data. In 2024, there were 40 major storms that had a minor impact on three of our buildings.

We use stress testing to evaluate the potential impact on our owned or leased premises. Our 2024 scenario stress test analysed how nine climate change-related hazards – comprising coastal flooding, fluvial flooding, pluvial flooding, soil movement due to drought, temperature extremes, water stress, wildfires, landslides and tropical cyclones – could impact 2,719 of our properties.

The 2024 test modelled climate change with the Intergovernmental Panel on Climate Change ('IPCC') Taking the Highway scenario (SSP5-8.5), which projects that the rise in global temperatures will likely exceed 4°C by 2100. It also modelled a less severe IPCC Middle of the Road scenario (SSP2-4.5), which projects that global warming will likely be limited to 2°C.

Risk review

Key findings from the Taking the Highway scenario included that by 2050, 15 of our 2,719 properties will have a high potential for impact due to climate change, with insurance-related losses estimated to be in excess of 10% of the insured value of the buildings.

A key finding from the Middle of the Road scenario showed that the total number of buildings at risk reduced from 15 to 9. The highlighted facilities are still at risk from the same perils of extreme temperature and water stress by 2050.

This forward-looking data along with historical data helps inform real estate planning. We will continue to enhance our understanding of how extreme weather events impact our buildings portfolio as climate risk assessment tools improve and evolve. We buy insurance for property damage and business interruption and consider insurance as a loss-mitigation strategy depending on its availability and price.

We regularly review and enhance our building selection process and global engineering standards and will continue to assess historical claims data to help ensure our building selection and design standards address the potential impacts of climate change.

Conclusion to insights from climate scenario analysis

Climate scenario analysis is an evolving process and there are data and modelling limitations due to the information and expertise available in the current market. Physical risk modelling is nascent and currently we are only able to model direct climate peril impacts on real estate. Limited considerations are made to the pricing implications of new green products and clients that are likely to emerge over the time horizon.

We will continue to enhance the use of climate scenario analysis in our business decision making, supporting our climate resilience. We have started to explore the impacts on our portfolio from a nature risk perspective and expect the model and capabilities to evolve over time.

Resilience risk

Overview

Resilience risk is the risk of sustained and significant business disruption from execution, delivery, physical security or safety events, causing the inability to provide critical services to our customers, affiliates and counterparties. Resilience risk arises from failures or inadequacies in processes, people, systems or external events.

Resilience risk management

Key developments in 2024

During the year, we conducted several initiatives to keep pace with geopolitical, regulatory and technology changes, and strengthened the management of resilience risk.

- We continued to recognise that our customers were impacted by service disruptions, responded to these urgently and aimed to recover with minimum delay. We continued to initiate post-incident review processes to prevent recurrence. Where we identify that investment is required to further enhance the Group's operational resilience capabilities, findings are fed into the Group's financial planning, helping to ensure we continue to meet the expectations of our customers and our regulators.
- We continued to monitor markets affected by the Russia-Ukraine war and the conflict in the Middle East, as well as other geopolitical events, for any potential impact they may have on our colleagues and operations.
- We provided analysis and easy-to-access risk and control information and metrics to enable management to focus on non-financial risks in their decision making and appetite setting.
- We further strengthened our non-financial risk governance and senior leadership.

We prioritise our efforts on material risks and areas undergoing strategic growth, aligning our location strategy to this need. We also remotely provide oversight and stewardship, including support of chief risk officers, in territories where we have no physical presence.

Governance and structure

The Enterprise Risk Management target operating model provides a globally consistent view across resilience risks, strengthening our risk management oversight while operating effectively as part of a simplified non-financial risk structure.

We view resilience risk across nine sub-risk types related to: technology and cybersecurity risk; third-party risk; transaction processing risk; business interruption and incident risk; data risk; change execution risk; building unavailability risk; protective security risk and workplace safety.

Risk appetite and key escalations for resilience risk are reported to the Non-Financial Risk Management Board, chaired by the Group Chief Risk and Compliance Officer, with an escalation path to the Group Risk Management Meeting and Group Risk Committee.

Key risk management processes

We operate processes to support our resilience according to our Risk Management Framework. Our operational resilience is our ability to anticipate, prevent, adapt, respond to, recover, and learn from internal or external disruption, continuing to provide Important Business Services to customers and clients, while minimising impact on the wider financial system when disruption occurs. This is achieved via day-to-day oversight and periodic and ongoing assurance, such as deep dive reviews and controls testing, which may result in challenges being raised to our businesses and group governance by our risk stewards. We have invested to improve response and recovery strategies for our important business services and Important Group business services to meet regulatory and customer expectations.

Business operations continuity

We continue to monitor the Russia-Ukraine war and the conflict in the Middle East, and remain ready to take measures to ensure business continuity in affected markets should the situations require. There have been no related significant disruptions to our services, although businesses and functions in nearby markets continually review their plans and responses to minimise any potential impacts.

Regulatory compliance risk

Overview

Regulatory Compliance risk is the risk associated with breaching our duty to clients and other counterparties, inappropriate market conduct (including unauthorised trading) and breaching related financial services regulatory standards. Regulatory Compliance risk arises from the failure to observe relevant laws, codes, rules and regulations and can manifest itself in poor market or customer outcomes and lead to fines, penalties and reputational damage to our business. We aim to keep abreast of developments in legal principles or conduct requirements (including in relation to the risk of such developments in one part of the financial industry being construed as applying to other parts of the financial industry, which could lead to legal or regulatory proceedings).

Regulatory compliance risk management

Key developments in 2024

Regulatory horizon scanning and mapping capabilities continue to evolve with a focus on enhanced connectivity to Risk management systems to support better traceability of regulatory obligations.

We have enhanced our processes, framework, and governance capabilities to improve the controls and oversight of Consumer Duty outcomes in the UK. Work is underway to transition from event-driven technology to incorporate Cloud and analytics capability to enhance our oversight abilities in areas such as surveillance.

Governance and structure

The Group Head of Regulatory Compliance reports to the Group Chief Risk and Compliance Officer. Regulatory Compliance and Financial Crime Compliance teams work together and with relevant stakeholders to achieve good conduct outcomes, and provide enterprise-wide support on the Compliance risk agenda in close collaboration with colleagues from the Group Risk and Compliance function.

Key risk management processes

The Global Regulatory Compliance capability is responsible for setting global policies, standards and risk appetite to guide the Group's management of Regulatory Compliance risk. It also devises the required frameworks, support processes and tooling to protect against Regulatory Compliance risks. The Group capability provides oversight, review and challenge to the global market, regional and local line of business teams to help them identify, assess and mitigate Regulatory Compliance risks, where required. The Group's Regulatory Compliance risk policies are regularly reviewed. Global policies and procedures require the identification and escalation of any actual or potential regulatory breaches.

Relevant events and issues are escalated to the Group's Non-Financial Risk Management Board, the Group Risk Management Meeting and the Group Risk Committee, as appropriate. The Group Head of Regulatory Compliance attends the Risk and Compliance Executive Committee, the Group Risk Management Meeting and the Group Risk Committee.

Financial crime risk

Overview

Financial crime risk is the risk that HSBC's products and services will be exploited for criminal activity. This includes fraud, bribery and corruption, tax evasion, sanctions and export control violations and evasion, money laundering, terrorist financing and proliferation financing. Financial crime risk arises from day-to-day banking operations involving customers, third parties and employees.

Financial crime risk management

Key developments in 2024

We regularly review the effectiveness of our financial crime risk management framework, which includes continued consideration of the complex and dynamic nature of sanctions compliance and export control risk. We continued to respond to the financial sanctions and trade restrictions that have been imposed on Russia, including methods used to limit sanctions evasion.

We continued to make progress with several key financial crime risk management initiatives, including:

- deployment of our intelligence-led, dynamic risk assessment capability for customer account monitoring in additional entities and global businesses;
- deployment of a next generation capability to increase our monitoring coverage on correspondent banking activity in additional markets;
- enhancing our fraud controls and continuing to invest in, and monitor, technological developments; and
- enhancements in response to the rapidly evolving and complex global payments landscape and refinement of our digital assets and currencies strategy.

Governance and structure

The structure of the Financial Crime function remained substantively unchanged in 2024. The Group Head of Financial Crime and Group Money Laundering Reporting Officer continues to report to the Group Chief Risk and Compliance Officer, while the Group Risk Committee retains oversight of matters relating to financial crime.

Key risk management processes

We will not tolerate knowingly conducting business with individuals or entities believed to be engaged in criminal activity. We require everybody in HSBC to play their role in maintaining effective systems and controls to prevent and detect financial crime. Where we believe we have identified suspected criminal activity or vulnerabilities in our control framework, we will take appropriate mitigating action.

We manage financial crime risk because it is the right thing to do to protect our customers, shareholders, staff, the communities in which we operate, as well as the integrity of the financial system on which we all rely. We operate in a highly regulated industry in which these same policy goals are codified in law and regulation.

We are committed to complying with the laws and regulations of all the markets in which we operate and apply a consistently high financial crime standard globally.

We continued to invest in enhancing our operational control capabilities and technology solutions to deter and detect criminal activity. We further strengthened our financial crime risk taxonomy and control libraries and our monitoring capabilities through technology deployments. We developed more targeted metrics, and continued to seek to enhance our governance and reporting.

Risk review

We are committed to working in partnership with the wider industry and the public sector in managing financial crime risk. In 2024, our focus remained on measures to improve the overall effectiveness of the global financial crime framework and promote the risk-based approach.

Through our work with industry bodies, such as the Wolfsberg Group, we provided input into legislative and regulatory reform activities and supported the efforts of the global standard setter, the Financial

Action Task Force. We did this by contributing to the development of responses to consultation papers focused on how financial crime risk management frameworks can deliver more effective outcomes in detecting and deterring criminal activity. In addition, we participated in a number of public events related to the promotion of risk-based supervision, payment transparency, fraud risk management and financial inclusion, as well as tackling forestry crimes, wildlife trafficking and human trafficking.

Model risk

Overview

Model risk is the risk of the potential for adverse consequences from model errors or the inappropriate use of modelled outputs to inform business decisions.

Model risk arises in both financial and non-financial contexts whenever business decision making includes reliance on models.

Key developments in 2024

In 2024, we continued to make improvements in our Model Risk Management ('MRM') processes amid regulatory changes in MRM requirements.

Initiatives during the year included:

- updating our MRM Framework to meet the requirements of the PRA's SS1/23 with a programme of work in progress to implement these changes across the model landscape;
- completing a review of model tiering across the organisation assessing the materiality and complexity of all models and assigning a new tier which will drive the level of oversight required at model level;
- introducing a new framework to govern and manage the risks associated with Deterministic Quantitative Methods, which are complex and material calculators that although not technically models still present similar risks;
- following feedback from the PRA and other regulators on a number of our model submissions for internal ratings-based ('IRB') models, we are delivering a programme of work to redevelop several IRB models for wholesale credit;
- enhancing our framework for the independent validation of models accounting for new generative AI techniques becoming more widely used; and
- working closely with businesses and functions in developing a governance framework to manage the range of risks these AI and Machine Learning ('ML') techniques can introduce.

Governance and structure

Model risk governance committees at the Group, business and functional levels provide oversight of model risk. The committees include senior leaders from the global businesses and the Group Risk and Compliance function, and focus on model-related concerns and are supported by key model risk metrics. We also have Model Risk Committees in our geographical regions focused on local delivery and requirements. The Group-level Model Risk Committee is chaired by the Group Chief Risk and Compliance Officer, and the heads of key businesses participate in these meetings.

Key risk management processes

We use a variety of modelling approaches, including regression, simulation, sampling, machine learning and judgemental scorecards for a range of business applications. These activities include customer selection, product pricing, financial crime transaction monitoring, creditworthiness evaluation and financial reporting. Global responsibility for managing model risk is delegated from the Board to the Group Chief Risk and Compliance Officer, who authorises the Group Model Risk Committee. This committee regularly reviews our model risk management policies and procedures, and requires the first line of defence to demonstrate comprehensive and effective controls based on a library of model risk controls provided by Model Risk Management. Model Risk Management also reports on model risk to senior management and the Group Risk Committee on a regular basis through the use of the risk map, risk appetite metrics and top and emerging risks.

We regularly review the effectiveness of these processes, including the model risk committee structure, to help ensure appropriate understanding and ownership of model risk is embedded in the businesses and functions.

Insurance manufacturing operations risk

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Overview

The key risks for our insurance manufacturing operations are market risk, in particular interest rate and equity, credit risk and insurance underwriting risk. These have a direct impact on the financial results and capital positions of the insurance operations.

HSBC's insurance business

We sell insurance products through a range of channels including our branches, insurance sales forces, 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 platforms 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.

Our life insurance manufacturing subsidiaries operate in eight markets, which are Hong Kong, Macau, Singapore, mainland China, France, UK, Malta and Mexico. This excludes Argentina where the sale of the insurance business was completed on 6 December 2024. In addition, we have: an interest in a life insurance manufacturing associate in India; a captive insurance entity in Bermuda that insures the non-financial risks of the wider Group; and a reinsurance entity in Bermuda.

Where we do not have the risk appetite or operational scale to be an effective insurance manufacturer, we engage with a small number of leading external insurance companies in order to provide insurance products to our customers. These arrangements are generally structured with our exclusive strategic partners and earn the Group a combination of commissions, fees and a share of profits. We distribute insurance products in all of our geographical regions.

This section focuses only on the risks relating to the insurance products we manufacture.

Insurance manufacturing operations risk management

Key developments in 2024

The insurance manufacturing subsidiaries follow the Group's risk management framework. In addition, there are specific policies and

practices relating to the risk management of insurance contracts, which did not change materially over 2024. During the year, there was continued market volatility observed across interest rates, equity and credit markets and foreign exchange rates. This was predominantly driven by geopolitical factors and wider inflationary concerns. Other areas of focus were the ongoing integration of the insurance business that was acquired through AXA Singapore in 2022 into the Group's risk management framework, development of processes and systems within the reinsurance entity established in Bermuda, and controls supporting IFRS 17.

As mentioned, the insurance business in Argentina was sold during 2024, with the sale completing on 6 December 2024. Following HSBC's announcement on 20 December 2024 of the signing of a memorandum of understanding for the planned sale of its French insurance business, the balance sheet of the French business has been reported as held for sale at 31 December 2024. Further details are provided on page 411.

Governance and structure

(Audited)

Insurance manufacturing risks are managed to a defined risk appetite, which is aligned to the Group's risk appetite and risk management framework, including its three lines of defence model. For details of the Group's governance framework, see page 128. The Global Insurance Risk Management Meeting oversees the control framework globally and is accountable to the WPB Risk Management Meeting on risk matters relating to the insurance business.

The monitoring of the risks within our insurance operations is carried out by Insurance Risk teams. The Group's risk stewardship functions support the Insurance Risk teams in their respective areas of expertise.

Stress and scenario testing

(Audited)

Stress testing forms a key part of the risk management framework for the insurance business. We participate in local and Group-wide regulatory stress tests, as well as internally developed stress and scenario tests, including Group internal stress test exercises.

The results of these stress tests and the adequacy of management action plans to mitigate these risks are considered in the Group's ICAAP and the entities' regulatory Own Risk and Solvency Assessments, which are produced by all material entities.

Key risk management processes

Market risk

(Audited)

All our insurance manufacturing subsidiaries have market risk mandates and limits that specify the investment instruments in which they are permitted to invest and the maximum quantum of market risk that they may retain. They manage market risk by using some or all of the techniques listed below, among others, depending on the nature of the contracts written.

- We are able to adjust bonus rates to manage the liabilities to policyholders for products with participating features. The effect is that a significant proportion of the market risk is borne by the policyholder.
- We use asset and liability matching where asset portfolios are structured to support projected liability cash flows. The Group manages its assets using an approach that considers asset quality, diversification, cash flow matching, liquidity, volatility and target

Risk review

investment return. We use models to assess the effect of a range of future scenarios on the values of financial assets and associated liabilities, and ALCOs employ the outcomes in determining how best to structure asset holdings to support liabilities.

- We use derivatives and other financial instruments to protect against adverse market movements.
- We design new products to mitigate market risk, such as changing the investment return sharing proportion between policyholders and the shareholder.

Credit risk

(Audited)

Our insurance manufacturing subsidiaries also have credit risk mandates and limits within which they are permitted to operate, which consider the credit risk exposure, quality and performance of their investment portfolios. Our assessment of the creditworthiness of issuers and counterparties is based primarily upon internationally recognised credit ratings and other publicly available information.

Stress testing is performed on investment credit exposures using credit spread sensitivities and default probabilities.

We use a number of tools to manage and monitor credit risk. These include a credit report containing a watch-list of investments with current credit concerns, primarily investments that may be at risk of future impairment or where high concentrations to counterparties are present in the investment portfolio. Sensitivities to credit spread risk are assessed and monitored regularly.

Capital and liquidity risk

(Audited)

Capital risk for our insurance manufacturing subsidiaries is assessed in the Group's ICAAP, based on their financial capacity to support the risks to which they are exposed. Capital adequacy is assessed on both the Group's economic capital basis, and the relevant local insurance regulatory basis.

Risk appetite buffers are set to ensure that the operations are able to remain solvent, allowing for business-as-usual volatility and extreme but plausible stress events.

Liquidity risk is less material for the insurance business. It is managed by cash flow matching and maintaining sufficient cash resources, investing in high credit-quality investments with deep and liquid markets, monitoring investment concentrations and restricting them where appropriate, and establishing committed contingency borrowing facilities.

Insurance manufacturing subsidiaries complete quarterly liquidity risk reports and an annual review of the liquidity risks to which they are exposed.

Insurance underwriting risk

(Audited)

Our insurance manufacturing subsidiaries primarily use the following frameworks and processes to manage and mitigate insurance underwriting risks:

- a formal approval process for launching new products or making changes to products;
- a product pricing and profitability framework, which requires initial and ongoing assessment of the adequacy of premiums charged on new insurance contracts to meet the risks associated with them;
- a framework for customer underwriting;
- reinsurance, which cedes risks to third-party reinsurers to keep risks within risk appetite, reduce volatility and improve capital efficiency; and
- oversight by financial reporting committees and actuarial review committees in each of our entities of the methodology and assumptions that underpin IFRS 17 reporting.

Insurance manufacturing operations risk in 2024

Measurement

The following tables show the composition of the fair value of underlying items of the Group's participating contracts at the reporting date.

Balance sheet of insurance manufacturing subsidiaries by type of contract

(Audited)

	Life direct participating and investment DPF contracts ¹	Life other contracts ²	Other contracts ³	Shareholder assets and liabilities	Total
At 31 Dec 2024	\$m	\$m	\$m	\$m	\$m
Financial assets	98,676	4,452	6,227	5,967	115,322
– trading assets	–	–	–	–	–
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	94,327	4,233	4,839	690	104,089
– derivatives	207	7	1	–	215
– financial investments – at amortised cost	545	90	1,060	4,335	6,030
– financial assets at fair value through other comprehensive income	–	–	6	73	79
– other financial assets	3,597	122	321	869	4,909
Insurance contract assets	14	104	–	–	118
Reinsurance contract assets	–	5,013	–	–	5,013
Other assets and investment properties ⁴	24,647	64	36	3,337	28,084
Total assets at 31 Dec 2024	123,337	9,633	6,263	9,304	148,537
Liabilities under investment contracts designated at fair value	–	–	5,931	–	5,931
Insurance contract liabilities	102,605	4,427	–	–	107,032
Reinsurance contract liabilities	–	701	–	–	701
Deferred tax	–	–	–	12	12
Other liabilities ⁴	21,772	39	–	6,035	27,846
Total liabilities	124,377	5,167	5,931	6,047	141,522
Total equity	–	–	–	7,015	7,015
Total liabilities and equity at 31 Dec 2024	124,377	5,167	5,931	13,062	148,537

Balance sheet of insurance manufacturing subsidiaries by type of contract

(Audited)

	Life direct participating and investment DPF contracts ¹	Life other contracts ²	Other contracts ³	Shareholder assets and liabilities	Total
	\$m	\$m	\$m	\$m	\$m
At 31 Dec 2023					
Financial assets	113,605	3,753	5,812	7,696	130,866
– trading assets	—	—	—	—	—
– financial assets designated and otherwise mandatorily measured at fair value through profit or loss	100,427	3,593	4,177	1,166	109,363
– derivatives	258	10	—	6	274
– financial investments – at amortised cost	1,351	67	1,157	4,772	7,347
– financial assets at fair value through other comprehensive income	8,859	—	5	693	9,557
– other financial assets	2,710	83	473	1,059	4,325
Insurance contract assets	13	213	—	—	226
Reinsurance contract assets	—	4,871	—	—	4,871
Other assets and investment properties	2,782	164	35	1,636	4,617
Total assets at 31 Dec 2023	116,400	9,001	5,847	9,332	140,580
Liabilities under investment contracts designated at fair value	—	—	5,103	—	5,103
Insurance contract liabilities	116,389	3,961	—	—	120,350
Reinsurance contract liabilities	—	819	—	—	819
Deferred tax	—	1	—	3	4
Other liabilities	—	—	—	6,573	6,573
Total liabilities	116,389	4,781	5,103	6,576	132,849
Total equity	—	—	—	7,731	7,731
Total liabilities and equity at 31 Dec 2023	116,389	4,781	5,103	14,307	140,580

- ¹ 'Life direct participating and investment DPF contracts' are life direct participating contracts and investment contracts with discretionary participating features. These are substantially measured under the variable fee approach measurement model.
- ² 'Life other contracts' are measured under the general measurement model and mainly include protection insurance contracts as well as reinsurance contracts. The reinsurance contracts primarily provide diversification benefits over the life direct participating and investment DPF contracts.
- ³ 'Other contracts' includes investment contracts for which HSBC does not bear significant insurance risk.
- ⁴ 'Other assets and investment properties' includes \$24,222m and 'Other liabilities' includes \$23,420m in respect of the classification of the French insurance business assets and liabilities as held for sale at 31 December 2024. Further details are provided on page 411.

Key risk types

Market risk

(Audited)

Description and exposure

Market risk is the risk of changes in market factors affecting HSBC's capital or profit. Market factors include interest rates, equity and growth assets, credit spreads and foreign exchange rates.

Our exposure varies depending on the type of contract issued. Our most significant life insurance products are contracts with participating features. These products typically include some form of capital guarantee or guaranteed return on the sums invested by the policyholders, to which bonuses are added if allowed by the overall performance of the funds. For contracts without participating features, some form of guarantee may still exist but HSBC's ability to share risks with policyholders will be reduced. Funds supporting these savings products are primarily invested in fixed income, with a proportion in some cases allocated to other asset classes to provide customers with the potential for enhanced returns.

These products expose HSBC to the risk of variation in asset returns, which will impact our participation in the investment performance.

In addition, in some scenarios the asset returns can become insufficient to cover the policyholders' financial guarantees, and some contracts are non-participating, in which case the shortfall has to be met by HSBC. Amounts are held against the cost of such positions, calculated by stochastic modelling in the larger entities.

The cost of such guarantees are generally not material and are absorbed by the insurance fulfilment cash flows.

For unit-linked contracts, market risk is substantially borne by the policyholder, but some market risk exposure typically remains, as fees earned are related to the market value of the linked assets.

Sensitivities

The following table provides the impacts on the CSM, profit after tax and equity of our insurance manufacturing subsidiaries from reasonably possible effects of changes in selected interest rate, credit spread, equity price, growth assets and foreign exchange rate scenarios for the year. These sensitivities are prepared in accordance with current IFRS Accounting Standards and are based on changing one assumption at a time with other variables being held constant, recognising that in practice such variables could be correlated.

Due in part to the impact of the cost of guarantees and hedging strategies which may be in place, the relationship between the CSM, profit after tax and total equity and the risk factors is non-linear. Therefore, the results disclosed should not be extrapolated to measure sensitivities to different levels of stress. For the same reason, the impact of the stress is not necessarily symmetrical on the upside and downside. The sensitivities are stated before allowance for management actions, which may mitigate the effect of changes in the market environment.

The method used for deriving sensitivity information and significant market risk factors remain unchanged except for updates made to the foreign exchange rate risk methodology, which now limits the impacts to within more recent historical ranges. 2023 comparative sensitivities have been updated to reflect this change.

The sensitivities provided below include the French insurance business, which was classified as held for sale at 31 December 2024. Further details are provided on page 411.

Risk review

Sensitivity of HSBC's insurance manufacturing subsidiaries to market risk factors

(Audited)

	2024			2023		
	Effect on CSM \$m	Effect on profit after tax ¹ \$m	Effect on total equity \$m	Effect on CSM \$m	Effect on profit after tax ¹ \$m	Effect on total equity \$m
+100 basis point parallel shift in yield curves	(155)	83	52	(92)	66	32
-100 basis point parallel shift in yield curves	(249)	(217)	(186)	(390)	(137)	(103)
+100 basis point shift in credit spreads	(907)	(84)	(115)	(884)	(11)	(45)
-100 basis point shift in credit spreads	876	60	91	806	104	138
10% increase in growth assets ²	467	73	73	436	78	78
10% decrease in growth assets ²	(514)	(79)	(79)	(507)	(85)	(85)
10% appreciation in US dollar exchange rate against local functional currency ³	71	17	17	24	(1)	(1)
10% depreciation in US dollar exchange rate against local functional currency ³	(26)	(3)	(3)	(35)	(3)	(3)

1 'Effect on profit after tax' in respect for the year.

2 'Growth assets' primarily comprise equity securities and investment properties. Variability in growth asset fair value constitutes a market risk to insurance manufacturing subsidiaries.

3 During the year 10% US dollar exchange rate methodology changed and the 10% sensitivity range applies to all currencies except for the Hong Kong dollar, where the extent of change is limited by the impact of the HKD to USD peg. The comparatives have been restated accordingly.

Credit risk

(Audited)

Description and exposure

Credit risk is the risk of financial loss if a customer or counterparty fails to meet their obligation under a contract. It arises in two main risks for our insurance manufacturers:

- the risk associated with credit spread volatility and default by debt security counterparties after investing premiums to generate a return for policyholders and shareholders; and
- the risk of default by reinsurance counterparties and non-reimbursement for claims made after ceding insurance risk.

The amounts outstanding at the balance sheet date in respect of these items are shown in the table on page 232.

The credit quality of the reinsurers' share of liabilities under insurance contracts is assessed as 'satisfactory' or higher (as defined on page 139), with none of the exposure being either past due or impaired (2023: none).

Credit risk on assets supporting unit-linked liabilities is predominantly borne by the policyholders. Therefore, our exposure is primarily related to liabilities under non-linked insurance and investment contracts and shareholders' funds. The credit quality of insurance financial assets is included in the table on page 166.

The risk associated with credit spread volatility is to a large extent mitigated by holding debt securities to maturity, and sharing a degree of credit spread experience with policyholders.

Liquidity risk

(Audited)

Description and exposure

Liquidity risk is the risk that an insurance operation, though solvent, either does not have sufficient financial resources available to meet its obligations when they fall due, or can secure them only at excessive cost. Liquidity risk may be able to be shared with policyholders for products with participating features.

The remaining maturity of insurance contract liabilities is included in Note 4 on page 373.

The amounts of insurance contract liabilities that are payable on demand are set out by the product grouping below; 2024 balances exclude the French insurance business that was classified as held for sale at 31 December 2024 (further details are provided on page 411).

Amounts payable on demand

(Audited)

	2024		2023	
	Amounts payable on demand \$m	Carrying amount for these contracts \$m	Amounts payable on demand \$m	Carrying amount for these contracts \$m
Life direct participating and investment DPF contracts	98,275	102,605	107,287	116,389
Life other contracts	2,960	4,427	2,765	3,961
At 31 Dec	101,235	107,032	110,052	120,350

Insurance underwriting risk

Description and exposure

Insurance underwriting risk is the risk of loss through adverse experience, in either timing or amount, of insurance underwriting parameters (non-economic assumptions). These parameters include mortality, morbidity, longevity, lapse and expense rates.

The principal risk we face is that, over time, the cost of the contract, including claims and benefits, may exceed the total amount of premiums and investment income received.

The tables on page 232 analyse our life insurance underwriting risk exposures by composition of the fair value of the underlying items.

The insurance underwriting risk profile and related exposures remain largely consistent with those observed at 31 December 2023.

Sensitivities

(Audited)

The following table shows the sensitivity of the CSM, profit and total equity to reasonably foreseeable changes in non-economic assumptions across all our insurance manufacturing subsidiaries.

These sensitivities are prepared in accordance with current IFRS.

Sensitivity to lapse rates depends on the type of contracts being written. An increase in lapse rates typically has a negative effect on CSM (and therefore expected future profits) due to the loss

of future income on the lapsed policies. However, some contract lapses have a positive effect on profit due to the existence of policy surrender charges.

Mortality and morbidity risk is typically associated with life insurance contracts. During the year we have revised the sensitivity to mortality and morbidity rates from 10% to 5% to align with reasonably foreseeable changes, and the comparatives have been restated accordingly. The effect on profit of an increase in mortality or morbidity depends on the type of business being written.

Expense rate risk is the exposure to a change in the allocated cost of administering insurance contracts. To the extent that increased expenses cannot be passed on to policyholders, an increase in expense rates will have a negative effect on our profits. This risk is generally greatest for our smaller entities.

The impact of changing insurance underwriting risk factors is primarily absorbed within the CSM, unless contracts are onerous in which case the impact is directly to profit. The impact of changes to the CSM is released to profits over the expected coverage periods of the related insurance contracts.

The sensitivities provided below include the French insurance business, which was classified as held for sale at 31 December 2024. Further details are provided on page 411.

Sensitivity of HSBC's insurance manufacturing subsidiaries to insurance underwriting risk factors¹

(Audited)

	Effect on CSM	Effect on profit after tax ²	Effect on total equity
	\$m	\$m	\$m
At 31 Dec 2024			
10% increase in lapse rates	(282)	(21)	(30)
10% decrease in lapse rates	297	23	36
5% increase in mortality and/or morbidity rates	(92)	(16)	(20)
5% decrease in mortality and/or morbidity rates	102	14	23
10% increase in expense rates	(66)	(11)	(15)
10% decrease in expense rates	68	12	15
At 31 Dec 2023			
10% increase in lapse rates	(277)	(24)	(24)
10% decrease in lapse rates	290	29	29
5% increase in mortality and/or morbidity rates ³	(87)	(11)	(11)
5% decrease in mortality and/or morbidity rates ³	87	16	16
10% increase in expense rates	(68)	(6)	(6)
10% decrease in expense rates	67	11	11

1 The sensitivities impacts are provided after considering the impacts of reinsurance contracts held as risk mitigation.

2 'Effect on profit after tax' in respect for the year.

3 During the year the sensitivity to mortality and morbidity rates have been changed from 10% to 5% and the comparatives have been restated accordingly.