HSBC Bank plc

Annual Report and Accounts 2022

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Philip miller

Company Secretary

HSBC Bank plc

25 April 2023



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Presentation of Information

This document comprises the *Annual Report and Accounts 2022* for HSBC Bank plc ('the bank' or 'the company') and its subsidiaries (together 'the group'). 'We', 'us' and 'our' refer to HSBC Bank plc together with its subsidiaries. It contains the Strategic Report, the Report of the Directors, the Statement of Directors' Responsibilities and Financial Statements, together with the Independent Auditors' Report, as required by the UK Companies Act 2006. References to 'HSBC', 'HSBC Group' or 'Group' within this document mean HSBC Holdings plc together with its subsidiaries.

HSBC Bank plc is exempt from publishing information required by The Capital Requirements Country-by-Country Reporting Regulations 2013, as this information is published by its parent, HSBC Holdings plc. This information is available on HSBC's website: www.hsbc.com.

Pillar 3 disclosures for the group are also available on www.hsbc.com, under Investors.

Contents of the linked websites are not incorporated into this document.

All narrative disclosures, tables and graphs within the Strategic Report and Report of the Directors are unaudited unless otherwise stated.

Our reporting currency is £ sterling.

Unless otherwise specified, all \$ symbols represent US dollars.

Cautionary Statement Regarding Forward-Looking Statements

This Annual Report and Accounts 2022 contains certain forward-looking statements with respect to the company's financial condition; results of operations and business, including the strategic priorities; financial, investment and capital targets; and the company's ability to contribute to the Group's Environmental, social and governance ('ESG') targets, commitments and ambitions described herein.

Statements that are not historical facts, including statements about the company's beliefs and expectations, are forward-looking statements. Words such as 'may', 'will', 'should', 'expects', 'targets', 'anticipates', 'intends', 'plans', 'believes', 'seeks', 'estimates', 'potential' and 'reasonably possible', or the negative thereof, other variations thereon or similar expressions are intended to identify forward-looking statements. These statements are based on current plans, information, data, estimates and projections, and therefore undue reliance should not be placed on them. Forward-looking statements speak only as of the date they are made. The company makes no commitment to revise or update any forward-looking statements to reflect events or circumstances occurring or existing after the date of any forwardlooking statements. Written and/or oral forward-looking statements may also be made in the periodic reports to the US Securities and Exchange Commission, offering circulars and prospectuses, press releases and other written materials, and in oral statements made by the company's Directors, officers or employees to third parties, including financial analysts. Forwardlooking statements involve inherent risks and uncertainties.

Readers are cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward-looking statement. These include, but are not limited to:

changes in general economic conditions in the markets in which the company operates, such as new, continuing or deepening recessions, prolonged inflationary pressures and fluctuations in employment and creditworthy customers beyond those factored into consensus forecasts (including, without limitation, as a result of the Russia-Ukraine war and, to a lesser extent, the Covid-19 pandemic); the Russia-Ukraine war and the Covid-19 pandemic and their impact on global economies and the markets where the company operates, which could have a material adverse effect on (among other things) the company's financial condition, results of operations, prospects, liquidity, capital position and credit ratings, deviations from the market and economic assumptions that form the basis for the company's ECL measurements (including, without limitation, as a result of the Russia-Ukraine war, inflationary pressures and the Covid-19 pandemic); changes in foreign exchange rates and interest rates; volatility in equity markets; lack of liquidity in wholesale funding or capital markets, which may affect the company's ability to meet its obligations under financing facilities or to fund new loans, investments and businesses; geopolitical tensions or diplomatic developments, both in Europe and in other regions such as Asia, producing social instability or legal uncertainty, such as the Russia-Ukraine war (including the continuation and escalation thereof) and the related imposition of sanctions and trade restrictions, the UK's relationship with the EU, supply chain restrictions and disruptions, sustained increases in energy prices and key commodities and diplomatic tensions between China and the US, extending to the UK and the EU, alongside other potential areas of tension, which may adversely affect the group by creating regulatory, reputational and market risks; the efficacy of government, customer, and the company's and the Group's actions in managing and mitigating ESG risks, in particular climate risk, nature-related risks and human rights risks, and in supporting the global transition to net zero carbon emissions, each of which can impact the company both directly and indirectly through its customers and which may result in potential financial and non-financial impacts; illiquidity and

Strategic Report | Highlights

downward price pressure in national real estate markets; adverse changes in central banks' policies with respect to the provision of liquidity support to financial markets; heightened market concerns over sovereign creditworthiness in overindebted countries; adverse changes in the funding status of public or private defined benefit pensions; societal shifts in customer financing and investment needs, including consumer perception as to the continuing availability of credit; exposure to counterparty risk, including third parties using us as a conduit for illegal activities without the company's knowledge; the discontinuation of certain key lbors and the development of near risk-free benchmark rates, as well as the transition of legacy lbor contracts to near risk-free benchmark rates, which exposes the company to material execution risks, including in relation to the effectiveness of the Group's Ibor remediation strategy, and increases some financial and non-financial risks; and price competition in the market segments that the company serves;

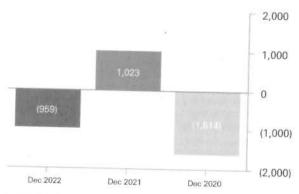
- changes in government policy and regulation, including the monetary, interest rate and other policies of central banks and other regulatory authorities in the principal markets in which the company operates and the consequences thereof (including, without limitation, actions taken as a result of the impact of the Russia-Ukraine war on inflation and as a result of the Covid-19 pandemic); initiatives to change the size, scope of activities and interconnectedness of financial institutions in connection with the implementation of stricter regulation of financial institutions in key markets worldwide; revised capital and liquidity benchmarks, which could serve to deleverage bank balance sheets and lower returns available from the current business model and portfolio mix; changes to tax laws and tax rates applicable to the company, including the imposition of levies or taxes designed to change business mix and risk appetite; the practices, pricing or responsibilities of financial institutions serving their consumer markets; expropriation, nationalisation, confiscation of assets and changes in legislation relating to foreign ownership; the UK's relationship with the EU, which continues to be characterised by uncertainty and political disagreement, particularly with respect to the regulation of financial services, despite the signing of the Trade and Cooperation Agreement ('TCA') between the UK and the EU; changes in UK macro-economic and fiscal policy as a result of the change in UK government leadership, which may result in fluctuations in the value of the pound sterling; general changes in government policy that may significantly influence investor decisions; the costs, effects and outcomes of regulatory reviews, actions or litigation, including any additional compliance requirements; and the effects of competition in the markets where we operate, including increased competition from non-bank financial services companies; and
- factors specific to the company and the Group, including the company's success in adequately identifying the risks it faces, such as the incidence of loan losses or delinquency, and managing those risks (through account management, hedging and other techniques); the company's ability to achieve its financial, investment, capital targets and the achievement of the Group's ESG targets, commitments and ambitions, which may result in the company's failure to achieve any of the expected benefits of its strategic priorities; model limitations or

failure, including, without limitation, the impact that high inflationary pressures, rising interest rates and the consequences of the Covid-19 pandemic have had on the performance and usage of financial models, which may require the company to hold additional capital, incur losses and/or use compensating controls, such as judgemental post-model adjustments, to address model limitations; changes to the judgements, estimates and assumptions the company bases its financial statements on; changes in the company's ability to meet the requirements of regulatory stress tests; a reduction in the credit ratings assigned to the company or any of its subsidiaries, which could increase the cost or decrease the availability of the company's funding and affect its liquidity position and net interest margin; changes to the reliability and security of the company's data management, data privacy, information and technology infrastructure, including threats from cyber-attacks, which may impact its ability to service clients and may result in financial loss, business disruption and/ or loss of customer services and data; the accuracy and effective use of data, including internal management information that may not have been independently verified; changes in insurance customer behaviour and insurance claim rates; the company's dependence on loan payments and dividends from subsidiaries to meet its obligations; changes in accounting standards, including the implementation of IFRS 17 'Insurance Contracts', which may have a material impact on the way the company prepares its financial statements and (with respect to IFRS 17) may negatively affect the profitability of HSBC's insurance business; changes in the company's ability to manage third-party, fraud and reputational risks inherent in its operations; employee misconduct, which may result in regulatory sanctions and/or reputational or financial harm; changes in skill requirements, ways of working and talent shortages, which may affect the company's ability to recruit and retain senior management and diverse and skilled personnel; and changes in the company's ability to develop sustainable finance and climate-related products consistent with the evolving expectations of its regulators, and the company's capacity to measure the climate impact from its financing activity (including as a result of data limitations and changes in methodologies), which may affect the Group's ability to achieve its climate ambition, targets and commitments, and increase the risk of greenwashing. Effective risk management depends on, among other things, the company's ability through stress testing and other techniques to prepare for events that cannot be captured by the statistical models it uses; the company's success in addressing operational, legal and regulatory, and litigation challenges; and other risks and uncertainties we identify in 'Top and emerging risks' on page 28 of the Annual Report and Accounts 2022.

Highlights

For the year ended 31 December 2022

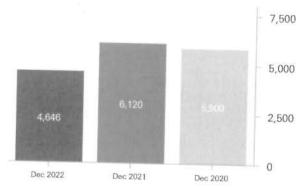
Reported (loss)/profit before tax (£m)



£(959)m

(2021: £1,023m); (2020: £(1,614)m)

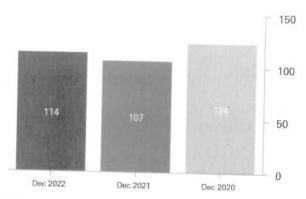
Reported revenue (£m)



£4,646m

(2021: £6,120m); (2020: £5,900m)

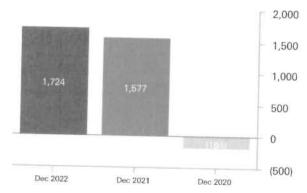
Reported risk-weighted assets at period end (£bn)



£114bn

(2021: £107bn); (2020: £124bn)

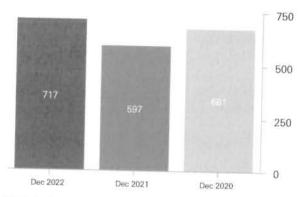
Adjusted profit/(loss) before tax (£m)



£1,724m

(2021: £1,577m); (2020: £(184)m)

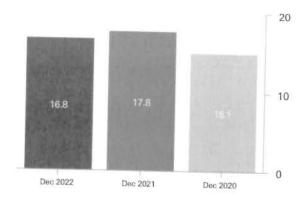
Total assets at period end (£bn)



£717bn

(2021: £597bn); (2020: £681bn)

Common equity tier 1 ratio at period end (%)



16.8%

(2021: 17.8%); (2020: 15.1%)

Key themes of 2022

HSBC Bank plc continued to support the Group through progress on our strategic aims, although challenges in the geopolitical and economic environment remain.

Financial Performance

Our financial performance in 2022 reflected losses associated with our restructuring initiatives, including impairments of businesses which have been classified as held-for-sale. These items resulted in a reported loss before tax. On an adjusted basis, profit before tax increased due to the benefit of higher interest rates and a strong performance in MSS. Costs decreased driven by the impact of our transformation and cost-saving initiatives. Expected credit losses returned to a charge for the year compared with a net release in 2021. Read more on pages 16 to 22.

Strategic Transformation

We have continued to progress in our areas of strength and simplify the group in order to streamline our operating model and seek to improve returns. During the course of 2022, we continued to prepare for the completion of the sale of our French retail operations, announced the sale of our Greece branch operations and entered into a sale agreement for our Russia business. We remain focused on implementing our Intermediate Parent Undertaking ('IPU'), in line with European Union ('EU') Capital Requirements Directive ('CRD'): HSBC Continental Europe ('HBCE') acquired HSBC Trinkaus & Burkhardt GmbH ('HSBC Germany') and HSBC Bank Malta ('HBMT'), and expect to acquire HSBC Private Bank (Luxembourg) SA in the first half of 2023, subject to receipt of pending regulatory approvals. More information can be found on pages 6 and 7.

Climate Ambition

The Group is committed to a net zero future and recognises that our planet urgently needs drastic and lasting action to protect our communities, businesses and the natural environment from the damaging effects of climate change.

The Group believe they can make the most significant impact by working with its customers to support their transition to a net zero global economy. Since 2020, HSBC Bank plc has supported our customers' transition to net zero and helped build a sustainable future by providing and facilitating \$86.2bn of sustainable finance, \$18.9bn of sustainable investment and \$0.1bn of sustainable infrastructure, as defined in the Group's Sustainable Finance Data Dictionary 2022. This financing and investment contributes towards the Group's ambition to provide and facilitate \$750bn to \$1tn of sustainable financing and investment by 2030. The \$86.2bn of sustainable finance includes lending facilities provided and capital markets facilitated transactions.

1 The detailed definitions of the contributing activities for sustainable finance are available in the Group's revised Sustainable Finance Data Dictionary 2022. For the Group's ESG Data Pack, Sustainable Finance Data Dictionary and third-party limited assurance report, see www.hsbc.com/who-we-are/esg-and-responsible-business/esgreportingcentre

Key financial metrics

For the year (£m)	2022	2021	2020
(Loss)/profit before tax (reported basis)			
Profit/(loss) before tax (adjusted basis)	(959)	1,023	(1,614)
Net operating income before change in expected gradit leaves and at the	1,724	1,577	(184)
Net operating income before change in expected credit losses and other credit impairment charges (reported basis) ⁹ (Loss)/profit attributable to the parent company	4,646	6,120	5,900
At 31 December (£m)	(408)	1,041	(1,488)
Total equity attributable to shareholders of the parent company			
Total assets	23,875	23,584	23,666
Risk-weighted assets ^{3,8}	717,353	596,611	681,150
Loans and advances to customers (net of impairment allowances)	114,171	106,703	124,353
Customer accounts	72,614	91,177	101,491
Capital ratios (%)3,8	215,948	205,241	195,184
Common equity tier 1			
Tier 1	16.8	17.8	15.1
Total capital	20.2	21.4	18.5
Leverage ratio (%) ^{4,8}	31.7	31.9	27.5
Performance, efficiency and other ratios (annualised %)	5.5	4.2	4.0
Return on average ordinary shareholders' equity ⁵			
Return on tangible equity (%) ⁶	(3.1)	4.3	(7.9)
Cost efficiency ratio (reported basis)7	5.5	6.1	(2.7)
Cost efficiency ratio (adjusted basis) ⁷	115.2	89.2	113.6
Ratio of customer advances to customer accounts	70.9	80.9	89.6
and of distorter advances to customer accounts	33.6	44.4	52.0

- Adjusted performance is computed by adjusting reported results for the effect of significant items as detailed on pages 18 to 20.
- Net operating income before change in expected credit losses and other credit impairment charges is also referred to as revenue. Unless otherwise stated, regulatory capital ratios and requirements are based on the transitional arrangements of the Capital Requirements Regulation in force at the time. These include the regulatory transitional arrangements for IFRS 9 'Financial Instruments', which are explained further on page 80. References to EU regulations and directives (including technical standards) should, as applicable, be read as references to the UK's version of such regulation and/or directive, as onshored into UK law under the European Union (Withdrawal) Act 2018, and as may be
- subsequently amended under UK law. 4 The leverage ratio is calculated using the end point definition of capital and the IFRS 9 regulatory transitional arrangements, in line with the UK leverage rules that were implemented on 1 January 2022, and excludes central bank claims and cash pooling netting. Comparatives for 2021 are reported based on the disclosure rules in force at that time, and include claims on central banks.
- The return on average ordinary shareholders' equity is defined as profit attributable to shareholders of the parent company divided by the average total shareholders' equity.
- 6 The RoTE is calculated by adjusting reported profit attributable to ordinary shareholders by excluding movements in PVIF and significant items (net of tax), divided by average tangible shareholders' equity excluding fair value of own debt, debit valuation adjustment ('DVA') and other adjustments for the period. The calculation of this measure includes the UK bank levy incurred for the first time in 2021, which was previously paid by the Group. Comparative data have not been re-presented.
- 7 Reported cost efficiency ratio is defined as total operating expenses (reported) divided by net operating income before change in expected credit losses and other credit impairment charges (reported), while adjusted cost efficiency ratio is defined as total operating expenses (adjusted) divided by net operating income before change in expected credit losses and other credit impairment charges (adjusted).
- From 30 September 2022, investments in non-financial institution subsidiaries or participations have been measured on an equity accounting basis in compliance with UK regulatory requirements. Comparatives for prior periods have been represented on a consistent basis with the current year.

About HSBC Group

With assets of \$3.0tn and operations in 62 countries and territories at 31 December 2022, HSBC is one of the largest banking and financial services organisations in the world. Approximately 39 million customers bank with the Group and the Group employs around 219,000 full-time equivalent staff. The Group has around 182,000 shareholders in 128 countries and territories.

Purpose and strategy

HSBC's purpose and ambition

The Group's purpose is 'Opening up a world of opportunity' and the Group's ambition is to be the preferred international financial partner for the Group's clients.

HSBC values

HSBC values help define who we are as an organisation and are key to our long-term success.

We value difference

Seeking out different perspectives.

We succeed together

Collaborating across boundaries.

We take responsibility

Holding ourselves accountable and taking the long view.

We get it done

Moving at pace and making things happen.

HSBC Group strategy

The Group is implementing its strategy at pace across the four strategic pillars aligned to its purpose, values and ambition announced in February 2021.

The Group's strategy centres on four key pillars: focus on our areas of strength, digitise at scale to adapt our operating model for the future; energise our organisation for growth and support the transition to a net zero global economy.

Focus on our strengths: in each of our global businesses, the Group will focus on areas where we are strongest and have opportunities to grow.

Digitise at scale: the Group will focus investments in areas such as technology, to improve our customers' experience while ensuring security and resilience. These investments in technology will also help drive down costs, including through automating our middle and back offices and building solutions to free up office footprint.

Energise for growth: the Group is moving to a leaner and simpler organisation that is energised and fit for the future. The Group aims to inspire a dynamic culture and champion inclusion across the organisation, as well as help employees develop future skills.

Transition to net zero: the Group's ambition is to support the transition to a net zero global economy. The Group has set out an ambitious plan to aim to become a net zero bank, to support customers in their transition, and to unlock new climate solutions.

HSBC in Europe

Europe is an important part of the global economy, accounting for roughly 40% of global trade and one-quarter of global Gross Domestic Product (UNCTAD, IMF 2021). In addition, Europe is the world's top exporter of services and second largest exporter of manufactured goods (UNCTAD, IMF 2021). HSBC Bank plc facilitates trade within Europe and between Europe and other jurisdictions where the HSBC Group has a presence.

With assets of £717bn at 31 December 2022, HSBC Bank plc is one of Europe's largest banking and financial services

organisations. We employ around 14,400 people across our locations. HSBC Bank plc is responsible for HSBC's European business, apart from UK retail and most UK commercial banking activity which, post ring-fencing, are managed by HSBC UK Bank plc.

HSBC Bank plc operates as one integrated business with two main hubs in London and Paris.

HSBC Bank plc is present in 20 markets¹. We are organised around the principal operating units detailed below, which represent the region to customers, regulators, employees and other stakeholders.

The London hub consists of the UK non-ring fenced bank, which provides overall governance and management for the Europe region as a whole and is a global centre of excellence for wholesale banking for the Group.

HBCE comprises our Paris hub, its EU branches (Belgium, Czech Republic, Greece, Ireland, Italy, Luxembourg, Netherlands, Poland, Spain and Sweden), Germany and Malta. We are creating an integrated Continental European bank anchored on Paris to better serve our clients and simplify our organisation.

1 Full list of markets where HSBC Bank plc has a presence: Armenia, Belgium, Channel Islands and Isle of Man, Czech Republic, France, Germany, Greece, Ireland, Italy, Israel, Luxembourg, Malta, Netherlands, Poland, Russia, South Africa, Spain, Sweden, Switzerland and the UK.

HSBC Bank plc's strategy and progress on our 2022 commitments

Our ambition in Europe is to be the leading international wholesale bank connecting East and West, with a complementary Wealth business, an efficient operating model and a robust control framework (see our global businesses on page 9).

HSBC Bank plc exists to open up a world of opportunity for our customers by connecting them to international markets. Europe is the largest trading region in the world and Asia is Europe's biggest and fastest growing external trading partner (UNCTAD, IMF 2021). We are well positioned to capitalise on this opportunity and play a pivotal role for the Group.

We expect Europe to continue to deliver change in 2023 to drive our ambition, the majority of announced transformation has been completed (see 'Focus on our strengths' for more information). In parallel to completing our transformation work, we are repositioning for growth and are well placed to seek to deliver strong financial performance. Further detail can be found below.

In 2022, Europe faced significant inflationary pressure, resulting in rapid central bank interest rate rises. We expect to continue operating in a volatile environment. Further information as to how we have and will continue to support and engage with our stakeholders can be found on page 10.

Below we provide a progress update on our commitments and strategic initiatives for 2022.

Focus on our strengths

Through our transformation programme we are building a leaner, simpler bank with a sharper strategic focus. We have redesigned our franchise around the needs of our international clients and maintaining product and service capability where clients demand them. We intend to be a market leader in sustainable financing and assist the Group in meeting its climate ambition for net zero operations and supply chain by 2030.

New regulation in the EU provides an opportunity to simplify our structure. In response to the requirement for an IPU in line with EU CRD V, HBCE acquired HSBC Germany and HBMT in the second half of 2022, and expects to acquire HSBC Private Bank (Luxembourg) SA in the first half of 2023. This remains subject to regulatory approvals for which the process has now started.

During 2022, HBCE has continued to prepare for the completion of the sale, of our French retail business which is expected in the second half of 2023, subject to regulatory approval. Until completion of the planned transaction, the business remains part of, and will be managed by HBCE. Please see Note 34: Assets held for sale and liabilities of disposal groups held for sale, for further financial information on the transaction on page 186.

Following a strategic review of our business in Greece, an agreement has been signed to sell HBCE's branch operations in Greece to Pancreta Bank SA. The transaction is subject to regulatory approval and is expected to complete in the first half of 2023.

Following a strategic review of HSBC Europe BV (a wholly-owned subsidiary of HSBC Bank plc), we have stopped taking on new business and clients in our Russian operations. The value of foreign currency customer deposits and RUB deposits is now minimal. HSBC Europe BV has entered into an agreement to sell its wholly-owned subsidiary HSBC Bank (RR) (Limited Liability Company), subject to regulatory and governmental approvals. Such sale is currently expected to occur in the first half of 2023.

HSBC Group has implemented a new operating model for its Private Banking activities, in which HSBC Private Bank (Luxembourg) SA will become a central hub for HBCE's Private Banking clients. These clients will be served via a Paris branch of HSBC Private Bank (Luxembourg) SA. This will enable us to provide an enhanced product range to clients leveraging our infrastructure in Luxembourg.

Digitise at scale

We continue to invest in the digitisation of our global businesses, which is central to our strategy. Within Europe, Wealth and Personal Banking ('WPB') is focused on enhancing our engagement between clients and relationship managers, and allowing clients to self-serve at a time that suits them. For example, we further enhanced our digital portfolio and risk analysis platform, which furthered Private Bank advisers' ability to make suitable investment recommendations to clients using a more holistic approach to risk management. For our Retail customers, we have placed efforts into reducing paper waste in connection with the bank statements, with 33,000 bank statements viewed or downloaded in the Channel Islands. Looking ahead, we will seek to deploy secure and private communications via social media channels between clients and relationship managers. We also plan to introduce new ESG-centred reporting.

We are committed to maintaining our core strength in Global Payments Solutions ('GPS'), formerly known as Global Liquidity and Cash Management ('GLCM'). In 2022, we successfully delivered Real Time Payment capability in Luxembourg. GPS have improved our offering for customers in HSBCnet by enabling new features such as allowing customers to track and create recurring SEPA payments. GPS also enhanced the Liquidity Management Dashboard functionality, improving customers' ability to create and manage cash flow forecasts. By December 2022, we had 288 customers using the dashboard.

Our strategy within Global Trade and Receivables Finance ('GTRF') Europe is to help make trade easier, faster and safer, whilst seeking to deliver sustainable and profitable growth. Throughout 2022, we enhanced our digital channel HSBCnet and strengthened collaborations with third-party platforms. Examples of third-party collaboration include Komgo, a bank-agnostic platform that provides solutions to our customers to manage trade finance needs, and Contour, a blockchain solution that fully digitises letters of credit.

As at year end, 85% of trade transactions across Europe were conducted digitally as we continue to see an increase in clients adopting digital solutions.

For digital currencies and assets, we have made significant progress in 2022 in building a strategic tokenisation platform ('HSBC Orion') in Global Banking and Markets. HSBC Orion launched the world's first GBP tokenised bond in January 2023.

The platform allows natively digital bonds to be registered and issued, fully supports both primary and secondary market trading and is part of our ambition to widen the adoption of digital assets.

In Foreign Exchange we continue to enhance our electronic trading infrastructure to provide improved risk management to our clients. Our focus is to support customers' FX and cross-border payment needs through improved pricing tools and e-trading.

Energise for growth

Empowering our organisation and energising our employees is critical to Europe's success and remains a key focus. We made good progress against our people strategy including our diversity and inclusion agenda and are committed to offering colleagues the opportunities to develop their skills whilst building our talent pipelines to support the achievement of our strategic priorities.

We are committed to increasing diverse representation in Europe, especially at senior levels and in 2023 we aim to significantly increase sponsorship and accountability for achieving our goals. Our Diversity and Inclusion Council defines and drives specific actions across our D&I strands, supported by our pan-European Employee Resource Group 'Inclusive Europe'.

To support the Group's climate ambitions to become net zero in its operations and supply chain by 2030, and align its financed emissions to the Paris Agreement goal of net zero by 2050, the Group launched the Sustainability Academy in 2022. The Academy is available to all colleagues across the Group and serves as a central point for colleagues to access learning plans and curated resources, and develop practical skills. The Group have partnered with some leading educational institutions such as Imperial College Business School and will continue to update the academy with new research and content related to ESG issues, including those related to social and governance issues.

We have strengthened the training we provide to leaders to help them support colleagues through the changing environment we are facing. We have continued the executive development programme for our most senior leaders, which focuses on the shifting expectations of our enterprise wide leadership cadre, embedding the clarity and alignment to achieve our goals and tackling strategic change.

For our Managing Director population, we have taken into consideration that leadership development will vary depending on individual career experiences and tenure in role. Our executive curriculum contains an array of programmes to meet varying leadership development personas and topics focus on a range of issues including critical skills areas such as influence, inclusion, and Agile methodologies. During 2022, we launched two Managing Director development programmes: 1) Shaping your Leadership; to help new Managing Directors sharpen their focus and define how they will 'show-up' as one of HSBC's most senior leaders, 2) Shaping HSBC, which focuses on the experimentation required to enhance the leadership skills that will drive adaptability, innovation and unleash the talent of our people to enable HSBC to thrive in a time of disruption and complexity.

We continue to focus on the development of people managers who are key to shaping the experience of, and development of, our colleagues. We have recently refreshed our core People Manager Excellence curriculum which covers 40 skills structured around four modules that are available in face-to-face and virtual formats. The modules focus on: 1) Your Role; connecting managers with HSBCs purpose and personal energetic leadership, 2) Your People; creating energy, commitment and high performance within your team, 3) Your work; managing productivity and delivering against outcomes, and 4) Your Team; building high performing collaborative teams.

Complimentary digital learning pathways will also be made available to support the development contained within the four modules.

Transition to net zero

Part of the Group's ambition to be a net zero bank is to achieve net zero carbon emissions in our operations and supply chain by 2030.

The Group has three elements to the strategy: reduce, replace and remove. The Group plan to first focus on reducing carbon emissions from consumption, and then replacing remaining emissions with low-carbon alternatives in line with the Paris Agreement. The Group plan to remove the remaining emissions that cannot be reduced or replaced by procuring, in accordance with prevailing regulatory requirements, high-quality offsets at a later stage.

In October 2020, the Group announced an ambition to reduce its energy consumption by 50% by 2030, against a 2019 baseline. In 2022, HSBC Bank plc implemented energy efficiency measures and a strategic reduction of our office footprint, across our office spaces and data centres.

These measures include:

- Embedding 100% renewable energy in our Germany offices;
- Further installation of LED lighting and optimisation of lighting timing controls in France, Switzerland, Spain and Germany; and
- Improvements to heating, ventilation and air conditioning systems throughout the HSBC Bank plc office portfolio to reduce energy consumption and increase efficiency.

As part of the Group's ambition to achieve 100% renewable power across our operations by 2030, HSBC Bank plc continue to look for opportunities to procure green energy in each of our markets.

HSBC Bank plc is managing the gradual resumption of employee travel in line with the Group's aim to halve travel emissions by 2030 compared with pre-pandemic levels.

For further information on the transition to net zero, please see the ESG review in the Group's Annual Reports and Accounts for the year ended 31 December 2022.

Supporting our Customers

The Group understands that financial institutions have a critical role to play in achieving the transition to a net zero global economy. The most significant contribution we can make is by mobilising finance to support our portfolio of customers in their transition to decarbonise.

Since 2020, HSBC Bank plc has supported our customers' transition to net zero and helped build a sustainable future by providing and facilitating \$86.2bn of sustainable finance, \$18.9bn of sustainable investment and \$0.1bn of sustainable infrastructure, as defined in the Group's Sustainable Finance Data Dictionary 2022.

This financing and investment contributes towards the Group's ambition to provide and facilitate \$750bn to \$1tn of sustainable financing and investment by 2030. The \$86.2bn of sustainable finance includes lending facilities provided and capital markets facilitated transactions.

Given the Group's global presence and relationships with our customers across industries, the Group recognise the role it can play in catalysing the global transition to net zero. The Group is well positioned to finance the transition in developing and emerging economies, mobilising capital to help enable sustainable business models and an inclusive, just and resilient transition.

For example, in 2022, HBCE acted as a sustainability coordinator, book runner and mandated lead arranger for a \$150m sustainability-linked revolving credit facility for company: Nordic Semiconductor. The technology company which specialises in designing ultra-low power performance wireless systems, incorporated for the first time, sustainability-linked key performance indicators and an ESG roadmap within its business to help achieve their sustainability targets by 2030.

The breakdown of the Group's sustainable finance and investment progress is included in its ESG Data pack. The detailed definitions of the contributing activities for sustainable finance are available in the Group's Sustainable Finance Data Dictionary 2022. For the Group's ESG Data Pack, Sustainable Finance Data Dictionary and PwC Assurance Report, see www.hsbc.com/who-we-are/esg-and-responsible-business/esg-reporting-centre.

Unlocking New Climate Solutions

The Group understands the need to find new solutions to increase the pace of change if the world is to achieve the Paris Agreement's goal of net zero by 2050. Therefore, the Group is working closely with a range of partners to accelerate investment in natural resources, technology and sustainable infrastructure to reduce emissions and help address climate change.

HSBC Group partnered with the World Resources Institute and World Wildlife Fund ('WWF') in 2020 to launch its \$100m philanthropic programme, Climate Solutions Partnership, with the aim to accelerate support for innovative solutions tackling climate change. This five-year philanthropic initiative aims to identify and remove barriers to scale for climate change solutions. As part of this, in France, two projects are being delivered in partnership with the French National Forestry Office and the Earthworm Foundation. These projects aim to better enable CO2 capture, preserve biodiversity and engage the community, helping to support a net zero and sustainable future.

Our Global Businesses

The Group manages its products and services through its three global businesses: Global Banking and Markets ('GBM'); Commercial Banking ('CMB'); Wealth and Personal Banking ('WPB'); and the Corporate Centre (comprising: certain legacy assets, central stewardship costs, and interests in our associates and joint ventures).

Business segments

Our operating model has the following material segments: a GBM business which is further split into three reportable segments: MSS, GB and GBM Other (as defined below), CMB, WPB and a Corporate Centre. These segments are supported by Digital Business Services and eleven global functions, including Risk, Finance, Compliance, Legal, Marketing and Human Resources.

Markets & Securities Services ('MSS')

Markets & Securities Services is a products group that services customers of all Global Businesses and institutional clients across the financial sector globally. We offer clients a range of services and capabilities including trading, financing and securities services across asset classes and geographies, supported by dedicated sales and research teams.

Our European teams play a key role in providing access to FX, commodities, Equities and Fixed Income offerings, bridging emerging and developed markets, and collaborating with other global businesses to provide clients across the Group with commoditised and bespoke solutions that seek to support their growth ambitions.

Global Banking ('GB')

Global Banking delivers tailored financial solutions to corporate and institutional clients worldwide opening up opportunities through the strength of our global network and capabilities. We provide a comprehensive suite of services including capital markets, advisory, lending, trade services and global payments services. Our European teams take a client-centric approach bringing together relationship and product expertise to deliver financial solutions customised to suit our clients' growth ambitions and financial objectives. We work closely with our business partners including MSS, WPB and CMB, to provide a range of tailored products and services that seek to meet the needs of international clients across the company. Global Banking Europe operates as an integral part of the global business and contributes significant revenues to other regions particularly Asia, through our European client base, supporting the Europe ambition to be the leading international wholesale bank, partly by benefiting from the client network managed outside Europe.

GBM Other

GBM Other primarily comprises Principal Investments and GBM's share of the Group's Markets Treasury function. The Principal Investments portfolio is focused on delivering investments that align to the group's strategy and seeks to deliver strong returns across a diversified portfolio. Our commitment to sustainable private equity funds contributes directly to the Group's aim to provide and facilitate \$750bn and \$1tn of sustainable finance and investment by 2030.

Commercial Banking ('CMB')

We have a clear strategy to be the leading international corporate bank in Europe. We help connect our European customers to our international network of relationship managers and product specialists; supporting their growth ambitions and targets. Our products are designed to support clients in their international growth and range from term loans to region-wide treasury and trade solutions. We see the greatest opportunity to deliver and grow alue for the Group by supporting European clients with international subsidiaries in Asia and other regions; our internal performance measures are aligned to this outcome. Commercial Banking is at the centre of creating revenue synergies within the Group: we collaborate closely with our Global Banking and Markets colleagues to provide expertise in capital finance and advisory solutions to support our Commercial Banking clients. Our trade teams within Commercial Banking also provide import and export finance solutions to Global Banking and Markets clients. We also support our clients to unlock efficiencies in their Treasury structures through our Global Payments Solutions team. As the European economy pivots to a net zero carbon economy, we are expanding our services and products to provide customers with innovative sustainable finance solutions and ensuring our relationship managers are positioned to support our clients' transition to net zero

Wealth and Personal Banking ('WPB')

In Europe, Wealth and Personal Banking serves customers with their financial needs through a number of business area ncluding Retail Banking, Private Banking, Wealth Management, Insurance and Asset Management. Our core retail proposition offers a full suite of products including personal banking, mortgages, loans, credit cards, savings, investments and insurance. Alongside this, WPB offers various propositions in certain markets, including Premier, as well as wealth solutions, financial planning and international services. In the Channel Islands and the Isle of Man, we serve local Islanders as well as international customers, the majority of whom are customers of HSBC in other markets, through our HSBC Expat proposition. Our Private Banking proposition serves high net worth and ultrahigh net worth clients. Whilst these clients are based all over the world, booking centres are based in the Channel Islands and Isle of Man, France and Germany, which facilitate customers with a total relationship balance greater than \$2m. The range of services available to private banking clients includes investment management, Private Wealth Solutions and bespoke lending such as lending against financial assets and residential mortgage financing for high-end properties Private Banking hosts a 'Next Generation' programme of events to support our clients' next generation in building and retaining the wealth within the family. The private bank offers this through its philanthropy advisory to our clients, which looks at business succession planning. We continue to focus on meeting the needs of our customers, the communities we serve, and our people, whilst working to build the bank of the future.

Adjusted profit/(loss) before tax by business segment

 £472m
 £486m
 £(329)m
 £785m
 £577m

 (2021, £(8m)), (2021, £58m); (2021, £99m), (2021, £490m); (2021, £490m); (2021, £323m)
 (2021, £490m); (2020, £152m)
 (2021, £323m)

Our global businesses are presented on an adjusted basis, which is consistent with the way in which we assess the performance of our global businesses.

ESG Overview

We conduct our business to support the sustained success of our customers, employees and other stakeholders.

Our approach

We are guided by the Group's purpose to open up a world of opportunity for our colleagues, customers and communities. Our purpose is underpinned by the Group's values: we value difference; we succeed together; we take responsibility; and we get it done. The Group's purpose and values help us to deliver our strategy and unlock long-term value for our stakeholders.

As an international bank with significant breadth and scale, we understand that our climate, economies, societies, supply chains and people's lives are interconnected. The Group recognise they can play an important role in tackling ESG challenges. The Group focuses its efforts on three areas: the transition to net zero, building inclusion and resilience, and acting responsibly.

Fair outcomes

We are focused on running a strong and sustainable business that puts the customer first, values good governance, and gives our stakeholders confidence in how we do what we do. Our conduct approach helps to guide us to do the right thing and to focus on the impact we have for our customers and the financial markets in which we operate. For further information on conduct, see page 6. For further details on our purpose-led conduct approach framework, see www.hsbc.com/who-we-are. Our section 172 statement, detailing our Directors' responsibility to stakeholders, can be found on page 12.

Our colleagues

We aspire to open up a world of opportunity for our colleagues and build an inspiring, dynamic culture where the best talent want to work.

We value difference and we continue to build an inclusive workforce that is representative of the communities we serve. We set and report on progress made against the Group-wide gender and ethnic diversity goals.

Understanding the experience of colleagues is central to our efforts. Through our employee Snapshot survey, we capture our colleagues' views on topics such as hybrid working and wellbeing. In 2022, over 8,000 colleagues responded to the survey across Europe, a participation rate of 54%. Developing the skills of colleagues is critical to energising our organisation. We foster a culture of learning through a range of resources that provide colleagues with a breadth of educational materials and development opportunities.

Our Climate ambition

The Group has set a climate ambition to become net zero in its operations and its supply chain by 2030, and align its financed emissions to the Paris Agreement goal of net zero by 2050. In 2022, the Group expanded coverage of sectors for on-balance sheet financed emissions targets, recognising the challenge of evolving methodologies and data limitations.

Transition to net zero represents one of the Group's four strategic pillars. At the core of it is an ambition to support our customers on their transition to net zero, so that the greenhouse gas emissions from our portfolio of clients reaches net zero by 2050. The summary of the Group's Transition to net zero disclosure can be found on page 47 of the HSBC Holdings plc ESG review 2022.

Engaging with our stakeholders

Engaging with our stakeholders is core to being a responsible business. To determine material topics that our stakeholders are interested in, we conduct a number of activities throughout the year, including engagements outlined in the table below.

Dur stakeholders	How we engage	Material topics highlighted by the engagement
Customers	Our customers' voices are heard through our interactions with them, surveys and by listening to their complaints	Customer advocacy
Employees	Our colleagues' voices are heard through our employee Snapshot survey, Exchange meetings, and our 'speak-up' channels, including our global whistleblowing platform, HSBC Confidential	Employee training Diversity and inclusion Employee engagement
Investors	Our ordinary shares are held by our parent HSBC Holdings plc, however external parties invest in our bond issuance. We engage with these investors via our investor relations programme which enables investor queries alongside a broader programme of management meetings and market engagement	Strategic progress ESG policies Risk management
Communities	We welcome dialogue with external stakeholders, including non- governmental organisations ('NGOs') and other civil societies groups. We engage directly on specific issues and by taking part in external forums and working groups	Financial Inclusion and Community Investment
Regulators and governments	and governments to facilitate strong relationships via virtual and in-person meetings, responses to consultations individually and jointly via the industry bodies	Corruption
Suppliers	Our ethical and environmental code of conduct for suppliers of goods and services sets out how we intend to engage with our suppliers on ethical and environmental performance	Supply Chain Management Human Rights

Supporting our stakeholders facing a rising cost of living

We know that many of our customers are facing increasing cost of living pressures from higher inflation, and we are committed to helping them. Colleagues across our global businesses have been contacting our customers to provide them with access to support.

Our ESG metrics and targets

The Group has established targets that guide how we do business, including how we operate and how we serve our customers. These include targets designed to help us achieve our environmental and social sustainability goals.

They also help us to improve employee advocacy, the diversity of senior leadership and strengthen our market conduct.

The targets for these measures are linked to the pillars of our ESG strategy: transitioning to net zero, building inclusion and resilience, and acting responsibly.

To help us achieve our ESG ambitions, a number of measures are included in the annual incentive scorecards of the Europe Chief Executive and Executive Committee members.

Below we set out how we have made progress against the ESG-related ambitions and targets.

Environmental - Transition to net zero

One of the Group's strategic pillars is to support the transition to a net zero global economy. The Group's ambition is to align its financed emissions to the Paris Agreement goal to achieve net zero by 2050. The Paris Agreement aims to limit the rise in global temperatures to well below 2°C, preferably to 1.5°C, above preindustrial levels.

The transition to net zero is one of the biggest challenges for our generation. Success will require governments, customers and finance providers to work together. The Group's global footprint means that many of its clients operate in high-emitting sectors and regions that face the greatest challenge in reducing emissions. This means that the Group's transition will be challenging but is an opportunity to make an impact.

The Group recognises that to achieve its climate ambition it needs to be transparent on the opportunities, challenges, related risks and progress it makes. To deliver on the ambition requires enhanced processes and controls, and new sources of data. The Group continues to invest in climate resources and skills, and develop its business management process to integrate climate impacts. Until systems, processes, controls and governance are enhanced, certain aspects of the Group's reporting will rely on manual sourcing and categorisation of data. In 2023, the Group will continue to expand its disclosures. Reporting will need to evolve to keep pace with market developments.

At the end of 2022, HSBC Bank plc achieved 63% cumulative reduction in absolute operational greenhouse gas emissions compared to a 2019 baseline in France, Germany, Switzerland and Malta. HSBC Bank plc continues to work to support the Group's ambition to achieve net zero in its own operations and supply chain by 2030.

Since 2020, HSBC Bank plc has supported our customers' transition to net zero and helped build a sustainable future by providing and facilitating \$86.2bn of sustainable finance, \$18.9bn of sustainable investment and \$0.1bn of sustainable infrastructure, as defined in the Group's Sustainable Finance Data Dictionary 2022. This financing and investment contributes towards the Group's ambition to provide and facilitate \$750bn to \$1tn of sustainable financing and investment by 2030. The \$86.2bn of sustainable finance includes lending facilities provided and capital markets facilitated transactions.

We continue to engage with our clients on their transition plans and to provide them with financing solutions to support their sustainability goals.

For further information regarding the Group's environmental footprint, please visit https://www.hsbc.com/who-we-are/our-climate-strategy/becoming-a-net-zero-bank.

Social - Build inclusion and resilience

- Our Snapshot employee engagement¹ score was 47% as at the end of 2022, an increase of 1% compared to 2021;
- Our ethnic diversity goal² for 2022 was to increase black heritage colleagues in senior leadership roles in the UK to 2.2%. We exceeded this target and reached 2.4%; and
- In 2022, we reached 24.6% senior leadership³ roles held by women up from 23.8% in 2021.

Governance - Acting responsibly

96%⁴ of HSBC Bank plc staff completed conduct training in 2022, which covers Conduct and Regulatory Compliance topics including: market abuse, conflicts of interest and treating customers fairly.

- 1 Employee engagement index is our headline measure of how employees feel about HSBC. HSBC Bank plc's score is low compared to the Group, key contributors are ongoing transformation and the challenging external environment in Europe. However, we are seeing year on year improvements and will continue to embed a positive and inclusive culture where our colleagues can thrive.
- 2 Our 2022 ethnicity goal of 2.2% includes UK RFB and NRFB.

- 3 Senior leadership is classified as those at band 3 and above in the Group's global career band structure. Our 2022 gender diversity target of 26.4% is cascaded by Group and inclusive of our operations in Bermuda, we reached 25.1% by end of 2022 at the regional level. We missed our 2022 target, our focus on improving gender balance in senior leadership across Europe remains a priority for HSBC Bank plc executive committee for 2023.
- 4 The completion rate shown relates to the 2021/22 'Taking Responsibility' Compliance training module which is categorised as 'required' learning for Global employees. Unlike with mandatory training, a formal target is not established for 'required' learning modules and non-completion is performance managed.

Responsible Business Culture

We have the responsibility to protect our customers, our communities and the integrity of the financial system. In this section, we outline our requirements under the Non-Financial Reporting Directive.

Environmental matters

More information about the Group's assessment of climate risk can be found in the HSBC Holdings plc *Annual Report and Accounts 2022*.

Employee matters

We are opening up a world of opportunity for our colleagues through building an inclusive organisation that values difference, takes responsibility and seeks different perspectives for the overall benefit of our customers.

We promote an environment where our colleagues can expect to be treated with dignity and respect. We are an organisation that acts where we find behaviours that fall short. Our index measuring colleagues' confidence in speaking up is at 67% in 2022.

At times our colleagues may need to speak up about behaviours in the workplace. We encourage colleagues to speak to their line manager in the first instance, and our annual employee Snapshot survey showed 82% feel comfortable doing so. We recognise that at times people may not feel comfortable speaking up through the usual channels. HSBC Confidential is our global whistleblowing channel, allowing our colleagues past and present to raise concerns confidentially and, if preferred, anonymously (subject to local laws).

We aspire to be an organisation that is representative of the communities which we serve. To achieve this, we set goals that will build sustainable lasting change. We are focused on increasing women and black heritage colleagues in senior leadership roles and whilst we have made good progress, we know there is more to be done.

To support our ambition, we encourage our colleagues to selfidentify their ethnicity data where legally permissible. At a European level, we are limited in our collection of ethnicity data and can only report in: UK, Channel Islands and the Isle of Man ('CIIOM'), and South Africa. However, we are continuing to drive open dialogue and action to strengthen our employee networks and improved our diversity data where possible.

Communities

The Group has a long-standing commitment to help support the communities in which it operates. Through charitable partnerships and volunteering opportunities, our people share their skills and create a positive impact on society. The Group's global reach is its unique strength and bringing together diverse people, ideas and perspectives, helps us open up opportunities and build a more inclusive world.

In 2022, HSBC Bank plc continued to work with our charity partners across Europe to promote employability and financial capabilities in disadvantaged communities, and respond to local needs:

 HBCE partnered with charities Cresus and Adie to deliver programmes that enhance financial capability and entrepreneurship amongst disadvantaged individuals in their respective communities. HBMT supported local disadvantaged young people through its charitable partnership with the Prince's Trust Foundation and the 'Prince's Trust International Achieve programme' to develop employable skills.

In 2022, HSBC Bank plc collectively donated £1.8m to charitable programmes and was further supported by our employees' contribution of 1,540 volunteer hours in various community activities and projects during work time.

Human rights

Our commitment to respecting human rights, principally as they apply to our employees, our suppliers and through our financial services lending, is set out in our Statement on Human Rights. This statement, along with our statements under the UK's Modern Slavery Act, is available on www.hsbc.com/who-we-are/esg-and-responsible-business/esg-reporting-centre.

Anti-corruption and anti-bribery

We are committed to high standards of ethical behaviour and operate a zero-tolerance approach to bribery and corruption. We consider such activity to be unethical and contrary to good corporate governance.

HSBC requires compliance with all applicable anti-bribery and corruption ('AB&C') laws in all markets and jurisdictions in which we operate. These include the UK Bribery Act and France's 'Sapin II' law. We have a global AB&C policy, which gives practical effect to these laws and regulations, but also requires compliance with the spirit of laws and regulations to demonstrate our commitment to ethical behaviours and conduct as part of our environmental, social and corporate governance.

The global AB&C policy sets out the key principles and minimum control requirements that enable HSBC to mitigate bribery and corruption risk. Mandatory AB&C training is provided to all staff, with additional targeted training tailored to the roles of individuals. HSBC carries out regular risk assessments, monitoring and testing of its AB&C programme and maintains clear whistleblowing policies and processes to ensure that individuals can confidentially report concerns.

Non-Financial Information Statement

Disclosures required pursuant to the Companies, Partnerships and Groups (Accounts and Non-Financial Reporting) Regulations 2016 can be found on the following pages:

Page 11
Pages 10 to 13 and 101 to 102
Page 11
Page 12
Page 12
Page 9
Page 24

HSBC creates value by providing products and services to meet our customers' needs. We aim to do so in a way that fits seamlessly into their lives. This helps us to build long-lasting relationships with our customers. HSBC maintains trust by striving to protect our customers' data and information, and delivering fair outcomes for them and if things go wrong, we need to address complaints in a timely manner.

Operating with high standards of conduct is central to our longterm success and underpins our ability to serve our customers. Our Conduct Framework guides activities to strengthen our business and increases our understanding of how the decisions we make affect customers and other stakeholders. Details on our Conduct Framework are available at www.hsbc.com/Conduct.

Section 172 statement

This section, from pages 12 to 13 forms our section 172 statement and addresses the requirements of the Companies (Miscellaneous Reporting) Regulations 2018. It describes how the Directors have performed their duty to promote the success of the bank, including how they have considered and engaged with

stakeholders and, in particular, how they have taken account of the matters set out in section 172(1)(a) to (f) of the Companies Act 2006 (the 'Act').

The Board considered a range of factors when making decisions and is supported in the discharge of its responsibilities by:

- a. an induction programme and ongoing training for Directors to provide an understanding of our business and financial performance and prospects;
- management processes which help ensure that proposals presented to Board and committee meetings for decision include information relevant to determine the action that would most likely promote the success of the bank and involve engagement with stakeholders where relevant, to support appropriate decision making; and
- agenda planning for Board and committee meetings to provide sufficient time for the consideration and discussion of key matters.

Stakeholder Engagement

The Board understands the importance of effective engagement with its stakeholders and is committed to open and constructive dialogue. Engagement with stakeholders takes place at the holding company level and at the operational level. On certain issues, the Board may engage directly with stakeholders. The outcomes from such stakeholder engagement feeds into Board discussions and decision making. This approach allows the Board to better understand the impact of the bank's actions on its stakeholders and respond to the challenges facing the bank. The relevance of each stakeholder group varies depending on the specific decision being taken by the Board. Not every decision the Board makes will necessarily result in a positive outcome for all stakeholders.

As a result of both its direct stakeholder interactions and the reporting and information on stakeholder engagement it receives about its six key stakeholders, namely customers, employees, shareholders and investors, regulators and governments, suppliers, and communities, the Board seeks to understand, and have regard to, the interests and priorities of these stakeholders.

The two examples provided below of principal discussions and decisions taken by the Board in 2022 show how the Directors and Board respectively discharged their individual and collective responsibility for promoting the long-term success of the bank and took different stakeholder considerations into account in reaching a decision or forming a view.

For further details regarding the role of the Board and the way in which it makes decisions, including key activities during 2022, please see page 95 to 96.

Customers

As one of Europe's largest banking and financial services organisations our corporate and institutional customers are at the core of the bank's business model: without customers there would be no bank. We have a clear vision to be the leading international wholesale bank in Europe, complemented by a targeted wealth and personal banking business. The Board strives to ensure it has a broad understanding of customers, their needs and challenges, and to give full consideration to these when its approval is sought on matters such as material acquisitions, disposals, investments, large scale change or transformation programmes.

Throughout 2022, geopolitical and economic uncertainty has given our customers additional challenges and senior management have engaged directly with customers to better understand their issues and difficulties and how the bank can respond to them. During this period, the Board has been provided with customer feedback and key performance indicators, such as net promoter scores, customer complaints, customer on-boarding times and satisfaction survey results. The Board schedule also included Commercial Banking, Wealth and Personal Banking, Global Banking and Markets deep dive strategy sessions which incorporated discussions on customer interactions, customer surveys, complaints feedback and product developments to meet customers' needs.

Employee (Workforce Engagement)

Employees are critical to the success of the bank, its sustainability and long-term future. Understanding employee sentiment and how we are addressing feedback is a key area of Board focus. During the year, the Board received regular updates from senior management on the progression of our people priorities covering various employee-focused initiatives across culture, leadership, talent, skills, inclusion, wellbeing and colleague experience. Further information on people priorities can be found under Employee at page 101-102.

Feedback from employees is gathered via various mechanisms including surveys, exchange meetings and 'speak up' channels and reported to the Board. The Board is presented bi-annually with a culture dashboard which has been developed to track progress in embedding a positive and inclusive culture across the business. Board focus on employees was heightened due to the ongoing transformation programme and the need for continuing consideration of the impact on employees when making Board decisions.

The Board remained committed to building active communication and feedback channels with employees across the region in 2022. During the year, three cohorts were specifically targeted given their importance to the bank's strategy and their role in building a robust leadership pipeline. These included: i) Executive Committee member's direct reports, ii) Subsidiary Board members, and iii) Flagship Talent programme including participants from Accelerating Female Leaders, Explore, and Accelerating into Leadership programmes. Further details of the bank's engagement with employees can be found on pages 10 to 11 and 101 to 102.

Shareholders and Investors

The bank is a wholly owned subsidiary of HSBC Holdings plc and, as such, the Board took into account the implications of its decisions with regard to its shareholder, HSBC Holdings plc, and its debt security investors. Examples of how it fulfilled this include:

- the Board Chair and Committee Chairs engaged with Group counterparts and attended Group forums and Group committee meetings, together with Executive Directors, to engage on common issues and strategic priorities;
- Board review and approval of HSBC Bank plc specific components of Group programmes; and
- Board consideration of the strength of the balance sheet to ensure that the ability to pay principal or interest on its debt securities was not at risk.

Regulators and Governments

During the year, Directors met regularly with regulators both in the UK and Europe. It is central to the success of the bank that it has constructive relationships with regulators and governments and that there is a mutual understanding on expectations and challenges given their impact on customers, the business model and the bank's strategy.

The Board receives regular updates on how HSBC interacts with regulators globally and at the European level. Understanding regulators' views and priorities in this way shapes and influences Board discussions and decision making.

Suppliers

Suppliers are critical to supporting the infrastructure and operations of the business and we work with suppliers to ensure mutually beneficial relationships. Examples of Board engagement with suppliers during 2022 include:

- the Chief Operating Officer's regular reports on third-party supplier matters covering key suppliers' operational resilience and how we work with suppliers to mitigate impact to our customers; and
- oversight of progress of implementing contractual changes with third party suppliers to adopt new Standard Contractual Clauses to meet 'Schrems II decision' data requirements.

Communities

The bank has legal, regulatory and social responsibilities to the communities in which it operates and the environment and is conscious of the need to manage the societal and environmental impact of its business when making decisions. During the year the Board received regular updates on matters spanning human rights and environmental and climate issues.

Principal Decisions

Set out below are some of the principal decisions made by the Board during 2022. In each case, in taking such decisions, the Directors exercised their statutory duties under section 172(1) (a)-(f) of the Companies Act 2006.

Liability Management Exercise - Tender Offer

A key regulatory responsibility of the Board is to periodically assess the bank's capital and liquidity position and associated risks in a structured way, while also considering management proposals in support of the bank's financial strength and capital efficiency.

Mindful of the bank's continued focus on balance sheet optimisation, and broader regulatory expectations, management undertook an exercise to review potential liability management actions relating to its issued debt securities.

The review resulted in a formal proposal being brought to the Board, recommending the bank make an invitation to holders of certain legacy debt securities to tender any and all of such debt securities for purchase by the bank for cash, subject to certain conditions being satisfied.

Prior to approval, the Board constructively challenged and engaged with senior management to consider the capital and liquidity impact on the bank's balance sheet. As part of its considerations, the Board took in to account the impact of the project on the bank's key stakeholders, in particular its investors in such instruments and its obligations to, and relationship with, its regulators. In considering stakeholders, the Board also considered its minimum requirements for own funds and eligible liabilities and how the legacy securities were treated from a regulatory capital perspective.

In reaching its decision, the Board acknowledged the rationale for the proposal in the context of seeking to further enhance efficiencies in the bank's capital structure. The Board also acknowledged the Bank of England's ('BoE') resolvability assessment of major UK banks, which welcomed action being taken, where it is appropriate and proportionate to do so, to reduce the stock of legacy capital securities issued from non-resolution entities to holders outside the group. Having taken all of these and other factors into account, and subject to market and economic conditions, the Board approved the proposed tender offer in respect of the chosen legacy securities, which was subsequently announced on 14 November 2022.

European Transformation - Malta Transfer

For a number of years, management have considered the most appropriate organisational structure within Continental Europe to help execute the bank's Europe transformation strategy. In addition to this review, management acknowledged the need for banking entities to comply with the requirement under the CRD V to establish an EU IPU structure by the end of 2023. The review included a formal proposal being brought to the Board in October 2022, recommending the sale of HSBC Europe BV's entire shareholding in HBMT to the group's EU IPU, HBCE. Prior to approval, the Board reviewed and assessed options presented by management to achieve compliance with the CRD V requirements. The Board constructively engaged with management to consider the financial and regulatory implications and the likely consequence of the proposal on the bank's key stakeholders, as appropriate. Mindful of longer-term consequences of decisions and the impact on operations, as well as HBMT's local listing, the Board also carefully considered the approach to valuation and purchaser protections for the

In reaching its decision, the Board acknowledged the rationale for the recommendation in the context of regulatory expectations and that HBCE had also provided its in-principle approval for the recommendation. Having taken these factors into consideration, including an assessment of the financial merits and risks, investor and regulatory engagement, the Board agreed to proceed with the proposal, as subsequently completed on 30 November 2022.

Tax

Our approach to tax

We are committed to applying both the letter and the spirit of the law in all territories where we operate, and have adopted the UK Code of Practice for the Taxation of Banks. As a consequence, we seek to pay our fair share of tax in the countries in which we operate. We continue to strengthen our processes to help ensure our banking services are not associated with any arrangements known or suspected to facilitate tax evasion.

HSBC continues to apply global initiatives to improve tax transparency such as:

- the US Foreign Account Tax Compliance Act ('FATCA');
- the Organisation for Economic Co-operation and Development ('OECD') Standard for Automatic Exchange of Financial Account Information (also known as the Common Reporting Standard);
- · the CRD IV Country by Country Reporting;
- the OECD Base Erosion and Profit Shifting ('BEPS') initiative; and
- the UK legislation on the corporate criminal offence ('CCO') of failing to prevent the facilitation of tax evasion.

We do not expect the BEPS or similar initiatives adopted by national governments to adversely impact our results.

Key Performance Indicators

The Board of Directors tracks the group's progress in implementing its strategy with a range of financial and non-financial measures or key performance indicators ('KPIs'). Progress is assessed by comparison with the group strategic priorities, operating plan targets and historical performance. The group reviews its KPIs regularly in light of its strategic objectives and may adopt new or refined measures to better align the KPIs to HSBC's strategy and strategic priorities.

Financial KPIs

2022	2021	2020
(959)	1,023	(1,614)
1,724	1,577	(184)
115.2	89.2	113.6
70.9	80.9	89.6
5.5	6.1	(2.7)
16.8	17.8	15.1
	(959) 1,724 115.2 70.9 5.5	(959) 1,023 1,724 1,577 115.2 89.2 70.9 80.9 5.5 6.1

Profit/(loss) before tax (reported/adjusted): Reported profit/ (loss) before tax is the profit/(loss) as reported under IFRS. Adjusted profit/(loss) before tax adjusts the reported profit/(loss) for the effect of significant items as detailed on pages 18 to 19.

Reported loss before tax in 2022 was £(959)m compared with a profit before tax of £1,023m in 2021. This was primarily driven by lower reported revenue, which reflected an impairment on the planned disposal of our retail banking operations in France and losses associated with the planned sale of our operations in Russia and Greece. Expected credit losses and other credit impairment charges ('ECL') were a net charge, largely reflecting stage 3 charges in Global Banking and CMB. This compared with a net release in 2021 primarily related to Covid-19 related allowances built up in 2020. Reported operating expenses were lower primarily driven by lower variable pay and the impact of our transformation cost-saving initiatives partly offset by higher restructuring and other related costs.

Share of profit/(loss) from associates recognised a loss of £30m compared with a gain of £191m in 2021.

Adjusted profit before tax was £1,724m, up £146m compared with £1,577m in 2021. This was driven by a strong revenue performance and lower operating expenses, partly offset by higher ECL. The increase in revenue was largely driven by higher net interest income in all of our global businesses, mainly due to interest rate rises. Revenue in Markets and Securities Services ('MSS') was also strong, mainly in Global Foreign Exchange and Equities. This was driven by increased client activity due to elevated market volatility and the macroeconomic impacts from rising inflation and increasing interest rates, and reflecting robust risk management. This was partly offset by lower valuation gains in Principal Investments ('PI') compared with 2021.

Operating expenses decreased, driven by lower performance related pay and the impact of our transformation cost-saving initiatives.

Reported cost efficiency ratio was 26.0 percentage points higher compared with 2021 driven by lower revenue partly offset by lower operating expenses. Reported revenue decreased by 24.1% and operating expenses decreased by 2.0%, mainly driven by the factors mentioned above.

Adjusted cost efficiency ratio improved by 10.0 percentage points from 2021, reflecting higher revenue and lower costs. Revenue increased by 7.1%, due to higher net interest income driven by the high interest rate environment and higher trading revenue in MSS. Operating expenses decreased by 6.1%, mainly driven by factors mentioned above.

Return on tangible equity ('RoTE') is computed by adjusting reported profit attributable to ordinary shareholders by excluding movements in PVIF and significant items (net of tax), divided by average tangible shareholders' equity excluding fair value of own debt, debit valuation adjustment ('DVA') and other adjustments for the period. The adjustment to reported results and reported equity excludes amounts attributable to non-controlling interests.

We provide RoTE as a way of assessing our performance, which is closely aligned to our capital positions.

CET1 capital ratio represents the ratio of common equity tier 1 capital to total risk-weighted assets ('RWA'). CET1 capital is the highest quality form of capital comprising shareholders' equity and related non-controlling interests less regulatory deductions and adjustments.

The group seeks to maintain a strong capital base to support the development of its business and meet regulatory capital requirements at all times.

The CET1 capital ratio of 16.8% in 2022 decreased by 1.0% from 2021, mainly due to an increase in RWAs.

Non-financial KPIs

We monitor a range of non-financial KPIs focusing on customers, people, culture and values, including customer service satisfaction, employee engagement and diversity and sustainability.

For details on customer service and satisfaction please refer below; for the remaining non-financial KPIs, refer to the Non-financial reporting section on page 11 and Corporate Governance section on pages 94 to 102.

Customer service, awards and satisfaction

MSS

Our customers are at the heart of what we do and we are committed to delivering services and capabilities that meet their needs and help them fulfil their ambitions.

In 2022, we won numerous awards and consistently ranked highly with our European clients, including winning Currency Manager of the Year at the European Pension Awards, Best Prime Broker – Emerging Markets at the HFM European Services Awards (for the 10th consecutive year), ranking number one for 'UK Research', 'UK Overall Broker' and 'Emerging EMEA Equity Research, Sales

and Corporate Access' in the Institutional Investor 2022 Survey and also ranking number one for 'UK Fund Accounting and Administration provider', 'Top 200 Asset Managers' and 'Rest of the World' in the R&M Investor Services Survey for Europe.

These accolades, coupled with multiple milestones and achievements in sustainable finance, demonstrate our leading capabilities to support clients locally and connect them to markets and expertise in the East, as well the key role Europe plays in supporting the Group's strategic priorities.

GB

Within Global Banking Europe we remain committed to providing excellent customer experience and continue to strive towards improving our proposition to meet client needs.

In 2022, HSBC received industry recognition across a number of product capabilities offered to our Global Banking clients including being recognised as number one Best Services for Trade Finance in Western Europe by Euromoney in their Trade Finance Survey and number one for Cash Management in the UK in the 2022 Euromoney Market Leaders survey.

Aligned with our purpose of opening up opportunities for our clients, HSBC also won six bond awards from Environmental Finance in 2022. These awards also highlight the continued strength and differentiation of our Sustainability capabilities globally as well as the role we play in Europe helping our clients transition to net zero.

CMB

Customer experience and satisfaction are priorities for Commercial Banking in Europe. We measure a number of operational metrics on customer service levels and gather direct customer feedback to ensure our solutions and channels remain relevant and fit for our customers' digital needs today. Our centralised booking model in Paris for our pan-European customers enables us to regionally cover and manage customers through a consistent and streamlined level of service.

This also ensures our Relationship Managers can support and cover customers using a common toolkit. Looking ahead, we will continue to measure how we deploy resources to our customers looking to expand and grow internationally, whilst also supporting them with their transition plans to achieve net zero.

WPB

Enhancing customer experience and improving satisfaction remains integral to our strategy. This is monitored through a number of customer satisfaction metrics covering branch, contact centre and digital channels. One example is iNPS ('Interactions Net Promoter Score') which measures interactions with our customers. In 2022 Channel Islands and Isle of Man ('CIIOM') Islands iNPS scored 14 against a target of 15 for mobile and 46 against a target of 50 for Premier Relationship Managers. The Expat proposition scored 24 against a target of 6 for Online, and Premier Relationship Managers scored 55 against a target of 46. We recognise the importance of customer feedback and continue to enhance our insights to gain a better understanding of our clients to provide a more personalised and relevant service. Digital continues to be a principal area of investment; enhancing customer experience, reducing processing costs and driving the sustainability agenda. We are on track to transition 30% of cheques (up to the value of £500) away from the branch to mobile, improving customer service with 2,500 cheques deposited to date.

Private Banking remains committed to enhancing our digital capabilities and offering, with improved internal platforms and software to support the delivery of excellent client service. Within Switzerland, Luxembourg and Channel Islands service improvements have been delivered within the E-Banking platform including client access to on-demand statements.

We recognise that enhancing customer satisfaction is an evolving process and are committed to ensure our investments and focus are prioritised to achieve this.

Economic background and outlook

UK

Falling real incomes are driving the UK's economic slowdown

UK consumer price inflation remains very high. In January 2023, the annual inflation rate fell to 10.1%, the third consecutive monthly fall. While inflation may have peaked at 11.1% in October, cost pressures are still high and inflation could remain close to 10% through Q1 2023 before decreasing further. Thanks partly to falls in wholesale energy prices, the BoE forecasts that headline inflation could fall below 4% by Q4 2023.

Underlying inflation pressures could prove more persistent. In December 2022, UK services inflation hit its highest rate since 1992, though it fell back in January 2023. The UK labour market continues to be characterised by a constrained supply of workers, across sectors and skill levels, which could also add to core inflation pressure. The unemployment rate was close to multidecade lows at 3.7% in the three months ended December 31, 2022. Wage growth, while strong, has not kept pace with inflation. Total nominal average weekly earnings were up 5.9% year-on-year in the three months ended December 31, 2022, while real pay on the same basis fell by 3.1%.

The real-terms income squeeze contributed to a fall in GDP of 0.2% quarter-on-quarter in Q3 2022, though an extra Bank Holiday for the Oueen's funeral may also have played a role. However, GDP was flat in Q4 2022, meaning the UK economy narrowly avoided slipping into technical recession. Even so, the underlying growth picture still looks challenging.

The BoE has raised Bank Rate at each policy meeting since December 2021, taking it to 4.0% in February 2023. This has already started to weigh on the housing market, with benchmark price indices showing falls in October and November 2022. In early February 2023, market prices implied that UK Bank Rate would peak at over 4.5% in mid-2023 with cuts expected to begin from Q4 2023.

Eurozone

Headline inflation falling and growth slowing

The eurozone economy was resilient through the second half of 2022. GDP grew 0.3% quarter on quarter in Q3, with a strong contribution from household spending despite high inflation. Preliminary data showed that the eurozone economy expanded again in Q4 2022, with GDP rising 0.1% quarter on quarter. The modest expansion means the eurozone also avoided slipping in to recession in 2022. With household savings rates still high, this resilience partly reflects government support measures.

Eurozone inflation remains high, even though it is estimated to have already reached its peak, having hit an all-time high of 10.6% in October 2022 and falling to 8.5% in the preliminary estimate for January 2023.

These elevated rates of inflation will weigh on real-terms incomes and, in turn, household spending. As the recent falls in wholesale energy prices start to feed through to consumers, headline inflation should fall further during the course of 2023. Declines in core inflation have been less pronounced, with core inflation of 5.2% in January 2023.

The ongoing inflationary squeeze on real-terms incomes means that a mild eurozone recession still seems likely, even though indicators of economic activity in early 2023 were resilient. The depth of any recession should be backstopped by a supportive labour market, not least because in Europe many firms can make use of government-backed short-time working schemes.

Financial summary

Use of alternative performance measures

Our reported results are prepared in accordance with International Financial Reporting Standards ('IFRSs'), as detailed in the Financial Statements starting on page 113.

In measuring our performance, we supplement our IFRS figures with non-IFRS measures, which constitute alternative performance measures under European Securities and Markets Authority guidance and non-GAAP financial measures defined and presented in accordance with US Securities and Exchange Commission rules and regulations. These measures include those derived from our reported results in order to eliminate factors that distort year-on-year comparisons. The 'adjusted performance' measure used throughout this report is described below. All alternative performance measures are described and reconciled to the closest reported financial measure when used.

Adjusted performance

Adjusted performance is computed by adjusting reported results for the year-on-year effects of significant items that distort year-on-year comparisons.

We use 'significant items' to describe collectively the group of individual adjustments excluded from reported results when arriving at adjusted performance. These items are ones that management and investors would ordinarily identify and consider separately when assessing performance to understand better the underlying trends in the business. We consider adjusted performance provides useful information for investors by aligning internal and external reporting, identifying and quantifying items management believes to be significant and providing insight into how management assesses year-on-year performance.

Summary consolidated income statement for the year ended			
	2022	2021	2020
	£m	£m	£m
Net interest income	1,904	1,754	1,898
Net fee income	1,261	1,413	1,400
Net income from financial instruments measured at fair value	1,751	3,432	2,314
Gains less losses from financial investments	(60)	60	95
Net insurance premium income	1,787	1,906	1,559
Losses/gains recognised on Assets held for sale	(1,947)	67	-
Other operating income	356	527	417
Total operating income ¹	5,052	9,159	7,683
Net insurance claims, benefits paid and movement in liabilities to policyholders	(406)	(3,039)	(1,783)
Net operating income before change in expected credit losses and other credit impairment charges ²	4,646	6,120	5,900
Change in expected credit losses and other credit impairment charges	(222)	174	(808)
Net operating income	4,424	6,294	5,092
Total operating expenses excluding impairment of goodwill and other intangible assets	(5,365)	(5,416)	(5,903)
Impairment of goodwill and other intangible assets	12	(46)	(802)
Operating (loss)/profit	(929)	832	(1,613)
Share of (loss)/profit in associates and joint ventures	(30)	191	(1)
(Loss)/profit before tax	(959)	1,023	(1,614)
Tax credit	561	23	136
(Loss)/profit for the year	(398)	1,046	(1,478)
(Loss)/profit attributable to the parent company	(408)	1,041	(1,488)
Profit attributable to non-controlling interests	10	5	10

1 Total operating income and expense include significant items as detailed on pages 16 to 19.

2 Net operating income before change in expected credit losses and other credit impairment charges is also referred to as revenue.

Reported performance

Reported loss before tax was £(959)m, compared with a profit before tax in 2021 of £1,023m, a decrease of £1,982m. The reported loss in 2022 included impairments of £1,947m, mainly due to the reclassification of our retail banking operations in France to held for sale, and net ECL charges compared with a net release in 2021. This was partly offset by a reduction in operating expenses.

Reported revenue was £1,474m lower, largely reflecting impairments on the planned disposals of our retail banking operations in France, and our operations in Russia and Greece in 2022. Revenue also decreased in GBM Other mainly driven by lower favourable valuation gains in Pl and a net loss of £91m from the buy-back of legacy securities to optimise the bank's future funding costs.

This decrease was partly offset by a strong performance in Markets and Securities Services ('MSS') and higher revenue from interest rate rises, notably in Global Payments Solutions ('GPS') in Global Banking and CMB. During 3Q22, we renamed our Global Liquidity and Cash Management ('GLCM') business to Global Payments Solutions as we reshape our payments proposition into

a technology-enabled, globally connected payments franchise, to better support our clients' needs and facilitate commerce.

In WPB, revenue grew supported by higher interest rates and higher revenue in insurance manufacturing driven by assumption updates, primarily reflecting favourable investment assumptions on asset management rebates for unit-linked investments and profit-sharing levels.

Reported operating expenses decreased, mainly driven by lower performance-related pay and the impact of our transformation cost-saving initiatives. This was partly offset by higher restructuring and other related costs.

In addition, there was also a loss compared with a gain in 2021 recognised from our share of profit/(loss) from associates.

Net interest income ('NII') increased by £150m or 9% compared with the prior year. This included higher net interest expense in Corporate Centre (up by £565m compared with 2021) associated with funding of our Markets business in MSS generating trading income. Excluding this, NII was up by £694m mainly in CMB (£277m) and Global Banking (£335m) driven by the higher interest rate environment, notably in GPS.

Net fee income decreased by £152m or 11% compared with the prior year, notably in Global Debt Markets in MSS and Global Banking, driven by lower underwriting fees as market activity fell

due to the effect of the Russia-Ukraine war and wider macroeconomic uncertainties. This compared with a strong 2021 when corporates raised finance as initial Covid-19 restrictions were eased. This reduction was partly offset by higher income in GPS, as volumes grew and we delivered on our strategic initiatives.

Net income from financial instruments measured at fair value decreased by £1,681m or 49%, primarily in WPB. This decrease was driven by lower returns on financial assets supporting insurance contracts where the policyholder is subject to part or all of the investment risk.

This adverse movement resulted in a corresponding movement in liabilities to policyholders, reflecting the extent to which policyholders participate in the investment performance of the associated assets. The offsetting movements are recorded in net insurance claims and benefits paid and movement in liabilities to policyholders.

The decrease in WPB was partly offset by higher revenue in MSS, mainly reflecting strong client activity and robust risk management, notably in Global Foreign Exchange, due to elevated market volatility resulting from the Russia-Ukraine war and macroeconomic impacts from rising inflation and increasing interest rates. Revenue also benefited from favourable fair value movements in preference shares holdings in VISA in CMB and WPB.

Gains less losses from financial investments decreased by £120m, mainly driven by losses on the disposal of bonds held at fair value through other comprehensive income ('FVOCI') in Markets Treasury. This compared with gains in the prior year.

Net insurance premium income decreased by £119m or 6%, in WPB, from insurance manufacturing revenue driven by lower new business volumes.

Losses/gains recognised on Assets held for sale of £(1,947m) mainly driven by an impairment on the planned disposals of the retail banking operations in France £1,711m, branch operations in Russia of £212m and Greece of £87m in 2022. This compared with a gain of £65m from sale of a property in Germany in 2021.

Net insurance claims, benefits paid and movement in liabilities to policyholders decreased by £2,633m or 87% in the insurance business in WPB. The decrease was driven by lower returns on financial assets supporting contracts where the policyholder is subject to part or all of the investment risks.

The losses recognised on the financial assets measured at fair value through profit and loss that are held to support these insurance contract liabilities are reported in 'Net income from financial instruments designated at fair value'.

Other operating income decreased by £171m or 32%, mainly in GBM Other due to lower intercompany recharge recoveries from other entities in the Group, with an offsetting decrease in operating expenses. This was partly offset by higher revenue in insurance manufacturing in WPB driven by assumption updates.

Changes in expected credit losses and other credit impairment charges ('ECL') were a charge of £222m in 2022, compared with a release of £174m in 2021. The charge in 2022 was mainly driven by higher stage 3 charges in Global Banking and in CMB reflecting heightened levels of uncertainty and inflationary pressures. This compared with a net release of stage 1 and stage 2 allowances in 2021 primarily relating to Covid-19 related allowances built up in 2020.

Total operating expenses excluding impairment of goodwill and other intangible assets decreased by £51m or 1%, mainly driven by lower variable pay and the impact of continued cost discipline as well as lower intercompany costs recharges. This was partly offset by an increase of £137m in restructuring and other related costs.

Impairment of goodwill and other intangible assets was a release of £12m compared with an impairment charge on non-financial assets of £(46)m in 2021.

Share of (loss)/profit in associates and joint ventures was a loss of £30m compared with a profit of £191m in 2021 due to the recovery in asset valuations. The loss in 2022 included a £24m true-up of prior year valuations in the underlying investments of an associate.

Tax credit of £561m was £538m higher compared with 2021. The effective tax rate of 58.5% for 2022 was driven by underlying losses before tax, non-recurring items including recognition of previously unrecognised deferred tax assets in France and a tax credit of £105m from movement in provisions for uncertain tax positions.

The tax credit in 2021 of £23m included favourable non-recurring items in respect of tax rate changes, prior period adjustments and the recognition of previously unrecognised deferred tax assets in France.

Adjusted performance

lignificant revenue items by business segment - (gains	s)/losses for the year e	nded					
	MSS	GB	GBM Other	CMB	WPB	Corporate Centre	Total
	£m	£m	£m	£m	£m	£m	£m
31 Dec 2022					Towns.	(04.0)	4 0 4 0
Reported revenue	2,446	1,571	(108)	1,433	(80)	(616)	4,646
Significant revenue items	(33)	-	100	(1)	1,572	498	2,136
fair value movements on financial instruments	(35)	-	(6)	(1)		(1)	(43)
restructuring and other related costs ²	2	-	106	790 c		126	234
- European restructurings	-		-	-	1,572	373	1,945
Adjusted revenue	2,413	1,571	(8)	1,432	1,492	(118)	6,782
01.0							
31 Dec 2021	2,043	1,367	310	1,096	1,276	28	6,120
Reported revenue	12		269	(1)	(1)	(69)	210
Significant revenue items	12		(5)	(1)	(1)		5
fair value movements on financial instruments ¹	T ES		274		4.00	(69)	205
 restructuring and other related costs² 	2,055	1,367	579	1,095	1,275	(41)	6,330
Adjusted revenue	2,000	1,007	0/0	1,000	170.0		
31 Dec 2020			52550		a one	Acres .	5,900
Reported revenue	1,966	1,381	437	1,132	1,035	(51)	97
Significant revenue items	2		187	1	-	(93)	
fair value movements on financial instruments	2		2	1		(2)	3
restructuring and other related costs ³		-	185	-		(91)	94
Adjusted revenue	1,968	1,381	624	1,133	1,035	(144)	5,997

Includes fair value movements on non-qualifying hedges and debit valuation adjustments on derivatives.

² Includes losses associated with the RWA reduction commitments.

	MSS	GB	GBM	смв	WPB	Corporate Centre	Total
	£m	£m	£m	£m	£m	£m	£m
31 Dec 2022							
Reported operating expenses	(1,940)	(932)	(402)	(663)	(917)	(499)	(5,353)
Significant cost items	-	_	84	70	9	384	547
- restructuring and other related costs	-		68	61	2	327	458
			16	9	7	57	89
- European restructurings Adjusted operating expenses	(1,940)	(932)	(318)	(593)	(908)	(115)	(4,806)
31 Dec 2021	(2,064)	(918)	(588)	(611)	(981)	(300)	(5,462)
Reported operating expenses	W., 55		103	(1)	6	236	344
Significant cost items			103	(1)	6	213	321
restructuring and other related costs			3.5		-	23	23
- European restructurings	(2,064)	(918)	(485)	(612)	(975)	(64)	(5,118)
Adjusted operating expenses	Application of the				19.144.77		
31 Dec 2020			7V 9 12012 9 0 1	Total and a second	11 4 001	/ron	10 70E
Reported operating expenses	(1,950)	(878)	(1,351)	(773)	(1,169)	(584)	(6,705)
Significant cost items	1		679	114	41	498	1,333 679
- restructuring and other related costs	-	127	218	79	5	377	6/9
- European restructurings	-	-	-	-	===	-	9
 settlements and provisions in connection with legal and regulatory 	1				-	8	
tt _t _t _t intensible recets			461	35	36	113	645

(1,949)

461

(659)

(1,128)

(86)

(5,372)

impairment of other intangible assets

Adjusted operating expenses

Net impact on profit/(loss) before tax by business segment							
	MSS	GB	GBM Other	СМВ	WPB	Corporate Centre	Total
	£m	£m	£m	£m	£m	£m	£m
31 Dec 2022							
Reported profit/(loss) before tax	505	486	(513)	716	(1,004)	(1,149)	(959)
Net impact on reported profit and loss	(33)	-	184	69	1,581	882	2,683
- Significant revenue items	(33)	-	100	(1)	1,572	498	2,136
- Significant cost items	-		84	70	9	384	547
Adjusted profit/(loss) before tax	472	486	(329)	785	577	(267)	1,724
31 Dec 2021							
Reported profit/(loss) before tax	(20)	589	(273)	492	318	(83)	1,023
Net impact on reported profit and loss	12	-	372	(2)	5	167	554
- Significant revenue items	12		269	(1)	(1)	(69)	210
- Significant cost items	-	-	103	(1)	6	236	344
Adjusted profit/(loss) before tax	(8)	589	99	490	323	84	1,577
31 Dec 2020							
Reported profit/(loss) before tax	17	55	(918)	37	(173)	(632)	(1,614)
Net impact on reported profit and loss	3	_	866	115	41	405	1,430
- Significant revenue items	2	-	187	1		(93)	97
- Significant cost items	1		679	114	41	498	1,333
Adjusted profit/(loss) before tax	20	55	(52)	152	(132)	(227)	(184)

Adjusted performance

Adjusted profit before tax was £1,724m, up £147m or 9% compared with 2021. This reflected higher revenue and lower operating expenses partly offset by higher ECL and a loss in our share of profit in associates and joint ventures compared with a gain in 2021.

Adjusted revenue increased by £452m or 7% compared with 2021. This increase was primarily in Global Payments Solutions ('GPS') within Global Banking and CMB, driven by the positive impact of interest rate rises and balance sheet growth. In MSS, strong revenue performance, notably in Global Foreign Exchange, Securities Services and Equities, was driven by strong client activity and robust risk management. Revenue also increased in WPB reflecting higher net interest income driven by rising interest rates and higher revenue in insurance manufacturing driven by assumption updates.

This increase was partly offset by a reduction in GBM Other, mainly driven by lower favourable valuation gains in PIs and a net loss from the buy-back of legacy securities to optimise the bank's future funding costs.

Adjusted ECL were a net charge of £222m compared with a net credit of £174m in 2021. In 2022, the net charge was mainly driven higher stage 3 charges in Global Banking and CMB. This compared with a net release of stage 1 and stage 2 allowances in 2021 reflecting an improved economic outlook and stabilisation of credit risk.

Adjusted operating expenses decreased by £312m or 6%, mainly reflecting the impact of our transformation cost-saving initiatives and lower performance-related pay. In addition, there was a lower UK bank levy charge, which included a credit of £44m relating to 2021 charges, and lower VAT costs in France due to an update in the VAT recovery rate and the recognition of a recovery of VAT paid in 2021.

Share of (loss)/profit in associates and joint ventures was a loss of £30m compared with a profit of £191m in 2021. The loss in 2022 included a £24m true-up of prior year valuations in the underlying investments of the Business Growth Fund ('BGF').

Markets and Securities Services

Adjusted profit before tax was £472m compared with a loss before tax of £(8)m in 2021. This was driven by strong revenue performance and lower operating expenses.

Adjusted revenue increased by £358m or 17%, mainly in Global Foreign Exchange (up by £305m). This was driven by increased client activity due to elevated market volatility and the macroeconomic impacts from rising inflation, increasing interest

rates and a strengthening of the US dollar, resulting in a strong trading performance. Revenue also increased in Securities Services (up £72m) driven by higher interest rates and transaction volumes. In Equities, revenue was higher by £32m as 2022 included a one-off gain on disposal of an associate of £61m following a merger event. This increase was partly offset lower client activity as a result of inflation concerns and lack of investor appetite in 2022.

In Securities Financing, revenue was down by £49m, mainly due to margin compression in repurchase agreements ('repos'). This reflected volatility due to the macro-economic environment, including central bank policies on interest rates. By contrast, revenue was up in Prime Finance driven by growth in client franchise revenue, up 10%, despite challenging market conditions.

Revenue also decreased in Global Debt Markets (down by £23m), mainly driven by lower primary issuances and reduced client activity due to challenging market conditions.

Adjusted operating expenses decreased by £124m or 6%, largely driven by a decrease in performance-related pay and the impact of our transformation cost-saving initiatives; partly offset by the impact of higher inflation.

Global Banking

Adjusted profit before tax was £486m, a decrease of £103m or 17% compared with 2021. This was largely driven by higher ECL, partly offset by higher revenue.

Adjusted revenue increased by £204m or 15%, mainly in GPS (up by £389m) driven by margin growth reflecting the rising global interest rate environment and strategic initiatives to grow fee income. In contrast, Capital Markets and Advisory revenue decreased by £124m, in line with the reduced market fee pool and adverse valuation movements on leveraged loans.

Adjusted ECL were a net charge of £153m compared with a net credit of £139m in 2021. The net charge in 2022 was mainly driven by higher stage 3 charges, notably in non-bank financial institutions and real estate sectors. This compared with a net release of stage 1 and stage 2 allowances in 2021 primarily relating to Covid-19 related allowances built up in 2020.

Adjusted operating expenses were £14m or 2% higher compared with 2021, reflecting the impact of higher inflation and strategic investments, partly offset by the impact of our ongoing cost discipline.

Global Banking and Markets Other

Adjusted loss before tax was £(329)m, compared with a profit before tax of £99m in 2021. This was largely driven by lower revenue, partly offset by lower operating expenses.

Adjusted revenue decreased by £587m, mainly in Pls driven by lower valuation gains of £209m compared with 2021. Revenue also decreased driven by a net loss from the buy-back of legacy securities to optimise the bank's future funding costs, and also lower intercompany recoveries of costs from other entities in the Group. There was also a decrease in revenue allocated from Markets Treasury.

Adjusted operating expenses decreased by £167m or 35% compared with 2021, reflecting the move of certain GBM costs from the bank to other entities in the Group (offset by lower intercompany recoveries in revenue). The decrease in operating expenses was also driven by lower UK Bank levy in 2022, which included a credit relating to 2021 charges.

Commercial Banking

CMB performed strongly in 2022 as we continued to implement our strategy to focus on serving our international customers.

Adjusted profit before tax was £785m, up by £295m compared with 2021. This was mainly driven by higher revenue and lower operating expenses, partly offset by ECL charges.

Adjusted revenue increased by £337m or 31% compared with 2021. This was primarily in GPS (up by £294m) driven by the higher interest rate environment and growth in average deposit balances. There was also an increase in collaboration revenue from MSS products (up £36m), notably Global Foreign Exchange. Additionally, revenue also benefited from favourable fair value movements in our holding of preference shares in VISA and an increase in revenue from Markets Treasury.

This was partly offset by a decrease in Credit and Lending revenue of £43m, in part due to an increase in the cost of funds.

Adjusted ECL were a net charge of £54m compared with a net release of £7m in 2021. The net charge in 2022 was largely driven by stage 3 charges in France and Germany, partly offset by a release of stage 1 and stage 2 allowances. This compared with a net release in 2021 of Covid-19-related allowances previously built up in 2020.

Adjusted operating expenses decreased by £19m or 3%, driven by continued cost discipline on discretionary spend and through hiring efficiencies, as well as from the impact of our cost-saving initiatives. The decrease was also driven by an update in the VAT recovery rate and the recognition of a recovery of VAT paid in 2021 in France.

Wealth and Personal Banking ('WPB')

Adjusted profit before tax of £577m, up £254m compared with 2021. This was primarily due to higher revenue and lower operating expenses, partly offset by higher ECL.

Adjusted revenue increased by £217m or 17%, mainly CIIOM from deposits (up £147m) due to the higher interest rate

environment and growth in average balances. Revenue also increased in insurance manufacturing (up by £58m) due to assumptions changes and experience variances, primarily reflecting favourable investment assumptions on asset management rebates for unit-linked investments and profit-sharing levels. There were also favourable fair value movements in our holding of preference shares in VISA of £33m.

Adjusted ECL were a net charge of £7m compared with a net release of £23m in 2021. The net charge in 2022 mainly reflected a more normalised level of charges including provisions relating to a deterioration in the forward economic outlook due to heightened levels of uncertainty and inflationary pressures. The net release in 2021 was from Covid-19-related allowances previously built up in 2020.

Adjusted operating expenses decreased by £67m or 7%. This was driven by the benefits of our cost-saving initiatives and a reduction due to the increase in the VAT recovery rate and the recognition of a recovery of VAT paid in 2021 in France.

Corporate Centre

Adjusted loss before tax of £267m compared with a profit before tax of £84m in 2021. This was mainly driven by a loss in associates and joint ventures compared with a gain in the first half of 2021, as well as lower revenue.

Adjusted revenue was lower by £77m, mainly driven by the nonrecurrence of a fair value gain of £32m in 2021 from a longstanding investment in a Germany-based brokerage company. There was also lower valuation gains of £12m in Legacy Credit portfolios.

Adjusted ECL were £5m higher compared with 2021, mainly driven by losses in Legacy Credit.

Adjusted operating expenses increased by £51m, largely driven by higher margin on recharges from UK ServCo and higher intercompany recharges from entities in the Group.

Shares of (loss)/profit in associates and joint ventures was a loss of £28m, of which £24m was due to a true-up of prior year valuations in the underlying investments of the BGF. This compared with a profit of £191m in 2021 due to the recovery in asset valuations.

Dividends

The consolidated reported profit for the year attributable to the shareholders of the bank was £(408)m.

A special dividend was declared/paid on CET1 capital in 2022.

Further information about the results is given in the consolidated income statement on page 114.

Review of business position

Summary consolidated balance sheet at 31 Dec

	2022	2021
Total assets	£m	£m
- cash and balances at central banks	717,353	596,611
- trading assets	131,433	108,482
	79,878	83,706
financial assets designated and otherwise mandatorily measured at fair value through profit or loss derivatives.	15,881	18,649
- loans and advances to banks	225,238	141,221
- loans and advances to customers	17,109	10,784
	72,614	91,177
reverse repurchase agreements – non-trading financial investments	53,949	54,448
assets held for sale	32,604	41,300
- Other assets	21,214	9
Total liabilities	67,433	46,835
	693,337	572,896
- deposits by banks	20.836	32,188
customer accounts	215,948	
- repurchase agreements - non-trading	32,901	205,241
trading liabilities		27,259
financial liabilities designated at fair value	41,265	46,433
derivatives	27,287	33,608
debt securities in issue	218,867	139,368
liabilities of disposal groups held for sale	7,268	9,428
liabilities under insurance contracts	24,711	7-1
other liabilities	19,987	22,264
Total equity	84,267	57,107
Total shareholders' equity	24,016	23,715
Non-controlling interests	23,875	23,584
	141	131

Total reported assets were 20.2% higher than at 31 December 2021. The group maintained a strong and liquid balance sheet with the ratio of customer advances to customer accounts decreasing to 33.6% from 44.4% as at 31 December 2021 driven by reclassification of French retail loans following the announcement of the sale to assets held for sale as well as ongoing loan book optimisation efforts.

Assets

Cash and balances at central banks increased by 21.2% as a result of increased customer deposits and decreased balances in reverse repos and advances to customers.

Trading assets and financial assets designated at fair value slightly reduced due to a reduction in Prime business and GDM activities on the basis of market conditions in 2022.

Derivative assets increased by 59.5% due to market movements in interest rates and FX rates.

Non-trading reverse repos decreased by 0.9% primarily due to changes in market conditions.

Financial investments decreased by 21.1% as a result of optimisation strategy.

Liabilities

Customer accounts increased by 5.2%, which is consistent with our funding strategy to grow customer deposits and increase stable funding.

Total of trading liabilities and financial liabilities designated at fair value balances has decreased by 14.4%.

Debt securities in issue decreased by 22.9% in line with the funding strategy.

Non-trading repos increased by 20.7% as a result of market activities.

Derivative liabilities increased by 57.0%. This is in line with derivative assets as the underlying risk is broadly matched.

Equity

Total shareholder's equity remained broadly unchanged as compared to 2021.

Net interest margin

interest-earning assets. Average balances are based on daily averages of the group's activities.

Net interest margin is calculated by dividing net interest income as reported in the income statement by the average balance of

Net interest income	2022	2021	2020
	£m	£m	£m
	6,535	3,149	4,086
Interest income	(4,631)	(1,395)	(2,188)
Interest expense	1,904	1,754	1,898
Net interest income	372,159	354,324	369,617
Average interest-earning assets	%	%	1%
	1.53	0.51	0.74
Gross interest yield ¹	(1.23)	(0.01)	(0.27)
Less: gross interest payable	0.30	0.50	0.47
Net interest spread ²	0.51	0.50	0.51
Net interest margin ³	0.31	0.00	

1 Gross interest yield is the average annualised interest rate earned on average interest-earning assets ('AIEA'). Gross interest payable is the average annualised interest cost as a percentage of average interest-bearing liabilities.

Net interest spread is the difference between the average annualised interest rate earned on AIEA, net of amortised premiums and loan fees, and the average annualised interest rate payable on average interest-bearing liabilities.

Net interest margin is net interest income expressed as an annualised percentage of AIEA.

Summary of interest income by asset type		2022			2021			2020	
	Average	Interest	Yield ¹	Average balance	Interest	Yield ¹	Average balance	Interest income	Yield [†]
	£m	£m	9/0	£m	£m	10/0	£m	£m	%
V-W		1,115	0.77	119.025	(221)	(0.19)	90,841	(113)	(0.12
Short term funds and loans and advances to banks	144,826			99,151	1,585	1.60	116,518	2,058	1.77
Loans and advances to customers	91,882	2,177	2.37					22	0.03
Reverse repurchase agreements - non-trading	56,144	1,099	1.96	57,630	(132)	(0.23)	68,573		
	37,949	633	1.67	45,142	497	1.10	51,335	652	1.27
Financial investments					67	0.20	42,350	118	0.28
Other interest-earning assets	41,358	686	1.66	33,376					0.74
Total interest-earning assets	372,159	5,710	1.53	354,324	1,796	0.51	369,617	2,737	U.74

1 Interest yield calculations include negative interest on assets recognised as interest expense in the income statement.

			2021			2020		
Average	Interest	Cost ¹	Average balance	Interest expense	Cost1	Average balance	Interest expense	Cost
	100	%	£m	Em	0/0	£m	£m	%
	55	0.17	32,891	(186)	(0.57)	28,812	(60)	(0.21)
			150 048	95	0.06	143,807	321	0.22
				/102/	(0.58)	38 829	(129)	(0.33)
31,898	680							1.03
29,385	589	2.00	38,727	258				
50 301	739	1.47	36,811	68	0.18	47,384	160	0.34
308,195	3,805	1.23	291,393	43	0.01	311,613	838	0.27
	Average balance £m 31,930 164,681 31,898 29,385 50,301	Average balance	Average balance expense Cost¹	Average balance Interest expense Cost¹ Average balance £m £m % fm 31,930 55 0.17 32,891 164,681 1,742 1.06 150,048 31,898 680 2.13 32,916 29,385 589 2.00 38,727 50,301 739 1.47 36,811	Average balance Interest expense Cost¹ Average balance Interest expense £m £m % £m £m 31,930 55 0.17 32,891 (186) 164,681 1,742 1.06 150,048 95 31,898 680 2.13 32,916 (192) 29,385 589 2.00 33,727 258 50,301 739 1.47 36,811 68	Average balance Interest expense Cost¹ Average balance Interest expense Cost¹ Average balance Interest expense Cost¹ Manual expense Cost¹ Cost¹ Manual expense Cost¹ Manual expense	Average balance Interest expense Cost¹ Average balance Interest expense Cost¹ Average balance Interest expense Cost¹ Average balance £m £m % £m £m % £m 31,930 55 0.17 32,891 (186) (0.57) 28,812 164,681 1,742 1.06 150,048 95 0.06 143,807 31,898 680 2.13 32,916 (192) (0.58) 38,829 29,385 589 2.00 38,727 258 0.67 52,781 50,301 739 1.47 36,811 68 0.18 47,384 50,301 739 1.47 36,811 68 0.01 311,613	Average balance Interest expense Cost¹ Average balance Interest expense Cost¹ Average balance Interest expense Cost¹ Average balance Interest expense Interest balance Em Em

¹ Interest payable calculations include negative interest on liabilities recognised as interest income in the income statement.

Reconciliation of alternative performance measures

Return on average ordinary shareholders' equity and return on average tangible equity

Return on average ordinary shareholders' equity ('RoE') is computed by taking profit attributable to the ordinary shareholders of the parent company ('reported results'), divided by average ordinary shareholders' equity ('reported equity') for the period. The adjustment to reported results and reported equity excludes amounts attributable to non-controlling interests and holders of preference shares and other equity instruments.

Return on average tangible equity ('RoTE') is computed by adjusting reported results for the movements in the present value of in-force long-term insurance business ('PVIF') and for impairment of goodwill and other intangible assets (net of tax), divided by average reported equity adjusted for goodwill, intangibles and PVIF for the period.

RoTE excluding significant items is annualised profit attributable to ordinary shareholders, excluding changes in PVIF, significant items and bank levy (net of tax), divided by average tangible shareholders' equity excluding fair value of own debt, DVA and other adjustments for the period.

We provide RoTE ratio in addition to RoE as a way of assessing our performance, which is closely aligned to our capital position.

Return on average ordinary shareholders' equity and return on average tangible equity				
	Year ended			
	31 Dec	31 Dec	31 Dec	
	2022	2021	2020	
	£m	£m	£m	
Profit				
Profit attributable to the ordinary shareholders of the parent company	(611)	847	(1,643)	
Decrease/(increase) in PVIF (net of tax)	(105)	(149)	59	
Profit attributable to the ordinary shareholders, excluding other intangible assets impairment and PVIF	(716)	698	(1,584)	
Significant items (net of tax)	1,753	468	1,050	
Profit attributable to the ordinary shareholders, excluding PVIF and significant items	1,037	1,166	(534)	
Equity				
Average total shareholders' equity .	23,550	23,629	24,457	
Effect of average preference shares and other equity instruments	(3,888)	(3,722)	(3,722)	
Average ordinary shareholders' equity	19,662	19,907	20,735	
Effect of PVIF (net of tax)	(727)	(553)	(464)	
Significant items and other adjustments (net of tax)	(240)	(92)	(733)	
Average tangible equity excluding PVIF, significant items and other adjustments	18,695	19,262	19,538	
Ratio				
Return on average ordinary shareholders' equity (annualised)	(3.1)	4.3	(7.9)	
Return on average tangible equity (annualised)	(3.8)	3.6	(8.1)	
Adjusted Return on average tangible equity (annualised)	5.5	6.1	(2.7)	

Risk overview

The group continuously identifies, assesses, manages and monitors risks. This process, which is informed by its risk factors and the results of its stress testing programme, gives rise to the classification of certain financial and non-financial risks. Changes in the assessment of these risks may result in adjustments to the group's business strategy and, potentially, its risk appetite.

Our banking risks include credit risk, treasury risk, market risk, climate risk, resilience risk, regulatory compliance risk, financial crime and fraud risk and model risk. We also incur insurance risk.

In addition to these banking risks, we have identified top and emerging risks with the potential to have a material impact on our financial results, our reputation and the sustainability of our long-term business model.

The exposure to our risks and risk management of these are explained in more detail in the Risk section of the Report of the Directors on pages 26 to 93.

We have reviewed our list of top and emerging risks and changed the title of 'Regulatory focus on conduct of business' risk to 'Evolving regulatory environment' risk to reflect the broad regulatory agenda, including conduct. Credit risk has been added to reflect the current economic environment.

Risk		Description
Externally driven		
Geopolitical and macroeconomic risk		Our operations and portfolios are exposed to risks associated with political instability, civil unrest and military conflict, which could lead to disruption of our operations, physical risk to our staff and/or physical damage to our assets. Heightened geopolitical tensions including the ongoing Russia-Ukraine war, alongside the economic impacts that continue to result from the Covid-19 pandemic, have also disrupted supply chains globally. These events and rising inflation in the European region have created a marked economic slowdown which will affect our customers and our business.
Credit risk	0	We regularly undertake detailed reviews of our portfolios and proactively manage credit facilities to customers and sectors likely to come under stress as a result of current macroeconomic and geopolitical events including the Russia-Ukraine war and the recessionary pressures across Europe. Particular emphasis has been maintained on the Real Estate, Construction and Contracting, Retail and Leverage portfolios. We have increased the frequency and depth of our monitoring activities with stress tests and other sectoral reviews performed to identify portfolios or customers who are likely to experience financial difficulty through the slowdown in economic activity.
Cyber threat and unauthorised access to systems	j-	We face a risk of service disruption from external and internal malicious activity. In response to the recent geopolitical events, we have further strengthened our monitoring approach. We operate a continuous improvement programme to protect our technology operations, and to counter a fast evolving cyber threat environment.
Evolving regulatory environment risk	Þ	The compliance risk environment remains complex, given heightened geopolitical tensions and consequent macroeconomic impacts. There remains increased regulatory focus on operational and cyber resilience, economic impacts (including on customers), crypto-asset-related risks and sanctions, and wider anti-money laundering controls. These, alongside an increased focus on how financial services organisations demonstrate active management of and compliance with regulatory obligations and wider expectations, may result in change requirements across the group in the short to medium term. We continue to monitor regulatory and wider industry developments closely and engage with regulators as appropriate.
Financial crime and fraud risk	A	We continue to support our customers against a backdrop of complex geopolitical, socio-economic and technological challenges, including the Russia-Ukraine war. We are monitoring the impacts of the Russia-Ukraine war on the group, and using our sanctions compliance capabilities to respond to evolving sanctions regulations, noting the challenges that arise in implementing the unprecedented volume and diverse set of sanctions and trade restrictions.
lbor transition	We remain exposed to regulatory compliance, legal and resilience risks as contracts transition away from demising Ibor benchmarks to new reference rates. As a result, we continue to consider the fairness of client outcomes, our compliance wiregulatory expectations and the operation of our systems and processes. The key risks are diminishing in line with our processimplementation as we have transitioned all but a small number of contracts in demised Ibors, and are well progressed in transitioning contracts in remaining demising Ibors, specifically US dollar Libor.	
Environmental, social and governance risk		We are subject to ESG risks relating to climate change, greenwashing, nature and human rights. This risk has increased owing to the pace and volume of regulatory developments globally and stakeholders placing more emphasis on financial institutions' actions and investment decisions in respect of ESG matters. Failure to meet these evolving expectations may result in financial and non-financial risks for the group, including adverse reputational consequences.

Risk		Description
Internally driven		
People risk	À	We monitor workforce capacity and capability requirements in line with our published growth strategy, in conjunction with risks related to employment relations practices, culture, and conduct. People risk has heightened in 2022 compared to 2021, mainly resulting from the many transformation and restructuring activities concomitantly happening in the region. The main risk drivers the region is exposed to are capacity and capability risks associated with talent attraction and retention, coupled with the effects of the current geopolitical tensions on our employees and markets' economies. Strong oversight continues to be maintained over people risks arising from change activity. Measures are being rolled out to support our people while transitioning to new business models as well as with challenges resulting from the current heightened inflationary pressures.
IT systems infrastructure and operational resilience	A	We continue to monitor and improve our IT systems and network resilience, both on our premises and on the Cloud to minimise service disruption and improve customer experience. To support the business strategy, we strengthened our end to end management, build and deployment controls and system monitoring capabilities. We are seeing increased demand on customer support centres and our business operations as a result of the current economic environment and there is additional focus on our operational resilience. We continue to seek to reduce the complexity of our technology estate and consolidate our core banking systems onto a single strategic platform.
Execution risk	A	Failure to effectively prioritise, manage and/or deliver transformation within the group impacts our ability to achieve our strategic objectives. Given the scale, complexity and pace of strategic change within the group, we must monitor, manage and oversee change execution risk to make sure our change portfolio and initiatives continue to deliver the right outcomes for our customers, people, regulators, investors and communities.
Model risk	▶.	Evolving regulatory requirements are driving material changes to the way model risk is managed across the banking industry, with particular focus on capital models. New technologies such as machine learning are driving changes to the model landscape, and the group's strategic focus on climate risk requires the development of new methods that will effectively model climate-related factors and activities. A key area of focus is ensuring our standards, processes and controls are adequate to identify, measure and manage the resulting model risks. New Bank of England guidance on model risk management will require greater focus on the management of model risks across the bank.
Data risk	We use data to serve our customers and run our operations, often in real-time within digital experiences and processes. If ou data is not accurate and timely, our ability to serve customers, operate with resilience or meet regulatory requirements could impacted. We need to ensure that data is kept confidential, and that we comply with the growing number of laws and increa expectations from regulators concerning data privacy controls and the cross-border movement of data.	
Third party risk	Þ	We procure services and goods from a range of third parties. It is critical that we have appropriate risk management policies and processes over the selection and governance of third parties. This includes third parties' supply networks, 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.

New risk introduced in 2022

▲ Risk has heightened during 2022

Risk remains at the same level as 2021

Risk has decreased during 2022

DM Wath

On behalf of the Board

David Watts

Director

20 February 2023

Registered number 00014259

Risk Page 26 Our approach to risk 26 Our risk appetite 27 Risk management 27 Key developments and risk profile 28 Top and emerging risks 28 Externally driven 32 Internally driven 34 Our material banking and insurance risks 36 Credit risk 75 Treasury risk 84 Market risk 86 Climate risk 87 Resilience risk 87 Regulatory compliance risk 88 Financial crime risk 89 Model risk 90 Insurance manufacturing operations risk Overview

Our approach to risk

Our risk appetite

We recognise the importance of a strong risk culture, which refers to our shared attitudes, values and standards that shape behaviours related to risk awareness, risk taking and risk management. All our people are responsible for the management of risk, with the ultimate accountability residing with the Board.

We seek to build our business for the long term by balancing social, environmental and economic considerations in the decisions we make. Our strategic priorities are underpinned by our endeavour to operate in a sustainable way. This helps us to carry out our social responsibility and manage the risk profile of the business. We are committed to managing and mitigating climate-related risks, both physical and transition, and continue to incorporate consideration of these into how we manage and oversee risks internally and with our customers.

The following principles guide the group's overarching appetite for risk and determine how our businesses and risks are managed.

Financial position

- Strong capital position, defined by regulatory and internal ratios.
- Liquidity and funding management for each entity on a standalone basis.

Operating model

- Ambition to generate returns in line with our risk appetite and strong risk management capability.
- Ambition to deliver sustainable earnings and appropriate returns for shareholders.

Business practice

- Zero tolerance for knowingly engaging in any business, activity or association where foreseeable reputational risk or damage has not been considered and/or mitigated.
- No appetite for deliberately or knowingly causing detriment to consumers arising from our products and services or incurring a breach of the letter or spirit of regulatory requirements.
- No appetite for inappropriate market conduct by a member of staff or by any group business.

Enterprise-wide application

Our risk appetite encapsulates the consideration of financial and non-financial risks. We define financial risk as the risk of a financial loss as a result of business activities. We actively take these types of risks to maximise shareholder value and profits.

Non-financial risk is defined as the risk to achieving our strategy or objectives as a result of inadequate or failed internal processes, people and systems, or from external events.

Our Risk Management Framework

An established risk governance framework and ownership structure ensures oversight of, and accountability for, the effective management of risk within the group. HSBC's Risk Management Framework ('RMF') fosters the continuous monitoring of the risk environment and an integrated evaluation of risks and their interactions. Integral to the RMF are risk appetite, stress testing and the identification of emerging risks.

Our Risk Committee focuses on risk governance and ensures a forward-looking view of risks and their mitigation. The Risk Committee is a committee of the Board and has responsibility for oversight and advice to the Board on, amongst other things, the bank's risk appetite, tolerance and strategy, systems of risk management, internal control and compliance. Additionally, members of the Risk Committee attend meetings of the bank's Nomination, Remuneration and Governance Committee at which the alignment of the reward structures to risk appetite is considered.

In carrying out its responsibilities, the Risk Committee is closely supported by the Chief Risk Officer, the Chief Financial Officer, the Head of Internal Audit and the Head of Compliance, together with other business functions on risks within their respective areas of responsibility.

Responsibility for managing both financial and non-financial risk lies with our people. They are required to manage the risks of the business and operational activities for which they are responsible. We maintain oversight of our risks through our various specialist Risk Stewards, as well as the accountability held by the Chief Risk Officer.

Non-financial risk includes some of the most material risks HSBC faces, such as cyber-attacks, poor customer outcomes and loss of data and the current geopolitical risks. Actively managing nonfinancial risks is crucial to serving our customers effectively and having a positive impact on society. During 2022 we continued to strengthen the control environment and our approach to the management of non-financial risks, as is broadly set out in our Risk Management Framework. The management of non-financial risk focuses on governance and risk appetite, providing a single view of the non-financial risks that matter most, and associated controls. It incorporates a risk management system designed to enable the active management of non-financial risk. Our ongoing focus is on simplifying our approach to non-financial risk management, while driving more effective oversight and better end-to-end identification and management of non-financial risks. This is overseen by the Operational and Resilience Risk function, headed by the group Head of Operational and Resilience Risk.

Three lines of defence

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.

To create a robust control environment to manage risks, we use an activity-based three lines of defence model, whereby the activity a member of staff undertakes drives which line they reside within. 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, encouraging collaboration and enabling efficient coordination of risk and control activities. The three lines are summarised below:

- The first line of defence owns the risks and is responsible for identifying, recording, reporting and managing them in line with risk appetite, and ensuring 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 and guidance in relation to the risk.

 The third line of defence is our Internal Audit function, which provides independent assurance that the group's risk management approach and processes are designed and operating effectively.

Risk appetite

We formally articulate our risk appetite through our risk appetite statement ('RAS'), which is approved by the Board on the recommendation of the Risk Committee. Setting out our risk appetite ensures that planned business activities provide an appropriate balance of return for the risk we are taking, and 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.

The RAS consists of qualitative statements and quantitative metrics, covering financial and non-financial risks. It is fundamental to the development of business line strategies, strategic and business planning and senior management balanced scorecards. Performance against the RAS is reported to the Risk Management Meeting ('RMM') so that any actual performance that falls outside the approved risk appetite is discussed and appropriate mitigating actions are determined. This reporting allows risks to be promptly identified and mitigated, and informs risk-adjusted remuneration to drive a strong risk culture.

Risk management

Stress testing

Stress testing is an important tool that is used by banks, as part of their internal risk management, and regulators to assess vulnerabilities in individual banks and/or the financial banking sector under hypothetical adverse scenarios. The results of stress testing are used to assess banks' resilience to a range of adverse shocks and to assess their capital adequacy.

HSBC Bank plc is subject to regulatory stress testing in several jurisdictions. These requirements are increasing in frequency and granularity. They include the programmes of the BoE, Prudential Regulation Authority ('PRA') and the European Banking Authority ('EBA'). Assessment by regulators is on both a quantitative and qualitative basis, the latter focusing on our portfolio quality, data provision, stress testing capability and capital planning processes.

A number of internal macroeconomic and event-driven scenarios specific to the European region were considered and reported to senior management during the course of the year. The selection of stress scenarios is based upon the output of our top and emerging risks identified and our risk appetite. The results help the Board and senior management to set our risk appetite and confirm the strength of our strategic and financial plans. Our risk appetite is set at a level that enables the group to withstand future stress impacts.

The macroeconomic internal stress tests, conducted throughout 2022, considered combinations of various potential impacts as identified in our top and emerging risks, in particular the impact of the Russia-Ukraine war, geopolitical tensions and trade wars, and operational risk.

In Q4 2022, the Group participated in the BoE Annual Cyclical Scenario ('ACS') stress testing exercise. The ACS focused on higher global interest rates in the face of a series of global cost shocks and high and persistent global inflation. Unemployment, also increased sharply. The impact of traded risk shocks was included, linked to a financial market scenario consistent with the content and calibration of the macroeconomic scenario.

This stress scenario was more severe than the Global Financial Crisis for both the UK and the world.

The scenario reflected the impact of weaker household real income growth, lower confidence and tighter financial conditions resulting in severe domestic and global recessions.

The BoE will publish the results in summer 2023.

In response to regulatory requirements and internal drivers, separately to the stress tests already mentioned, we are developing our capabilities to model the impact of climate risk on our bank, specifically physical and transition risk.

In 2022, we have considered four bespoke scenarios that were designed to articulate our view of the range of potential outcomes for global climate change. In our climate scenario analysis, we consider, separately: transition risk arising from the process of moving to a net zero economy, including changes in policy, technology, consumer behaviour and stakeholder perception, which will each impact borrowers' operating income, financing requirements and asset values; and physical risk arising from the increased frequency and severity of weather events, such as hurricanes and floods, or chronic shifts in weather patterns, which will each impact property values, repair costs and lead to business interruptions.

These scenarios, which reflect different levels of physical and transition risk and are varied by severity and probability, were: the Net Zero scenario, which aligns with the Group net zero strategy and is consistent with the Paris Agreement; the Current Commitments scenario, which assumes that climate action is limited to the current governmental commitments and pledges; the Downside Transition Risk scenario, which assumes that climate action is delayed until 2030; and the Downside Physical Risk scenario, which assumes climate action is limited to current governmental policies.

We consider our Current Commitments scenario as the most likely scenario to transpire over the next five years. Under the Current Commitments scenario, we expect moderate levels of losses relating to transition risks. However, the rise in global warming will lead to increasing levels of physical risk losses in later years. Based on this scenario the potential impact on expected credit losses is not considered material over the next five years, as the impacts of climate risk will emerge later in the following decades.

Key developments and risk profile

Key developments in 2022

We actively managed the risks related to the Russia-Ukraine war and broader macroeconomic and geopolitical uncertainties, as well as other key risks described in this section.

In addition, we enhanced our risk management in the following areas:

- We have continued to improve our risk governance decision making, particularly with regard to the governance of treasury risk to ensure senior executives have appropriate oversight and visibility of macroeconomic trends around inflation and interest rates.
- We enhanced our enterprise risk reporting processes to place a greater focus on our emerging risks, including by capturing the materiality, oversight and individual monitoring of these risks.
- We have further strengthened our third-party risk policy and processes to improve control and oversight of our material third parties that are key to maintaining our operational resilience, and to meet new and evolving regulatory requirements.
- We have continued to embed, the governance and oversight around model adjustments, related processes for IFRS 9 models and financial reporting processes.
- Through our climate risk programme we have continued to embed climate considerations throughout the firm, including updating the scope of our programme to cover all risk types, expanding the scope of climate related training and developing new climate risk metrics to monitor and manage exposures.
- We continued to improve the effectiveness of our financial crime controls, deploying advanced analytics capabilities into our markets. We are refreshing our financial crime policies, ensuring they remain up-to-date and address changing and emerging risks. We continue to monitor regulatory changes.

Top and emerging risks

We use a top and emerging risks process to provide a forwardlooking 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 the European region and the group's businesses, for any risks that may require escalation. We update our top and emerging risks as necessary.

Our current top and emerging risks are as follows.

Externally driven

Geopolitical and macroeconomic risk

The Russia-Ukraine war has had far-reaching geopolitical and economic implications. The group is monitoring the impacts of the war and continues to respond to the further economic sanctions and trade restrictions that have been imposed on Russia in response. In particular, significant sanctions and trade restrictions against Russia have been put in place by the US, the UK and the EU, as well as other countries. Such sanctions and restrictions have specifically targeted certain Russian government officials, politically exposed persons, business people, Russian oil imports, energy products, financial institutions and other major Russian companies, as well as more generally applicable investment, export, and import bans and restrictions. In response to such sanctions and trade restrictions, as well as asset flight, Russia has implemented certain countermeasures. Further sanctions, trade restrictions and Russian counter sanctions may adversely affect the group, its customers and the markets in which we operate by creating regulatory, reputational and market risks.

Our business in Russia principally serves multinational corporate clients headquartered in other countries, is not accepting new business or customers, and is consequently on a declining trend. Following a strategic review, HSBC Europe BV (a wholly-owned subsidiary of HSBC Bank plc) has entered into an agreement to sell its wholly-owned subsidiary HSBC Bank (RR) (Limited Liability Company), subject to regulatory and governmental approvals.

Global commodity markets have been significantly impacted by the Russia-Ukraine war and localised Covid-19 outbreaks, leading to continued supply chain disruptions. This has resulted in European product shortages and increased prices for both energy and non-energy commodities, such as food. Despite falls in wholesale energy prices in late 2022 and early 2023, which may provide relief, ongoing pass-through of input price rises means we do not expect underlying inflationary pressures to ease significantly in the near term. These issues have exacerbated inflation across the region. Prolonged spells of relatively mild seasonal weather, and diversification of fuel services have nevertheless helped Europe to substantially reduce risks of energy rationing over the winter months.

Rising global inflation has prompted the ECB to tighten monetary policy. The combined pressure of inflation and interest rate rises may lead to pressures on customers and their ability to repay debt. The ECB has increased its benchmark rate by 300bps since July 2022. Further interest rate increases by the ECB are anticipated in light of inflation forecasts. Investors appear less willing to tolerate expansionary fiscal policies in the context of high debt ratios. An economic slowdown, possibly a recession in parts of the EU and the UK, could slow the pace of tightening in our major markets. However, should interest rates need to rise beyond what is currently expected, a realignment of market expectations could cause turbulence in financial asset prices.

Second order impacts from the Russia-Ukraine war and other geopolitical events remain uncertain and may lead to significant credit losses on specific exposures, which may not be fully captured in our ECL estimates. Higher inflationary concerns and interest rate expectations across the region are also having an impact on ECL. In line with existing practice we have continued to carry out enhanced monitoring of model outputs and the use of model overlays, including management adjustments based on the expert judgement of senior credit risk managers to reflect current market inflation and interest rate conditions where they have not

been incorporated in the underlying macroeconomic scenarios. Inflation and rising interest rates have been considered both directly in certain models, and assessed via adjustments where not directly considered.

Whilst many of the government programmes implemented during the Covid-19 pandemic to support businesses and individuals have ceased, these have impacted the level of credit losses, which in turn may have impacted the longer-term reliability of loss and capital models.

Negotiations between the UK and the EU over the operation of the Northern Ireland Protocol are continuing. While there are signs that differences may be diminishing, failure to reach agreement could have implications for the future operation of the EU-UK TCA. In June 2022, the UK government published proposed legislation that seeks to amend the Protocol in a number of respects. In response, the EU launched infringement procedures against the UK, and is evaluating the UK response, received in September 2022. If the proposed legislation were to pass, and infringement procedures progressed, it could further complicate the terms of trade between the UK and the EU and potentially prevent progress in other areas such as financial services. We are monitoring the situation closely, including the potential impacts on our customers.

Our business could also be adversely affected by economic or political developments in regions of the world outside Europe. This reflects our extensive business links, through members of the Group and other entities, in Asia and elsewhere. Tensions between China and the US, extending to the UK, the EU, India and other countries, and political developments in Hong Kong and Taiwan, may adversely affect the group.

The US, the UK, the EU and other countries have imposed various sanctions and trade restrictions on China. In response to foreign sanctions and trade restrictions, China has also announced sanctions, trade restrictions and laws that could impact the group and its customers.

High Covid-19 vaccination rates and acquired population immunity in 2022 across the European region have reduced the public health risks and the need for restrictions. New Covid-19 variants and subvariants pose a continuing risk and could result in the European governments reintroducing restrictions, potentially impacting our personal and business customers.

Our Central macroeconomic scenario, which has the highest probability weighting in our IFRS 9 'Financial Instruments' calculations of ECL, assumes low growth and a higher inflation environment. However, due to the rapidly changing economic conditions, the potential for forecast dispersion and volatility remain high, impacting the degree of accuracy and certainty of our Central scenario forecast. The level of volatility depends on various factors, including but not limited to: commodity price increases, supply chain constraints and the monetary policy response to inflation. There is also uncertainty with respect to the relationship between the economic drivers and the historical loss experience, which has required adjustments to modelled ECLs in cases where we determined that the model was unable to capture the material underlying risks. For further details of our Central and other scenarios, see 'Measurement uncertainty and sensitivity analysis of ECL estimates' on page 48.

- We closely monitor geopolitical and economic developments including the impacts of the Russia-Ukraine war and undertake scenario analysis and stress testing where appropriate. This helps us to take portfolio actions where necessary, including seeking to ensure enhanced monitoring and amending our risk appetite.
- We continue to monitor the EU's relationship with the UK, and assess the potential impact on our people, operations and portfolios.
- We continue to monitor our risk profile closely in the context of the current geopolitical and macroeconomic situation, and given the significant uncertainties, additional mitigating actions may be required.

Credit risk

Credit risk has increased driven chiefly by the impacts and uncertainty caused by the current geopolitical and macroeconomic environment. Economic prospects and therefore the outlook for credit risk across our key markets will be driven by a number of factors including how inflationary pressures are managed across the EU and the UK, and whether a global recession develops, exacerbated by the ongoing Russia-Ukraine war.

Mitigating actions

- Reviews of key credit portfolios are undertaken regularly to seek to ensure that individual customer or portfolio risks are understood and our management of the level of facilities offered through the economic downturn is appropriate.
- We continue to monitor high risk wholesale industry sectors closely and in 2022 we undertook specific reviews of portfolios showing vulnerability such as Real Estate, Retail, Construction and Contracting and Wholesale Trade,
- Detailed performance monitoring is reviewed on a monthly basis, which includes early warning indicators and a view of concentration risks. Portfolio limits and exposures are reassessed and reductions implemented where appropriate.
- We stress test portfolios of particular concern to identify sensitivity to loss under a range of scenarios, with management actions being taken to seek to rebalance exposures and to manage risk appetite where necessary.

Cyber threat and unauthorised access to systems

Together with other organisations, we continue to operate in an increasingly hostile cyber threat environment. These threats include potential unauthorised access to customer accounts, attacks on our systems or those of our third-party suppliers and require ongoing investment in business and technical controls to defend against them.

Mitigating actions

- We continuously evaluate threat levels for the most prevalent cyber-attack types and their potential outcomes. To further protect the group and our customers and help ensure the safe expansion of our business lines, we continue to strengthen our controls to reduce the likelihood and impact of advanced malware, data leakage, exposure through third parties and security vulnerabilities.
- We seek to enhance our cybersecurity capabilities, including Cloud security, identity and access management, metrics and data analytics, and third-party security reviews. An important part of our defence strategy is ensuring our colleagues remain aware of cybersecurity issues and know how to report incidents.
- We report and review cyber risk and control effectiveness at executive and non-executive Board level. We also report it across our businesses and functions to help ensure appropriate visibility and governance of the risk and its mitigating actions.
- We participate globally in industry bodies and working groups to collaborate on tactics employed by cyber-crime groups and to collaborate in defending, detecting and preventing cyberattacks on financial organisations.

Evolving regulatory environment risk

We aim to keep abreast of the emerging regulatory compliance and conduct agenda, which currently includes, but is not limited to: ESG matters; ensuring good customer outcomes; addressing customer vulnerabilities due to cost of living pressures; regulatory compliance; regulatory reporting; employee compliance, including use of e-communication channels; and the proposed reforms to the UK financial services sector, known as the Edinburgh Reforms.

We monitor regulatory developments closely and engage with regulators, as appropriate, to help ensure new regulatory requirements are implemented effectively and in a timely way. The competitive landscape in which the group operates may be impacted by future regulatory changes and government intervention.

Mitigating actions

- We monitor for regulatory developments to understand the evolving regulatory landscape and seek to respond with changes in a timely way.
- We continue to support work that is focussed on the implementation of UK Consumer Duty requirements.
- We engage with governments and regulators to make a contribution to regulations and to try and ensure that new requirements are considered properly and can be implemented effectively. We hold regular meetings with relevant authorities to discuss strategic contingency plans, including those arising from geopolitical issues.
- Our simplified conduct approach has been embedded to align to our purpose and values, in particular the value 'we take responsibility'.

Financial crime and fraud risk

Financial institutions remain under considerable regulatory scrutiny regarding their ability to detect and prevent financial crime, which continues to evolve. Challenges include managing conflicting laws and approaches to legal and regulatory regimes, and implementing the unprecedented volume and diverse set of sanctions, notably as a result of the Russia-Ukraine war.

Amid rising inflation and increasing cost of living pressures, we face increasing regulatory expectations with respect to increases in internal and external fraud and the abuse of vulnerable customers for financial crime.

The digitisation of financial services continues to have an impact on the payments ecosystem, with an increasing number of market entrants and payment mechanisms, not all of which are subject to the same level of regulatory scrutiny or regulations as financial institutions. This presents ongoing challenges in terms of maintaining required levels of payment transparency, notably where financial institutions serve as intermediaries. 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.

Expectations with respect to the intersection of ESG issues and financial crime as our organisation, customers and suppliers transition to net zero, continue to increase, focussed on potential 'greenwashing,' human rights issues and environmental crimes.

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

- We continue to manage sanctions and trade restrictions through the use of, and enhancements to, our existing controls.
- We continue to develop our fraud controls, and invest in capabilities to fight financial crime through the application of advanced analytics and artificial intelligence.
- We are looking at 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 ensure our financial crime controls remain appropriate.
- We are assessing our existing policies and control framework so that developments relating to the ESG space are considered and the risks mitigated.
- We engage with regulators, policymakers and relevant international bodies, seeking to address data privacy challenges through international standards, guidance and legislation.

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lbor transition

Interbank offered rates ('Ibors') have previously been used extensively to set interest rates on different types of financial transactions and for valuation purposes, risk measurement and performance benchmarking.

Following the UK's Financial Conduct Authority ('FCA') announcement in July 2017 that it would no longer continue to persuade or require panel banks to submit rates for the London interbank offered rate ('Libor') after 2021, we have been actively working to transition legacy contracts from Ibors to products linked to near risk-free replacement rates ('RFRs') or alternative reference rates.

The publication of sterling, Swiss franc, euro and Japanese yen Libor interest rate benchmarks, as well as Euro Overnight Index Average ('Eonia'), ceased from the end of 2021. The group's Ibor transition programme, which is tasked with the development of RFR products and the transition of legacy lbor products, has continued to support the transition of a limited number of remaining contracts in sterling and Japanese yen Libor, which were published using a 'synthetic' interest rate methodology during 2022. The remaining 'tough legacy' sterling contracts have required protracted client discussions where contracts are complex or restructuring of facilities is required. Following the cessation of publication of 'synthetic' Japanese yen Libor after 31 December 2022, and the announcements by the FCA, in September and November 2022, that 'synthetic' sterling Libor rates will cease to be published on 31 March 2023 for one and sixmonth sterling Libor, or 31 March 2024 for three-month sterling Libor, we have or are prepared to transition or remediate the remaining few contracts outstanding as at 31 December 2022 in advance of those cessation dates.

For the cessation of the publication of US dollar Libor from 30 June 2023, we have implemented the majority of required processes, technology and RFR product capabilities throughout the group in preparation for upcoming market events and continue to transition outstanding legacy contracts through the first half of 2023. We continue to make steady progress with the transition of the outstanding legacy committed lending facilities. Transition of our derivatives portfolio is progressing well with most clients reliant on industry mechanisms to transition to RFRs. For the limited number of bilateral derivatives trades where an alternative transition path is required client engagement is continuing. For certain products and contracts, including bonds and syndicated loans, we remain reliant on the continued support of agents and third parties, but we continue to progress those contracts requiring transition. We continue to monitor contracts that may be potentially more challenging to transition and may need to rely upon legislative solutions. Additionally, following the FCA's consultation in November 2022 proposing that US dollar Libor is to be published using a 'synthetic' methodology for a defined period, we will continue to work with our clients to support them through the transition of their products if transition is not completed by 30 June 2023.

We remain mindful of the various factors that have an impact on the lbor remediation strategy for our regulatory capital instruments, including, but not limited to, timescales for cessation of relevant lbor rates. We remain committed in seeking to remediate or mitigate relevant risks relating to lbor-demise, as appropriate, on our outstanding regulatory capital instruments before the relevant calculation dates, which may occur post-cessation of the relevant lbor rate or rates.

For US dollar Libor and other demising lbors, we continue to be exposed to, and actively monitor, risks including:

- Regulatory compliance and conduct risks, as the transition of legacy contracts to RFRs or alternative rates, or sales of products referencing RFRs, may not deliver fair client outcomes:
- Resilience and operational risks, as changes to manual and automated processes, made in support of new RFR methodologies, and the transition of large volumes of lbor contracts may lead to operational issues;
- Legal risk, as issues arising from the use of legislative solutions and from legacy contracts that the group is unable to transition may result in unintended or unfavourable outcomes for clients and market participants, which could potentially increase the risk of disputes;
- Model risk, as there is a risk that changes to our models, to replace lbor-related data, adversely affect the accuracy of model outputs; and
- Market risk, because as a result of differences in Libor and RFR interest rates, we are exposed to basis risk resulting from the asymmetric adoption of rates across assets, liabilities and products.

While the level of risk is diminishing in line with our process implementation and continued transition of contracts, we will continue to monitor these risks through the remainder of the transition of legacy contracts. Throughout 2023, we continue to be committed to engaging with our clients and investors to seek to complete an orderly transition of contracts that reference the remaining demising lbors.

- The group Ibor transition programme, which is overseen by the group Chief Risk Officer, will continue to deliver IT and operational processes to meet its objectives.
- We carry out extensive training, communication and client engagement to facilitate appropriate selection of new rates and products.
- · We have dedicated teams in place to support the transition.
- We have actively transitioned legacy contracts and ceased entering into new contracts based on demised or demising lbors, other than those allowed under regulatory exemptions, and implemented associated monitoring and controls.
- We assess, monitor and dynamically manage risks arising from lbor transition, and implement specific mitigating controls when required.
- We continue to actively engage with regulatory and industry bodies to mitigate risks relating to 'tough legacy' contracts.

Financial instruments impacted by Ibor reforms

Interest Rate Benchmark Reform Phase 2, the amendments to IFRS's issued in August 2020, represents the second phase of the IASB's project on the effects of interest rate benchmark reform. The amendments address issues affecting financial statements when changes are made to contractual cash flows and hedging relationships.

Under these amendments, changes made to a financial instrument measured at other than fair value through profit or loss that are

economically equivalent and required by interest rate benchmark reform, do not result in the derecognition or a change in the carrying amount of the financial instrument. Instead they require the effective interest rate to be updated to reflect the change in the interest rate benchmark. In addition, hedge accounting will not be discontinued solely because of the replacement of the interest rate benchmark if the hedge meets other hedge accounting criteria.

	Financial instruments yet to transition to alternative benchmarks, by main benchmark			
At 31 Dec 2022	USD Libor	GBP Libor	Others	
Non-derivative financial assets ²	£m	£m	£m	
Loans and advances to customers				
Financial investments	4,350	83	18	
Others	1,072		_	
Total non-derivative financial assets	554	35	_	
Non-derivative financial liabilities	5,976	118	18	
Subordinated liabilities				
Others	1,287	-	_	
Total non-derivative financial liabilities	560	-	-	
Derivative notional contract amount	1,847	-	_	
Foreign exchange				
Interest rate	6,754	-	144	
Others	1,636,679	56	2,031	
Total derivative notional contract amount	-	-	487	
At 31 Dec 2021	1,643,433	56	2,518	
Non-derivative financial assets ²				
Loans and advances to customers				
Financial investments	5,999	2,562	26	
Others	1,171	140		
Total non-derivative financial assets	693	499	-	
Non-derivative financial liabilities	7,863	3,201	26	
Subordinated liabilities			0	
Others	1,145		_	
otal non-derivative financial liabilities	479	181	1	
Derivative notional contract amount	1,624	181	-	
oreign exchange			- 0	
nterest rate	8,288	1,568	1,080	
otal derivative notional contract amount	1,567,577	215,377	77,738	
	1,575,865	216,945	78,818	

- 1 Comprises financial instruments referencing other significant benchmark rates yet to transition to alternative benchmarks (euro Libor, Swiss franc Libor, Eonia, SOR, THBFIX, MIFOR and Sibor). Announcements were made by regulators during 2022 on the cessation of the Canadian dollar offered rate ('CDOR'), and Mexican Interbank equilibrium interest rate ('TIIE'), which will eventually transition to the Canadian overnight reporate current period.
- 2 Gross carrying amount excluding allowances for expected credit losses.

The amounts in the above table relate to the group's main operating entities where we have material exposures impacted by lbor reform, including in the United Kingdom, France and Germany. The amounts provide an indication of the extent of the group's exposure to the lbor benchmarks that are due to be replaced. Amounts are in respect of financial instruments that:

- contractually reference an interest rate benchmark that is planned to transition to an alternative benchmark;
- have a contractual maturity date beyond the date by which the reference interest rate benchmark is expected to cease; and
- are recognised on the group's consolidated balance sheet

Environmental, social and governance ('ESG') risk

We are subject to financial and non-financial risks associated with ESG related matters. Our current areas of focus are climate risk, nature-related risks and human rights risks. These can impact us both directly and indirectly through our business activities and relationships.

Focus on climate-related risk in particular increased over 2022, owing to the importance, pace and volume of policy development and regulatory changes on climate risk management, stress

testing and scenario analysis and disclosures. Climate change can have an impact across HSBC's risk taxonomy through both transition risk, arising from the move to a low-carbon economy, such as through policy, regulatory and technological changes, and physical risk impacts due to increasing severity and/or frequency of severe weather or other climatic events, such as rising sea levels and flooding, which could affect our ability to conduct our day-to-day operations.

Our most material risks in terms of managing climate risk relate to corporate financing within our banking portfolio. We continue to explore and test methodologies for quantifying how climate risks could impact the individual credit profiles of our clients across various sectors.

Our credit risk policy further embeds climate risk considerations into our corporate credit decisions. We are also developing and rolling out a climate risk assessment, also known as the client Transition Engagement Questionnaire, to corporate clients to help determine the level of transition risk exposure which may affect our credit decisioning and helping to ensure that the transition plans are consistent with HSBC Group's targets and commitments.

We also delivered training to select colleagues in the Risk function to raise awareness of how climate risk is likely to impact certain high transition risk sectors and the associated credit risk considerations.

In addition to financial risks arising in our corporate banking portfolio, we could also face increased reputational, legal and regulatory risks as we make progress towards the HSBC Group's net zero ambition, with stakeholders likely to place greater focus on our actions, such as the development of climate-related policies, the HSBC Group's and our disclosures and financing and investment decisions relating to the HSBC Group's ambition.

We will face additional risks if we are perceived to mislead stakeholders regarding our climate strategy, the climate impact of a product or service, or regarding the commitments of our customers. Climate risk may also impact on model risk, as the uncertain impacts of climate change and data and methodology limitations present challenges to creating reliable and accurate model outputs.

We face reporting risk in relation to our climate disclosures, as any data, methodologies and standards we have used may evolve over time in line with market practice, regulation or owing to developments in climate science. While emissions reporting has improved over time, data remains of limited quality and consistency. The use of inconsistent or incomplete data and models could result in suboptimal decision making. Any changes could result in revisions to our internal frameworks and reported data, and could mean that reported figures are not reconcilable or comparable year on year. We may also have to re-evaluate our progress towards the HSBC Group's climate-related targets in future and this could result in reputational, legal and regulatory risks.

There is increasing evidence that a number of nature-related risks beyond climate change, which include risks that can be represented more broadly by impact and dependence on nature, can and will have significant economic impact. These risks arise when the provision of natural services, such as water availability, air quality, and soil quality, is compromised by overpopulation, urban development, natural habitat and ecosystem loss, ecosystem degradation arising from economic activity and other environmental stresses beyond climate change. They can show themselves in various ways, including through macroeconomic, market, credit, reputational, legal and regulatory risks, for both HSBC and our customers. We continue to engage with investors, regulators and customers on nature-related risks to evolve our approach and understand best practice risk mitigation.

Regulation and disclosure requirements in relation to human rights, and to modern slavery in particular, are increasing. Businesses are expected to be transparent about their efforts to identify and respond to the risk of negative human rights impacts arising from their business activities and relationships.

Mitigating actions

- Our product design, management and governance processes have been adapted to help ensure that climate risk factors are effectively and consistently considered. We also aim to enhance our approach to greenwashing risk management.
- We have established a climate risk appetite which helps support the oversight and management of the risks from climate change and supports the business on helping to deliver the HSBC Group's climate ambition in a safe and sustainable way. The metrics implemented include exposure to high risk transition sectors in our wholesale portfolio. We continue to review our risk appetite to try and ensure that it captures the most material climate risks and develop appropriate metrics to measure and monitor these risks.
- We have enhanced and expanded the use of a client Transition Engagement Questionnaire to better understand our exposure to the highest transition risk sectors and we continue to engage with our customers to understand and help support their transition away from high carbon activities.

- We implement HSBC Group's sustainability risk policies as part of its broader reputational risk framework. We focus our policies on sensitive sectors which may have a high adverse impact on people or on the environment and in which we have a significant number of customers. In December 2022, the HSBC Group announced an updated policy covering the broader energy system including upstream oil and gas, oil and gas power generation, coal, hydrogen, renewables and hydropower, nuclear, biomass and energy from waste. In addition, the HSBC Group also expanded on its thermal coal phase-out policy in which the HSBC Group committed not to provide new finance or advisory services for the specific purpose of the conversion of existing coal-to-gas fired power plants or new metallurgical coal mines. We intend to use our relationships to partner with corporate customers to help them transition to cleaner and safer energy alternatives.
- In 2021, the HSBC Group joined several industry working groups dedicated to helping assess, and manage, naturerelated risks, such as the Taskforce on Nature-related Financial Disclosure ('TNFD'). We will use these outputs to help assess the availability of internal nature related data, and identify opportunities to enhance our capabilities further.
- In 2022, building on an earlier review which had identified modern slavery and discrimination as priority human rights issues, the HSBC Group conducted a comprehensive review to refresh our salient human rights issues, which are the human rights at risk of the most severe negative impact through our business activities and relationships. The review identified five salient human rights issues, including the right to decent work and the right to equality and freedom from discrimination, amongst others. The HSBC Group incorporated additional human rights elements into its existing procurement processes and supplier code of conduct, we are applying the approach being developed by HSBC Group to inform our own management of this risk.
- Climate stress tests and scenarios are being used to further improve our understanding of our risk exposures for use in risk management and business decision making.

For further details on our approach to climate risk management, see 'Climate risk' on page 86.

Internally driven

People risk

Our success in delivering our strategic priorities and managing the regulatory and legislative environment proactively depends on the development and retention of our leadership and high-performing employees.

The ability to continue to attract, develop and retain talent is primarily impacted by a competitive labour market across the EU and the UK, coupled with heightened inflationary pressures. While challenges resulting from transformation continued in 2022, these are expected to reduce as we progress with programme execution. The current people risk outlook is expected to remain heightened for the first half of 2023.

- We seek to promote a diverse and inclusive workforce and provide active support across a wide range of health and wellbeing activities. We continue to build our speak up culture through active campaigns.
- We monitor people risks that have arisen from organisational restructuring. Talent attraction and retention actions are rolled out; focus and emphasis on our strategy, values and purpose are maintained; and improved capacity and enhanced workload management through demand planning review and strengthening are applied.
- We aim to have robust plans in place, driven by senior management, to help mitigate the effect of external factors that may impact our employment practices. Political, legislative, and regulatory challenges are closely monitored to try and minimise the impact on the attraction and retention of talent and key performers.

- We carefully monitor the impact of the rising cost of living across the region. Our fixed pay principles consider the impact of inflation on our employees across the region recognising the pay pressure that exists and the related people risk impact.
- We deploy a Future Skills Curriculum to all employees through the HSBC University to help provide skills that will enable employees and HSBC to be successful in the future.
- We continue to develop succession plans for key management roles, with actions agreed and reviewed on a regular basis by the group's Executive Committee.

IT systems infrastructure and operational resilience

We operate an extensive and complex technology landscape, which must remain resilient in order to support customers, the group and markets where we operate. Risks arise where technology is not understood, maintained, or developed appropriately. We remain committed to investing in the reliability and resilience of our IT systems and critical services. The group does so in order to protect its customers, affiliates and counterparties, and to help ensure they do not receive disruption to services that could result in reputational, legal and regulatory consequences. Increased pressure has been seen on our business operations and customer support centres as our people, processes and systems have responded to meet the current economic environment.

The group's strategy includes simplification of our technology estate to reduce complexity and costs; this includes consolidation of our core banking systems onto a single strategic platform. The target state will leverage existing and known technology, and will be simpler and easier to maintain. However, as with any strategic transformation programme risks associated with implementation must be managed continuously.

Mitigating actions

- We continue to invest in transforming how software solutions are developed, delivered and maintained. We invest both to improve system resilience and to test service continuity. We continue to ensure security is built into our software development life cycle and to seek to improve our testing processes and tools.
- We continue to upgrade our IT systems, simplify our service provision and replace older IT infrastructure and applications.
- We manage implementation risks arising from the simplification of our technology estate continuously via oversight of these risks at all levels of the programme and reporting up to our Risk Committee.

Execution risk

In order to deliver our strategic objectives and meet mandatory regulatory requirements, it is important for the group to maintain a strong focus on execution risk. This requires robust management of significant resource-intensive and time-sensitive programmes that are due to execute in 2023. Risks arising from the magnitude and complexity of change planned in 2023 may include regulatory censure, reputational damage and/or financial losses. Current major initiatives include managing the operational implications of the planned disposal of our retail banking operations in France, large transformation programmes including the simplification and integration of our IT systems and other restructuring programmes across Europe.

Mitigating actions

- Change execution risk was added to our risk taxonomy and control library in 2022, so that the risk can be defined, assessed, managed, reported and overseen in the same way as the group's other material risks.
- Our prioritisation and governance processes for significant programmes are monitored by the HSBC Bank plc and Group's Executive Committees.
- We continue to work to strengthen our change management practices in order to try and deliver sustainable change, increased adoption of agile ways of working, and a more consistent standard of delivery. For HSBC Bank plc, this

includes strengthening the embedding of an improved Groupwide change framework which sets out the mandatory principles and standards to be adhered to when leading and delivering change.

Model risk

Model risk arises whenever business decision making includes reliance on models. We use models in both financial and non-financial contexts and 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. Models can need redevelopment as market conditions change. Significant increases in global inflation and interest rates have impacted the reliability and accuracy of both credit risk and traded risk models.

We continued to prioritise the redevelopment of internal ratingsbased ('IRB'), internal model approach ('IMA') and internal model methods ('IMM') models, as part of the IRB repair and Basel III programmes with a key focus on enhancing the quality of data used as model inputs. A number of these models have been submitted to the PRA and the European Central Bank ('ECB') for feedback and approval is in progress.

Some IMM models have been approved for use and feedback has been received for some IRB models. Climate risk modelling is a key focus as our commitment to sustainability has become a critical part of the group's strategy.

Mitigating actions

- We have continued to embed the enhanced monitoring, review and challenge of expected loss model performance through our Model Risk Management function as part of a broader quarterly process to determine loss levels. The Model Risk Management team aims to provide strong and effective review and challenge of any future redevelopment of these models.
- Model Risk Management works closely with our lines of business to ensure that our models meet regulatory requirements as well as risk management, pricing, liquidity and capital management needs. Internal Audit provides assurance over the risk management framework for models.
- Additional assurance work is performed by the model risk governance teams, which act as second lines of defence. The teams test whether controls implemented by model users comply with model risk policy and if model risk standards are adequate.
- Models using advanced machine learning techniques are validated and monitored to try and ensure that model risks arising from the usage of those algorithms have adequate oversight and review.
- A framework to manage the range of risks that are generated by these advanced techniques is being developed to try and capture the multi-disciplinary nature of these risks.

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. 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 ('GDPR').

- 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 have made improvements to our data policies. We are implementing an updated control framework to enhance the end-to-end management of data risk.
- We aim 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.

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- We seek to continue to modernise our data and analytics infrastructure through investments in Cloud technology, data visualisation, machine learning and artificial intelligence.
- We educate our employees on data risk and data management.
 We delivered regular mandatory training on how to protect and manage data appropriately.

Third Party risk

We use third parties to provide a range of goods and services. Risks arising from the use of third-party providers and their supply chain may be harder to identify.

It is critical that we ensure we 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 have enhanced our control framework for the use of thirdparty providers to seek to ensure risks associated with these arrangements are understood and managed effectively by our businesses and functions across the group.
- We continue to enhance the effective management of our intragroup arrangements as we have for external third-party arrangements using the same control standards.
- We are implementing the changes required by new regulations as set by our regulators.

meeting ('RMM') and the RMM in various global businesses,

Our material banking and insurance 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			
Credit risk (see page 36) 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 certain other products such as guarantees and derivatives.	Credit risk is: 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 robust risk control framework that outlines clear and consistent policies, principles and guidance for risk managers.			
Treasury risk (see page 75) 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 foreign exchange exposures and changes in market interest rates, and including the financial risks arising from historic and current provision of pensions and other post employment benefits to staff and their dependants.	Treasury risk arises from changes to the respective resources and risk profiles driven by customer behaviour, management decisions or the external environment.	Treasury risk is: measured through appetites set as target and minimum ratios; monitored and projected against appetites and using stress and scenario testing; and managed through control of resources in conjunction with risk profiles and cashflows.			
Market risk (see page 84) The risk that movements in market factors such as foreign exchange rates, interest rates, credit spreads, equity prices and commodity prices will reduce our income or the value of our portfolios.	Exposure to market risk is separated into two portfolios: trading portfolios; and non-trading portfolios. Market risk exposures arising from our insurance operations are discussed on page 90.	Market risk is: measured using sensitivities, value at risk ('VaR') 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 specifier time horizons; monitored using VaR, stress testing and other measures, including the sensitivity of net interest income and the sensitivity of structura foreign exchange; and managed using risk limits approved by the risk management			

Description of risks - banking operations (continued)

Climate risk (see page 86) Climate risk relates to the financial Climate risk can materialise through: Climate risk is: and non-financial impacts that may physical risk, which arises from the measured using a variety of risk appetite metrics and Key arise as a result of climate change increased frequency and severity of Management Indicators, which assess the impact of climate risk and the move to a greener weather events: across the risk taxonomy; economy. transition risk, which arises from the monitored using stress testing; and process of moving to a low-carbon managed through adherence to risk appetite thresholds and via economy; and specific policies greenwashing risk, which arises from the act of knowingly or unknowingly misleading stakeholders regarding our strategy relating to climate, the climate impact/benefit of a product or service, or the climate commitments or performance of our customers. Resilience risk (see page 87) Resilience risk is the risk that we are Resilience risk arises from failures or unable to provide critical services to inadequacies in processes, people, systems measured through a range of metrics with defined maximum our customers, affiliates, and or external events. These may be driven by acceptable impact tolerances, and against our agreed risk appetite. counterparties as a result of rapid technological innovation, changing monitored through oversight of enterprise processes, risks, controls sustained and significant operational behaviours of our consumers, cyber-threats disruption. and attacks, cross border dependencies, and strategic change programmes; and managed by continuous monitoring and thematic reviews. and third party relationships. Regulatory compliance risk (see page 87) Regulatory compliance risk is the Regulatory compliance risk arises from the Regulatory compliance risk is: risk associated with breaching our failure to observe the letter and spirit of measured by reference to risk appetite, identified metrics, incident duty to clients and other relevant laws, codes, rules, regulations and assessments, regulatory feedback and the judgement and counterparties, inappropriate market standards of good practice, This could assessment of our regulatory compliance teams; conduct and breaching related result in poor market or customer monitored against the first line of defence risk and control financial services regulatory outcomes leading to fines, penalties and assessments, the results of the monitoring and control assurance standards. reputational damage to our business. activities of the second line of defence functions, and the results of internal and external audits and regulatory inspections; and managed by establishing and communicating appropriate policies and procedures, training employees in them and monitoring activity to help ensure their observance. Proactive risk control and/or remediation work is undertaken where required. Financial crime risk (see page 88) Financial crime risk is the risk of Financial crime risk arises from day-to-day Financial crime risk is: knowingly or unknowingly helping banking operations involving customers, measured by reference to risk appetite, identified metrics, incident parties to commit or to further third parties and employees. assessments, regulatory feedback and the judgement of, and potentially illegal activity through assessment by, our regulatory compliance teams; HSBC, including money laundering, monitored against the first line of defence risk and control fraud, bribery and corruption, tax evasion, sanctions breaches, and assessments, the results of the monitoring and control assurance terrorist and proliferation financing. activities of the second line of defence functions, and the results of internal and external audits and regulatory inspections; and managed by establishing and communicating appropriate policies and procedures, training employees in them and monitoring activity to help ensure their observance. Proactive risk control and/or remediation work is undertaken where required. Model risk (see page 89) Model risk is the potential for Model risk arises in both financial and non- Model risk is: adverse consequences from financial contexts whenever business measured by reference to model performance tracking and the business decisions informed by decision making includes reliance on output of detailed technical reviews, with key metrics including models, which can be exacerbated models model review statuses and findings; by errors in methodology, design or monitored against model risk appetite statements, insight from the the way they are used.

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audits, and regulatory reviews, and

independent review function, feedback from internal and external

managed by creating and communicating appropriate policies, procedures and guidance, training colleagues in their application, and supervising their adoption to 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

some of the same risks as our banking operations, and these are covered by the Group's risk management processes. There are though specific risks inherent to the insurance operations as noted helow.

Description of risks - insurance manufacturing operations

Risks	Arising from	Measurement, monitoring and management of risk
Financial risk (see page 90 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.	 Exposure to financial risks arises from: market risk affecting the fair values of financial assets or their future cash flows; credit risk; and liquidity risk of entities not being able to make payments to policyholders as they fall due. 	measured (i) for credit risk, in terms of economic capital and the amount that could be lost if a counterparty fails to make repayments; (ii) for market risk, in terms of economic capital, internal metrics and fluctuations in key financial variables; and (iii) 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 robust risk control framework that outlines clear and consistent policies, principles and guidance. This includes using product design and asset liability matching and bonus rates.
olicyholders under certain ontracts is not possible. nsurance risk (see page 9C)		
The risk that, over time, the cost of the contract, including claims and benefits may exceed the total amount of premiums and investment income received.	The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, as well as lapse and surrender rates.	measured in terms of life insurance liabilities and economic capital allocated to insurance underwriting risk; monitored though a framework of approved limits and delegated authorities; and managed through a robust risk control framework that outlines clear and consistent policies, principles and guidance. This includes using product design, underwriting, reinsurance and claims-handling procedures.

Credit risk

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 certain other products, such as guarantees and derivatives.

Credit risk management

Key developments in 2022

There were no material changes to the policies and practices for the management of credit risk in 2022. We continued to apply the requirements of IFRS 9 'Financial Instruments' within the Credit Risk sub-function. For certain retail portfolios we enhanced the significant increase in credit risk ('SICR') approach to capture relative movements in probability of default ('PD') since origination.

For our retail portfolios, we adopted the EBA 'Guidelines on the application of definition of default' during 2022 and, for our wholesale portfolios, these guidelines were adopted during 2021. Adoption of these guidelines did not have a material impact on our portfolios and comparative disclosures have not been restated.

We actively managed the risks related to macroeconomic uncertainties, including inflation, fiscal and monetary policy, the Russia-Ukraine war, broader geopolitical uncertainties, the continued risks resulting from the Covid-19 pandemic.

For further details, see 'Top and emerging risks' on page 28.

Governance and structure

We have established group-wide credit risk management and related IFRS 9 processes. We continue to actively assess the impact of economic developments in key markets on specific customers, customer segments or portfolios. As credit conditions change, we take mitigating action, 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

Credit approval authorities are delegated by the Board to the Chief Executive together with the authority to sub-delegate them. The Credit risk sub-function in Risk is responsible for the key policies and processes for managing credit risk, which include formulating credit policies and risk rating frameworks, guiding the 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 the group a strong culture of responsible lending and a robust risk policy and control framework;
- to both partner and challenge global 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 mitigation.

Key risk management process

IFRS 9 'Financial Instruments' process

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

Modelling, data and forward economic guidance

The Group has 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 team, as well as regional groupings. 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 ECL 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

Management review forums are established in order to review and approve the impairment results. Regional management review forums have representatives from Credit Risk and Finance. Required members of the forums are the heads of Wholesale Credit, Market Risk, and Wealth and Personal Banking Risk, as well as the global business Chief Financial Officers and the Chief Accounting Officer.

Concentration of exposure

(Aurtited)

Concentrations of credit risk arise when a number of counterparties or exposures have comparable economic characteristics, or are engaged in similar activities or operate in the same geographical areas/industry sectors, so that their collective ability to meet contractual obligations is uniformly affected by changes in economic, political or other conditions. The group uses a number of controls and measures to minimise undue concentration of exposure in the group's portfolios across industry, country and customer groups. 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 each encompass a range of granular internal credit rating grades assigned to wholesale and retail lending businesses, 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 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.

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.

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 probability of default %	Internal credit rating	12 month probability- weighted PD %		
BBB and above	A- and above	CRR1 to CRR21	0 - 0.169	Band 1 and 2	0.000 - 0.500		
BBB- to BB	BBB+ to BBB-	CRR3	0.170 - 0.740	Band 3	0.501 - 1.500		
BB- to B and unrated	BB+ to B and unrated	CRR4 to CRR5	0.741 - 4.914	Band 4 and 5	1.501 – 20.000		
B- to C	B- to C	CRR6 to CRR8	4.915 - 99.999	Band 6	20.001 - 99.999		
Default	Default	CRR9 to CRR10	100	Band 7	100		
	BBB and above BBB- to BB BB- to B and unrated B- to C	External credit rating BBB and above A- and above BBB- to BB BB- to B BB+ to BBB- BB- to B and unrated B- to C B- to C	External credit rating	External credit rating	External credit rating BBB and above A- and above CRR1 to CRR2¹ 0 - 0.169 Band 1 and 2 BBB- to BB BB+ to BBB- CRR3 0.170 - 0.740 Band 3 BB- to B and unrated unrated CRR4 to CRR5 0.741 - 4.914 Band 4 and 5 B- to C B- to C CRR6 to CRR8 4.915 - 99.999 Band 6		

- 1 Customer risk rating ('CRR').
- 2 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) on 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 significant concerns about the borrowers' ability to meet contractual payments when they were due.

In 2022, we expanded our definition of forborne to capture nonpayment-related concessions, such as covenant waivers. For our wholesale portfolio, we began identifying non-payment-related concessions in 2021 when our internal policies were changed. For our retail portfolios, we began identifying them during 2022. The comparative disclosures have been presented under the prior definition of forborne for the wholesale and retail portfolios.

For details of our policy on derecognised renegotiated loans, see Note 1.2(i) on 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 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 customer being classed as credit impaired.

Forborne loans and recognition of expected credit losses

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

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

For details of our accounting policy on the write-off of loans and advances, see Note 1.2(i) on the financial statements.

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 achieve a fair customer outcome, and in line with regulatory expectations, they 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.

Any secured assets maintained on the balance sheet beyond 60 months of consecutive delinquency-driven default require additional monitoring and review to assess the prospect of recovery.

There are exceptions in a few countries and territories where local regulation or legislation constrain earlier write-off, or where the realisation of collateral for secured real estate lending takes more time. Write-off, either partially or in full, may be earlier when there is no reasonable expectation of further recovery, for example, in the event of a bankruptcy or equivalent legal proceedings. Collection procedures may continue after write-off.

Credit risk in 2022

At 31 December 2022, gross loans and advances to customers and banks of £91bn decreased by £12bn, compared with 31 December 2021. This included favourable foreign exchange movements of £3bn and a £22bn decrease due to a reclassification of businesses to assets held for sale, including our retail banking operations in France.

The reclassification of assets held for sale resulted in a decrease of loans and advances to customers, of which £2bn pertaining to wholesale and £19bn to personal banking. For loans and advances to banks, the reclassification resulted in a decrease of £1bn.

Excluding foreign exchange movements and the reclassification of assets held for sale, there was £1bn decrease in personal loans and advances, offset by £1bn increase in wholesale loans and advances to customers. Loans and advances to banks increased by £7bn.

At 31 December 2022, the allowance for ECL excluding foreign exchange movements and the reclassification of assets held for sale, in relation to loans and advances to customers increased by £50m from 31 December 2021.

This was attributable to

- a £46m increase in wholesale loans and advances to customers, of which £44m was driven by stages 1 and 2; and
- a £4m increase in personal loans and advances to customers, of which £7m was driven by stages 1 and 2.

Stage 3 balances at 31 December 2022 remained broadly stable compared with 31 December 2021.

The ECL charge for 2022 was £222m, inclusive of recoveries. Inflation, recession and high interest rates combined with an unstable geopolitical environment and the effects of a global supply chain disruption have contributed to elevated degrees of uncertainty during the year. At 31 December 2022, as a result of this uncertainty, additional stage 1 and 2 allowances have been recorded.

Summary of credit risk

The following disclosure presents the gross carrying/nominal amount of financial instruments to which the impairment requirements in IFRS9 are applied and the associated allowance for ECL. The allowance for ECL increased from £1,240m at 31 December 2021 to £1,370m at 31 December 2022.

The allowance for ECL at 31 December 2022 comprised of £1,283m (2021: £1,168m) in respect of assets held at amortised cost, £87m (2021: £72m) in respect of loans and other credit related commitments, and financial guarantees, and £24m (2021: £19m) in respect of debt instruments measured at FVOCI.

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

(Audited)				
	31 De	2022	31 Dec	2021
	Gross carrying/ nominal amount	Allowance for ECL ¹	Gross carrying/ nominal amount	Allowance for ECL
The group	£m	£m	£m	£m
Loans and advances to customers at amortised cost	73,717	(1,103)	92,331	(1,154)
- personal	6,013	(55)	25,394	(163)
 corporate and commercial 	55,004	(937)	56,087	(964)
 non-bank financial institutions 	12,700	(111)	10,850	(27)
Loans and advances to banks at amortised cost	17,152	(43)	10,789	(5)
Other financial assets measured at amortised cost	269,755	(137)	202,137	(9)
- cash and balances at central banks	131,434	(1)	108,482	
- items in the course of collection from other banks	2,285	-	346	
 Hong Kong Government certificates of indebtedness 	_	-		-
 reverse repurchase agreements – non trading 	53,949	_	54,448	
- financial investments	3,248	-	10	_
- other assets?	55,634	(3)	38,851	(9)
 assets held for sale⁶ 	23,205	(133)		<u> </u>
Total gross carrying amount on balance sheet	360,624	(1,283)	305.257	(1,168)
Loans and other credit related commitments	126,457	(67)	115,695	(55)
- personal	2,116	-	2,269	(1)
 corporate and commercial 	68,441	(62)	63.352	(48)
- financial	55,900	(5)	50.074	(6)
Financial guarantees ³	5,327	(20)	11,054	(17)
- personal	23		26	1117
- corporate and commercial	3.415	(19)	9,894	(16)
- financial	1,889	(1)	1,134	(1)
Total nominal amount off balance sheet ⁴	131,784	(87)	126,749	(72)
	492,408	(1,370)	432,006	(1,240)

	Fair value allo £m 29,248	Memorandum allowance for ECL ⁵	Fair value	Memorandum allowance for ECL [±]
	£m	£m	£m	£m
Debt instruments measured at fair value through other comprehensive income ('FVOCI')	29,248	(24)	41,188	(19)

- 1 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.
- 2 Includes only those financial instruments which are subject to the impairment requirements of IFRS 9. 'Prepayments, accrued income and other assets' as presented within the consolidated balance sheet on page 116 includes both financial and non-financial assets, including cash collateral and settlement accounts.
- 3 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.
- 4 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.
- 5 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.
- 6 For further details on gross carrying amounts and allowances for ECL related to assets held for sale, see 'Assets held for sale' on page 186.

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

	21 Dec	c 2022	31 Dec	2021
	Gross carrying/	Allowance for ECL ¹	Gross carrying/ nominal amount	Allowance for ECL ¹
The bank	£m	£m	£m	£m
Loans and advances to customers at amortised cost	37,370	(378)	34,286	(350)
- personal	3,584	(12)	3,680	(6)
- corporate and commercial	22,456	(247)	21,182	(308)
non-bank financial institutions	11,330	(119)	9,424	(36)
Loans and advances to banks at amortised cost	14,529	(43)	6,782	(4)
Other financial assets measured at amortised cost	169,321	(3)	135,033	(1)
- cash and balances at central banks	78,442	(1)	63,008	-
- items in the course of collection from other banks	1,863		211	-
reverse repurchase agreements-non trading	43,055		39,708	-
- financial investments	6,378	-	3,337	=
- other assets ²	39,583	(2)	28,769	(1)
Total gross carrying amount on balance sheet	221,220	(424)	176,101	(355)
Loans and other credit related commitments	35,692	(31)	31,255	(29)
- personal	886	_	589	-
- corporate and commercial	18,900	(28)	19,175	(26)
- financial	15,906	(3)	11,491	(3)
Financial guarantees ³	1,363	(12)	1,270	(7)
- personal	3	i inc	3	-
- corporate and commercial	827	(11)	527	(6)
- financial	533	(1)	740	(1)
Total nominal amount off balance sheet ⁴	37,055	(43)	32,525	(36)
	258,275	(467)	208,626	(391)

	Fair value alle	Memorandum owance for ECL ⁵	Fair value	Memorandum allowance for ECL ⁵
	£m	£m	£m	£m
Debt instruments measured at FVOCI	12,206	(4)	23,152	(4)

1 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.

2 Includes only those financial instruments which are subject to the impairment requirements of IFRS 9. 'Prepayments, accrued income and other assets' as presented within the consolidated balance sheet on page 116 includes both financial and non-financial assets, including cash collateral and settlement accounts.

3 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

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

5 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 and bank'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 since initial recognition on which a lifetime ECL is recognised.
- Stage 3: There is objective evidence of impairment, and are therefore considered to be in default or otherwise creditimpaired on which a lifetime ECL is recognised.
- Purchased or originated credit-impaired ('POCI'): Financial assets that are purchased or originated at a deep discount that reflects 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 2022

(Gross carry	ing/nomina	l amoun	t ²		Allow	vance for E	CL			ECL	coverage	%	
Stage 1	Stage 2	Stage 3	POCI ³	Total	Stage 1	Stage 2	Stage 3	POCI ³	Total	Stage 1	Stage 2	Stage 3	POCI ³	Tota
£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	%	%	%	%	9/6
63,673	7,817	2,224	3	73,717	(51)	(145)	(907)	-	(1,103)	0.1	1.9	40.8		1.5
5,293	615	105	_	6,013	(9)	(15)	(31)	_	(55)	0.2	2.4	29.5		0.9
46,671	6,479	1,851	3	55,004	(40)	(123)	(774)	-		0.1		10-1-0	_	1.7
11,709	723	268	_	12,700	(2)	(7)	(102)	_		_			_	0.9
16,673	414	65	-	17,152	(6)	(21)	(16)	_	(43)		5.1			0.3
267,770	1,662	323	2	269,755	(14)	(17)	(106)		(137)		1.0		_	0.1
116,994	9,300	163	_	126,457	(13)	(32)	(22)	_	(67)	_	0.3			0.1
2,004	107	5	77	2,116	-	_	1-		-	_	-	47.67	_	-
60,659	7,625	157	+0	68,441	(12)	(28)	(22)	-	(62)		0.4	14.0		0.1
54,331	1,568	1	-	55,900	(1)	(4)	_	-	(5)		0.3	_		000
4,715	528	84		5,327	(1)	(2)	(17)		3.71	_		20.2	_	0.4
20	2	1	_	23	_	-	-	_			38.5.8.	389,557-97		-
2,946	387	82	_	3,415	(1)	(1)	(17)	_		_				0.6
1,749	139	1	-	1,889		633	3.00			2007	37.576	230 (47.52)		0.1
469,825	19,721	2.859	3											0.1
	Stage 1 £m 63,673 5,293 46,671 11,709 16,673 267,770 116,994 2,004 60,659 54,331 4,715 20 2,946 1,749	Stage 1 Stage 2 £m 63,673 7,817 5,293 615 46,671 6,479 11,709 723 16,673 414 267,770 1,662 116,994 9,300 2,004 107 60,659 7,625 54,331 1,568 4,715 528 20 2 2,946 387 1,749 139	Stage 1 Stage 2 Stage 3 Em Stage 3 Em 63,673 7,817 2,224 5,293 615 105 46,671 6,479 1,851 11,709 723 268 16,673 414 65 267,770 1,662 323 116,994 9,300 163 2,004 107 5 60,659 7,625 157 54,331 1,568 1 4,715 528 84 20 2 1 2,946 387 82 1,749 139 1	Stage 1 Stage 2 Stage 3 POCI³ £m £m £m £m 63,673 7,817 2,224 3 5,293 615 105 — 46,671 6,479 1,851 3 11,709 723 268 — 267,770 1,662 323 — 267,770 1,662 323 — 116,994 9,300 163 — 2,004 107 5 — 60,659 7,625 157 — 54,331 1,568 1 — 4,715 528 84 — 20 2 1 — 2,946 387 82 — 1,749 139 1 —	£m £m £m £m £m £m 63,673 7,817 2,224 3 73,717 5,293 615 105 — 6,013 46,671 6,479 1,851 3 55,004 11,709 723 268 — 12,700 16,673 414 65 — 17,152 267,770 1,662 323 — 269,755 116,994 9,300 163 — 126,457 2,004 107 5 — 2,116 60,659 7,625 157 — 68,441 54,331 1,568 1 — 55,900 4,715 528 84 — 5,327 20 2 1 — 23 2,946 387 82 — 3,415 1,749 139 1 — 1,889	Stage 1 Stage 2 Stage 3 POCI3 Total 5m Stage 1 Em 400 400 Ch Ch	Stage 1 Stage 2 Stage 3 POCI3 Total fm Stage 1 Stage 2 Em £m £m	Stage 1 Stage 2 Stage 3 POCI3 Total fm Stage 1 Stage 2 Stage 3 Fm Em Em </td <td>Stage 1 Stage 2 Stage 3 POCI3 Total Em Em Stage 1 Stage 2 Stage 3 POCI3 £m £m</td> <td>Stage 1 Stage 2 Stage 3 POCI³ Total Stage 1 Stage 2 Stage 3 POCI³ Total 63,673 7,817 2,224 3 73,717 (51) (145) (907) — (1,103) 5,293 615 105 — 6,013 (9) (15) (31) — (55) 46,671 6,479 1,851 3 55,004 (40) (123) (774) — (937) 11,709 723 268 — 12,700 (2) (7) (102) — (111) 16,673 414 65 — 17,152 (6) (21) (16) — (43) 267,770 1,662 323 — 269,755 (14) (17) (106) — (137) 116,994 9,300 163 — 126,457 (13) (32) (22) — (67) 2,004 107 5 — 2,116</td> <td>Stage 1 Stage 2 Stage 3 POCI3 Total Em Stage 1 Stage 2 Stage 3 POCI3 Total Em Stage 1 Stage 2 Stage 3 POCI3 Total Em Stage 1 63,673 7,817 2,224 3 73,717 (51) (145) (907) — (1,103) 0.1 5,293 615 105 — 6,013 (9) (15) (31) — (55) 0.2 46,671 6,479 1,851 3 55,004 (40) (123) (774) — (937) 0.1 11,709 723 268 — 12,700 (2) (7) (102) — (111) — 267,770 1,662 323 — 269,755 (14) (17) (106) — (137) — 2,004 107 5 — 2,116 — — — — — — — — — — — — — (67) — 2,033 1 26,457 (13) (32) (22) — (67) — 2,044 107 5</td> <td>Stage 1 Stage 2 Stage 3 POCl³ Total Em Stage 1 Stage 1 Stage 2 Stage 3 POCl³ Total Em Stage 1 Stage 2 POCl³ POCl³ Total Em Stage 1 Stage 2 POCl³ POCl³ M % % % 63,673 7,817 2,224 3 73,717 (51) (145) (907) — (1,103) 0.1 1.9 5,293 615 105 — 6,013 (9) (15) (31) — (55) 0.2 2.4 46,671 6,479 1,851 3 55,004 (40) (123) (774) — (937) 0.1 1.9 11,709 723 268 — 12,700 (2) (7) (102) — (111) — 1.0 16,673 414 65 — 17,152 (6) (21) (16) — (43) — 5.1 267,770 1,662 323 — 269,755 (14) (17) (106) — (137) — 1.0</td> <td>Stage 1 Stage 2 Stage 3 POCI Em Total Em Stage 1 Em Stage 3 Em POCI Em Total Em Stage 3 Em POCI Em Total Em Stage 1 Em Stage 3 Em Stage 3 Em Stage 3 Em POCI Em Total Em Stage 1 Em Stage 3 Em POCI Em Em Em Em Em Em Em Em Em % <t< td=""><td>Stage 1 Stage 2 Stage 3 POCl³ Em Total Em Mode %</td></t<></td>	Stage 1 Stage 2 Stage 3 POCI3 Total Em Em Stage 1 Stage 2 Stage 3 POCI3 £m £m	Stage 1 Stage 2 Stage 3 POCI³ Total Stage 1 Stage 2 Stage 3 POCI³ Total 63,673 7,817 2,224 3 73,717 (51) (145) (907) — (1,103) 5,293 615 105 — 6,013 (9) (15) (31) — (55) 46,671 6,479 1,851 3 55,004 (40) (123) (774) — (937) 11,709 723 268 — 12,700 (2) (7) (102) — (111) 16,673 414 65 — 17,152 (6) (21) (16) — (43) 267,770 1,662 323 — 269,755 (14) (17) (106) — (137) 116,994 9,300 163 — 126,457 (13) (32) (22) — (67) 2,004 107 5 — 2,116	Stage 1 Stage 2 Stage 3 POCI3 Total Em Stage 1 Stage 2 Stage 3 POCI3 Total Em Stage 1 Stage 2 Stage 3 POCI3 Total Em Stage 1 63,673 7,817 2,224 3 73,717 (51) (145) (907) — (1,103) 0.1 5,293 615 105 — 6,013 (9) (15) (31) — (55) 0.2 46,671 6,479 1,851 3 55,004 (40) (123) (774) — (937) 0.1 11,709 723 268 — 12,700 (2) (7) (102) — (111) — 267,770 1,662 323 — 269,755 (14) (17) (106) — (137) — 2,004 107 5 — 2,116 — — — — — — — — — — — — — (67) — 2,033 1 26,457 (13) (32) (22) — (67) — 2,044 107 5	Stage 1 Stage 2 Stage 3 POCl ³ Total Em Stage 1 Stage 1 Stage 2 Stage 3 POCl ³ Total Em Stage 1 Stage 2 POCl ³ POCl ³ Total Em Stage 1 Stage 2 POCl ³ POCl ³ M % % % 63,673 7,817 2,224 3 73,717 (51) (145) (907) — (1,103) 0.1 1.9 5,293 615 105 — 6,013 (9) (15) (31) — (55) 0.2 2.4 46,671 6,479 1,851 3 55,004 (40) (123) (774) — (937) 0.1 1.9 11,709 723 268 — 12,700 (2) (7) (102) — (111) — 1.0 16,673 414 65 — 17,152 (6) (21) (16) — (43) — 5.1 267,770 1,662 323 — 269,755 (14) (17) (106) — (137) — 1.0	Stage 1 Stage 2 Stage 3 POCI Em Total Em Stage 1 Em Stage 3 Em POCI Em Total Em Stage 3 Em POCI Em Total Em Stage 1 Em Stage 3 Em Stage 3 Em Stage 3 Em POCI Em Total Em Stage 1 Em Stage 3 Em POCI Em Em Em Em Em Em Em Em Em % <t< td=""><td>Stage 1 Stage 2 Stage 3 POCl³ Em Total Em Mode %</td></t<>	Stage 1 Stage 2 Stage 3 POCl ³ Em Total Em Mode %

- 1 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.
- 2 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.
- 3 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 days 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 2022

Audited	Gross	carrying amo	ount	Alle	wance for EC	L	EC	CL coverage %	0
		of which:	of which:		of which:	of which:		of which:	of which:
	Stage 2	1 to 29 DPD1.2	30 and > DPD ^{1,2}	Stage 2	1 to 29 DPD ^{1,2}	30 and > DPD ^{1,2}	Stage 2	1 to 29 DPD ^{1,2}	30 and > DPD ^{1,2}
The group	£m	£m	£m	£m	£m	£m	%	%	%
Loans and advances to customers at amortised cost:	7,817	93	331	(145)	(2)	(2)	1.9	2.2	0.6
- personal	615	43	9	(15)	(2)	(1)	2.4	4.7	11.1
 corporate and commercial 	6,479	50	296	(123)		(1)	1.9	-	0.3
 non-bank financial institutions 	723	-	26	(7)		-	1.0	_	_
Loans and advances to banks at amortised cost	414	_	8	(21)	_	_	5.1	_	
Other financial assets measured at amortised cost	1,662	25	12	(17)	_	(2)	1.0	_	16.7

1 Days past due ('DPD'). Up-to-date accounts in stage 2 are not shown in amounts presented above.

2 The days past due amounts presented above are on a contractual basis and include the benefit of any customer relief payment holidays granted.

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector at 31 December 2021 (continued)

	6	rose carno	ing/nomina	Lamount?			Allo	vance for E	CL			ECI	. coverage t	1/6	
	Stage 1	Stage 2	Stage 3	POCI ³	Total	Stage 1	Stage 2	Stage 3	POCI ³	Total	Stage 1	Stage 2	Stage 3	POCI ²	Total
The group	£m	£m	£m	Em	£m	£m	Em	£m	£m	£m	%	%	%	%	%
Loans and advances to customers at amortised cost	80,730	9,121	2,478	2	92,331	(86)	(158)	(908)	(2)	(1,154)	0.1	1.7	36.6	100.0	1.2
– personal	24,255	686	453		25,394	(22)	(16)	(125)	-	(163)	0.1	2.3	27.6	-	0.6
- corporate and commercial	46,237	8,066	1,782	2	56,087	(58)	(137)	(767)	(2)	(964)	0.1	1.7	43.0	100.0	1.7
non-bank financial institutions	10,238	369	243		10,850	(6)	(5)	(16)		(27)	0.1	1.4	6.6	-	0.2
Loans and advances to banks at amortised cost	10,750	39			10,789	(4)	(1)			(5)		2.6			-
Other financial assets measured at amortised cost	202,048	47	42		202,137			(9)		(9)			21.4		-
Loan and other credit- related commitments	107,922	7,571	202		115,695	(25)	(22)	(8)	-	(55)		0.3	4.0		-
- personal	2,152	114	3		2,269	(1)			-	(1)			-	-	
 corporate and commercial 	56,325	6,829	198	-	63,352	(20)	(20)	(8)	-	(48)	-	0.3	4.0	- 2	0.1
- financial	49,445	628	1		50,074	(4)	(2)		-	(6)		0.3	1	-	
Financial guarantees ¹	10,215	740	99	-	11,054	(3)	(7)	(7)	-	(17)		0.9	7.1		0.2
- personal	23	2	1	-	26	-		-	-	-		_		-	-
 corporate and commercial 	9,257	540	97		9,894	(2)	(7)	(7)		(16)		1.3	7.2	=	0.2
- financial	935	198	1		1,134	(1)	_			(1)	0.1			-	0.1
At 31 Dec 2021	411,665	17,518	2,821	2	432,006	(118)	(188)	(932)	(2)	(1,240)		1.1	33.0	100.0	0.3

- 1 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.
- 2 Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.
- 3 Purchased or originated credit-impaired ('POCI').

Stage 2 days past due analysis at 3	1 December 2	021 (contin	ued)							
		carrying amou		Allo	wance for ECL		ECL coverage %			
		of which:	of which:		of which:	of which:		of which:	of which	
	Stage 2	1 to 29 DPD ^{1,2}	30 and > DPD ¹²	Stage 2	1 to 29 DPD ^{†,)}	30 and > DPD ^{† 2}	Stage 2	1 to 29 DPD ^{1,2}	30 and > DPD ^{1,2}	
The group	£m	£m.	Em	£m	£m	Em	9/6	96	%	
Loans and advances to customers at amortised cost	9,121	56	237	(158)	(1)	(1)	1.7	1.8	0.4	
- personal	686	49	29	(16)	(1)	(1)	2.3	2.0	3.4	
- corporate and commercial	8,066	7	199	(137)	100		1.7	0.0		
non-bank financial institutions	369		9	(5)		-	1.4			
Loans and advances to banks at amortised cost	39		-	(1)			2.6			
Other financial assets measured at amortised cost	47	-		=		-		-	-	

Days past due ('DPD'). Up-to-date accounts in stage 2 are not shown in amounts presented above.
 The days past due amounts presented above are on a contractual basis and include the benefit of any customer relief payment holidays granted.

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

(Audited)															
			ing/nomina	l amoun	t ²		Allow	vance for I	ECL			ECI	coverage ^t	,	
771	Stage 1		Stage 3	POCI ³	Total	Stage 1		Stage 3	POCI ³	Total	Stage 1		Stage 3	POCI ³	*
The bank	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	%	%			Total
Loans and advances to customers at amortised cost	33,919	2,576	875	-	37,370	(19)	(35)	(324)		(378)			%	%	%
- personal	3,090	482	12	-	3,584	(2)	(7)			*	0.1	1.4	37.0	-	1.0
 corporate and commercial 	20,314	1,547	595	-	22,456	.coem		(3)	-	(12)	0.1	1.5	25.0	-	0.3
 non-bank financial 		.,,,,,,	555		22,430	(16)	(27)	(204)	=	(247)	0.1	1.7	34.3	-	1.1
institutions	10,515	547	268	-	11,330	(1)	(1)	(117)		(119)		0.2	43.7		1.1
Loans and advances to banks at amortised cost	14,299	165	65	_	14.529	(5)	(22)	(16)		440)					1.1
Other financial assets measured at amortised cost	169,276	24	21	-	169,321	(2)	(1)			(43)	-	13.3	24.6	-	0.3
Loan and other credit-related						(2)	111	-	_	(3)	-	4.2	(144	-	-
commitments	32,427	3,225	40	-	35,692	(9)	(15)	(7)	-	(31)	***	0.5	17.5		
- personal	874	10	2	2-7	886		_	_	_			- 322	17.5		0.1
commercial	16,565	2,297	38	-	18,900	(8)	(13)	(7)		-	-	-	_	-	
financial	14,988	918		-	15,906			25.24		(28)	-	0.6	18.4	100	0.1
Financial					10,000	(1)	(2)		-	(3)	-	0.2	_	_	_
guarantees ¹	1,194	133	36		1,363	-	(1)	(11)	_	(12)			44.00		
personal	2	1	-	-	3	-						8.0	30.6	-	0.9
corporate and commercial	770							-	-	-	-	2-		-	-
financial	775	17	35	-	827	-	1-1	(11)	_	(11)	-	-	31,4	144	1.3
7777777741	417	115	1	-	533	_	(1)		-	(1)		0.9	-		0.2
At 31 Dec 2022	251,115	6,123	1,037	-	258,275	(35)	(74)	(358)		(467)	_	1.2	34.5	- 11	0.2

- 1 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.
- Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.

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

Stage 2 days past due analysis at 31 December 2022

	Gross	carrying amo	ount	Allowance for ECL FCL			L coverage %		
		of which:	of which:		of which:	of which:		of which:	of which:
The bank	Stage 2	1 to 29 DPD ^{1,2}	30 and > DPD ^{1,2}	Stage 2	1 to 29 DPD ^{1,2}	30 and > DPD ^{1,2}	Stage 2	1 to 29 DPD ^{1,2}	30 and >
	£m	£m	£m	£m	£m	£m	%		
Loans and advances to customers at amortised cost:	2,576	26	6	(35)	(1)	60800		%	%
- personal	482	26	6	(7)		(1)	1.4	3.8	16.7
 corporate and commercial 	1,547	_			(1)	(1)	1.5	3.8	16.7
non-bank financial institutions	547		-	(27)	-		1.7	_	
Loans and advances to banks at	547	-	1.77	(1)	-	-	0.2	_	
amortised cost	165	_		(22)					
Other financial assets measured at amortised cost				(22)		_	13.3	-	-
arror tiona cost	24	-	-	(1)	(1)	-	4.2		

Days past due ('DPD'). Up-to-date accounts in stage 2 are not shown in amounts presented above.
 The days past due amounts presented above are on a contractual basis and include the benefit of any customer relief payment holidays granted.

Summary of credit risk (excluding debt instruments measured at FVOCI) by stage distribution and ECL coverage by industry sector at 31 December 2021 (continued)

			2.00.000				Allowance for ECL ECL coverage %								
			g/nominal ar	POCI ³	Total	Stage 1	Stage 2	Stage 3	POCI ³	Total	Stage 1	Stage 2	Stage 3	POCI ³	Total
	Stage 1	Stage 2	Stage 3	Em	£m	£m	£m	£m	£m	£m	%	8/0	9/6	%	9/6
The bank	£m	£m	£m	LIII	Litt	4.00									
oans and advances to customers at amortised cost	30,105	3,197	984		34,286	(33)	(47)	2001		(350)	0.1	1.5	27.4 6.3		1.0
personal	3,544	88	48	-	3,680	(1)	(2)	(3)		(6)		2.3	0.5		0,2
corporate and commercial	17,608	2,893	681	-	21,182	(28)	(45)	(235)	-	(308)	0.2	1.6	34.5		1.5
non-bank financial institutions	8,953	216	255	_	9,424	(4)	0=	(32)	-	(36)	-		12.5		0.4
Loans and advances to banks at amortised cost	6,775	7			6,782	(3)	(1)	_		(4)		14.3		-	0.1
Other financial assets measured at amortised cost	134,984	21	28		135,033			(1)		(1)			3.6	-	-
Loan and other credit-related commitments	28,911	2,301	43		31,255	(15	(11				0.1			-	0.1
- personal	585	2	2		589		-	-							
corporate and	17,010	2,124	41		19,175	(12	(11) (3)	-	10000					0.1
- financial	11,316	175	-		11,491	(3) –		_	(3)			_		
Financial	1,060	150	60		1,270	(1) –	(6) –	(7)	0.	F -	10.0		
guarantees ¹	2	1	1000		3				-	-				_	
personalcorporate and								1		10			10.2	_	1.
commercial	437	31	59	=	527						200		10.2		
- financial	621	118			740					(1 (391		- 2			- 1
At 31 Dec 2021	201,835	5,676	1,115	-	208,626	(52	2) (59	9) (280)	(391		- 1.	2011		

- Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.
- Represents the maximum amount at risk should the contracts be fully drawn upon and clients default.
- 3 Purchased or originated credit-impaired ('POCI').

Stage 2 days past due analysis at 3	Decountries as			Allov	vance for ECL		ECI	L coverage %	
	Gross	arrying amou of which:	of which:		of which:	of which:		of which:	of which:
	Stage 2	1 to 29 DPD	30 and >	Stage 2	1 to 29 DPD ¹	30 and > DPD [†]	Stage 2	1 to 29 DPD ¹	30 and > DPD ¹
	Stage 2	£m.	£m	£m	Em	£m:	%	%	%
The bank	2000								
Loans and advances to customers at	3,197	19	6	(47)	(1)		1.5	5.3	
amortised cost:		- 200	6	(2)	(1)		2.3	5.3	_
- Personal	88	19	.0		100		1.6	44	_
 Corporate and commercial 	2,893			(45)			17.5		
Non-bank financial institutions	216			_					
Loans and advances to banks at amortised cost	7	-		(1)	-	=	14.3		
Other financial assets measured at amortised cost	21		-		-	-		-	-

1 Days past due ('DPD'). Up-to-date accounts in stage 2 are not shown in amounts presented above.

Stage 2 decomposition as at 31 December 2022

The following disclosure presents the stage 2 decomposition of gross carrying amount and allowances for ECL for loans and advances to customers. 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 2022.

The quantitative classification shows gross carrying values and allowances for ECL for which the applicable reporting date PD measure exceeds defined quantitative thresholds for retail and wholesale exposures.

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

For further details on our approach to the assessment of significant increase in credit risk, see 'Summary of significant accounting policies' on page 126.

Loans and advances to customers at 31 December 20221

Loans and advances to customers at 31 December 2021

		Gross carry	ng amount	Allowance for ECL					
	Personal	Corporate and commercial	Non-bank financial institutions	Total	Personal	Corporate and commercial	Non-bank financial institutions	Total	ECL Coverage % Total
The group	£m	£m	£m	£m	£m	£m	£m	£m	%
Quantitative	557	3,310	379	4,246	(12)	(71)	(2)	(85)	2.0
Qualitative	56	2,874	319	3,249	(3)	(51)	(5)	(59)	1.8
30 DPD backstop ²	2	295	25	322	-	(1)	11	(1)	0.3
Total stage 2	615	6,479	723	7,817	(15)	(123)	(7)	(145)	1.9
The bank						1,	1.7	(110)	1.0
Quantitative	456	1,109	314	1,879	(6)	(13)	(1)	(20)	1.1
Qualitative	26	438	233	697	(1)	(14)	-	(15)	2.2
30 DPD backstop?	_		-	_	-	- 1		(13)	2.2
Total stage 2	482	1,547	547	2,576	(7)	(27)	(1)	(35)	1.4

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

2 Days past due ('DPD').

Gross carrying amount Allowance for ECL Corporate Non-bank Corporate ECL financial and financia Coverage % Total Personal commercial institutions Total Personal commercial institutions Total The group £m £m £m £m £m £m £m Quantitative 561 3,611 162 4.334 (13)(41)(1) (55)1.3

Qualitative	102	4.260	100	4 500	1001	122			
	102	4,200	198	4,560	(2)	(96)	(4)	(102)	2.2
30 DPD backstop ²	23	195	9	227	(1)	1-		(1)	0.4
Total stage 2	686	8,066	369	9,121	(16)	(137)	(5)	(158)	1.7
The bank		130/4/2020					177	(100)	7.47
Quantitative	26	1,731	95	1,852	(2)	(9)	-	(11)	0.6
Qualitative	62	1,162	121	1,345	_	(36)		(36)	27
30 DPD backstop ²	44	_	-				_	10-01	
Total stage 2	88	2,893	216	3,197	(2)	(45)		(47)	1.5

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

2 Days past due ('DPD').

Assets held for sale

Audited

During 2022, gross loans and advances and related impairment allowances were reclassified from 'loans and advances to customers' and 'loans and advances to banks' to 'assets held for sale' in the balance sheet.

At 31 December 2022, the most material balances held for sale came from our retail banking operations France.

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 47);

 Distribution of financial instruments by credit quality at 31 December (page 57);

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

Loans and other credit-related commitments and financial guarantees, 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

Auvited

	Total gross loans and advances	Impairment allowances on loans and advances
Section and the section of the secti	£m	£m
As reported	90,869	(1,146)
Reported in 'Assets held for sale'	21,325	(131)
At 31 Dec 2022	112,194	(1,277)

At 31 December 2022, gross loans and advances of our retail banking operations in France were £21bn, and the related impairment allowance for ECL was £0.1bn.

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. 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.

For further details of the carrying amount and the fair value at 31 December 2022 of loans and advances to banks and customers classified as held for sale, see note 34.

Gross loans and impairment allowances on loans and advances to customers and banks reported in 'Assets held for sale'

	Retail banking operations in France	Other ¹	Total
Gross Loans	£m	£m	£m
Loans and advances to customers at amortised cost:	20,852	342	21,194
Personal	18,835	253	19,088
Corporate and Commercial	1,975	89	2,064
Non-bank financial institutions	42	-	42
Loans and advances to banks at amortised cost		131	131
At 31 Dec 2022	20,852	473	21,325
Impairment allowance			
Loans and advances to customers at amortised cost:	(76)	(51)	(127)
Personal	(73)	(38)	(111)
Corporate and Commercial	(3)	(13)	(16)
Non-bank financial institutions	-	-	
Loans and advances to banks at amortised cost	100	(4)	(4)
At 31 Dec 2022	(76)	(55)	(131)

1 Comprising assets held for sale relating to the planned sale of our branch operations in Greece and of our business in Russia.

The table below analyses the amount of ECL (charges)/releases arising from assets held for sale. The charges during the period primarily relate to the retail banking operations in France.

Changes in expected credit losses and other credit impairment

	2022	2021
	£m	£m
ECL charges arising from:		
- Asset held for sale	4	740
Asset not held for sale	218	
At 31 Dec	. 222	

Credit exposure

Maximum exposure to credit risk

This section provides information on balance sheet items and their offsets as well as loan and other credit-related commitments. The offset on derivatives remains in line with the movements in maximum exposure amounts.

'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 financial instruments whose carrying amount best represents the net exposure to credit risk and it excludes equity securities 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; 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 which 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 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 Note 28 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 and other credit enhancement' section on page 69.

Maximum exposure to credit risk						
(Audited)		2022				
	NA.	2022			2021	
The group	Maximum exposure	Offset	Net	Maximum exposure	Offset	Ne
Loans and advances to customers held at amortised cost	£m	£m	£m	£m	£m	£r
- personal	72,614	(8,149)	64,465	91,177	(7,057)	84,12
- corporate and commercial	5,958	(1)	5,957	25,231	-1	25,23
 non-bank financial institutions 	54,067	(7,269)	46,798	55,123	(6,228)	48,89
Loans and advances to banks at amortised cost	12,589	(879)	11,710	10,823	(829)	9,994
Other financial assets held at amortised cost	17,109	(145)	16,964	10,784	(88)	10,696
cash and balances at central banks	268,023	(10,882)	257,141	202,455	(10,239)	192,216
- items in the course of collection from other banks	131,433	-	131,433	108,482		108,482
reverse repurchase agreements – non trading	2,285	_	2,285	346	-	346
- financial investments	53,949	(10,882)	43,067	54,448	(10,239)	44,209
- asset held for sale	3,248	-	3,248	10	-	10
- other assets	21,214	77	21,214			
Derivatives	55,894		55,894	39,169	-	39,169
Total on balance sheet exposure to credit risk	225,238	(224,444)	794	141,221	(139,668)	1,553
Total off-balance sheet	582,984	(243,620)	339,364	445,637	(157,052)	288,585
financial and other guarantees ¹	150,270		150,270	146,261	_	146,261
loan and other credit-related commitments	22,425	-	22,425	26,840		26,840
At 31 Dec	127,845	_	127,845	119,421	-	119,421
	733,254	(243,620)	489,634	591,898	(157,052)	434,846
The bank						
oans and advances to customers held at amortised cost	26 000	74 000				
personal	36,992	(8,132)	28,860	33,936	(7,047)	26,889
corporate and commercial	3,572	-	3,572	3,674	-	3,674
non-bank financial institutions	22,209	(7,264)	14,945	20,874	(6,224)	14,650
oans and advances to banks at amortised cost	11,211	(868)	10,343	9,388	(823)	8,565
Other financial assets held at amortised cost	14,486		14,486	6,778	-	6,778
cash and balances at central banks	169,367	(10,427)	158,940	135,109	(9,045)	126,064
items in the course of collection from other banks	78,441	-	78,441	63,008	-	63,008
reverse repurchase agreements - non trading	1,863	_	1,863	211	-	211
financial investments	43,055	(10,427)	32,628	39,708	(9,045)	30,663
other assets	6,378		6,378	3,337	_	3,337
erivatives	39,630	-	39,630	28,845		28,845
otal on balance sheet exposure to credit risk	196,714	(196,505)	209	125,787	(123,964)	1,823
otal off-balance sheet	417,559	(215,064)	202,495	301,610	(140,056)	161,554
financial and other guarantees ¹	44,673		44,673	41,034		41,034
loan and other credit-related commitments	8,231	-	8,231	8,592		8,592
t 31 Dec	36,442		36,442	32,442		32,442
	462,232	(215,064)	247,168	342,644	(140,056)	202,588

1 'Financial and other guarantees' represents 'Financial guarantees' and 'Performance and other guarantees' as disclosed in Note 30, net of ECL.

Concentration of exposure

We have a number of businesses with a broad range of products. We operate in a number of markets with the majority of our exposures in UK and France.

For an analysis of:

- financial investments, see Note 15 on the financial statements;
- trading assets, see Note 10 on the financial statements;
- derivatives, see page 72 and Note 14 on the financial statements; and
- loans and advances by industry sector and by the location of the principal operations of the lending subsidiary or by the location of the lending branch, see page 67 for wholesale lending and page 72 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 and 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

Auditog

The recognition and measurement of ECL involves the use of significant judgement and estimation. We form multiple economic scenarios based on economic forecasts, apply these assumptions to credit risk models to estimate future credit losses, and probability-weight the results to determine an unbiased ECL estimate. Management judgemental adjustments are used to address late-breaking events, data and model limitations, model deficiencies and expert credit judgements.

Amid a deterioration in the economic and geopolitical environment, management judgements and estimates continued to be subject to a high degree of uncertainty in relation to assessing economic scenarios for impairment allowances in 2022.

Inflation, economic contraction and high interest rates combined with an unstable geopolitical environment and the effects of global supply chain disruptions have contributed to elevated levels of uncertainty during the year.

At 31 December 2022, as a result of this uncertainty, additional stage 1 and 2 impairment allowances were recognised. Management continued to reflect a degree of caution both in the selection of economic scenarios and their weightings, and in the use of management judgemental adjustments, described in more detail below.

At 31 December 2022, there was a reduction in management judgemental adjustments compared with 31 December 2021. Adjustments related to Covid-19 and for sector-specific risks were reduced as scenarios and modelled outcomes better reflected the key risks at 31 December 2022.

Methodology

Four economic scenarios are used to capture the current economic environment and to articulate management's view of the range of potential outcomes. Scenarios produced to calculate ECL are aligned to HSBC's top and emerging risks.

Three of the scenarios are drawn from consensus forecasts and distributional estimates. The Central scenario is deemed the 'most likely' scenario, and usually attracts the largest probability weighting, while the outer scenarios represent the tails of the distribution, which are less likely to occur. The Central scenario is created using the average of a panel of external forecasters. Consensus Upside and Downside scenarios are created with reference to distributions for select markets that capture forecasters' views of the entire range of outcomes. In the later years of the scenarios, projections revert to long-term consensus trend expectations. In the consensus outer scenarios, reversion to trend expectations is done mechanically with reference to historically observed quarterly changes in the values of macroeconomic variables.

The fourth scenario, Downside 2, is designed to represent management's view of severe downside risks. It is a globally consistent narrative-driven scenario that explores more extreme economic outcomes than those captured by the consensus scenarios. In this scenario, variables do not, by design, revert to long-term trend expectations. They may instead explore alternative states of equilibrium, where economic activity moves 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 constructed with 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 is determined to be particularly uncertain and risks are elevated.

In light of ongoing risks, management deviated from this probability weighting in the fourth quarter of 2022, and assigned additional weight to outer scenarios.

Description of economic scenarios

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

Economic forecasts remain subject to a high degree of uncertainty. Upside and Downside scenarios are constructed so that they encompass the potential crystallisation of a number of key macro-financial risks.

At the end of 2022, risks to the economic outlook included the persistence of inflation and its consequences on monetary policy. Rapid changes to public policy also increased forecast uncertainty.

In Europe, risks relating to energy pricing and supply security remain significant. Geopolitical risks also remain significant and include the possibility of a prolonged and escalating Russia-Ukraine war, continued disagreements between the US and other countries with China over a range of economic and strategic issues, and the evolution of the UK's relationship with the EU.

Economic forecasts for our main markets deteriorated in the fourth quarter as GDP growth slowed. In Europe high inflation and rising interest rates have reduced real household incomes and raised business costs, dampening consumption and investment and lowering growth expectations. The effects of higher interest rate expectations and lower growth are evident in asset price expectations, with house prices forecasts, in particular, significantly lower.

The scenarios used to calculate ECL in the Annual Report and Accounts 2022 are described below.

The consensus Central scenario

HSBC's Central scenario reflects a low growth and higher inflation environment across many of our key markets. The scenario features an initial period of below-trend GDP growth in most of our main markets as higher inflation and tighter monetary policy causes a squeeze on business margins and households' real disposable income. Growth returns to its long term expected trend in later years as central banks bring inflation back to target.

Our Central scenario assumes that inflation peaked in most of our key markets at the end of 2022 but remains high through 2023 before moderating as energy prices stabilise and supply chain disruptions abate. Central banks are expected to keep raising interest rates until midway through 2023. Inflation is forecast to revert to target in most markets, by early 2024.

Global GDP is expected to grow by 1.6% in 2023 in the Central scenario and the average rate of global GDP growth is 2.5% 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.

The key features of our Central scenario are:

- Economic activity in European and North American markets continues to weaken. Most major economies are forecast to grow in 2023, but at very low rates. Hong Kong and mainland China are expected to see a recovery in economic activity from 2023 as Covid-19 related restrictions are lifted.
- In most markets, unemployment rises moderately from historic lows as economic activity slows. Labour markets remain fairly tight across our key markets.
- Inflation is expected to remain elevated across many of our key markets driven by energy and food prices. Inflation is subsequently expected to converge back towards central banks target rate over the next two years of the forecast.
- Policy interest rates in key markets will continue to rise in the near term but at a slower pace. Interest rates will stay elevated but start to ease as inflation returns to target.
- The West Texas Intermediate oil price is forecast to average \$72 per barrel over the projection period.

The Central scenario was first created with forecasts available in November, and reviewed continuously until late December. Probability weights assigned to the Central scenario are 60% for UK and France.

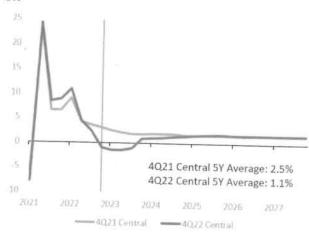
The following table describes key macroeconomic variables and the probabilities assigned in the consensus Central scenario.

Central scenario 2023-2027		
	UK	France
one.	%	%
GDP growth rate		
2023: Annual average growth rate	(0.8)	0.2
2024: Annual average growth rate	1.3	1.6
2025: Annual average growth rate	1.7	1.5
5-year average	1.1	1.2
Unemployment rate		1.2
2023: Annual average rate	4.4	7.6
2024: Annual average rate	4.6	7.5
2025: Annual average rate	4.3	7.3
5-year average	4.3	7.3
House price growth	4.3	7.3
2023: Annual average growth rate	0.2	1.8
2024: Annual average growth rate	(3.8)	2.0
2025: Annual average growth rate	0.7	3.1
5-year average	0.7	
Inflation rate	0.4	2.8
2023: Annual average rate	6.9	4.6
2024: Annual average rate	2.5	
2025: Annual average rate	2.5	2.0
5-year average		1.8
Probability	3.1	2.4
Control of the Contro	60.0	60.0

The graphs compare the respective Central scenario at the year end 2021 with current economic expectations at the end of 2022.

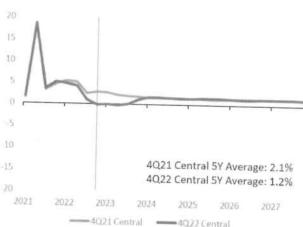
GDP growth: Comparison

UK



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

France



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 incorporated in the Central scenario.

The scenario is consistent with a number of key upside risk themes. These include faster resolution of supply chain issues; a rapid conclusion to the Russia-Ukraine war; de-escalation of tensions between the US and China; relaxation of Covid-19 policies in Asia; and improved relations between the UK and the EU.

The following table describes key macroeconomic variables and the probabilities assigned in the consensus Upside scenario.

Consensus Upside scenario 'best outcome

U	K	France	
%		%	
4.4	(4024)	3.1	(1024)
3.5	(4023)		(4024)
4.2	(1023)		(1023)
0.7			(4023)
			-
	% 4.4 3.5 4.2 0.7	4.4 (4024) 3.5 (4023) 4.2 (1023)	% % 4.4 (4024) 3.1 3.5 (4023) 6.5 4.2 (1023) 3.7 0.7 (1024) 0.8

Note: Extreme point in the consensus Upside is 'best outcome' in the scenario, for example the highest GDP growth and the lowest unemployment rate, in the first two years of the scenario. The date on which the extreme is reached is indicated in parenthesis. For inflation, lower inflation is interpreted as the 'best' outcome.

Downside scenarios

Downside scenarios explore the intensification and crystallisation of a number of key economic and financial risks.

High inflation and the tighter monetary policy response have become key concerns for global growth. In the downside scenarios, supply chain disruptions intensify, exacerbated by an escalation in the spread of Covid-19 and rising geopolitical tensions drive inflation higher.

There also remains a risk that energy and food prices rise further due to the Russia-Ukraine war, increasing pressure on household budgets and firms' costs.

The possibility of inflation expectations becoming detached from central bank targets also remains a risk. A wage-price spiral triggered by higher inflation and pandemic related labour supply shortages across could put sustained upward pressure on wages, aggravating cost pressures and the squeeze on household real incomes and corporate margins. In turn, it raises the risk of a more forceful policy response from central banks, a steeper trajectory for interest rates and ultimately, deep economic recession.

The risks relating to Covid-19 are centred on the emergence of a new variant with greater vaccine resistance that necessitates a stringent public health policy. In Asia, with the reopening of China in December, management of Covid-19 remains a key source of uncertainty, with the rapid spread of the virus posing a heightened risk of a new variant emerging.

The geopolitical environment also presents risks, including:

- a prolonged Russia-Ukraine war with escalation beyond Ukraine's borders;
- the deterioration of the trading relationship between the UK and the EU over the Northern Ireland Protocol; and
- continued differences between the US and other countries with China, which could affect sentiment and restrict global economic activity.

The consensus Downside scenario

In the consensus Downside scenario, economic activity is considerably weaker compared with the Central scenario. In this scenario, GDP growth weakens below the Central scenario, unemployment rates rise and asset prices fall.

The scenario features a temporary supply side shock that keeps inflation higher than the baseline, before the effects of weaker demand begin to dominate leading to a fall in commodity prices and to lower inflation.

The following table describes key macroeconomic variables and the probabilities assigned in the consensus Downside scenario.

Consensus Downside scena	irio Worst outco	HIIE			
	UI	(France		
	9/9		4/0		
GDP growth rate	(3.5)	(3023)	(1.4)	(3023)	
Unemployment rate	5.8	(2024)	8.8	(4023)	
House price growth	(10.1)	(2024)	(0.6)	(4023)	
Inflation rate (min)	(0.4)	(4024)	0.3	(4024)	
	10.8	(1023)	7.2	(1023)	
Inflation rate (max) Probability	2	5	2	5	

Note: Extreme point in the consensus Downside is 'worst outcome' in the scenario, for example lowest GDP growth and the highest unemployment rate, in the first two years of the scenario. The date on which the extreme is reached is indicated in parenthesis. Due to the nature of the shock to inflation in the downside scenarios, both the lowest and the highest point is shown in the tables.

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 further escalation of the Russia-Ukraine war, worsening of supply chain disruptions and the emergence of a vaccine-resistant Covid-19 variant that necessitates a stringent public health policy response globally.

This scenario features an initial supply-side shock that pushes up inflation and interest rates higher. This impulse is expected to prove short lived as a large downside demand pressure causes commodity prices to correct sharply and global price inflation to fall as a severe and prolonged recession takes hold.

The following table describes key macroeconomic variables and the probabilities assigned in the Downside 2 scenario.

ncome				
UI	<	Fran	ce	
9/0		%		
(6.9)	(3023)	(6.8)	(4023)	
8.7	(2024)	10.3	(4024)	
(22.9)	(2024)	(6.4)	(2024)	
(2.3)	(2024)	(2.5)	(2024)	
13.5	(2023)	10.4	(2023)	
1	10		10	
	% (6.9) 8.7 (22.9) (2.3) 13.5	(6.9) (3023) 8.7 (2024) (22.9) (2024) (2.3) (2024) 13.5 (2023)	WK Fran % % (6.9) (3023) (6.8) 8.7 (2024) 10.3 (22.9) (2024) (6.4) (2.3) (2024) (2.5) 13.5 (2023) 10.4	

Note: Extreme point in the Downside 2 is 'worst outcome' in the scenario, for example lowest GDP growth and the highest unemployment rate, in the first two years of the scenario. The date on which the extreme is reached is indicated in parenthesis. Due to the nature of the shock to inflation in the downside scenarios, both the lowest and the highest point is shown in the tables.

Scenario weighting

In reviewing the economic conjuncture, the level of uncertainty and risk, management has considered both global and country specific factors. This has led management to assign scenario probabilities that are tailored to its view of uncertainty in individual

Key consideration around uncertainty attached to the Central scenario projections focused on:

- the progression of the Covid-19 pandemic in Asian countries and announcement of removal of Covid-19 measures and travel restrictions in mainland China and Hong Kong;
- further tightening of monetary policy and impact on borrowing costs in interest rate sensitive sectors, such as housing;
- the risks to gas supply security in Europe and subsequent impact on inflation and commodity prices and growth; and

the ongoing risks to global supply chains.

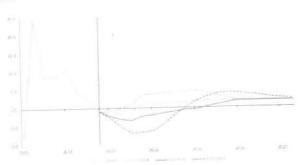
In the UK, the surge in price inflation and a squeeze on household real incomes have led to strong monetary policy responses from central bank. Higher interest rates have increased recession risks and the prospects for outright decline in house prices.

The UK faces additional challenges from the rise in energy prices and accompanying deterioration in the terms of trade. For the UK, the consensus Upside and Central scenarios had a combined weighting of 65%.

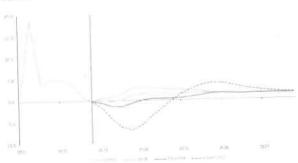
In France, uncertainties around the outlook remain elevated due to high inflation and Europe's exposure to the Russia-Ukraine war through the economic costs incurred from the imposition of sanctions, trade disruption and energy dependence on Russia. The consensus Upside and Central scenarios had a combined weighting of 65%.

The following graphs show the historical and forecasted GDP growth rate for the various economic scenarios in UK and France.

UK



France



Critical accounting estimates and judgements

The calculation of ECL under IFRS 9 involves significant judgements, assumptions and estimates. The level of estimation uncertainty and judgement has remained elevated since 31 December 2021, including judgements relating to:

- the selection and weighting of economic scenarios, given rapidly changing economic conditions and a wide dispersion of economic forecasts. There is judgement in making assumptions about the effects of inflation and interest, global growth, supply chain disruption; and
- estimating the economic effects of those scenarios on ECL, particularly as the historical relationship between macroeconomic variables and defaults might not reflect the dynamics of current macroeconomic conditions.

How economic scenarios are reflected in ECL calculations

Models are used to reflect economic scenarios on ECL estimates. As described above, modelled assumptions and linkages based on historical information could not alone produce relevant information under the conditions experienced in 2022, 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 2022.

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, LGD estimates take into account independent recovery valuations provided by external consultants where available or internal forecasts corresponding to anticipated economic conditions and individual company conditions. In estimating the ECL on impaired loans that are individually considered not to be significant, we incorporate forward economic guidance proportionate to the probability-weighted outcome and the Central scenario outcome of the performing population.

For our retail portfolios, the impact of economic scenarios on PD is modelled at a portfolio level. Historical relationships between observed default rates and macroeconomic variables are integrated into IFRS 9 ECL estimates by using economic response models. The impact of these scenarios on PD is modelled over a period equal to the remaining maturity of the underlying asset or assets. The impact on LGD is modelled for mortgage portfolios by forecasting future loan-to-value ("LTV") profiles for the remaining maturity of the asset by using national level forecasts of the house price index and applying the corresponding LGD expectation.

These models are based largely on historical observations and correlations with default rates. Management judgemental adjustments are described below.

Management judgemental adjustments

In the context of IFRS 9, management judgemental adjustments are short-term increases or decreases to the ECL at either a customer, segment or portfolio level to account for late-breaking events, model and data limitations and deficiencies, and expert credit judgement applied following management review and challenge.

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

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

Management judgemental adjustments are reviewed under the governance process for IFRS 9 (as detailed in the section 'Credit risk management' on page 36). 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.

Management judgemental adjustments made in estimating the scenario-weighted reported ECL at 31 December 2022 are set out in the following table.

Management judgemental adjustments to ECL at 31 December 2022¹

Retail	Wholesale	Total
£m	£m	£m
(16)	(2)	(18)
-	(100)	(100)
8	_	8
3		3
-	_	-
7	_	7
2	(102)	(100)
	£m (16) — 8	£m £m (16) (2) — (100) 8 — 3 — 7 —

Management judgemental adjustments to ECL at 31 December 2021

2021			
	Betail	Wholesale	Total
	£m	£m	£m
Low-risk counterparties (banks,sovereigns and government entities)			
27/11/2007/	_	(4)	(4)
Corporate lending adjustments		31	31
Retail lending probability of default adjustments			
Retail model default timing adjustments		-	
Macroeconomic-related adjustments	17	_	17
Pandemic-related economic recovery adjustments	3		3
Other retail lending adjustments			_
Total	20	27	47

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

Management judgemental adjustments at 31 December 2022 were a decrease to ECL of £102m for the wholesale portfolio and an increase to ECL of £2m for the retail portfolio.

During 2022, management judgemental adjustments reflected an evolving macroeconomic outlook and the relationship of the modelled ECL to this outlook and to late-breaking and sector-specific risks.

At 31 December 2022, wholesale management judgemental adjustments were an ECL decrease of £102m (31 December 2021; £27m increase).

- Adjustments relating to low credit-risk exposures decreased ECL by £2m at 31 December 2022 (31 December 2021: £4m decrease). The adjustments mainly relate to standard, monthly adjustments for bank and sovereign exposures secured by Export Credit Agency guarantees; the benefit from which is not recognised in the inbound data. The reduction in ECL for these exposures was mostly offset by a management overlay on a Russian Bank exposure due to sanctions. Total net adjustments are broadly flat in comparison to 31 December 2021.
- Adjustments to corporate exposures decreased ECL by £100m at 31 December 2022 (31 December 2021: £31m increase). The adjustments mainly relate to standard, monthly adjustments for corporate exposures secured by Export Credit Agency guarantees and government Covid-19 guarantees; the benefit from which is not recognised in the inbound data. The reduction in ECL for these exposures has been partially offset by management overlays to reflect increased risk on an individual exposure in France and increased risk on certain subsectors within France. In comparison to December 2021, the level of management overlay has significantly reduced as modelled results increasingly reflect the macroeconomic environment and portfolio risk, resulting in a net underlay rather than overlay.

At 31 December 2022, retail management judgemental adjustments were an ECL increase of £2m (31 December 2021: £20m increase).

- Retail lending inflation-related adjustments increased ECL by £8m (31 December 2021: nil). These adjustments addressed where increasing inflation and interest rates results in affordability risks which were not fully captured by the modelled output.
- Other macroeconomic-related adjustments increased ECL by £3m (31 December 2021: £17m increase). These adjustments were primarily in relation to country-specific risks related to future macroeconomic conditions.
- Banks, sovereigns, government entities and low-risk counterparties adjustments decreased ECL by £16m (31 December 2021: nil). These adjustments related to the realignment of PD between reporting and origination date for certain parts of the portfolio.
- Other retail lending adjustments increased ECL by £7m (31 December 2021: nill), reflecting all other data, model and management judgemental adjustments.
- Pandemic-related economic recovery adjustments were removed during 2022 as scenarios stabilised.

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 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 ECL.

The 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 ECL for loans at the balance sheet date.

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

For wholesale credit risk exposures, the sensitivity analysis excludes ECL and financial instruments related to defaulted (stage 3) obligors. It is generally impracticable to separate the effect of macroeconomic factors in individual assessments of obligors in default. The measurement of stage 3 ECL is relatively more sensitive to credit factors specific to the obligor than future economic scenarios, and loans to defaulted obligors are a small portion of the overall wholesale lending exposure, even if representing the majority of the allowance for ECL. Therefore, the sensitivity analysis to macroeconomic scenarios does not capture the residual estimation risk arising from wholesale stage 3 exposures. 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 credit risk exposures, the sensitivity analysis includes ECL for loans and advances to customers related to defaulted obligors. 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. Additionally, 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 risk profiles relative to the consensus scenarios for the period end.

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

Wholesale analysis

FRS 9 ECL sensitivity to future economic cor	nditions123	
	UK	France
	£m	£m
ECL of loans and advances to customers at 31 December 2022		
Reported ECL	84	94
Consensus scenarios		
Central scenario	64	87
Upside scenario	51	77
Downside scenario	91	104
Downside 2 scenario	271	124
Gross carrying amount?	143,037	148,417

FRS 9 ECL sensitivity to future economic co	onditions	
	UK	France
	£m	£m
ECL of loans and advances to customers at 31 December 2021		
Reported ECL	104	98
Consensus scenarios		
Central scenario	90	89
Upside scenario	71	78
Downside scenario	109	120
Downside 2 scenario	189	138
Gross carrying amount?	142,450	120,955

- 1 ECL sensitivity includes off-balance sheet financial instruments that 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 67.

Retail analysis

IFRS S	ECL	sensitivity t	o future economic	conditions1
				UK

	UK	France ²
	£m	£m
ECL of loans and advances to customers at 31 December 2022		
Reported ECL	7	87
Consensus scenarios		
Central scenario	6	86
Upside scenario	6	84
Downside scenario	7	88
Downside 2 scenario	12	92
Gross carrying amount	2,037	18,987

JEDG G ECL appositivity to future aconomic conditions

	UK	France
	£m	£m
ECL of loans and advances to customers at 31 December 2021		
Reported ECL	5	91
Consensus scenarios		
Central scenario	4	91
Upside scenario	4	91
Downside scenario	5	92
Downside 2 scenario	10	93
Gross carrying amount	2,007	18,295

- 1 ECL sensitivities exclude portfolios utilising less complex modelling approaches.
- 2 Includes balances and ECL which have been reclassified from 'loans and advances to customers' to 'assets held for sale' in the balance sheet. This also includes any balances and ECL which continue 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.

Reconciliation 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. 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 represent the impact of stage transfers upon the gross carrying/nominal amount and associated allowance for ECL.

The net remeasurement of ECL arising from stage transfers 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 in risk parameters – credit quality' line item.

Changes in 'New financial assets originated or purchased', 'Assets derecognised (including final repayments)' and 'Changes to risk parameters – further lending/repayments' represent the impact from volume movements within the group's lending portfolio.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees¹

(Audited)										
		Non credit -	impaired			Credit - i	mpaired			
	Stage 1		Stag	Stage 2		Stage 3		POCI		tal
	Gross carrying/ nominal amount	Allowance for ECL								
The group	£m	£m								
At 1 Jan 2022	179,612	(118)	17,471	(188)	2,779	(923)	2	(2)	199,864	(1,231)
Transfers of financial instruments	(14,449)	(26)	13,625	59	824	(33)	_		-	-
 transfers from stage 1 to stage 2 	(25,027)	15	25,027	(15)	-					_
 transfers from stage 2 to stage 1 	10,847	(42)	(10,847)	42	1944	_	_	1	-	_
 transfers to stage 3 	(340)	2	(600)	35	940	(37)		-	-	_
 transfers from stage 3 	71	(1)	45	(3)	(116)	4	-	144		_
Net remeasurement of ECL arising from transfer of stage	_	29	_	(24)	_	(10)	_	_		(5)
New financial assets originated or purchased	47,763	(30)		-	_				47,763	(30)
Asset derecognised (including final repayments)	(27,882)	4	(2,625)	13	(442)	110		_	(30,949)	127
Changes to risk parameters – further lending/repayments	(9,969)	33	(8,645)	16	(261)	(20)	1	_	(18,874)	29
Changes to risk parameters - credit quality	_	32	_	(101)		(318)		2	(10,074)	(385)
Changes to model used for ECL calculation	**	4	_	10	_	-	-	_		14
Assets written off		_	-		(165)	165		_	(165)	165
Credit related modifications that resulted in derecognition	-	_	-	_	(1)	1	144		(1)	1
Foreign exchange	5,764	(3)	744	(11)	88	(34)	-	_	6,596	(48)
Others ^{2,3}	(12,468)	4	(2,511)	26	(286)	100			(15,265)	130
At 31 Dec 2022	168,371	(71)	18,059	(200)	2,536	(962)	3		188,969	
ECL income statement change for the period		72	10,000	(86)	2,000	(238)	3	2	100,909	(1,233)
Recoveries				(-0)		(2.00)				
Others										2
Total ECL income statement change for the period										(220)

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees[†] (continued)

	At 31 Dec	2022	12 months ended 31 Dec 2022
	Gross carrying/ nominal amount	Allowance for ECL	ECL release/ (charge)
	£m	£m	£m
As above	188,969	(1,233)	(220)
Other financial assets measured at amortised cost	269,755	(137)	(3)
Non-trading reverse purchase agreement commitments	33,684	8-	-
Performance and other guarantees not considered for IFRS 9			6
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/Summary consolidated income statement	492,408	(1,370)	(217)
Debt instruments measured at FVOCI	29,248	(24)	(5)
Total allowance for ECL/total income statement ECL change for the period	N/A	(1,394)	(222)

1 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

2 Includes the period on period movement in exposures relating to other HSBC Group companies. As at 31 December 2022, these amounted to £4bn and were classified as stage 1 with no ECL.

3 Total includes £21bn 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 £131m reflecting business disposals as disclosed in Note 34 'Assets held for sale and liabilities of disposal groups held for sale' on page 186.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees¹ (continued)

		Non credit -	impaired			Credit - m	npaired			
	Stage	1	Stag	e 2	Stag	je 3	PO	CI	Tot	al
	Gross carrying/ nominal amount	Allowance for ECL								
The group	£m	£m	£m	£m	£m	Em	£m	£m	£m	£m
At 1 Jan 2021	184,715	(180)	31,726	(378)	3,352	(1,050)	40	(12)	219,833	(1,620)
Transfers of financial instruments:	5,245	(66)	(5,617)	90	372	(24)				_
- transfers from stage 1 to stage 2	(8,431)	14	8,431	(14)			-	-	E-1	-
- transfers from stage 2 to stage 1	13,714	(78)	(13,714)	78	7.2		-	-1	-	See
- transfers to stage 3	(93)		(401)	28	494	(28)				-55
- transfers from stage 3	55	(2)	67	(2)	(122)	4			-	-
Net remeasurement of ECL arising from transfer of stage	-	43		(22)		(5)			-	16
New financial assets originated or purchased	72,348	(55)		55					72,348	(55)
Asset derecognised (including final repayments)	(57,098)	6	(3,481)	32	(454)	95	(3)	2	(61,036)	135
Changes to risk parameters – further lending/repayments	(16,766)	76	(3,927)	62	(213)	40	(29)	2	(20,935)	180
Changes to risk parameters – credit quality		54	-	7		(176)		-	-	(115
Changes to model used for ECL calculation		2	-	9			-		-	11
Assets written off					(152)	152	(5)	5	(157)	157
Credit related modifications that resulted in derecognition		_						-	-	-
Foreign exchange	(7,512)	2	(1,060)	10	(126)	46	(1)	1	(8,699)	59
Others ²	(1,320)		(170)	2	100	(1)			(1,490)	
At 31 Dec 2021	179,612	(118)	17,471	(188)	2,779	(923)	2	(2)	199,864	(1,231
ECL Income statement change for the period		126		88		(46)		4		172
Recoveries										3
Others										(23
Total ECL income statement change for the period										152

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees¹ (continued)

	At 31 De	ec 2021	12 months ended 31 Dec 2021
	Gross carrying/ nominal amount	Allowance for ECL	ECL release /(charge)
	£m	£m	£m
As above	199,864	(1,231)	152
Other financial assets measured at amortised cost	202,137	(9)	
Non-trading reverse purchase agreement commitments	30,005	101	(1)
Performance and other guarantees not considered for IFRS 9	0	0	18
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/Summary consolidated income statement	432.006	(1,240)	
Debt instruments measured at FVOCI			169
Total allowance for ECL/total income statement ECL change for the period	41,188	(19)	5
Total anowaries for Lectrotal income statement ECL change for the period	N/A	(1,259)	174

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

		Non credit -	- impaired			Credit - i				
	Stag	je 1	Sta	ge 2	Sta	ge 3		CI	To	otal
The bank	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
At 1 Jan 2022	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Transfers of financial instruments	65,710	(56)	5,657	(58)	1,088	(276)	(1)	-	72,454	(390)
	(959)	(3)	774	21	185	(18)		-	_	-
transfers from stage 1 to stage 2	(6,499)	6	6,499	(6)	-	1 - 1	-	-	-	
- transfers from stage 2 to stage 1	5,554	(9)	(5,554)	9	1 - 1	-		-	****	-
- transfers to stage 3	(53)	-	(172)	18	225	(18)	-	-		
- transfers from stage 3	39	ind.	1	-	(40)	-	-		_	_
Net remeasurement of ECL arising from transfer of stage	_	6	-	(11)	_	_	_			(5)
New financial assets originated or purchased	11,825	(15)	-	_				_	11,825	0.44
Asset derecognised (including final repayments)	(6,459)	1	(272)	2	(21)	2			(6,752)	(15)
Changes to risk parameters - further lending/repayments	2,162	11	(79)	14	(182)	5			1,901	30
Changes to risk parameters – credit quality	_	17	_	(48)	_	(131)			1,301	(162)
Changes to model used for ECL calculation	-	7		10			225			17
Assets written off	_			_	(62)	62	_			- 1155
Credit related modifications that resulted in derecognition		1-1	_	_	(02)	-		_	(62)	62
Foreign exchange	210	_	19	(3)	8	(2)		-		
Others ²	6.034	(1)	-	(3)	-		1	. —	238	(5)
At 31 Dec 2022	78,523	(33)	6,099	(73)	1,016	(358)		_	6,034	(1)
ECL income statement change for the period	, 5,020	27	0,033	(33)	1,010	(124)	-	-	85,638	(464)
Recoveries				(00)		(124)		-		(130)
Others										-
Total ECL income change for the period										18
										(112)

Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.
 Includes the period on period movement in exposures relating to other HSBC Group companies. As at 31 December 2021, these amounted to £(1)bn and were classified as stage 1 with no ECL.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including nitments and financial guarantees1 (continued)

At 31 Dec	2022	12 months ended 31 Dec 2022
Gross carrying/ nominal amount	Allowance for ECL	ECL release/ (charge)
£m	£m	£m
85,638	(464)	(112)
169,321	(3)	(1)
3,316		
		1
258,275	(467)	(112)
12,206	(4)	2
n/a	(471)	(110)
	Gross carrying/ nominal amount	### ECL ### #### EM #### ######################

Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

Includes the period on period movement in exposures relating to other HSBC Group companies. As at 31 December 2022, these amounted to £3bn and were classified as stage 1 with no ECL.

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees1 (continued)

		Non-credit -	impaired			Credit - in	npaired			
	Stage	1	Stag	e 2	Stag	je 3	PO	CI	Tot	al
	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
The bank	£m	f.m	£m	£m	£m	£m	£m	Em	£m	£m
1 Jan 2021	78,422	(121)	14,161	(213)	1,395	(363)	2	(2)	93,980	(699)
Transfers of financial instruments:	4,795	(27)	(4,840)	39	45	(12)			-	
transfers from stage 1 to stage 2	(2,261)	3	2,261	(3)	-		_		-	-
transfers from stage 2 to stage 1	7,043	(29)	(7,043)	29	-	-			-	
- transfers to stage 3		-	(59)	13	59	(13)		-		-
- transfers from stage 3	13	(1)	1	="	(14)	1				
Net remeasurement of ECL arising from transfer of stage		13		(1)		(1)			14	11
New financial assets originated or purchased	11,532	(31)		_		-		-	11,532	(31)
Asset derecognised (including final repayments)	(11,861)	2	(1,836)	17	(80)	4	(2)	1	(13,779)	24
Changes to risk parameters – further lending/repayments	(13,051)	58	(1,813)	32	(190)	4	_	-	(15,054)	94
Changes to risk parameters – credit quality	-	48		59	_	13	-	-	-	120
Changes to model used for ECL calculation	52	2		9			-	_	(70)	11 79
Assets written off	-			_	(78)	78	(1)	- 1	(79)	79
Credit related modifications that resulted in derecognition		_							-	
Foreign exchange	(76)		(15)		(4)	1			(95)	
Others ²	(4,051)		-			-			(4,051)	
At 31 Dec 2021	65,710	(56)	5,657	(58)	1,088	(276)	(1)		72,454	(390
ECL income statement change for the period		92		116		20		1		229
Recoveries										(23
Others										(23
Total ECL income statement change for the period										207

Reconciliation of changes in gross carrying/nominal amount and allowances for loans and advances to banks and customers including loan commitments and financial guarantees¹ (continued)

	At 31 Dec 2021 Gross carrying/ nominal amount £m 72,454 135,033 1,139	ec 2021	12 months ended 31 Dec 2021
		Allowance for ECL	ECL release/ (charge)
	£m	£m	£m
As above	72,454	(390)	207
Other financial assets measured at amortised cost	135,033	(1)	1
Non-trading reverse purchase agreement commitments	1,139		
Performance and other guarantees not considered for IFRS 9	01,100		4
Summary of financial instruments to which the impairment requirements in IFRS 9 are applied/Summary consolidated income statement	208,626	(391)	212
Debt instruments measured at FVOCI	23,152	(4)	5
Total allowance for ECL/total income statement ECL change for the period	n/a	(395)	217

1 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

2 Includes the period on period movement in exposures relating to other HSBC Group companies. As at 31 December 2021, these amounted to £(4)bn and were classified as stage 1 with no ECL.

Credit quality

Credit quality of financial instruments

(Auchter)

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 the probability of default ('PD'), whereas stages 1 and 2 are determined based on relative deterioration of credit quality since initial recognition.

Accordingly, for non-credit-impaired financial instruments, there is no direct relationship between the credit quality assessment and stages 1 and 2, though 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 37.

Distribution of financial instruments by credit quality at 31 December 2022

		G	ross carrying/no	otional amount				
	Strong	Good	Satisfactory	Sub- standard	Credit impaired	Total	Allowance for ECL	Net
The group	£m	£m	£m	£m	£m	£m	£m	£m
In-scope for IFRS 9								
Loans and advances to customers held at amortised cost	27,997	19,618	19,612	4,263	2,227	73,717	(1,103)	72,614
- personal	2,019	2,928	858	103	105	6,013	(55)	5,958
 corporate and commercial 	19,352	13,393	16,496	3,910	1,853	55,004	(937)	54,067
 non-bank financial institutions 	6,626	3,297	2,258	250	269	12,700	(111)	12,589
Loans and advances to banks held at amortised cost	14,637	790	1,634	26	65	17,152	(43)	17,109
Cash and balances at central banks	131,379	-	55	-	_	131,434	(1)	131,433
Items in the course of collection from other banks	2,281		4	_		2,285	- '''	2,285
Reverse repurchase agreements - non-trading	43,777	7,953	2,219	-	_	53,949	1,342	53,949
Financial investments	3,028	-	220	_	_	3,248	-	3,248
Assets held for sale	19,419	1,598	1,773	124	291	23,205	(133)	23.072
Prepayments, accrued income and other assets	53,972	708	896	26	32	55,634	(3)	55,631
- endorsements and acceptances	208	4	25		6	243	-	243
- accrued income and other	53,764	704	871	26	26	55,391	(3)	55,388
Debt instruments measured at fair value through other comprehensive income	28,248	2,471	626	105	-	31,450	(24)	31,426
Out-of-scope for IFRS 9								0.17100
Trading assets	26,961	4,323	9,966	298	-	41,548	_	41,548
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	1,945	331	669	1		2.946		2,946
Derivatives	199,167	21,128	4,886	29	28	225,238	_	225,238
Assets held for sale	107	_	-	-		107		107
Total gross carrying amount on balance sheet	552,918	58,920	42,560	4,872	2,643	661,913	(1,307)	660,606

Distribution of financial instruments by credit quality at 31 December 2022 (continued)

		G	ross carrying/no	tional amount				
	Strong	Good	Satisfactory	Sub- standard	Credit impaired	Total	Allowance for ECL	Net
The group	£m	£m	£m	£m	£m	£m	£m	£m
Percentage of total credit quality	84%	9%	6%	1%	-%	100%		
Loans and other credit-related commitments	82,801	23,578	17,523	2,392	163	126,457	(67)	126,390
Loan and other credit related commitments for loans and advances to customers	48,627	23,501	17,422	2,390	163	92,103	(66)	92,037
Loan and other credit-related commitments for loans and advances to banks	34,174	77	101	2	-	34,354	(1)	34,353
Financial guarantees	2,924	1,171	995	153	84	5,327	(20)	5,307
In-scope: Irrevocable loan commitments and financial guarantees	85,725	24,749	18,518	2,545	247	131,784	(87)	131,697
Loans and other credit-related commitments	1,168	183	90	14	1	1,456	-	1,456
Performance and other guarantees	9,791	3,583	3,074	599	89	17,136	(18)	17,118
Out-of-scope: Revocable loan commitments and non-financial guarantees	10,959	3,766	3,164	613	90	18,592	(18)	18,574

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value 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 2021 (continued)

		Gross carrying/notional amount								
		G	ivaa carrying/nor	Sub-	Credit		Allowance			
	Strong	Good	Satisfactory	standard	impaired	Total	for ECL	Net		
The group	£m	£m	£m	Em	£m	£m	£m	£m		
In-scope for IFRS 9										
Loans and advances to customers held at				9595555	0.700	12/2/12/20	14 45 41	04 477		
amortised cost	41,339	20,531	23,469	4,512	2,480	92,331	(1,154)	91,177		
- personal	18,956	4,136	1,793	56	453	25,394	(163)	25,231		
 corporate and commercial 	16,533	13,867	19,597	4,305	1,785	56,087	(964)	55,123		
 non-bank financial institutions 	5,850	2,528	2,079	151	242	10,850	(27)	10,823		
Loans and advances to banks held at amortised cost	8,649	320	1,815	5		10,789	(5)	10,784		
Cash and balances at central banks	108,133	198	151	-	-	108,482		108,482		
Items in the course of collection from other banks	343		3			346		346		
Reverse repurchase agreements - non-trading	47,071	6,355	1,022			54,448		54,448		
Financial investments	2		8			10	_	10		
Assets held for sale		_		-			_	-		
Prepayments, accrued income and other assets	36,558	666	1,574	11	42	38,851	(9)	38,842		
endorsements and acceptances	105	61	23	-	7	196	-	196		
- accrued income and other	36,453	605	1,551	11	35	38,655	(9)	38,646		
Debt instruments measured at fair value through other comprehensive income!	36,410	1,899	1,406	118		39,833	(19)	39,814		
Out-of-scope for IFRS 9										
Trading assets	28,110	5,331	8,985	350		42,776	-	42,776		
Other financial assets designated and otherwise mandatorily measured at fair value through profit	2.2.2	201	0.044	3		5.197		5,197		
or loss	2,246	304	2,644			04103077		141,221		
Derivatives	111,471	25,487	4,054	207	2	141,221	-	141,221		
Assets held for sale				F 000	0.504	E24.004	(1.187)	533,097		
Total gross carrying amount on balance sheet	420,332	61,091	45,131	5,206	2,524	534,284 100.0%	(1,107)	333,037		
Percentage of total credit quality	78.7%	11.4%	8.4%	1.0%	0.5%	115,695	(55)	115,640		
Loans and other credit-related commitments	71,741	21,860	20,018	1,874	202	11,054	(17)	11,037		
Financial guarantees	8,412	1,088	1,245	210	99	11,054	(117)	11,037		
In-scope: Irrevocable loan commitments and financial guarantees	80,153	22,948	21,263	2,084	301	126,749	(72)	126,677		
Loans and other credit-related commitments	2,134	1,114	432	94	7	3,781	78.4	3,781		
Performance and other guarantees	7,738	4,359	3,130	490	116	15,833	(31)	15,802		
Out-of-scope: Revocable loan commitments and non-financial guarantees	9,872	5,473	3,562	584	123	19,614	(31)	19,583		

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value 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 2022

	Strong	Good	ross carrying/no	Sub- standard	Credit impaired	Total	Allowance for ECL	Net
The bank	£m	£m	£m	£m	£m	£m	£m	£m
In-scope for IFRS 9								
Loans and advances to customers held at amortised cost	21,601	9,291	4,838	765	875	37,370	(378)	36,992
- personal	1,837	927	797	10	13	3,584	(12)	3,572
 corporate and commercial 	12,018	6,001	3,230	613	594	22,456	(247)	22,209
 non-bank financial institutions 	7,746	2,363	811	142	268	11,330	(119)	11,211
Loans and advances to banks held at amortised cost	13,764	512	163	25	65	14,529	(43)	14,486
Cash and balances at central banks	78,442	_	-	-	-	78,442	(1)	78,441
Items in the course of collection from other banks	1,863	_	_	-	_	1,863	- (1)	1,863
Reverse repurchase agreements - non-trading	33,159	7,763	2,133	_		43,055		43,055
Financial investments	6,190	_	188	_		6,378		6,378
Prepayments, accrued income and other assets	39,376	95	81	10	21	39,583	(2)	39,581
- endorsements and acceptances	205	4	3		6	218	- 121	218
- accrued income and other	39,171	91	78	10	15	39,365	(2)	39,363
Debt instruments measured at fair value through other comprehensive income†	12,827	64	307	_	-	13,198	(4)	13,194
Out-of-scope for IFRS 9					1995	,	177	10,104
Trading assets	18,479	4,226	9,213	298	-	32,216	-	32,216
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	149	214	651	1	***	1,015	-	1,015
Derivatives	174,548	18,118	4,031	17		196,714		196,714
Total gross carrying amount on balance sheet	400,398	40,283	21,605	1,116	961	464,363	(428)	463,935
Percentage of total credit quality	86.2%	8.7%	4.7%	0.2%	0.2%	100.0%		
Loans and other credit-related commitments	25,143	6,577	3,200	732	40	35,692	(31)	35,661
Financial guarantees	729	205	388	5	36	1,363	(12)	1,351
In-scope: Irrevocable loan commitments and financial guarantees	25,872	6,782	3,588	737	76	37,055	(43)	37,012
Loans and other credit-related commitments	493	183	91	14	1	782	-	782
Performance and other guarantees	5,338	1,083	417	42	6	6,886	(7)	6,879
Out-of-scope: Revocable loan commitments and non-financial guarantees	5,831	1,266	508	56	7	7,668	(7)	7,661

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value 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 2021 (continued)

		G	ross carrying/not	ional amount				
	Strong	Good	Satisfactory	Sub- standard	Credit impaired	Total	Allowance for ECL	Net
The bank	£m	£m	£m	£m	£m	£m	£m	£m
In-scope for IFRS 9								
Loans and advances to customers held at amortised cost	16,993	9,038	6,467	804	984	34,286	(350)	33,936
- personal	1,909	850	860	13	48	3,680	(6)	3,674
- corporate and commercial	8,120	6,649	5,003	729	681	21,182	(308)	20,874
non-bank financial institutions	6,964	1,539	604	62	255	9,424	(36)	9,388
Loans and advances to banks held at amortised cost	6,427	166	187	2		6,782	(4)	6,778
Cash and balances at central banks	63,008					63,008	-	63,008
Items in the course of collection from other banks	211					211		211
Reverse repurchase agreements – non-trading	32,877	5,916	915			39,708		39,708
Financial investments	3,337			=52		3,337	-	3,337
Prepayments, accrued income and other assets	28,524	121	94	2	28	28,769	(1)	28,768
- endorsements and acceptances	90	61	13		7	171	-	171
- accrued income and other	28,434	60	81	2	21	28,598	(1)	28,597
Debt instruments measured at fair value through other comprehensive income ¹	21,748	64	1,039			22,851	(4)	22,847
Out-of-scope for IFRS 9								
Trading assets	18,318	5,082	8,470	350		32,220	-	32,220
Other financial assets designated and otherwise mandatorily measured at fair value through profit or loss	138		2,504	2		2,644		2,644
Derivatives	98,698	24,160	2,854	75		125,787	100	125,787
Total gross carrying amount on balance sheet	290,279	44,547	22,530	1,235	1,012	359,603	(359)	359,244
Percentage of total credit quality	80.7%	12.4%	6.3%	0.3%	0.3%	100.0%		04.000
Loans and other credit-related commitments	20,446	6,663	3,651	452	43	31,255	(29)	31,226
Financial guarantees	630	89	471	20	60	1,270	(7)	1,263
In-scope: Irrevocable loan commitments and financial guarantees	21,076	6,752	4,122	472	103	32,525	(36)	32,489
Loans and other credit-related commitments	620	383	126	86	1	1,216	-	1,216
Performance and other guarantees	4,846	1,939	480	56	13	7,334	(7)	7,327
Out-of-scope: Revocable loan commitments and non-financial guarantees	5,466	2,322	606	142	14	8,550	(7)	8,543

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value 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 to which the impairment requirements in IFRS 9 are applied, by credit quality and stage distribution

The group	Strong		ross carrying/no					
	.00.70.200.400	22-17-17-2		Sub-	Credit		Allowance	
		Good	Satisfactory	standard	impaired	Total	for ECL	Net
	£m	£m	£m	£m	£m	£m	£m	£m
Loans and advances to customers at amortised								
cost	27,997	19,618	19,612	4,263	2,227	73,717	(1,103)	72,614
- stage 1	27,183	18,885	16,313	1,292	-	63,673	(51)	63,622
- stage 2	814	733	3,299	2,971	-	7,817	(145)	7,672
- stage 3	-	(44)	-	-	2,224	2,224	(907)	1,317
- POCI	-	_	-	-	3	3	-	3
Loans and advances to banks at amortised								
cost	14,637	790	1,634	26	65	17,152	(43)	17,109
stage 1	14,502	565	1,605	1		16,673	(6)	16,667
- stage 2	135	225	29	25	722	414	(21)	393
stage 3		-	-	_	65	65	(16)	49
- POCI	-	-		-		-	,	-
Other financial assets measured at amortised								
cost	253,856	10,259	5,167	150	323	269,755	(137)	269,618
stage 1	253,577	9,893	4,272	28	-1	267,770	(14)	267,756
stage 2	279	366	895	122		1,662	(17)	1,645
stage 3	-		-		323	323	(106)	217
POCI			2	_	-	-	(100)	217
oans and other credit-related commitments	82,801	23,578	17,523	2,392	163	126,457	(67)	126,390
stage 1	79,931	21,530	14,570	963	_	116,994	(13)	116,981
stage 2	2,870	2,048	2,953	1,429	-	9,300	(32)	9,268
stage 3	-	_	-	-,,,,,,	163	163	(22)	141
POCI				_	103	103	(22)	
inancial guarantees	2,924	1,171	995	153	84	5,327	(20)	5,307
stage 1	2,895	1,058	727	35	-	4,715	(1)	4,714
stage 2	29	113	268	118	_	528		
stage 3	-	-	_				(2)	526
POCI	-			-	84	84	(17)	67
At 31 Dec 2022	382,215	55,416	44,931	6,984	2.862	402 400		-
Debt instruments at FVOCI ¹	002/2.10	30,410	44,551	0,564	2,002	492,408	(1,370)	491,038
stage 1	28,047	2,384	547			20.070	(a p)	00.000
stage 2	201	87	79	105	-	30,978	(10)	30,968
stage 3	201	0/		105	-	472	(14)	458
POCI		-	-	-	-		-	-
at 31 Dec 2022	28,248	2,471	626	105	_	31,450	(24)	31,426

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value 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 to which the impairment requirements in IFRS 9 are applied, by credit quality and stage distribution (continued)

		G	ross carrying/noti					
	Strong	Good	Satisfactory	Sub- standard	Credit impaired	Total	Allowance for ECL	Net
The group	fm	£m	£m	Em	£m	£m	£m	£m
Loans and advances to customers at amortised cost	41,339	20,531	23,469	4,512	2,480	92,331	(1,154)	91,177
stage 1	40,831	19,376	19,077	1,446	-	80,730	(86)	80,644
- stage 2	508	1,155	4,392	3,066		9,121	(158)	8,963
- stage 3				-	2,478	2,478	(908)	1,570
- POCI				-	2	2	(2)	-
Loans and advances to banks at amortised cost	8,649	320	1,815	5		10,789	(5)	10,784
- stage 1	8,620	311	1,814	5		10,750	(4)	10,746
- stage 2	29	9	7	=	2-1	39	{1}	38
- stage 3	=4	100	-	100			-	-
- POCI		-	-		_	-	-	-
Other financial assets measured at amortised cost	192,107	7,219	2,758	11	42	202,137	(9)	202,128
- stage 1	192,105	7,214	2,727	2	-	202,048	-	202,048
- stage 2	2	5	31	9		47		47
- stage 3					42	42	(9)	33
- POCI							-	-
Loans and other credit-related commitments	71,741	21,860	20,018	1,874	202	115,695	(55)	115,640
- stage 1	71,074	19,960	16,337	551	n=1	107,922	(25)	107,897
- stage 2	667	1,900	3,681	1,323		7,571	(22)	7,549
- stage 3					202	202	(8)	194
- POCI	_		-					
Financial guarantees	8,412	1,088	1,245	210	99	11,054	(17)	11,037
- stage 1	8,340	951	849	75		10,215	(3)	10,212
- stage 2	72	137	396	135		740	(7)	733
- stage 3					99	99	(7)	92
- POCI	-			-		0.04	-	
At 31 Dec 2021	322,248	51,018	49,305	6,612	2,823	432,006	(1,240)	430,766
Debt instruments at FVOCI [†]								
- stage 1	36,005	1,825	1,292	-	-0	39,122	(10)	39,112
- stage 2	405	74	114	118	=1	711	(9)	702
- stage 3	-		-	-	-:	-	-1	
- POCI		-			-	==	-1	-
At 31 Dec 2021	36,410	1,899	1,406	118		39,833	(19)	39,814

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value 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 to which the impairment requirements in IFRS 9 are applied, by credit quality and stage distribution (continued)

Auxitedi

(Auditorit)								
		G	ross carrying/no	tional amount				
	Strong	Good	Satisfactory	Sub- standard	Credit impaired	Total	Allowance for ECL	Net
The bank	£m	£m	£m	£m	£m	£m	£m	£m
Loans and advances to customers at amortised cost	21,601	9,291	4,838	765	875	37,370	(378)	36,992
- stage 1	20,937	9,032	3,849	101		33,919	(19)	33,900
- stage 2	664	259	989	664		2,576	(35)	2,541
- stage 3		-	100	-	875	875	(324)	551
- POCI	-		-	-		-	_	
Loans and advances to banks at amortised				-				
cost	13,764	512	163	25	65	14,529	(43)	14,486
- stage 1	13,663	502	134			14,299	(5)	14,294
- stage 2	101	10	29	25		165	(22)	143
- stage 3		_	_	-	65	65	(16)	49
- POCI	-	_	-	-	44-1	_		-
Other financial assets measured at amortised cost	159,030	7,858	2,402	10	21	169,321	(3)	169,318
- stage 1	159,026	7,857	2,393	-		169,276	(2)	169,274
- stage 2	4	1	9	10		24	(1)	23
- stage 3		_	_	-	21	21	-	21
- POCI		12.		_	_	_	_	_
Loans and other credit-related commitments	25.143	6,577	3,200	732	40	35,692	(31)	35,661
- stage 1	24,007	5,971	2,329	120	_	32,427	(9)	32,418
- stage 2	1,136	606	871	612	_	3,225	(15)	3,210
- stage 3	- 1,100	_	-	-	40	40	(7)	33
- POCI	_			_	40	40	(7)	33
Financial guarantees	729	205	388	5	36	1,363	(12)	1,351
- stage 1	729	200	265	_		1,194	- 1	1,194
- stage 2	,	5	123	5		133	(1)	132
- stage 3			123	-	36	36	(11)	25
- POCI		_	_	1994	1972.0			
At 31 Dec 2022	220,267	24,443	10,991	1,537	1,037	258,275	(467)	257,808
Debt instruments at FVOCI¹	220,207	24,440	10,331	1,557	1,037	230,273	(407)	237,000
Management of the Control of the Con	12,827	64	302			12 102	141	10 100
- stage 1 - stage 2	12,827	5.00	5	-	-	13,193	(1)	13,192
		-		77	_	5	(3)	2
- stage 3 - POCI	-		-	-	-		-	-
and the state of t	42.027	- 04	- 207			40.400		-
At 31 Dec 2022	12,827	64	307			13,198	(4)	13,194

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value 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 to which the impairment requirements in IFRS 9 are applied, by credit quality and stage distribution (continued)

		C	ross carrying/noti	onal amount				
	Strong	Good	Satisfactory	Sub- standard	Credit impaired	Total	Allowance for ECL	Net
The bank	Em	£m	£m	£m	Em	£m	Em	£m
Loans and advances to customers at amortised cost	16,993	9,038	6,467	804	984	34,286	(350)	33,936
- stage 1	16,757	8,305	4,964	79	-	30,105	(33)	30,072
- stage 2	236	733	1,503	725		3,197	(47)	3,150
- stage 3	144	100			984	984	(270)	714
- POCI		-						-
Loans and advances to banks at amortised cost	6,427	166	187	2		6,782	(4)	6,778
- stage 1	6,427	160	186	2	-	6,775	(3)	6,772
- stage 2	, —	6	1			7	(1)	6
- stage 3					544	-:	-	-
- POCI	_				-		-	
Other financial assets measured at amortised cost	127,957	6,037	1,009	2	28	135,033	(1)	135,032
- stage 1	127,956	6,037	991			134,984	-	134,984
- stage 2	1		18	2	-	21		21
- stage 3				-	28	28	(1)	27
- POCI	-						-	-
Loans and other credit-related commitments	20,446	6,663	3,651	452	43	31,255	(29)	31,226
- stage 1	20,307	6,469	2,135		-	28,911	(15)	28,896
- stage 2	139	194	1,516	452	-	2,301	(11)	2,290
- stage 3				-	43	43	(3)	40
- POCI		-			-		-	
Financial guarantees	630	89	471	20	60	1,270	(7)	1,263
- stage 1	630	89	324	1.7		1,060	(1)	1,059
- stage 2		-	147	3	-	150	-	150
- stage 3		-			60	60	(6)	54
- POCI		-			-			-
At 31 Dec 2021	172,453	21,993	11,785	1,280	1,115	208,626	(391)	208,235
Debt instruments at FVOCI ¹								
- stage 1	21,748	64	1,035		-	22,847	(2)	22,845
- stage 2	-		4	***		4	(2)	2
- stage 3	="			-		==	5-	-
- POCI	_			-	/=	=	-	_
At 31 Dec 2021	21,748	64	1,039			22,851	(4)	22,847

¹ For the purposes of this disclosure gross carrying value is defined as the amortised cost of a financial asset, before adjusting for any loss allowance. As such the gross carrying value 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

(Auditor)

The group determines 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 that 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 unlikeliness to pay is not identified at an earlier stage, it is deemed to occur when an exposure is 90 days past due, even where regulatory rules permit default to be defined based on 180 days past due. Therefore, the definitions of credit-impaired and default are aligned as far as possible so that stage 3 represents all loans which are considered defaulted or otherwise credit-impaired.

Forbearance

A summary of our current policies and practices for forbearance is set out in 'Credit risk management' on page 37,

The following table shows the gross carrying amounts of the group's holdings of forborne loans and advances to customers by industry sector and by stages.

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

	Stage 1	Stage 2	Stage 3	POCI	Total
The group	£m	£m	£m	£m	£m
Gross carrying amount				17 47 41	
Personal	_	29	32	-	61
 first lien residential mortgages 	-	24	27		51
 other personal lending which is secured 		3	4	-	7
- credit cards	_	1	-	122	1
 other personal lending which is unsecured 		1	1	_	2
Wholesale	-	1,816	726		2,542
 corporate and commercial 		1,804	722	-1	2,526
 non-bank financial institutions 		12	4	_	16
At 31 Dec 2022	-	1,845	758	_	2,603
Allowance for ECL		142,15			2,003
Personal		(2)	(4)		(6)
- first lien residential mortgages	_	(2)	(4)	-	
- other personal lending which is secured	_	-	(4)	-	(6)
- credit cards			_	_	-
 other personal lending which is unsecured 	_	_	-		-
Wholesale	_	(25)	(252)		
- corporate and commercial	-	(24)	(252)		(277)
- non-bank financial institutions	_	(1)	(252)		(276)
At 31 Dec 2022		(27)	(256)	-	(1)
		(27)	(250)		(283)
The group					
Gross carrying amount					
Personal		122	132		100
- first lien residential mortgages			96		132
- other personal lending					96
Wholesale	49	192	36		36
corporate and commercial	49	192	706	2	949
non-bank financial institutions	45	192	702	2	945
At 31 Dec 2021 ¹	49	100	4		- 4
Allowance for ECL	49	192	838	2	1,081
Personal			772		
first lien residential mortgages			(15)		(15)
- other personal lending		-	(11)	-77	(11)
Wholesale			(4)		(4)
- corporate and commercial	(1)	(5)	(218)	(2)	(226)
non-bank financial institutions	(1)	(5)	(218)	(2)	(226)
At 31 Dec 2021				-	
N. 01 D00 Z0Z1	(1)	(5)	(233)	(2)	(241)

¹ Forborne exposures and allowances for ECL at 31 December 2021 have not been restated and agreed with the policies and disclosures presented in the Annual Report and Accounts 2021.

Following the adoption of the EBA 'Guidelines on the application of definition of default', retail and wholesale loans are identified as forborne and classified as either performing or non-performing when we modify the contractual terms due to financial difficulty of the borrower. At 31 December 2022, we reported £1,845m (31 December 2021: £241m) of performing forborne loans. The increase of £1,604m was mainly driven by the inclusion of non-payment-related concessions in the forbearance assessment since 1 January 2022.

	Stage 1	Stage 2	Stage 3	POCI	Total
The bank	£m	£m	£m	£m	£m
Gross carrying amount					
Personal	-	1	7		8
first lien residential mortgages		-	6	3 77	6
- credit cards		1		1	- 1
other personal lending which is unsecured	-	144	1	1780	1
Wholesale	<u> </u>	106	364	-	470
- corporate and commercial		106	364	-	470
At 31 Dec 2022	-	107	371	-	478
Allowance for ECL					
Personal	÷	-	(1)	-	(1)
- first lien residential mortgages	-		(1)	25-	(1)
- credit cards	-		-	-	-
other personal lending which is unsecured		-	199	1-1	-
Wholesale	111	(1)	(158)		(159)
- corporate and commercial	_	(1)	(158)	-	(159)
At 31 Dec 2022		(1)	(159)	\rightarrow	(160)
At 01 pob 1022					
The bank					
Gross carrying amount					3
Personal			3		2
- first lien residential mortgages			2		1
- other personal lending			1		629
Wholesale	40	158	431		629
- corporate and commercial	40	158	431		
At 31 Dec 20211	40	158	434	-	632
Allowance for ECL					
Personal					
- first lien residential mortgages					-
- other personal lending				-	1000
Wholesale	(1)	(2)	(124)		(127
- corporate and commercial	(1)	(2)	(124)		(127
At 31 Dec 20211	(1)	(2)	(124)		(127

¹ Forborne exposures and allowances for ECL at 31 December 2021 have not been restated and agreed with the policies and disclosures presented in the Annual Report and Accounts 2021.

Wholesale lending

This section provides further details on the countries and industries comprising wholesale loans and advances to customers and banks. Industry granularity is also provided by stage with

geographical data presented for loans and advances to customers and banks, loans and other credit-related commitments and financial guarantees.

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

		Gross	carrying amou	int			Allo	wance for ECI		
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
The group	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Corporate and commercial	46,671	6,479	1,851	3	55,004	(40)	(123)	(774)	_	(937)
 agriculture, forestry and fishing 	166	20	29	-	215	-	(1)	(12)		(13)
 mining and quarrying 	943	1	-	-	944	(2)	_	-	-	(2)
- manufacture	9,963	1,228	317	2	11,510	(7)	(13)	(78)		(98)
 electricity, gas, steam and air- conditioning supply 	1,838	165	78	_	2,081	(1)	(1)	(6)	_	(8)
 water supply, sewerage, waste management and remediation 	208	6	5	_	219	-		(4)	_	(4)
- construction	571	107	47		725	(1)	(3)	(14)	-	(18)
 wholesale and retail trade, repair of motor vehicles and motorcycles 	8,397	645	178	1	9,221	(4)	(6)	(114)	-	(124)
- transportation and storage	2,980	1,418	157	-	4,555	(6)	(13)	(56)	-	
- accommodation and food	668	209	46	_	923	(2)	(5)	3.23.23	-	(75)
 publishing, audiovisual and broadcasting 	3,292	90	36	_	3,418	(2)	543	(11)	-	(18)
- real estate	3,955	784	199		4,938		(1)	(14)	= 0	(17)
professional, scientific and technical activities	2,568	564	211	_	3,343	(5)	(16)	(124)	-	(145)
- administrative and support services	8,177	957	312			(2)	(12)	(95)	-	(109)
public administration and defence.	0,177	957	312	-	9,446	(7)	(38)	(173)	-	(218)
compulsory social security	33	-		-	33	_		_	_	
- education	30	4	3	200	37	-		(1)		(1)
- health and care	153	25	88	-	266	-	(1)	(49)		(50)
- arts, entertainment and recreation	86	70	5	***	161	-	(2)	(2)	_ [(4)
- other services	1,330	38	76	22	1,444	(1)	-	(19)	-	(20)
- activities of households	3	-0	-		3	_	_	(10)	_	(2.0)
 extra-territorial organisations and bodies activities 	39	_	_	<u>=</u> 1	39	_	_	-	_	_
- government	1,255	137	64	-	1,456	_	201	(2)	-	(2)
- asset-backed securities	16	11	-	-	27	-	(11)	-	_	(11)
Non-bank financial institutions	11,709	723	268		12,700	(2)	(7)	(102)		(111)
Loans and advances to banks	16,673	414	65	_	17,152	(6)	(21)	(16)	-	(43)
At 31 Dec 2022	75,053	7,616	2,184	3	84,856	(48)	(151)	(892)		(1,091)
By country										11,001,7
UK	36,885	2,187	825		39,897	(15)	(47)	(309)		(371)
France	25,940	3,331	850	2	30,123	(16)	(67)	(435)	_	(518)
Germany	5,197	1,155	313		6,665	-	(21)	(107)		(128)
Other countries	7,031	943	196	1	8,171	(17)	(16)	(41)	_	(74)
At 31 Dec 2022	75,053	7,616	2,184	3	84,856	(48)	(151)	(892)	_	(1,091)

Total wholesale lending for loans and other credit-related commitments and financial guarantees1 by stage distribution

		Nominal amount						Allowance for ECL					
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total			
The group	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m			
Corporate and commercial	63,605	8,012	239	-	71,856	(13)	(29)	(39)	-	(81)			
Financial	56,080	1,707	2	-	57,789	(1)	(5)	100	-	(6)			
At 31 Dec 2022	119,685	9,719	241	-	129,645	(14)	(34)	(39)		(87)			
By geography										10.7			
Europe	119,685	9,719	241	_	129,645	(14)	(34)	(39)	_	(87)			
- of which: UK	29,090	3,665	59	-	32,814	(9)	(17)	(7)	***	(33)			
- of which: France	75,886	2,796	38	_	78,720	(2)	(5)	(14)	_	(21)			
- of which: Germany	10,748	2,749	100	-	13,597	(1)	(11)	_		(12)			

¹ Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

		Gross	carrying amour	it			Allov	vance for ECL		
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
The group	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Corporate and commercial	46,237	8,066	1,782	2	56,087	(58)	(137)	(767)	(2)	(964
agriculture, forestry and fishing	157	7	7		171	-	-	(5)	-	(5
mining and quarrying	1,207	86	58		1,351	(1)	(1)	(5)		(7
- manufacture	7,327	1,624	281	2	9,234	(8)	(14)	(72)	(2)	(96
electricity, gas, steam and air- conditioning supply	2,891	49	30		2,970	(3)	(1)	(4)	_	(8
 water supply, sewerage, waste management and remediation 	215	_	4		219	-		(4)	120	(4
- construction	641	116	97		854	(2)	(2)	(40)		(44
 wholesale and retail trade, repair of motor vehicles and motorcycles 	7,743	889	192		8,824	(4)	(8)	(132)	-	(144
- transportation and storage	3,254	1,570	205		5,029	(9)	(20)	(56)	-	(85
accommodation and food	831	409	80	-	1,320	(4)	(10)	(20)	-	(34
 publishing, audiovisual and broadcasting 	2,390	81	50		2,521	(2)	(2)	(12)	-	(16
- real estate	4,849	891	280	-	6,020	(9)	(32)	(159)	-	(200
 professional, scientific and technical activities 	2,522	669	221	_	3,412	(3)	(8)	(60)	-	(71
 administrative and support services 	8,765	1,204	178		10,147	(9)	(21)	(161)	1.0	(191
 public administration and defence, compulsory social security 	376	180			556	_	_	-	:-	
- education	22	5	3	-	30	-	(1)	(1)	0-0	(2
- health and care	473	47	6		526	(1)	(4)	(5)		(10
 arts, entertainment and recreation 	104	116	5		225	-	(3)	(3)	-	(6
- other services	1,427	66	85		1,578	(3)	(2)	(28)		(33
 activities of households 	-	2	-		2	-	-	-		-
- government	1,027	45		-	1,072		= 1		·	_
 asset-backed securities 	16	10	-		26		(8)			3)
Non-bank financial institutions	10,238	369	243		10,850	(6)	(5)	(16)	=	(27
Loans and advances to banks	10,750	39			10,789	(4)	(1)	7.000000000	140V	(!
At 31 Dec 2021	67,225	8,474	2,025	2	77,726	(68)	(143)	(783)	(2)	(996
By country						159,000	V-0250-0	1,750,550,001		100.00
UK	27,765	3,001	832	0=	31,598	(34)	(43)	(233)		(310
France	29,287	3,492	572	1	33,352	(27)	(62)	(396)	(1)	(480
Germany	4,628	1,175	328		6,131		(17)	(73)	141	(90
Other countries	5,545	806	293	1	6,645	(7)	(21)	(81)	(1)	(11)
At 31 Dec 2021	67,225	8,474	2,025	2	77,726	(68)	(143)	(783)	(2)	(99)

		Nor	ninal amount				Allo	wance for ECL		
	Stage 1	Stage 2	Stage 3	POCI	Total	Stage 1	Stage 2	Stage 3	POCI	Total
The group	f.m	£m	£m	£m	£m	£m	£m	Em	Em	£m
Corporate and commercial	65,582	7,369	295	-	73,246	(22)	(27)	(15)	-	(64
Financial	50,380	826	2		51,208	(5)	(2)		-	(7)
At 31 Dec 2021	115,962	8,195	297		124,454	(27)	(29)	(15)		(71)
By geography										
Europe	115,962	8,195	297	-	124,454	(27)	(29)	(15)	-	(71
- of which: UK	25,662	2,910	87	-	28,659	(16)	(11)	(3)		(30)
- of which: France	77,664	1,273	37		78,974	(3)	(3)	(4)	-	(10)
- of which: Germany	10,113	3,693	127	-	13,933	(4)	(8)	(1)	-	(13)

¹ Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

Collateral and other credit enhancement

September 1

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 repos 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 Commercial 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 our 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 loss calculations. CDS mitigants are not reported in the following tables.

Collateral on loans and advances

The following tables include off-balance sheet loan commitments, primarily undrawn credit lines.

The collateral measured in the following tables consists of charges over cash and marketable financial instruments. The values in the tables represent the expected market value on an open market basis. 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. 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 129.

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 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 – corporate, commercial and financial (non-bank) loans and advances including loan commitments by level of collateral for key countries by stage (excluding commercial real estate)

					of whi	ich:		
	Tota	1	UK		Franc		Germa	iny
	Gross carrying/ nominal amount	ECL coverage	Gross carrying/ nominal amount	ECL coverage	Gross carrying/ nominal amount	ECL coverage	Gross carrying/ nominal amount	ECL coverage
The group	£m	%	£m	%	£m	%	£m	%
Stage 1								
Not collateralised	117,166		46,080		53,960		11,577	_
Fully collateralised	10,444	0.1	6,300	0.1	2,146	-	809	
LTV ratio:				No. of the last of				
less than 50%	2,456	0.2	1,643	0.2	491	(-	-	
- 51% to 75%	3,321	0.1	2,161	92	1,050	-	-	
- 76% to 90%	354	-	234	-	36	-		
- 91% to 100%	4,313	144	2,262	-	569	-	809	100 5
Partially collateralised (A):	4,542	0.1	169	1.77	3,797	0.1		7.51
- collateral value on A	3,664		77		3,128			
Total	132,152	-	52,549	_	59,903	7=7_	12,386	
Stage 2								
Not collateralised	13,074	0.9	4,219	0.8	4,581	1.0	3,269	0.9
Fully collateralised	1,132	1.5	327	1.2	239	1.7	228	0.9
LTV ratio:								
- less than 50%	515	1.7	224	0.4	122	0.8		
- 51% to 75%	272	1.5	84	3.6	69	1.4	+	_
- 76% to 90%	4	_	2	-	1	_		_
- 91% to 100%	341	1.2	17	i-	47	4.3	228	0.9
Partially collateralised (B):	509	1.4	23	12	472	1.5	-	-
- collateral value on B	426		13		405		_	
Total	14,715	1.0	4,569	0.8	5,292	1.1	3,497	0.9
Stage 3								
Not collateralised	1,795	40.3	673	31.2	668	57.9	348	28.7
Fully collateralised	80	26.3	10	10.0	12	33.3	24	29.2
LTV ratio:								
- less than 50%	26	23.1	2		7	28.6	-	-
- 51% to 75%	6	33.3	3	33.3	2	50.0	-	_
- 76% to 90%	11	36.4	2		1	-	-	-
- 91% to 100%	37	21.6	3	_	2	50.0	24	29.2
Partially collateralised (C):	172	23.8	11	27.3	159	23.3	-	1000
- collateral value on C	125		3		122			
Total	2,047	38.4	694	30.8	839	51.0	372	28.8
POCI								
Not collateralised	2		- c-		2	-	-	-
Fully collateralised	572	-	THE	44	12.1	-	-	-
LTV ratio:								
- less than 50%	_		-	-	-		-	1995
- 1685 than 50% - 51% to 75%		_		-	_		_	
- 51% to 75% - 76% to 90%			-	_	_	-	-	_
- 76% to 90% - 91% to 100%			= 7	_	_	-	-	-
			_	_	_	_	_	-
Partially collateralised (D):			-		_		-	
- collateral value on D	2	-		_	2		22	
Total	148,916	0.7	57,812	0.5	66,036	0.8	16,255	0.9
At 31 Dec 2022	140,510	V.7	07,012	5.0	55,530			

Wholesale lending - corporate, commercial and financial (non-bank) loans and advances including loan commitments by level of collateral for key countries by stage (excluding commercial real estate) (continued)

(Auditol)

					of whic	sh:		
	Total		UK		Franc	e.	Germa	my
	Gross		Grass		Gross		Gross	
	carrying/ nominal	FOI	carrying/	200	carrying/	2020	carrying/	Products.
	amount	ECL coverage	nominal amount	ECL coverage	nominal amount	ECL coverage	nominal amount	ECL coverage
The group	£m	96	£m	%	£m	%	£m	%
Stage 1	4.11)		LIII	70	4.771	70	E.M	76
Not collateralised	109,435	0.1	40,298	0.1	52,583		11,479	
Fully collateralised	10,399	0.1	6,133	0.1	2,221	0.1	708	
LTV ratio:	1 470000		0,700	0.7	2,221	0.7	700	_
- less than 50%	2,450	0.2	1,649	0.1	587		-	
- 51% to 75%	3,543	0.1	2,124	0.0	989	0.1		
- 76% to 90%	801	0.1	446	0.0	349	7850000	-	
- 91% to 100%	3,605	0.1	1,914				700	-
Partially collateralised (A):	3,424	0.1	85	-	296		708	
- collateral value on A		0.1		-	3,248	0.1	_	
Total	2,661	0.1	51		2,555		1850-1868-0	
Stage 2	123,258	0.1	46,516	0.1	58,052		12,187	
olisi bar a da								
Not collateralised	11,024	0.9	4,365	0.9	1,890	1.5	3,942	0.6
Fully collateralised	1,675	1.1	608	0.8	639.4	1.1	243	0.4
LTV ratio:	200							
- less than 50%	689	1.7	217	1.4	350	1.1	275	-
- 51% to 75%	253	8.0	217	0.9	34	2.9	-	-
- 76% to 90%	271	0.4	165	0.0	106	0.9	-	
- 91% to 100%	462	0.9	9		149	1.3	243	0.4
Partially collateralised (B):	1,573.2	0.9	4	0.0	1,567	0.9		-
- collateral value on B	1,408		3		1,404		_	
Total	14,272	0.9	4,977	0.9	4,096.4	1.2	4,185	0.5
Stage 3								
Not collateralised	1,598	37.2	669	25.1	378	86.0	393	17.8
Fully collateralised	148	16.2	77	7.8	10	50.0	24	16.7
LTV ratio:		Towns I	255.1	20.00				
- less than 50%	76	18.4	41	7.3	6	50.0		-
- 51% to 75%	22	13.6	19	10.5	2	50.0	-	-
- 76% to 90%	18	5.6	17	-	1	++	-	
- 91% to 100%	32	15.6	-	-	1	100.0	24	16.7
Partially collateralised (C):	216	27.3	35	17.1	165	27.3	-	-
 collateral value on C 	152		22		123		<u> </u>	
Total	1,962	34.6	781	23.0	553	67.8	417	17.7
POCI								
Not collateralised	_		-		/=		-	
Fully collateralised	5-	-	_	-		_	_	-
LTV ratio:								
- less than 50%		_		594		-	-	4
- 51% to 75%		_	-		_	-		
- 76% to 90%	-	-	-			_	_	
- 91% to 100%		-				-	-	
Partially collateralised (D):	2	100.0	-	-	2	100.0	_	-
- collateral value on D	2		-		2		_	
Total	2	100.0			2	100.0	_	**
At 31 Dec 2021	139,494	0.6	52,274	0.5	62,703	0.7	16,789	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 described in more detail below:

- Some securities issued by governments, banks and other financial institutions benefit from additional credit enhancement 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 loan and advances mainly pledged against cash collaterals are posted to satisfy margin requirements. There is limited credit risk on trading loans and advances since in the event of default of the counterparty these would be set off against the related liability. Reverse repos and stock borrowings are by their nature collateralised.

Collateral accepted as security that the group is permitted to sell or repledge under these arrangements is described on page 165 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 30 on the financial statements.

Report of the Directors | Risk

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 market factors such as interest rates, exchange rates or asset prices.

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 value adjustment ('CVA').

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.

Sea Note 28 on the Immenil 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 provides further details on the countries and products comprising personal loans and advances to customers.

Further product granularity is also provided by stage, with geographical data presented for loans and advances to customers, loan and other credit-related commitments, and financial guarantees.

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

		Gross Carryin	ng amount			Allowance	for ECL	
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
The group	£m	£m	£m	£m	£m	£m	£m	£m
By portfolio								
First lien residential mortgages	4,155	511	81	4,747	(7)	(7)	(22)	(36)
 of which: interest only (including offset) 	878	53	30	961	===	(1)	(12)	(13)
- affordability including ARMs	353	6	-	359	(1)	(1)	-	(2)
Other personal lending	1,138	104	24	1,266	(2)	(8)	(9)	(19)
- guaranteed loans in respect of residential property	-	-	8-4	-	-			-
 Other personal lending which is secured 	982	70	9	1,061	(1)	(4)	(2)	(7)
- credit cards	61	23	7	91	1444	(2)	-	(2)
- Other personal lending which is unsecured	95	11	8	114	(1)	(2)	(7)	(10)
At 31 Dec 2022	5,293	615	105	6,013	(9)	(15)	(31)	(55)
By geography								
UK¹	3,090	482	13	3,585	(2)	(9)	(3)	(14)
France	50	3	36	89	_		(17)	(17)
Germany	163	32	- 5 1	195	-	-	_	_
Other countries	1,990	98	56	2,144	(7)	(6)	(11)	(24)
At 31 Dec 2022	5,293	615	105	6,013	(9)	(15)	(31)	(55)

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		
The group	£m	£m	£m	£m	£m	£m	£m	£m		
UK	875	11	2	888	-	177				
France	637	32	3	672	£	244	-	_		
Germany	155	57		212	1,5		324			
Other countries	357	9	1	367	-	-	-	-		
At 31 Dec 2022	2,024	109	6	2,139			_	-		

1 Includes primarily first lien residential mortgages in Channel Islands and Isle of Man.

2 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

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

		Gross carryin	g amount			Allowance	for ECL	
CC.	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
The group	£m	£m	£m	£m	£m	£m	£m	£m
By portfolio							70111	2.01
First lien residential mortgages	6,723	173	234	7,130	(11)	(5)	(65)	1011
- of which: interest only (including offset)	3,134	115	94	3,343	(1)	(2)	(27)	(81)
- affordability including ARMs	451	2	6	459	(3)	147	(1)	
Other personal lending	17,532	513	219	18,264	(11)	(11)	(60)	(4)
 guaranteed loans in respect of residential property 	14,387	332	38	14,757	(5)	(2)		(82)
Other personal lending which is secured	2,535	136	100	2,771	(3)	(4)	(1)	(8)
- credit cards	318	22	11	351	(1)	(2)	(1)	(4)
 Other personal lending which is unsecured 	292	23	70	385	(2)	(3)	(34)	(39)
At 31 Dec 2021	24,255	686	453	25,394	(22)	(16)	(125)	(163)
By geography				10,001	(22)	(10)	(123)	(103)
UK¹	3,543	88	49	3,680	(1)	(3)	(3)	171
France	18,500	497	239	19,236	(10)	(10)	(75)	(7)
Germany	161	47		208	(10)			(95)
Other countries	2,051	54	165	2,270	(11)	(3)	(47)	1041
At 31 Dec 2021	24,255	686	453	25,394	(22)	(16)	(47)	(61)

Total personal lending for loans and other credit-related commitments and financial guarantees² by stage distribution (continued)

		Nominal amount				Allowance for ECL			
T.	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	
The group	£m	£m	£m	£m	£m	£m	£m	£m	
UK	586	3	2	591			2001		
France	1,076	20	2	1,098			22		
Germany	136	85	-	221				_	
Other countries	377	8		385	(1)				
At 31 Dec 2021	2,175	116	4	2,295	(1)			(1)	

- 1 Includes primarily first lien residential mortgages in Channel Islands and Isle of Man.
- 2 Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

Collateral on loans and advances

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 adjustment for obtaining and selling the collateral and in particular loans shown as 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

		of which:					
			of which: UK France				
	Tot		UI			ce ECL	
	Gross exposure	ECL coverage	Gross exposure	ECL coverage	Gross exposure	coverage	
The group	£m	9/0	£m	%	£m	%	
Stage 1						Sec.	
-ully collateralised	4,340	0.1	2,376	155	3	_	
TV ratio							
less than 50%	2,199	0.1	1,255	-	3	-	
- 51% to 60%	744	0.1	429		-		
61% to 70%	738	0.3	420	0.2	-	_	
- 71% to 80%	442	0.2	198		-	-	
- 81% to 90%	202	-	63	7-	-	-	
91% to 100%	15	-	11	1 - 1	-	ion.	
Partially collateralised (A):	50	-	11	_	-		
LTV ratio:							
- 101% to 110%	4		3	-	· · ·	100	
- 111% to 120%	3		1	_	14	-	
greater than 120%	43	-	7	-	-	-	
	10		6		-		
- collateral value on A	4,390	0.1	2,387	-	3		
Total	-						
Stage 2	510	1.4	428	0.5	-	-	
Fully collateralised							
LTV ratio:	203	1.5	151	0.7	144	-	
less than 50%	105	1.9	90	1.1	-		
- 51% to 60%	91	1.1	83	-		-	
- 61% to 70%	66	1.5	60	-	-		
- 71% to 80%	39	1=	38	-	-		
- 81% to 90%	6		6	_		-	
- 91% to 100%	1	_	1	_	_	-	
Partially collateralised (B):	,**/						
LTV ratio:	1	_	1		-	-	
- 101% to 110%				_	_	-	
- 111% to 120%		_	_	-	_		
- greater than 120%	1		1		-		
 collateral value on B 	511	1.4	429	0.5	112	_	
Total	511	1.7	12.0				
Stage 3	65	16.9	10	10.0	7	14.3	
Fully collateralised	- 03	10.5					
LTV ratio:	46	13.0	9	11.1	-	_	
- less than 50%	5		1	-	_		
- 51% to 60%	9				6		
- 61% to 70%	//8					_	
- 71% to 80%	3		-		-	_	
- 81% to 90%	1				1	100.0	
- 91% to 100%	1			_	16		
Partially collateralised (C):	16	68.8		_	.,,	02.0	
LTV ratio:		1				1 2	
- 101% to 110%	-		1	_	-		
- 111% to 120%			-	-	-1		
- greater than 120%	16	68.8		_	16		
- collateral value on C							
Total	81						
At 31 Dec 2022	4,982	2 0.7	2,826	0.1	26	42.3	

Personal lending: residential mortgage loans including loan commitments by level of collateral for key countries (continued)

	Tota	46	of which: UK France				
	Gross	ECL	Grass	ECL	Gross	ce ECL	
	exposure	coverage	exposure	coverage	exposure	coverage	
The group	£m	%	£m	%	£m	%	
Stage 1							
Fully collateralised	6,915	0.2	2,789		2,088		
LTV ratio:							
- less than 50%	3,400	0.1	1,308	-	1,110	0.1	
- 51% to 60%	1,274	0.2	540	-	431	++	
- 61% to 70%	1,074	0.2	452	-	296	-	
- 71% to 80%	776	0.3	358	-	177	-	
- 81% to 90%	345	0.3	113	-	48	-	
- 91% to 100%	46		18	-	26	-	
Partially collateralised (A):	90		11	-	50	_	
LTV ratio:							
- 101% to 110%	18		2	-	12	_	
- 111% to 120%	9	_	1		5	_	
- greater than 120%	63		8	-	33	-	
- collateral value on A	63		4		50		
Total	7,005	0.2	2,800	-	2,138	Е.	
Stage 2					2004 (5-10-10-1		
Fully collateralised	169	3.0	46		83	1.2	
LTV ratio:							
- less than 50%	91	2.2	18	-	48	21	
- 51% to 60%	25	4.0	6		13	-	
- 61% to 70%	34	2.9	17		12		
71% to 80%	15	6.7	5		7	-	
- 81% to 90%	3		- 20	_	2	_	
- 91% to 100%	1		_	-	1	_	
Partially collateralised (B):	5		-		2	===	
LTV ratio:					2		
- 101% to 110%	i i	-		_	-	_	
- 111% to 120%	1						
- greater than 120%	3	-		_	2		
- collateral value on B	4		-	-		-	
Total	174	2.9	46		3	4.0	
Stage 3	174	2.0	40	===	85	1.2	
Fully collateralised	204	24.5	9	11.1	-00	24.0	
LTV ratio:	204	24.0	9	11.1	62	21.0	
less than 50%	94	10.0	0	40.7	0.4	00.0	
- 51% to 60%		12.8	6	16.7	24	20.8	
- 61% to 70%	31	19.4	3	-:	8	25.0	
- 71% to 80%	34	23.5	-		19	10.5	
- 81% to 90%	13	38,5	-1		3	33.3	
91% to 100%	14	42.9	-		4	25.0	
	18	72.2	=:		4	50.0	
Partially collateralised (C):	30	53.3	_	-	24	58.3	
LTV ratio:		STORAGE T					
- 101% to 110%	2	50.0	-		2	50.0	
- 111% to 120%	2	50.0	-		2	50.0	
greater than 120%	26	53.8	(=)	(-)	20	60.0	
- collateral value on C	6		_		6		
Total	234	28.2	9	11.1	86	31.4	
At 31 Dec 2021	7,413	1.1	2,855	_	2,309	1.3	

Treasury risk

Overview

Treasury risk is the risk of having insufficient capital, liquidity or funding resources to meet financial obligations and satisfy regulatory requirements, as well as the risk to our earnings or capital due to structural and transactional foreign exchange exposures and 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, taking into account 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 2022

Treasury risk management

Key developments in 2022

- Our CET1 ratio decreased from 17.8% at 31 December 2021 to 16.8% at 31 December 2022. This included a 1.6 percentage point impact from the disposal of the retail banking operations in France and a 1.2 percentage point impact from RWA growth due to implementation of new regulations, increased volatility in the market and the impact of FX movements. Share issuance, profits and other movements added 1.8 percentage points to the ratio.
- The Group Board approved a new interest rate risk in the banking book ('IRRBB') strategy in September, with the objective of increasing our stabilisation of NII, with consideration given to any capital or other constraints, and then adopting a managed approach based on interest rates and outlook.
- We took steps to reduce the duration risk of our Treasury hold-to-collect-and-sell portfolio, which is accounted for at FVOCI primarily to reduce the capital impact from rising interest rates. This risk reduction lowered the hold-to-collect-and-sell stressed value at risk ('SVaR') exposure of this portfolio from 532m at the end of 2021 to 353m at the end of 2022.
- We implemented a new hold-to-collect business model to better reflect our management strategy to stabilise NII. This portfolio of High Quality Liquid Assets ('HQLA') will form a greater part of our liquid asset buffer going forward, as well as being a hedge to our structural interest rate risk.
- We enhanced the monitoring and forecasting of our capital
 positions as a result of the Russia-Ukraine war, although there
 were no material capital or liquidity direct impacts from the
 increased uncertainty on the forward economic outlook. There
 was also limited direct impact on our pension plans, as the
 most material plans had little or no direct investments in Russia
 or Ukraine.
- Work continued over 2022 to implement and improve derisking strategies for our pension plans with a particular focus on asset de-risking in Germany. In light of the increased market volatility we have reviewed the investment strategies of our pension plans to ensure that they remain appropriate and the pension plans continue to cope with future volatility.
- The cost of living has continued to increase throughout Europe over 2022 and there are a number of pension risks arising from this issue. The main areas where this impacts pensions are across investment strategy, actuarial factors, pension increases and members' behaviours. We have worked with the fiduciaries of the pension plan to ensure impact to plans and members is understood and monitored.
- HBCE signed a framework agreement with Promontoria MMB SAS ('My Money Group') and its subsidiary Banque des Caraïbes SA, for the sale of its retail banking business in France. The sale, which is subject to regulatory approvals, is anticipated to complete in the second half of 2023. The impact of classifying the disposal group as held for sale resulted in a 1.6 percentage point reduction in the group's CET1 ratio, which will be partly offset by the reduction in RWAs upon closing.
- The Group performed its inaugural resolvability self-assessment to meet the BoE requirements, which came into effect on 1 January 2022. This was incorporated into the BoE publication of their findings from the first assessment of the resolvability of the eight major UK firms as part of the Resolvability Assessment Framework.

Governance and structure

The Chief Risk Officer is the accountable risk steward for all treasury risks. The Chief Financial Officer is the risk owner for treasury risks with the exception of pension risk which is coowned together with the regional heads of Performance & Reward.

Capital, liquidity, interest rate risk in the banking book and non-trading book foreign exchange risk are the responsibility of the Executive Committee and the Risk Committee. The Treasury function actively manages these risks on an on-going basis, supported by the Asset and Liability Management Committee ('ALCO'), overseen by Treasury Risk Management and the Risk Management Meeting ('RMM').

Pension risk is overseen by the Pension Risk Management Meeting.

Capital, liquidity and funding risk management processes

Assessment and risk appetite

Our capital management policy is supported by a global capital management framework. The framework sets out approach to determining key capital risk appetites including CET1, total capital, minimum requirements for own funds and eligible liabilities ('MREL'), and leverage ratio. 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 our 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, and interest rate risk in the banking book. Climate risk is also considered as part of the ICAAP, and we are continuing to develop our approach. The ICAAP supports the determination of our 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.

We aim to ensure that management has oversight of our liquidity and funding risks at group and entity level through robust governance, 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 robust 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 validation of risk tolerance and the setting of risk appetite. It also assesses the capability to manage liquidity and funding effectively. These metrics are set and managed locally but are subject to robust global review and challenge to ensure consistency of approach and application of the Group's policies and controls.

Planning and performance

Capital and risk-weighted asset ('RWA') plans form part of the annual financial resource plan that is approved by the Board. Capital and RWA forecasts are submitted to the ALCO on a monthly basis, and capital and RWAs are monitored and managed against the plan.

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. Our strategy is to allocate capital to businesses and entities to support growth objectives where returns above internal hurdle levels have been identified and in order to meet their

regulatory and economic capital needs. We evaluate and manage business returns by using a RoTE 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 LCR and net stable funding ratio ('NSFR'), together with an internal liquidity metric. 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. We closely monitor future regulatory changes 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

Our capital adequacy ratios have been affected by regulatory developments in 2022, including changes to internal-ratings based ('IRB') modelling requirements and the UK's implementation of the revisions to the Capital Requirements Regulation and Directive ('CRR II'). The PRA's final rules on NSFR were implemented and have been reflected in disclosures since the first quarter of 2022.

With effect from 1 January 2023 IFRS 17 Insurance Contracts comes into force. We expect this to reduce the group's CET1 ratio by 0.3 percentage points because we value our insurance subsidiaries under the equity method in our capital adequacy reporting. Also from the same date, the group will be subject to a binding minimum leverage ratio, set according to PRA rules.

Future changes to our ratios will occur with the implementation of Basel 3.1. The PRA published its consultation on the implementation of Basel 3.1 in the UK during the last quarter of 2022, with a proposed implementation date of 1 January 2025. The proposal includes five-year transitional provisions for certain elements of the reform.

Regulatory reporting processes and controls

The quality of regulatory reporting remains a key priority for management and regulators. We are progressing with a comprehensive programme to strengthen our processes, improve consistency and enhance controls across our prudential regulatory reporting, focussing on PRA requirements initially. We commissioned a number of independent external reviews, some at the request of our regulators, including one on our credit risk RWA reporting process, which concluded in December 2022. These reviews have so far resulted in improvements in the accuracy of reported RWAs and LCR in accordance with policies, which have been reflected in our year-end regulatory reported ratios. Our prudential regulatory reporting programme is being phased over a number of years, prioritising RWA, capital and liquidity reporting in the early stages of the programme. 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 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, allocation of financial resources, 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 programmes of the BoE, the EBA and the ECB. 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 recovery plan sets out the framework and governance arrangements to support restoring us to a stable and viable position, and so lowering the probability of failure from either idiosyncratic company-specific stress or systemic marketwide 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 entities can stabilise their financial position and recover from financial losses in a stress environment.

The group also has capabilities, resources and arrangements in place to address the unlikely event that we might not be recoverable and would therefore need to be resolved by regulators. We have contributed to the Group's inaugural resolvability assessment framework ('RAF') self-assessment during 2021 to meet the BoE's requirements, which came into effect on 1 January 2022.

Overall, our recovery and resolution planning helps safeguard the Group's financial and operational stability. The Group is committed to further developing its recovery and resolution capabilities, including in relation to the BoE's resolvability assessment framework.

Measurement of interest rate risk in the banking book

Interest rate risk in the banking book is the risk of an adverse impact to earnings or capital due to changes in market interest rates. It is generated by our non-traded assets and liabilities, specifically loans, deposits and financial instruments that are not held for trading intent or held to hedge positions held with trading intent. Interest rate risk that can be economically hedged may be transferred to the Markets Treasury business. Hedging is generally executed through interest rate derivatives or fixed-rate government bonds. Any interest rate risk that Markets Treasury cannot economically hedge is not transferred and will remain within the global business where the risks originate.

The following measures are used by Treasury to monitor and control interest rate risk in the banking book including:

- · Net Interest Income ('NII') sensitivity;
- · Economic Value of Equity ('EVE') Sensitivity; and
- · Non-Trading Value at Risk ('VaR').

Net interest income sensitivity

A principal part of our management of non-traded interest rate risk is to monitor the sensitivity of expected Net Interest Income (NII) under varying interest rate scenarios (simulation modelling), where all other economic variables are held constant. This monitoring is undertaken at an entity level. HSBC Bank plc calculates both one-year and five-year NII sensitivities across a range of interest rate scenarios.

NII sensitivity figures represent the effect of pro forma movements in projected yield curves based on a static balance sheet size and structure. The exception to this is where the size of the balances or repricing is deemed interest rate sensitive, for example, early prepayment of mortgages. These sensitivity calculations do not incorporate actions that would be taken by Markets Treasury or in the business that originates the risk to mitigate the effect of interest rate movements.

Report of the Directors | Risk

The NII sensitivity calculations assume that interest rates of all maturities move by the same amount in the 'up-shock' scenario. The sensitivity calculations in the 'down-shock' scenarios reflect no floors to the shocked market rates.

However, customer product-specific interest rate floors are recognised where applicable.

Economic value of equity sensitivity

EVE represents the present value of the future banking book cash flows that could be distributed to equity holders under a managed run-off scenario. This equates to the current book value of equity plus the present value of future NII in this scenario. EVE can be used to assess the economic capital required to support interest rate risk in the banking book. An EVE sensitivity represents the expected movement in EVE due to pre-specified interest rate shocks, where all other economic variables are held constant. Operating entities are required to monitor EVE sensitivities as a percentage of capital resources.

Non-trading Value at Risk

Non-trading portfolios comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities, financial investments measured at FVOCI, debt instruments measured at amortised cost, and exposures arising from our insurance operations.

The following table summarises the main business areas where non-trading market risks reside, and the market risk measures used to monitor and limit exposures.

	Non-trading risk
Risk types	Interest rates
10.00	Credit spreads
Risk measure	Value at risk Sensitivity Stress testing

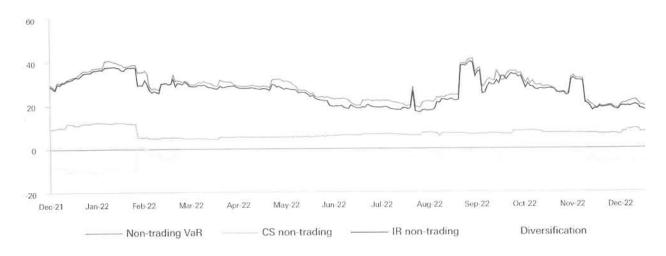
Non-trading portfolios

Value at risk of the non-trading portfolios

Non-trading VaR includes the interest rate risk in the banking book transferred to and managed by Markets Treasury and the exposures generated by the portfolio of HQLA held by Markets Treasury to meet liquidity requirements.

The non-trading VaR reduced materially during 2022 from £29.4m to end the year at £18.6m and was predominately driven by interest rate risk. The volatile market conditions driven by geopolitical events and concerns around high inflation led the Markets Treasury business to materially reduce the holdings of outright and asset swapped UK and US Government bonds. The rationale for the execution was to firstly protect the value of the Held to Collect and Sale portfolio and secondly to reduce the entities sensitivity to the increase of interest rates. There was a spike in the VaR during September due to a recalibration of the VaR model to incorporate the market volatility, however the Markets Treasury business took further action to reduce their Interest Rate sensitivity following change in the UK fiscal stance and increase in uncertainty leading the bond market to sell off sharply and bond yields rise to multi year highs. The daily levels of total non-trading VaR over the last year are set out in the graph below.

Daily VaR (non-trading portfolios), 99% 1 day (£m)



The group's non-trading VaR for the year is shown in the table below.

Non-trading VaR, 99% 1 day

(Audited

	Interest rate ('IR')	Credit spread ('CS')	Portfolio diversification ¹	Total ²
	£m	£m	£m	£m
Balance at 31 Dec 2022	17.1	7.2	(5.6)	18.6
Average	26.3	6.7	(5.0)	28.0
Maximum	39.7	11.9	_	40.9
Minimum	16.3	4.2	-	17.8
Balance at 31 Dec 2021	28.7	9.0	(8.4)	29.4
Average	26.6	10.0	(5.6)	31.0
Maximum	34.6	12.7	-	37.8
Minimum	18.0	7.2	-	22.5

- 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, for example, 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 occurs on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for this measure.
- 2 The total VaR is non-additive across risk types due to diversification effect.

Other Risk

Non-trading book foreign exchange exposures are outlined below.

Structural foreign exchange exposures

Structural foreign exchange exposures represent net assets or capital investments in subsidiaries, branches, joint arrangement or associates, together with any associated hedges, the functional currencies of which are currencies other than pound sterling.

An entity's functional currency is that of the primary economic environment in which the entity operates. We use the pound sterling as our presentation currency in our consolidated financial statements because sterling forms the major currency in which we transact and fund our business. Exchange rate differences on structural exposures are recognised in other comprehensive income ('OCI').

The structural foreign exchange exposures are managed within limits such that the capital ratios and the capital ratios of individual banking subsidiaries are largely protected from the effect of changes in exchange rates. We may hedge certain structural foreign exchange positions, either at entity level, or by relying on hedges held in other group entities, subject to approved limits

Transaction foreign exchange exposures

Transactional foreign exchange risk arises primarily from day-to-day transactions in the banking book generating profit and loss or FVOCI reserves in a currency other than the reporting currency of the operating entity. Transactional foreign exchange exposure generated through profit and loss is periodically transferred to Markets and Securities Services and managed within limits with the exception of limited residual foreign exchange exposure arising from timing differences or for other reasons. Transactional foreign exchange exposure generated through OCI reserves is managed by the Markets Treasury business within agreed appetite.

Pension risk management processes

HSBC provides future pension benefits on a defined contribution basis from many of its European operations. However, there remain future defined benefit pensions provided in the region.

Pension plans are run by local fiduciaries in line with local legislative requirements. The largest pension plan is the HSBC Trinkaus & Burkhardt Pension Scheme which is regulated by the German Company Benefits Act (Gesetz zur Verbesserung der betrieblichen Altersversorgung – Betriebsrentengesetz – BetrAVG).

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, it 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 that 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, causing an increase in the value of the 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.

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 of the defined benefit plan assets between asset classes is established. 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.

Capital risk in 2022

Capital overview

Capital adequacy metrics		
	At	
	31 Dec	31 Dec
	2022	2021
Risk-weighted assets ('RWAs') (£m)		
Credit risk	68,821	69,929
Counterparty credit risk	17,981	16,434
Market risk	15,822	9,828
Operational risk	11,547	10,512
Total RWAs	114,171	106,703
Capital on a transitional basis (£m)		
Common equity tier 1 ('CET1') capital	19,184	18,963
Tier † capital	23,077	22,825
Total capital	36,187	33,992
Capital ratios on a transitional basis (%)		
Common equity tier 1	16.8	17.8
Total tier 1	20.2	21.4
Total capital ratio	31.7	31.9
Leverage ratio (transitional) 2		
Tier 1 capital (£m)	23,077	22,825
Total leverage ratio exposure measure (£m)	417,587	536,518
Leverage ratio (%)	5.5	4.3
Leverage ratio (fully phased-in) 2		
Tier 1 capital (£m)	23,077	22,652
Total leverage ratio exposure measure (£m)	417,587	536,518
Leverage ratio (%)	5.5	4.5

References to EU regulations and directives (including technical standards) should, as applicable, be read as references to the UK's version of such regulation and/or directive, as onshored into UK

law under the European Union (Withdrawal) Act 2018, and as may be subsequently amended under UK law.

Capital figures and ratios in the table above are calculated in accordance with the revised Capital Requirements Regulation and Directive, as implemented ('CRR II'). Leverage ratios are calculated using the end point definition of capital and the IFRS 9 regulatory transitional arrangements.

Regulatory transitional arrangements for IFRS 9 'Financial Instruments'

We have adopted the regulatory transitional arrangements in CRR II for IFRS 9, including paragraph four of article 473a. Our capital and ratios are presented under these arrangements throughout the table above. Without their application, our CET1 ratio would be 16.8%.

The IFRS 9 regulatory transitional arrangements allow banks to add back to their capital base a proportion of the impact that IFRS 9 has upon their loan loss allowances during the first five years of use. The impact is defined as:

- the increase in loan loss allowances on day one of IFRS 9 adoption; and
- any subsequent increase in expected credit losses ('ECL') in the non-credit-impaired book thereafter.

Any add-back must be tax-effected and accompanied by a recalculation of exposure and RWAs. The impact is calculated separately for portfolios using the standardised ('STD') and internal ratings based ('IRB') approaches. For IRB portfolios, there is no add-back to capital unless loan loss allowances exceed regulatory 12-month expected losses.

In the current period, the add-back to the capital base amounted to £24m under the STD approach with tax impacts of £5m which resulted in a net add-back of £19m.

Own funds

Own	funds disclosure		
		At	
		31 Dec	31 Dec
		2022	2021
Ref*		£m	£m
1161	Common equity tier 1 ('CET1') capital: instruments and reserves		
1	Capital instruments and the related share premium accounts	1,217	797
	- ordinary shares	1,217	797
2	Retained earnings ^{1,2}	16,177	15,511
3	Accumulated other comprehensive income (and other reserves) ^{1,7}	4,010	2,931
5	Minority interests (amount allowed in consolidated CET1)	72	57
5a	Independently reviewed interim net profits net of any foreseeable charge or dividend	(1,459)	625
6	Common equity tier 1 capital before regulatory adjustments ²	20,017	19,921
28	Total regulatory adjustments to common equity tier 1	(833)	(958)
29	Common equity tier 1 capital ²	19,184	18,963
36	Additional tier 1 capital before regulatory adjustments	3,942	3,906
43	Total regulatory adjustments to additional tier 1 capital	(49)	(44)
44	Additional tier 1 capital	3,893	3,862
45	Tier 1 capital ²	23,077	22,825
51	Tier 2 capital before regulatory adjustments	13,559	11,591
57	Total regulatory adjustments to tier 2 capital	(449)	(424)
58	Tier 2 capital	13,110	11,167
59	Total capital ²	36,187	33,992

- * The references identify the lines prescribed in the European Banking Authority template, which are applicable and where there is a value.
- 1 These disclosures are based on updated rules implemented from 1 January 2022 including the PRA's disclosure templates and instructions which came into force at that time. The presentation of comparatives has been amended only for CRR II grandfathered instruments to align to the updated template's rows and instructions.
- 2 From 30 September 2022, investments in non-financial institution subsidiaries or participations have been measured on an equity accounting basis in compliance with UK regulatory requirements. Comparatives for prior periods have been represented on a consistent basis with the current year.
- 3 This row includes losses that have been recognised and deducted as they arose and were therefore not subject to an independent review.

At 31 December 2022, our common equity tier 1 ('CET1') capital ratio decreased to 16.8% from 17.8% at 31 December 2021. The key drivers of the fall in our CET1 ratio were:

- a 1.6 percentage point impact from the expected loss on reclassification of our retail banking operations in France to held for sale:
- a 1.2 percentage point impact from RWA growth due to implementation of new regulations and increased volatility in the market and due to impact of FX movement

Share issuance, profits and other movements added 1.8 percentage points to the CET1 ratio.

Throughout 2022, we complied with the PRA's regulatory capital adequacy requirements, including those relating to stress testing.

Risk-weighted assets

RWA movement by key driver	
	Total RWAs
	£m
RWAs at 1 Jan 2022	106,703
Asset size	3,531
Asset quality	296
Model updates	(2,804)
Methodology and policy	(937)
Foreign exchange movement	7,382
Total RWA movement	7,468
RWAs at 31 Dec 2022	114,171

RWAs increased by £7.5bn during the year, including an increase of £7.4bn due to foreign currency translation differences.

Asset size

Asset size increased by £3.5bn driven by an increase in Market Risk RWA by £4.5bn mainly attributable to heightened market risk volatility, and an increase in transactional and structural foreign exchange exposure. This was partially offset by £0.7bn decrease in Credit Risk RWAs due to other balance sheet movements.

Asset quality

Credit Risk increased marginally by £0.3bn due to portfolio mix changes.

Model updates

The £2.8bn decrease in RWAs was mainly driven by the implementation of new models for retail credit risk and equity prices (in market risk).

Methodology and policy

The £0.9bn decrease in RWA is mainly driven by synthetic securitization and by risk parameter refinements, partially offset by increases due to implementation of CRR II rules.

Leverage ratio

Our leverage ratio is 5.5% at 31 December 2022, up from 4.2% at 31 December 2021. The improvement was primarily due to the exclusion of central bank claims and cash pooling netting following the implementation of the PRA UK leverage ratio framework from 1 January 2022 and a rise in tier 1 capital.

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. Our *Pillar 3 Disclosures at 31 December 2022* is published on our website, www.hsbc.com/investors.

Structural foreign exchange exposures

The group's structural foreign currency exposure is represented by the net assets or capital investments in subsidiaries, branches, joint arrangements or associates, the functional currencies of which are currencies other than the sterling.

For our policies and procedures for managing structural foreign exchange exposures, see page 79 of the 'Risk management' section.

Net structural foreign exchange exposures

At 31 Dec	11,746	10,311
Others, each less than £150m	305	319
Israeli New Shekel	85	169
South African Rand	287	285
US Dollars	1,062	1,470
Euro	10,007	8,068
Currency of structural exposure		
	£m	£m
	2022	2021

Liquidity and funding risk in 2022

Liquidity coverage ratio

The LCR aims to ensure that a bank has sufficient unencumbered HQLA to meet its liquidity needs in a 30-calendar-day liquidity stress scenario. HQLA consist of cash or assets that can be converted into cash at little or no loss of value in markets.

At 31 December 2022, all the group's principal operating entities were within the LCR risk tolerance level established by the Board and applicable under the LFRF.

The following table displays the individual LCR levels for HSBC Bank plc's principal operating entities on the European Commission Delegated Regulation basis.

Operating entities' LCRs ^{1,2,3}		
,	At	
	31 Dec	31 Dec
	2022	2021
	11/0	9/0
HSBC Bank plc	143	142
HSBC Continental Europe	150	142

In addition to the regulatory metric, the group manages liquidity via 'internal liquidity metric', which is being used to monitor and manage liquidity risk via a low-point measure across a 270-day horizon, taking into account recovery capacity.

Net stable funding ratio

The Net Stable Funding Ratio ('NSFR') requires institutions to maintain sufficient stable funding relative to required stable funding, and reflects a bank's long-term funding profile (funding with a term of more than a year).

At 31 December 2022, all the group's principal operating entities were within the NSFR risk tolerance level established by the Board and applicable under the LFRF.

Operating entities' NSFRs ^{1,7}		
	At	
	31 Dec	31 Dec
	2022	2021
	%	10/0
HSBC Bank plc	115	115
HSBC Continental Europe	140	130

Depositor concentration and term funding maturity concentration

The LCR and NSFR metrics assume a stressed outflow based on a portfolio of depositors within each depositor segment. To ensure the validity of these assumptions in the sense that the deposit base is sufficient diversified, the depositor concentration is monitored on an ongoing basis.

In addition to this, operating entities monitor the term funding maturity concentration metric to ensure they are not overly exposed to term funding concentration of wholesale market counterparts by the current maturity profile in any defined period.

Liquid assets of the group's principal operating entities

The table below shows the unweighted liquidity value of assets categorised as liquid, which is used for the purposes of calculating the LCR metric. This reflects the stock of unencumbered liquid assets at the reporting date, using the regulatory definition of liquid assets.

Operating entities! liquid assets ^{1,2,3}		
	At Estimated liquidity value	At Estimated liquidity value
	31 Dec 2022	31 Dec 2021
	£m	£m
HSBC Bank plc		
Level 1	93,500	88,423
Level 2a	5,726	3,195
Level 2b	3,270	3,473
HSBC Continental Europe		
Level 1	74,852	39,159
Level 2a	781	450
Level 2b	173	142

1 The LCR and NSFR ratios presented in this table are based on average value. The LCR is the average of the preceding 12 months. The NSFR is the average of preceding quarters. Prior period numbers have been restated for consistency.

2 In response to the requirement for an IPU in line with EU Capital Requirements Directive ('CRD V'), HBCE completed the change of control transactions for HSBC Germany ('HTDE') and HSBC Malta ('HBMT') on 30 November 2022. The average for LCR and NSFR includes the impact of inclusion of two entities for Nov-22 and Dec-22.

3 In December 2022, a strategic data enhancement was implemented which resulted in a reclassification of some securities. This reclassification drove a reduction in total High Quality Liquid Assets and corresponding LCR as of 31 December 2022. Prior period numbers have been restated for consistency.

Sources of funding

Our primary sources of funding are customer current accounts, repo and wholesale securities.

The following 'Funding sources and uses' table provides a consolidated view of how our balance sheet is funded, and should be read in light of the LFRF, which requires operating entities to manage liquidity and funding risk on a stand-alone basis.

The table analyses 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 at other balance sheet lines. In 2022, the level of customer accounts continued to exceed the level of loans and advances to customers. The positive funding gap was predominantly deployed in liquid assets, cash and balances with central banks and financial investments, as required by the LFRF.

Funding sources and uses for the group		
	2022	2021
	£m	£m
Sources		
Customer accounts	215,948	205,241
Deposits by banks	20,836	32,188
Repurchase agreements - non-trading	32,901	27,259
Debt securities in issue	7,268	9,428
Cash collateral, margin and settlement accounts	60,385	37,076
Liabilities of disposal groups held for sale	24,711	
Subordinated liabilities	14,528	12,488
Financial liabilities designated at fair value	27,287	33,608
Liabilities under insurance contracts	19,987	22,264
Trading liabilities	41,265	46,433
- repos	8,213	7,663
- stock lending	1,773	1,637
 other trading liabilities 	31,279	37,133
Total equity	24,016	23,715
Other balance sheet liabilities	228,221	146,911
At 31 Dec	717,353	596,611

	2022	2021
	£m	£m
Uses		
Loans and advances to customers	72,614	91,177
Loans and advances to banks	17,109	10,784
Reverse repurchase agreements – non-trading	53,949	54,448
Cash collateral, margin and settlement accounts	51,858	34,907
Assets held for sale	21,214	9
Trading assets	79,878	83,706
reverse repos	8,729	8,626
 stock borrowing 	5,627	6,498
- other trading assets	65,522	71,862
Financial investments	32,604	41,300
Cash and balances with central banks	131,433	108,482
Other balance sheet assets	256,694	171,798
At 31 Dec	717,353	596,611

Contingent liquidity risk arising from committed lending facilities

The group provides customers with committed facilities such as standby facilities to corporate customers and committed backstop lines to conduits sponsored by the group. All of the undrawn commitments provided to conduits or external customers are accounted for in the LCR and NSFR in line with the applicable regulations.

This ensures that under a stress scenario any additional outflow generated by increased utilisation of these committed facilities by either customers or the group's sponsored conduits is appropriately reflected in our liquidity and funding position.

In relation to commitments to customers, the table below shows the level of undrawn commitments outstanding in terms of the five largest single facilities and the largest market sector.

The group's contractual exposures at 31 December monitored under the contingent liquidity risk limit structure

	2022	2021
	2022	
	£bn	£bn
Commitments to conduits		
Multi-seller conduits		
- total lines	3.7	4.2
- largest individual lines	0.2	0.2
Securities investment conduits - total lines	1.3	1.3
Commitments to customers		
- five largest 7	3.7	10.4
- largest market sector ⁹	13.3	7.7

- 1 Exposures relate to the Regency multi-seller conduit. This vehicle provides funding to group customers by issuing debt secured by a diversified pool of customer-originated assets.
- 2 Represents the undrawn balance for the five largest committed liquidity facilities provided to customers, other than those facilities to conduits.
- 3 Represents the undrawn balance for the total of all committed liquidity facilities provided to the largest market sector, other than those facilities to conduits.

Asset encumbrance and collateral management

An asset is defined as encumbered if it has been pledged as collateral against an existing liability and, as a result, is no longer available to the group to secure funding, satisfy collateral needs or be sold to reduce the funding requirement. Collateral is managed on an operating entity basis consistent with the approach to managing liquidity and funding. Available collateral held in an operating entity is managed as a single consistent collateral pool

from which each operating entity will seek to optimise the use of the available collateral. The objective of this disclosure is to facilitate an understanding of available and unrestricted assets that could be used to support potential future funding and collateral needs. The disclosure is not designed to identify assets which would be available to meet the claims of creditors or to predict assets that would be available to creditors in the event of a resolution or bankruptcy.

Summary of assets available to support potential future funding and collateral needs (on- and off-balance)		20000
	2022	2021
	£m	£m
Total on-balance sheet assets at 31 Dec	717,353	596,611
Less		
reverse repo/stock borrowing receivables and derivative assets	(293,543)	(207,513)
other assets that cannot be pledged as collateral	(51,974)	(48,350)
Total on-balance sheet assets that can support funding and collateral needs at 31 Dec	371,836	340,748
Add: off-balance sheet assets		
fair value of collateral received in relation to reverse repo/stock borrowing/derivatives that is available to sell or repledge	180,233	202,794
Total assets that can support future funding and collateral needs	552,069	543,542
Less:		
on-balance sheet assets pledged	(98,124)	(93,513)
re-pledging of off-balance sheet collateral received in relation to reverse repo/stock borrowing/derivatives	(136,777)	(151,378)
Assets available to support funding and collateral needs at 31 Dec	317,168	298,651

Market risk

Overview

Market risk is the risk that movements in market factors, including foreign exchange rates and commodity prices, interest rates, credit spreads and equity prices will reduce the group's income or the value of its portfolios.

Exposure to market risk is separated into two portfolios.

Trading portfolios comprise positions arising from market-making and warehousing of customer-derived positions.

Non-trading portfolios including Markets Treasury comprise positions that primarily arise from the interest rate management of the group's retail and commercial banking assets and liabilities, financial investments designated as held-to-collect-and-sale ('HTCS'), and exposures arising from the group's insurance operations.

Key developments in 2022

There were no material changes to our policies and practices for the management of market risk in 2022.

Market risk governance

The following diagram summarises the main business areas where trading market risks reside, and the market risk measures used to monitor and limit exposures.



Trading risk

- Foreign exchange and commodities
- Interest rates
- Credit spreads
- · Equities

Risk measure Value at risk | Sensitivity | Stress testing

Where appropriate, we apply similar risk management policies and measurement techniques to trading portfolios. Our objective 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 Officer. These limits are allocated across business lines and to the group and its subsidiaries. The majority of HSBC's total VaR and almost all trading VaR reside in GBM. 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. The Traded Risk function enforces the controls around trading in permissible instruments approved for each site as well as following completion of the new product approval process. Traded Risk also restricts trading in the more complex derivative products to offices with appropriate levels of product expertise and robust control systems.

Market risk measures

Monitoring and limiting market risk exposures

Our objective is to manage and control market risk exposures while maintaining a market profile consistent with the group's risk

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 individual market factor movements on specific instruments or portfolios, including interest rates, foreign exchange rates, credit spreads and equity prices, such as the effect of a one basis point change in yield. We use sensitivity measures to monitor the market risk positions within each risk type. Sensitivity limits are set for portfolios, products and risk types, with the depth of the market being one of the principal factors in determining the level of limits set.

Value at risk

VaR is a technique that estimates the 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 is calculated for all trading positions regardless of how the group capitalises those exposures. Where there is not an approved internal model, the group uses the appropriate local rules to

The VaR model for trading portfolios are predominantly based on historical simulation. The VaR is calculated at a 99% confidence level for a one-day holding period. Where we do not calculate VaR explicitly, we use alternative tools like Stress Testing.

The VaR models derive plausible future scenarios from past series of recorded market rates and prices, taking into account interrelationships between different markets and rates such as interest rates and foreign exchange rates. The models also incorporate the effect of option features on the underlying exposures.

The historical simulation models used incorporates the following features:

- · Historical market rates and prices are calculated with reference to foreign exchange rates and commodity prices, interest rates, equity prices and the associated volatilities;
- Potential market movements utilised for VaR are calculated with reference to data from the past two years; and
- VaR measures are calculated to a 99% confidence level and use a one-day holding period.

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

VaR model limitations

Although a valuable guide to risk, VaR should always be viewed in the context of its limitations. For example:

- the use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those which are extreme in nature;
- the use of a holding period assumes that all positions can be liquidated or the risks offset during that period. This may not fully reflect the market risk arising at times of severe illiquidity, when the holding period may be insufficient to liquidate or hedge all positions fully;
- the use of a 99% confidence level by definition does not take into account losses that might occur beyond this level of confidence; and
- VaR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures.

Risk not in VaR framework

Other basis risks which are not completely covered in VaR are complemented by our risk not in VaR ('RNIV') calculations, and are integrated into our capital framework.

Risk factors are reviewed on a regular basis and either incorporated directly in the VaR models, where possible, or quantified through the VaR-based RNIV approach or a stress test approach within the RNIV framework. The outcome of the VaR-based RNIV is included in the VaR calculation; a stressed VaR RNIV is also computed for the risk factors considered in the VaR-based RNIV approach.

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 tool 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 is implemented at legal entity, regional and overall Group levels. A standard set of scenarios is utilised consistently across all regions within the HSBC Group. Scenarios are tailored to capture the relevant events or market movements at each level. The risk appetite around potential stress losses for the group is set and monitored against referral limits.

Market risk reverse stress tests are undertaken on the premise that there is a fixed loss. The stress testing process identifies which scenarios lead to this loss. The rationale behind the reverse stress test is to understand scenarios which are beyond normal business settings that could have contagion and systemic implications.

Stressed VaR and stress testing, together with reverse stress testing and the management of gap risk, provide management with insights regarding the 'tail risk' beyond VaR for which the group's appetite is limited.

Trading portfolios

Back-testing

We routinely validate the accuracy of our VaR models by backtesting 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 of intra-day transactions. The hypothetical profit and loss reflects the profit and loss that would be realised if positions were held constant from the end of one trading day to the end of the next. This measure of profit and loss does not align with how risk is dynamically hedged, and is not therefore necessarily indicative of the actual performance of the business.

The number of back-testing exceptions is used to gauge how well the models are performing. We consider enhanced internal monitoring of a VaR model if more than five profit exceptions or more than five loss exceptions occur in a 250-day period.

We back-test our VaR at set levels of our group entity hierarchy.

Defined benefit pension plans

Market risk also arises within the Bank's defined benefit pension plans to the extent that the obligations of the plans are not fully matched by assets with determinable cash flows. Refer to the Pension risk management processes section on page 79 for additional information.

Market risk in 2022

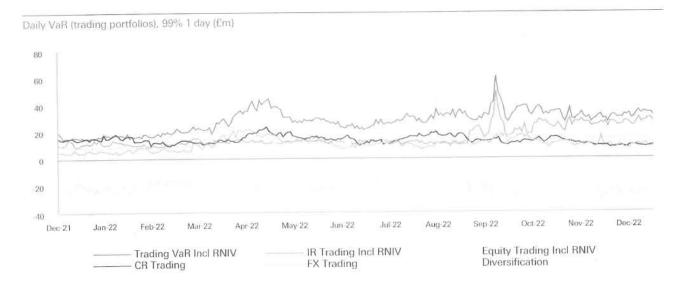
The volatility in financial markets was elevated in 2022 driven by high inflation and the geopolitical risk around Ukraine. During the first half of the year, Russia-Ukraine war led supply chain disruptions increasing energy and food prices. The Zero-Covid policy in China added to the supply chain disruptions. Central Banks around the world (both from Developed and Emerging markets) aggressively started raising policy rates to tame the surging inflation. The US and Europe imposed multiple sanctions on Russia leading to large sell off of the Russian assets. The global equity markets sold off and IPO dried off. The fixed income prices fell responding to increasing rates. The USD index rallied with JPY, EUR and GBP depreciating. The Credit market sold off with new issuances drying up. European markets also underperformed as Russia retaliated by cutting of gas supply to Europe. US and European governments aggressively intervened in the energy market by releasing Oil from strategic reserve driving Oil prices down. Supply chain disruption also eased leading to Inflation coming down in second half of 2022. However, volatility in financial markets remained elevated particularly in the UK as the cost of living crisis intensified. In addition, a change in the UK fiscal stance in late September 2022 led to the pound sterling reaching record lows and to significant turmoil in the market for long-dated UK government bonds, which was exacerbated by rapid deleveraging of liability-driven investment funds used by pension schemes.

Trading portfolios

Value at risk of the trading portfolios

Audited

The Trading VaR predominantly resides within Market Securities Services where it was £31.2m as at 31 December 2022, compared with £19m at 31 December 2021. The Total Trading VaR peaked at £60m in September owing to the sensitivity of the trading book to interest rate moves, coupled with a large volatility in the rates market. When the central banks started to intervene beginning of Q4, the market volatility started to ease; as a result, the Trading VaR decreased and remained fairly stable over the last three months of the year, ranging between £31.2m and £38.15m.



The group's trading VaR for the year is shown in the table below.

Frading VaR, 99% 1 day						
	Foreign exchange ('FX') and commodity	Interest rate ('IR')	Equity ('EQ')	Credit Spread ('CS')	Portfolio Diversification ¹	Total ²
	£m	£m	£m	£m	£m	£m
Balance at 31 Dec 2022	7.5	26.4	13.6	8.6	(24.9)	31.2
Average	10.0	15.3	11.7	13.0	(22.8)	27.2
Maximum	21.5	49.2	17.1	22.9		60.0
Minimum	3.3	8.2	6.8	7.0		14.2
Balance at 31 Dec 2021	4.5	10.0	10.5	14.9	(20.9)	19.0
Average	7.1	12.8	10.2	12.6	(20.4)	22.3
Maximum	19.3	26.7	14.9	16.7	-	31.9
Minimum	3.7	9.3	6.3	9.2	-	17.3

- 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, for example, 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 occurs on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for this measure.
- 2 The total VaR is non-additive across risk types due to diversification effect and it includes VaR RNIV.

Back-testing

HSBC Bank plc experienced 11 back testing exceptions against the Hypothetical P&L and 9 back testing exceptions against the Actual P&L. The hypothetical back testing exceptions were driven by losses from defensive positioning in rates, equity, credit and FX exposures on days when markets rallied.

In addition, there were two actual back testing exceptions driven by one off changes in reserves (such as month end adjustment) and two actual back testing exceptions driven by losses from the unwinding of a large trade.

Climate Risk

Overview

Climate risks have the potential to cause both financial and non-financial impacts for HSBC Bank plc. Financial impacts could materialise, for example, through greater transactional losses and/or increased capital requirements. Non-financial impacts could materialise if our own assets or operations are impacted by extreme weather or chronic changes in weather patterns, or as a result of business decisions to help achieve the HSBC Group's climate ambition.

We remain aligned to the HSBC Group climate ambition to align HSBC Group's own operations and supply chain to net zero by 2030, and the financed emissions from the HSBC Group's portfolio of customers to net zero by 2050. The HSBC Group announced in March 2022 that it intends to publish a climate transition plan in 2023, and committed to a science-aligned phase-down of fossil fuel finance, and a review of its wider financing and investment policies critical to achieving net zero by 2050. This follows the HSBC Group's thermal coal phase out policy, which was announced in 2021.

Key developments in 2022

- HSBC Bank plc's risk appetite statement is approved by the Board and includes the measures we intend to take to enable the delivery of our climate ambition and meet our commitments.
- Through our dedicated climate risk programme, we have continued to embed climate considerations throughout the firm, including updating the scope of our programme to cover all risk types, expanding the scope of climate related training and developing new climate risk metrics to monitor and manage exposures as well as publishing a new greenwashing risk management framework.
- We have enhanced and expanded the use of a client Transition Engagement Questionnaire to better understand our exposure to the highest transition risk sectors and we continue to engage with our customers to understand and support their transition away from high carbon activities.

Governance and structure

The group's Board takes overall responsibility for our ESG strategy, overseeing executive management in developing the approach, execution and associated reporting.

We continue to aim to deepen our understanding of the drivers of climate risk as well as aim to manage our exposure. A dedicated Climate Risk Oversight Forum is responsible for shaping and overseeing our approach and providing support in managing climate risk.

The group's Risk Management Meeting and Risk Committee receive regular updates on our climate risk profile and progress of our climate risk programme.

Key risk management processes

We are integrating climate risk into the 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. We continue to enhance our climate risk scoring tool, which will enable us to assess our customers' exposures to climate risk.

Resilience Risk

Overview

Resilience risk is the risk that we are unable to provide critical services to our customers, affiliates and counterparties as a result of sustained and significant operational disruption. Resilience risk arises from failures or inadequacies in processes, people, systems or external events.

Key developments in 2022

The Operational and Resilience Risk sub-function seeks to provide robust Risk Steward oversight of the management of risk by our businesses, functions and legal entities. This includes effective and timely independent challenge and expert advice. During the year, we carried out a number of initiatives to seek to keep pace with geopolitical, regulatory and technology changes and to strengthen the management of resilience risk:

- We focus on understanding of our risk and control environment, by updating our risk taxonomy and control libraries, and refreshing risk and control assessments.
- We implemented heightened monitoring and reporting of cyber, third party, business continuity and payment/sanctions risks resulting from the Russia-Ukraine war and enhanced controls and key processes where needed.
- We provide analysis and reporting of non-financial risks providing easy to access risk and control information and metrics that enable management to focus on non-financial risks in their decision-making and appetite setting.
- We aimed to further strengthen our non-financial risk governance and senior leadership and improved our coverage and Risk Steward oversight, for data privacy and change execution.

Governance and structure

The Operational and Resilience Risk target operating model provides a globally consistent approach, which allows us to define a group 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: failure to manage third parties; technology and cybersecurity; transaction processing; failure to protect people and places from physical malevolent acts; business interruption and incident risk; data risk; change execution risk; building unavailability; and workplace safety.

Risk appetite and key escalations for resilience risk are reported to our Risk Management Meeting (chaired by the HSBC Bank plc Chief Risk Officer) and to our Risk Committee.

Key risk management process

Operational resilience is our ability to anticipate, prevent, adapt, respond to, recover and learn from operational disruption while minimising customer and market impact. Resilience is determined by assessing whether we are able to continue to provide our most important services, within an agreed level. This is achieved via day-to-day oversight, periodic and ongoing assurance, such as deep dive review and controls testing, which may result in challenges being raised to the business by Risk Stewards. Further challenge is also raised in the form of quarterly Risk Steward opinion papers to formal governance. We accept we will not be able to prevent all disruption but we prioritise investment to continually improve the response and recovery strategies for our most important business services.

Business operations continuity

We continue to monitor the situation in Russia and Ukraine, and remain ready to take measures to help ensure business continuity, should the situation require. There has been no significant impact to our services in nearby markets where the group operates. Publications from the UK Government, EU Commission and the National Grid, amongst others, advised on potential plans for power cuts and energy restrictions across the UK and Continental Europe during the winter period. In light of potential disruption, businesses and functions in these markets are reviewing existing plans and responses to minimise the impact.

Regulatory compliance risk

Overview

Regulatory compliance risk is the risk associated with breaching our duty to clients and other counterparties, inappropriate market conduct 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.

Key developments in 2022

The dedicated programme to embed our updated purpose-led conduct approach has concluded. Work to map applicable regulations to our risks and controls continues in 2023 alongside adoption of new tooling to support enterprise-wide horizon scanning for new regulatory obligations and to manage our regulatory reporting inventories. Climate risk has been integrated into regulatory compliance policies and processes, with enhancements being made to the Product Governance Framework and controls in order to ensure the effective consideration of Climate, and in particular Greenwashing, risks.

A major change initiative that begun in 2022 was the introduction of the UK Consumer Duty (which will begin to be implemented in July 2023) and measures resulting from ongoing thematic reviews into the workings of the retail, small to medium enterprises ('SME') and wholesale banking sectors and the provision of financial advice to consumers in the UK particularly. A number of the issues arising from this work have been exacerbated by the cost of living crisis affecting the UK and the EU, and we may see further regulatory intervention as a result, in particular to protect vulnerable customers.

Governance and structure

The structure of the Compliance function is substantively unchanged and the Group Regulatory Conduct capability and Group Financial Crime capability both continue to work closely with the regional Chief Compliance Officers and their respective teams to help them identify and manage regulatory and financial crime compliance risks across the Group. They also work together and with all relevant stakeholders to ensure we achieve good conduct outcomes and provide enterprise-wide support on the Compliance risk agenda in collaboration with the Group's Risk function.

Key risk management processes

The Europe Regulatory Conduct function is engaged in setting policies, standards and risk appetite to guide the management of regulatory compliance. It also devises clear frameworks and support processes to mitigate regulatory compliance risks. The capability provides oversight, review and challenge to the Country Chief Compliance Officers and their teams to help them identify, assess and mitigate regulatory compliance risks, where required. The regulatory compliance risk policies are regularly reviewed. Policies and procedures require the prompt identification and escalation of any actual or potential regulatory breach. Relevant reportable events are escalated to the HSBC Bank plc RMM and to the Group Risk Committee, as appropriate.

Conduct of business

Our conduct approach aims to guide us to do the right thing and to focus on the impact we have on our customers and the financial markets in which we operate. It complements our purpose and values and – together with more formal policies and the tools we have to do our jobs – provides a clear path to achieving our purpose and delivering our strategy. For further information on our Purpose-led Conduct Approach, see www.hsbc.com/who-we-are/esg-and-responsible-business/our-conduct

Regulators and governments

We proactively engage with regulators and governments to facilitate strong relationships through virtual and in-person meetings and by responding to consultations individually and jointly via industry bodies.

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, money laundering, terrorist financing and proliferation financing. Financial crime risk arises from day-to-day banking operations involving customers, third parties and employees.

Key developments in 2022

We regularly review the effectiveness of our financial crime risk management framework, which includes consideration of the complex and dynamic nature of sanctions compliance risk. In 2022, we adapted our policies, procedures and controls to respond to the unprecedented volume and diverse set of sanctions and trade restrictions imposed against Russia following its invasion of Ukraine.

We also continued to make progress with several key financial crime risk management initiatives, including:

- We enhanced our screening and non-screening controls to aid the identification of potential sanctions risk related to Russia, as well as risk arising from export control restrictions.
- We deployed a key component of our intelligence-led, dynamic risk assessment capabilities for customer account monitoring in our Non-Ring Fenced Bank for CMB and in our Jersey market for domestic customers in retail and wholesale, while building toward other markets in Europe. Global Social Network Analysis was deployed in December for correspondent banking in the UK, bringing a broader, more holistic review of potential financial crime risk.
- We reconfigured our transaction screening capability in readiness for the global change to payment systems formatting under ISO20022 requirements, and enhanced transaction screening capabilities by implementing automated alert discounting.
- We strengthened the first party lending fraud framework, reviewed and published an updated fraud policy and associated control library, and continued to develop fraud detection tools.

Governance and Structure

The structure of the Financial Crime function remained substantively unchanged in 2022, although we continued to review the effectiveness of our governance framework to manage financial crime risk. The Regional Head of Financial Crime and HSBC Bank plc Money Laundering Reporting Officer continues to report to the EMEA Head of Compliance, while the HSBC Bank plc Risk Management Meeting retains oversight of matters relating to money laundering, fraud, bribery and corruption, tax evasion, sanctions and export control breaches, terrorist financing and proliferation financing.

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 law and regulation of all the markets in which we operate in HSBC Bank plc and applying a consistently high financial crime standard. In cases where material differences exist between the law and regulation of these markets, our policy adopts the highest standard while acknowledging the primacy of local law.

We continue to assess the effectiveness of our end-to-end financial crime risk management framework, and invest in enhancing our operational control capabilities and technology solutions to deter and detect criminal activity. We have simplified our framework by streamlining and de-duplicating policy requirements. We also strengthened our financial crime risk taxonomy and control libraries and our investigative and monitoring capabilities through technology deployments. We developed more targeted metrics, and have also enhanced our governance and reporting.

We are committed to working in partnership with the wider industry and the public sector in managing financial crime risk, protecting the integrity of the financial system and the communities we serve. We participate in numerous public-private partnerships and information-sharing initiatives around the Europe region, including holding leadership positions in many. In 2022, our focus remained on measures to improve information sharing, including typologies of financial crime and highlighting key tools in the fight against it. Within the European Police agency, Europol, we maintained a presence, and lent our expertise to working groups, as well as advocacy teams focused on how financial crime risk management frameworks can deliver more effective outcomes in detecting and deterring criminal activity, including tackling evolving criminal behaviour such as fraud. We continued our engagement in the Joint Money Laundering Intelligence Task Force in the UK, particularly on sanctions matters.

ESG disclosures

We have continued our efforts to combat financial crime and reduce its impact on our organisation, customers and the communities that we serve. Financial crime includes fraud, bribery and corruption, tax evasion, sanctions and export control violations, money laundering, terrorist financing and proliferation financing.

We are committed to acting with integrity and have built a strong financial crime risk management framework across all global businesses and all countries and territories in which we operate. The financial crime risk framework, which is overseen by the HSBC Bank plc Board, is supported by our financial crime policies that are designed to enable adherence to applicable laws and regulations globally.