Standard Chartered Bank

Reference Number ZC18

Directors' Report and Financial Statements

31 December 2022

Incorporated in England with limited liability by Royal Charter 1853
Principal Office: 1 Basinghall Avenue, London, EC2V 5DD, England

Contents

Our business

Our purpose to drive commerce and prosperity through our unique diversity

We have built a strong presence in the world's most dynamic and influential markets. The businesses we serve, connect and partner with are the engines of trade and innovation, and central to the transition to a fair, sustainable future.

We are at the frontline of today's biggest challenges and are taking a stand on key issues such as climate change, economic participation and globalisation. Our collaborative approach to innovation and drive to be diverse and inclusive means we can do more, better and faster.

Our heritage and values are expressed in our brand promise, Here for good.

The following are company designations as described in the document:
Standard Chartered Bank Group (Group) – being Standard Chartered Bank and its subsidiaries
Standard Chartered PLC Group (PLC Group) – being the ultimate parent and its subsidiaries
Standard Chartered Bank (Company) – being the standalone Bank legal entity
Standard Chartered PLC (PLC) – being the standalone legal entity of the ultimate parent

About this report

Sustainability reporting – We adopt an integrated approach to corporate reporting, embedding non-financial information throughout our Annual Report.

Alternative performance measures – The Group uses a number of alternative performance measures in the discussion of its performance. These measures exclude certain items which management believe are not representative of the underlying performance of the business and which distort period-on-period comparison. They provide the reader with insight into how management measures the performance of the business.

For more information please visit sc.com
linkedin.com/company/standard-chartered-bank
facebook.com/standardchartered

Unless another currency is specified, the word 'dollar' or symbol '$' in this document means US dollar and the word 'cent' or symbol 'c' means one-hundredth of one US dollar.

All disclosures in the Strategic Report Directors' Report and the Risk Review and Capital Review are unaudited unless otherwise stated.

Unless the context requires, within this document, 'China' refers to the People's Republic of China and, for the purposes of this document only, excludes Hong Kong Special Administrative Region (Hong Kong), Macau Special Administrative Region (Macau) and Taiwan. 'Korea' or 'South Korea' refers to the Republic of Korea. Greater China & North Asia (GCNA) includes Mainland China, Hong Kong, Japan, Korea, Macau and Taiwan; ASEAN & South Asia (ASA) includes Australia, Bangladesh, Brunei, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Singapore, Sri Lanka, Thailand and Vietnam; and Africa & Middle East (AME) includes Angola, Bahrain, Botswana, Cameroon, Cote d'Ivoire, Egypt, The Gambia, Ghana, Iraq, Jordan, Kenya, Lebanon, Mauritius, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia, Sierra Leone, South Africa, Tanzania, the United Arab Emirates (UAE), Uganda, Zambia and Zimbabwe and Europe & Americas (EA) includes Argentina, Brazil, Colombia, Falkland Islands, France, Germany, Ireland, Jersey, Poland, Sweden, Turkey, the UK and the US., Sweden, Turkey, the UK and the US

Within the tables in this report, blank spaces indicate that the number is not disclosed, dashes indicate that the number is zero and nm stands for not meaningful. Standard Chartered Bank is incorporated in England and Wales with limited liability and is headquartered in London. The Group's head office provides guidance on governance and regulatory standards.

Our business

We are a leading international cross-border bank

Standard Chartered is a bank like no other. Our unique footprint, diverse experience, capabilities and culture set us apart. They enable us to capitalise on opportunities for our business, our customers, and the communities we serve. Guided by our Purpose – to drive commerce and prosperity through our unique diversity connecting the world's most dynamic markets, backing the people and businesses who are the engines of global growth.

Together, we are developing new economies that can deliver sustained prosperity in the decades ahead. As our brand promise makes clear, we are Here For Good.

FINANCIAL KPIs AND MEASURES

Underlying basis

Return on tangible equity

9.1%

↑ 226bps

Read more on (page 29)

Operating income

$10,193m

↑ 14%

Read more on (page 20)

Profit before tax

$3,579m

↑ 30%

Read more on (page 20)

Statutory basis

Return on tangible equity

8.8%

↑ 329bps

Read more on (page 29)

Operating income

$10,234m

↑ 16%

Read more on (page 21)

Profit before tax

$3,474m

↑ 46%

Read more on (page 21)

CAPITAL KPIs

Common Equity Tier 1 ratio

12.3%

↑ 2bps

Read more on (page 20)

NON-FINANCIAL KPIs

Diversity and inclusion: Women in senior roles

28.3%

↓ 0.4ppt

1 Basis point (bps) and per centage movements are in relation to 31 December 2021, with brackets representing negative movements

2 Reconciliations from underlying to statutory and definitions of alternative performance measures can be found on pages 25 to 29

Our business

Standard Chartered Bank is authorised by the Prudential Regulation Authority (PRA) and regulated by the PRA and by the Financial Conduct Authority (FCA). The PRA is the consolidated supervisor in respect of the Group (of which PLC is the ultimate parent).

Standard Chartered Bank is a material subsidiary of the PLC Group for the purposes of the Bank of England led single point of entry preferred resolution strategy for the PLC Group. The Group is a core part of, and critical provider of essential services to the PLC Group and is fundamental to the delivery of the PLC Group's purpose, franchise and strategy. The formation of an ASEAN hub was completed in 2021, following the transfers of Malaysia, Thailand and Vietnam subsidiaries under our existing Singapore subsidiary entity, which itself remains under Standard Chartered Bank.

Clients	• The Group remains the largest CCIB origination hub supporting a significant part of CCIB revenues and is key to the global network proposition • The Group is the relationship hub for the majority of key CCIB clients, particularly Organisation for Economic Co-operation and Development (OECD) clients • The Group holds the majority of the PLC Group's corporate and financial institutions deposits, a significant part of the PLC Group's USD funding base
Capabilities	• The Group holds key licenses and hosts infrastructure vital for the global franchise such as global USD & EUR clearing • The Group is the main Financial Markets (FM) booking centre supporting the majority of global FM revenues • The Group remains a main access point to high quality USD funding
Critical infrastructure	• The Group is the key liquidity management centre: holding the majority of the PLC Group's high-quality liquid assets for regulatory purposes • The Group provides functional support on a global basis • The Group operates global business services hubs for the benefit of the PLC Group including shared service centres and centres of excellence
Investors	• The Group's UK domicile underpins a unique investor proposition: emerging markets access from a UK regulated platform • A significant number of PLC Group's equity and debt investors are based in the Group's footprint
Recovery and resolution	• Standard Chartered Bank is the largest material subsidiary for the purposes of minimum requirement for own funds and eligible liabilities (MREL) and total loss-absorbing capital (TLAC) • The Group is critical to the delivery of capital and liquidity generating management actions in PLC Group's recovery planning • The Group houses various critical services and critical functions in resolution and resolution management

The Group's Credit Ratings

The Group remains a highly rated institution (in both absolute and relative terms) with the following long and short-term issuer ratings all with a stable outlook. S&P upgraded Standard Chartered Bank in December 2021 to A+ from A. The upgrade was driven by a methodology change, supported by strengthened risk management, COVID-19 resilience and an increase in loss-absorbing capacity. Fitch outlook revision to stable in July 2022 reflects their expectations of improved profitability, mitigating pressures from higher operating costs and heightened macroeconomic risks.

	S&P	Moody's	Fitch
Long Term	A+	A1	A+
Short Term	A-1	P-1	F1
Outlook	Stable	Stable	Stable

Our business

Who we are and what we do

Our Purpose is to drive commerce and prosperity through our unique diversity. We serve three client segments in three regions, supported by eight global functions.

Our client segments

Corporate, Commercial & Institutional Banking

Corporate, Commercial and Institutional Banking supports clients with their transaction banking, financial markets, corporate finance and borrowing needs across our markets. We provide solutions to our clients in some of the world's fastest-growing economies and most active trade corridors.

Operating income

$7,024m
Underlying basis

$7,043m
Statutory basis

Consumer, Private & Business Banking

Consumer, Private and Business Banking serves individuals and small businesses, with a focus on affluent and emerging affluent in many of the world's fastest growing cities.

Operating income

$2,875m
Underlying basis

$2,875m
Statutory basis

Ventures

Ventures promotes innovation, invests in disruptive financial technology and explores alternative business models.

Operating income

$3m
Underlying basis

$3m
Statutory basis

Central & other items

Operating income

$291m
Underlying basis

$313m
Statutory basis

Total operating income

Operating income

$10,193m
Underlying basis

$10,234m
Statutory basis

Our business

Our regions

Asia

Our largest markets by income are Singapore and India.

Operating income

$4,631m
Underlying basis

$4,652m
Statutory basis

Europe & Americas

Centred in London, with a growing presence across continental Europe, and New York, with presence in both North America and several markets in Latin America. A key income generator for the Group.

Operating income

$2,587m
Underlying basis

$2,586m
Statutory basis

Africa & Middle East

Present in 25 markets, of which the most sizeable by income are UAE, Nigeria, Pakistan, Kenya, Nigeria, South Africa and Ghana.

Operating income

$2,582m
Underlying basis

$2,584m
Statutory basis

Central & other items (region)

Operating income

$393m
Underlying basis

$412m
Statutory basis

Total operating income

Operating income

$10,193m
Underlying basis

$10,234m
Statutory basis

Global functions

Enabling and supporting our businesses

Our client-facing businesses are supported by our global functions, which work together to ensure the Group's operations run smoothly and consistently

Transformation, Technology & Operations
Responsible for leading bank-wide transformation and for reshaping the Group's systems and technology platforms to ensure we support the Bank with robust, responsive, and innovative technology digital solutions. Also manage all client operations where we seek to provide an optimal client service and experience across the board. The function's strategy is supported by consistent performance metrics, standards and practices aligned to successful client and business outcomes.

Legal
Enables sustainable business and protects the Group from legal-related risk.

Human Resources
Maximises the value of our investment in people through recruitment, development and employee engagement.

Risk
Responsible for the overall second line of defence responsibilities related to risk management, which involves oversight and challenge of risk management actions of the first line

Group Chief Financial Officer
Comprises seven support functions: Finance, Treasury, Strategy, Investor Relations, Corporate Development, Supply Chain and Property. The leaders of these functions report directly to the Group Chief Financial Officer.

Corporate Affairs & Brand and Marketing
Manages the Group's communications and engagement with stakeholders to protect the Group's reputation, brand and services.

Group Internal Audit
An independent function whose primary role is to help the Court and Executive Management to protect the assets, reputation and sustainability of the Group.

Conduct, Financial Crime and Compliance
Delivering the right outcomes for the Bank, its clients and communities by partnering internally and externally to achieve the highest standards in conduct and compliance to enable a sustainable business and fight financial crime.

Valued behaviours

We are developing a future ready workforce built on good conduct and our valued behaviours.

Never settle
- Continuously improve and innovate
- Simplify
- Learn from your successes and failures

Better together
- See more in others
- "How can I help?"
- Build for the long term

Do the right thing
- Live with integrity
- Think client
- Be brave, be the change

Where we operate

We operate in the world's most dynamic markets which set the pace for global growth. Our unique footprint connects emerging and high-growth markets in Asia, Africa and the Middle East with more established economies, allowing us to channel capital where it's needed most. For over 160 years, we have used the power of our network to maximise opportunities for people and businesses who trade, operate or invest in these regions. Our diverse experience, capabilities and culture sets us apart.

We are present in 57 markets.

Asia

We have a long-standing and deep franchise across some of the world's fastest-growing economies in Asia. The two markets contributing the highest income are Singapore and India.

Australia	Laos	Singapore
Bangladesh	Macau	Sri Lanka
Brunei	Mainland China	Taiwan
Cambodia	Malaysia	Thailand
India	Myanmar	Vietnam
Indonesia	Nepal	
Japan	Philippines	

Africa & Middle East

We have a deep-rooted heritage in Africa & Middle East and have been present in the region for more than 160 years. We are present in the largest number of sub-Saharan African markets of any international banking group.

Angola	Jordan	Sierra Leone
Bahrain	Kenya	South Africa
Botswana	Lebanon	Tanzania
Cameroon	Mauritius	UAE
Cote d'Ivoire	Nigeria	Uganda
Egypt	Oman	Zambia
The Gambia	Pakistan	Zimbabwe
Ghana	Qatar	
Iraq	Saudi Arabia	

Europe & Americas

We support clients in Europe & Americas through hubs in London and New York and also have a strong presence in several European and Latin American markets.

Argentina	France	Poland
Brazil	Germany	Sweden
Colombia	Ireland	Turkey
Falkland Islands	Jersey	UK
US		

Market environment

Macroeconomic factors affecting the global landscape

Global macro trends

Trends in 2022

- Global GDP growth slowed sharply in 2022 , likely to 3.4%, following the 6.0% expansion in 2021, as inflation soared, and central banks were forced to tighten policy aggressively.
- MENAP was the best-performing region, recording growth of 6.2%, supported by elevated commodity prices; Asia recorded growth of 4.2%, down from 7.1% in 2021, primarily driven by the slowdown in China, with growth falling to 3.0% in 2022 from 8.1% in 2021.
- Among the majors, despite a technical recession in the first half of the year, the US recorded annual growth of 2.0% on the back of resilient domestic demand while the UK likely grew by over 4.0%
- The euro-area economy likely grew by 3.5% in 2022 following 5.3% growth in 2021; while the recovery was strong in H1 due to COVID reopening effects, H2 was held back by rising energy costs related to the Russia-Ukraine conflict
- In most majors, labour markets showed signs of further tightening despite slowing growth.
- Central banks began to unwind support, at first gradually and then more rapidly as the year progressed and inflationary pressures built. Fiscal support continued in the euro area as governments sought to shield households and businesses from elevated energy costs but provided less of a tailwind in the US as COVID support measures were unwound.

Outlook for 2023

- Global growth is expected to weaken to 2.5% in 2023, as central banks focus on bringing inflation back under control
- Asia will likely be the fastest-growing region in the world and will continue to drive global growth, expanding by 5.3%. Among the majors, the US is expected to witness a mild contraction of 0.2% in 2023, the UK a larger contraction of 0.5%, while the euro area is likely to see an overall modest expansion of 0.4%
- 2023 will be a tale of two halves, with global growth likely to pick up in H2-2023 as the US and euro area recover from mild recessions and a more significant opening up of the China economy from COVID restrictions helps boost demand and growth.
- Tight global liquidity conditions are likely to make it difficult for some emerging markets to access international financing, forcing them to seek multilateral support.
- Downside risks to this outlook include sustained inflationary pressures, slower-than-expected China reopening and another flare-up of geopolitical tensions, including the Russia-Ukraine war

Medium and long-term view

Stagflation risks

- Tight labour markets and the broadening of inflationary pressures to the services sector is likely to keep stagflation a key concern for central banks over the coming quarters.
- The need to meet ESG targets could also prove inflationary in the medium term as the cost of using fossil fuels during the transition period rises due to a combination of taxes, carbon pricing and external tariffs.
- As companies aim to reduce concentration risks and move towards onshore/near-shore production, the risk is a lowering of efficiency gains that might push up consumer prices
- However, easing of supply-chain bottlenecks is likely to help dampen some of these pressures.
- Fiscal policy might also turn from a tailwind to a headwind for growth. High public debt and government deficits also means that most economies are looking to tighten fiscal policy over the medium term.

Broader global trends

- The world economy could see a permanent loss of economic output or 'scarring' due to the recession that followed the pandemic. This would make it harder for emerging markets to catch up with developed markets.
- Long-term growth in the developed world is constrained by ageing populations and high levels of debt, exacerbated by the policy response to COVID-19.
- Rising nationalism, anti-globalisation and protectionism are threats to long-term growth prospects in emerging markets.
- However, there are potential offsets. Higher capex to meet sustainability targets and moves towards digitalisation could boost productivity growth, proving an antidote to economic scarring concerns. Within emerging markets, countries in Asia are best placed to take advantage of digitalisation.
- Relatively younger populations, as well as the adoption of digital technology, will allow emerging markets to become increasingly important to global growth

Regional outlooks

Actual and projected growth by country in 2022 and 2023 per cent

		2023	2022
Asia	China	5.8 per cent	3.0 per cent
	Hong Kong	3.2 per cent	-3.5 per cent
	India	5.5 per cent	7.0 per cent
	Indonesia	5.1 per cent	5.4 per cent
	Singapore	2.0 per cent	3.8 per cent
Africa & Middle East	Nigeria	3.5 per cent	3.1 per cent
	UAE	4.5 per cent	6.9 per cent
Europe & Americas	UK	-0.5 per cent	4.3 per cent
	US	-0.2 per cent	2.1 per cent

Trends and outlook for our three regions

Asia

- China's GDP growth slowed to 3.0% in 2022 from 8.4% in 2021, falling short of the 5.5% target. Weak consumption and property investment were the main drag on the economy, due to the stringent zero-COVID policy and ongoing housing-market correction. We forecast 2023 growth at 5.8%, as the government appears more determined after the conclusion of the Party Congress in October to address the two headwinds. China scrapped the COVID-zero policy sooner than expected. Recent measures aimed at supporting property financing will likely stabilise home sales and investment in H2-2023. In addition, the regulatory storm targeting internet platforms will likely give way to more normalised regulation. Consumption is likely to become a key growth driver and property investment less of a drag.
- Monetary policy is likely to remain accommodative near-term, diverging from major economies, to curb the downside risk that may linger in early 2023. However, China's growth will likely rebound significantly in Q2 following the expected reopening, driving inflation higher and prompting the central bank to shift to a more neutral policy stance to stabilise the total debt-to-GDP ratio. The broad budget deficit is likely to be scaled back in 2023 on sustainability concerns.
- We expect Hong Kong's economy to grow 3.2% in 2023 following a 3.5% contraction in 2022. While there are some domestic bright spots, including a much-improved labour market and relaxation of travel curbs, external drags will likely be substantial, with traditional export markets like the US and euro area experiencing recession at the start of 2023. We expect South Korea's economy to grow just 1.7% on concerns about weaker external demand and slowing domestic consumption amid rising interest rates and tighter fiscal policy.
- In India, recovery momentum remains robust, driven by firmer reopening in the services sector. Nevertheless, we expect FY24 (year beginning April 2023) GDP growth to moderate to 5.5%, from 7.0% in the current financial year, given moderating global growth, erosion of real purchasing power and high domestic interest rates. Easing inflation, back to the comfort threshold of 2-6%, in FY24 should also lead to a prolonged pause from the MPC after the terminal repo rate hits 6.5% by February 2023. The external sector will remain in focus amid the likelihood of still-elevated crude oil prices and relatively better economic activity in India. Ample FX reserves, however, are likely to remain a strong buffer for the economy. The central bank is likely to focus on rebuilding FX reserves, although this might remain challenging amid a still-wide current account deficit. The central government budget presentation in February 2023 will be closely watched for any growth-supportive measures ahead of national elections in mid-2024. We believe the government will stay focused on narrowing the fiscal deficit, which is already significantly wider relative to the pre-pandemic phase.

- ASEAN as a region grew 5.9% in 2022, recovering strongly from a Delta-hit 2021. We expect ASEAN growth to ease to its long-term average of 5.0% in 2023. As well as high base effects, external demand for ASEAN exports may soften due to global synchronised monetary policy tightening and the electronic cycle peak. Domestic demand may ease as COVID-induced pent-up demand normalises, while local monetary policy tightening may rein in overall consumer and investment impetus. However, stable labour markets will help support spending. The recovery in the tourism sector, which is a large growth contributor for the region, will also help drive growth. In addition, investments may be boosted by FDI seeking diversification and alternative production capacity.
- We expect inflation to be milder in 2023 due to high base effects. External prices may be more manageable, while tighter monetary policy should help. While monetary policy tightening may pause by early 2023 any easing might not be forthcoming amid potentially sticky inflation, unless growth deteriorates significantly.

Africa & Middle East

- After a robust post-COVID recovery in early 2022 on rising global demand and economic reopening, including the re-establishment of international travel, Sub-Saharan African economies are now set to see a growth moderation. Notwithstanding global trends, rising food and fuel prices are still pressuring domestic inflation, with transmission often exacerbated by FX weakness. The impact of 2022's monetary policy tightening will be felt with a lag, with a number of central banks still expected to raise interest rates further.
- In Nigeria, presidential and general elections in February/March 2023 will be a key focus, with the likelihood of FX and fuel subsidy reforms potentially establishing conditions for more robust medium-term investment and growth. While load-shedding will dampen near-term growth prospects in South Africa, a faster embrace of renewables and increased corporatisation of South Africa's rail and port infrastructure, could unlock a greater private-sector contribution to growth. In Kenya, efforts to boost lending to SMEs, and the increased adoption of digital channels for financial intermediation, should help lift loan growth.
- Across the SSA space, monetary tightening will drive healthier net interest margins. However, international capital market access is likely to remain constrained for a number of sovereigns, raising doubts over the easy refinancing of external debt obligations. The timely conclusion of debt restructurings in Zambia and Ghana could help boost investor sentiment towards the SSA region. A pause in Fed tightening, while not sufficient in itself to trigger new inflows to all SSA markets, may nonetheless help to reduce investor demand for higher risk premia.
- A supportive energy price environment will likely provide continued benefit to GCC growth. The focus is once again on the region as a provider of capital, as Gulf economies proceed with longer-term economic diversification plans, seek to reduce the traditional pro-cyclicality of spending, and invest strategically in green technology. In the UAE and Saudi Arabia, we expect the continuation of robust growth, driven by strong investment across both the hydrocarbon and non-hydrocarbon sectors. For smaller GCC economies such as Oman, higher oil prices will drive a reduction in accumulated debt levels. For the non-GCC MENAP region, conditions remain challenging. Pakistan's ability to reassure on its external debt commitments, amid dwindling FX reserves, will remain a key focus. In Egypt, recent currency depreciation and a more accommodative risk backdrop globally could see the return of the carry trade. But economic conditions remain difficult amid higher inflation, and the authorities' commitment to FX flexibility will be closely monitored.

Europe & Americas

- We see a high risk of contraction in the US in H1 2023; in the euro area, we expect annual growth to decline sharply in 2023 as high inflation and central bank tightening weigh on economic activity.
- The peak for consumer price inflation is likely behind us for both the US and Euro area, but will take time to return to target. Central banks will remain alert to any signs of inflation expectations becoming unanchored or wage pressures building over the medium term.
- The Fed is likely to stop hiking rates by Q1-2023, with the Federal funds rate peaking at 4.75%, before beginning to gradually cut rates (by 25bps per quarter) from Q3-2023. The ECB is likely to hike its main refinancing rate to a peak of 3.75% by Q2-2023, but not start cutting rates until 2024 as inflation proves sticky on the downside.
- Fiscal support is likely to remain focused on supporting households and businesses struggling with elevated energy costs in Europe, but otherwise we can expect the tailwind from fiscal support to ease in both the Euro area and US.
- In Latin America, we expect a significant growth slowdown in 2023 following a strong 2022. The delayed impact of aggressive monetary tightening and other idiosyncratic issues are likely to weigh on domestic demand; external headwinds and looming recession risks in the US are likely to drag down the region's growth.

Business model

We help international companies to connect across our global network and help individuals and local business grow their wealth.

Our business

Corporate, Commercial and Institutional Banking (CCIB)
We support companies across the world, from small and medium-sized enterprises to large corporates and institutions, both digitally and in person.

Consumer, Private and Business Banking (CPBB)
We support small businesses and individuals, from mass retail clients to affluent and high-net-worth individuals, both digitally and in person.

Ventures
We promote innovation, invest in disruptive financial technology and explore alternative business models. Our pipeline includes our cloud native digital bank in Singapore.

Our products and services

Financial Markets
- Macro, commodities and credit trading
- Financing and securities services
- Sales and structuring
- Debt capital markets and leveraged finances
- Project and transportation finance

Transaction Banking
- Cash management
- Trade finance
- Working capital

Wealth Management
- Investments
- Insurance
- Wealth advice
- Portfolio management

Retail Products
- Deposits
- Mortgages
- Credit cards
- Personal loans

How we generate returns

We earn net interest on the margin for loans and deposit products, fees on the provision of advisory and other services, and trading income from providing risk management in financial markets.

Income
- Net interest income
- Fee income
- Trading income

Profits
- Income gained from providing our products and services minus expenses and impairments

Return on tangible equity
- Profit generated relative to tangible equity invested

What makes us different

Our purpose is to drive commerce and prosperity through our unique diversity – this is underpinned by our brand promise, Here for good. Our stands – aimed at tackling the world's biggest issues – Accelerating Zero, Lifting Participation and Resetting Globalisation (see pages 15-16 for more), challenge us to use our unique position to help.

Client focus
Our clients are our business. We build long-term client relationships through trusted advice, expertise and best-in-class capabilities.

Distinct proposition
Our understanding of the markets and our extensive international network allow us to offer a tailored proposition to our clients, combining global expertise and local knowledge.

Robust risk management
We are here for the long-term. Effective risk management allows us to grow a sustainable business.

Sustainable and responsible business
We're committed to sustainable social and economic development across our business, operations and communities.

How we are shaping our future

We remain committed to executing against our strategy to drive returns and accretive growth
We are committing resources to grow our franchise in large and high-returns markets, and accelerating progress in markets being optimised. We continue to review our business models to drive performance.

In 2022, we refocused our resources in the Africa and Middle-East (AME) region into existing and new markets with the greatest scale and growth potential, provided further clarity on how we will achieve net zero in financed emissions by 2050, and successfully launched Trust, a digital bank in Singapore.

In addition, in April 2022, we expanded our reporting structure with the creation of Ventures. The increased reporting transparency for Ventures reflects the growing significance of the Group's investment in technology and innovation.

Over the medium term, we will continue to relentlessly transform and innovate to become a leading cross-border bank which bridges east and west, while deeply rooted in our core markets, and supports a sustainable future.

The sources of value we rely on

We aim to use resources in a sustainable way, to achieve the goals of our strategy.

Human capital
Diversity differentiates us. Delivering our Purpose rests on how we continue to invest in our people, the employee experience we further enhance and the culture we strengthen.

How we're enhancing our resources
- We continue to create a work environment that supports resilience, innovation and inclusion, with ongoing focus on mental, physical, social and financial well-being. This includes further rolling out hybrid-working across our markets.
- Colleagues are encouraged and enabled to build the future skills that we need – including analytics, data, digital, cyber security, sustainable finance and leadership

Strong brand
We are a leading international banking group with more than 160 years of history. In many of our markets we are a household name.

How we're enhancing our resources
- In 2022 we evolved our brand identity to become a digital-first brand, reflecting the innovation that drives our business forward. The refreshed Standard Chartered identity is modern, dynamic and agile, adapted for the digital world and representing our commitment to stay relevant to our clients and their evolving needs
- We have been successful in leveraging brand and insights to support business growth. The PLC Group successfully improved its reputation in 2022, exceeding the average score for the banking sector and ranking top three in the majority of our key markets in 2022

International network
We have an unparalleled international network, connecting companies, institutions, and individuals to, and in, some of the world's fastest growing and most dynamic regions.

How we're enhancing our resources

- We continue to invest in transforming our core business into a leading digital first and data-driven platform, positioning us to deliver superior client experiences, access new high-growth segments, grow wallet with existing clients and create new business model opportunities
- Our network remains one of our key competitive advantages and we continue to leverage our network to drive growth in Trade from corridors and Financial Markets solutions for our clients

Local expertise

We have a deep knowledge of our markets and an understanding of the drivers of the real economy, offering us insights that help our clients achieve their ambitions.

How we're enhancing our resources

- We continue to support small and medium businesses (SMEs), providing them with much needed funding to restart and grow their businesses amid the re-opening of economies.
- We increased our focus on SMEs participating in the New Economy, in particular those who are part of e-commerce ecosystems

Financial strength

With $551 billion in assets on our balance sheet, we are a strong, trusted partner for our clients.

How we're enhancing our resources

- Stronger capital and much more resilient balance sheet with growth in high quality deposits.
- Common Equity Tier 1 (CET1) ratio at 12.3 per cent, above the Group target of 12 per cent

Technology

We possess strong digital foundations and leading technological capabilities to enable data-driven digital bank delivering world class client service.

How we're enhancing our resources

- We are leveraging partnerships to create market leading digital platforms including Digital Banks and Banking as a Service, utilising next generation technologies to service our clients
- We continue to invest in our engineering capabilities, providing best in class tools, growing our engineering talent, and creating an automated and scalable technology stack able to continuously deliver value to our clients

The value we create

We aim to create long-term value for a broad range of stakeholders in a sustainable way

Clients

We want to deliver easy, everyday banking solutions to our clients in a simple and cost-effective way, and with a great customer experience. We enable individuals to grow and protect their wealth; we help businesses trade, transact, invest, and expand; and we also help a variety of financial institutions, including banks, public sector and development organisations, with their banking needs.

Employees

We believe great employee experience drives great client experience. We want all our people to pursue their ambitions, deliver with purpose and have a rewarding career enabled by great people leaders.

Society

We strive to operate as a sustainable and responsible company, driving prosperity through our core business, and collaborating with local partners to promote social and economic development.

Suppliers

We engage diverse suppliers, both locally and globally, to provide efficient and sustainable goods and services for our business.

Regulators and governments

We engage with relevant public authorities to play our part in supporting the effective functioning of the financial system and the broader economy.

Investors

We aim to deliver robust returns and long-term sustainable value for our investors.

Our strategy
To become a leader in global finance

We will continue to focus on:

- Four strategic priorities: Wholesale Network business, Affluent client business, Mass Retail business and Sustainability
- Three critical enables: People and Culture, Ways of Working and Innovation

Over the past several years, we have conducted a bottom-up review of our strategy. While we could have done more in a few areas, such as faster tackling of low returning risk weighted assets (RWA) in CCIB, further simplifying the way we operate, and being even more aggressive in transforming our business processes and generating additional savings, we still believe our strategy is the right one. We have made good progress in the year, and are on track to deliver our objectives.

We remain committed to achieve PLC Group's ambitions by 2025:

- To be the number one wholesale digital banking platform
- To be among the top three affluent brands
- Double our mass presence
- Become a market leader in sustainability We will continue to focus on:

Going forward, our strategic priorities and enablers will continue to be anchored in our three Stands: Accelerating Zero; Lifting Participation and Resetting Globalisation. More details on our Stands are described on pages 15-16.

Strategic priorities

Wholesale network business
Through our unique network, we facilitate investment, trade and capital flows, providing a starting point in achieving our stand of resetting globalisation. We have also started on our journey towards our stand of accelerating zero, by focusing on sustainable finance.

We are one of the leading international wholesale banks in our emerging markets footprint through:

- Taking leading positions in high-returning, high-growth sectors
- Delivering a market-leading digital platform by continuing to invest in core digital capabilities
- Speeding up growth in large markets while expanding in growing markets and corridors e.g. intra-Asia and East-West

Affluent client business
We offer outstanding personalised advice and exceptional experiences for our Private, Priority and Premium Banking clients to help them grow and prosper internationally and at home. Providing access to sustainable investments is a key differentiator, supporting our Stand of Accelerating Zero.

As a leading international wealth manager in Asia across the Affluent continuum, we are:

- Unlocking the value of the Affluent client continuum across Asia, Africa and the Middle East, with suitable client propositions, coverage models and advisory capabilities
- Maximising the reach of our diverse network through international banking, complemented by a strong focus on developing Singapore as key international wealth centres

Mass retail business
We help our clients prosper and deliver everyday banking solutions by integrating our services into their digital lives.

New digital solutions, strategic partnerships and advanced analytics are instrumental to our business, enabling us to significantly increase our reach and relevance to serve clients in a meaningful way, supporting our stand of lifting participation. We are:

- Transforming to a digital first model and building enablers to be the partner of choice to leading global and regional companies
- Enhancing our value proposition and deepening our capabilities across digital sales and marketing as well as data and analytics
- Growing the share of our mass retail client income from new innovative business models

Sustainability
In Sustainability, in line with our stands, we continue to focus on sustainable and transition finance, achieving net zero carbon emissions from both our operations and financing. We provide access to finance, networks and training to young people, and support companies in improving environmental, social and governance standards.

We strive to be a leading private sector catalyser of finance for the UN Sustainable Development Goals (SDGs) where it matters most – in Asia, Africa, and the Middle-East. We are:

- Leveraging climate risk management to support clients in managing climate risk and identifying transition opportunities e.g. mobilise green and transition finance
- Integrating sustainable finance as a core component of our customer value proposition and delivering sustainable finance solutions
- Promoting economic inclusion to tackle inequality in our footprint through Futuremakers by Standard Chartered
- Targeting net zero carbon emissions from our operations by 2025, and from our financing by 2050

People and culture
We are continuing to invest in our people to build future-ready skills, provide them a differentiated experience and strengthen our culture of innovation and inclusion. This includes:

- Embedding our refreshed approach to performance, reward and recognition that puts greater focus on outperformance through collaboration and innovation
- Increasing re-skilling and upskilling opportunities towards future roles that are aligned with the business strategy and individuals' aspirations
- Expanding hybrid working across our footprint, with 78% of colleagues across 43 markets on hybrid-working

New ways of working
We continue to be client-centric, improve our operating rhythm in organisational agility and empower our people to continuously improve the way we work. We are working on identifying ways to track derived value and enhance our speed of decision-making and delivery, as a key source of competitive advantage.

Innovation
We have a three-pronged innovation approach to transform the bank, to achieve our goal of 50 per cent income from new businesses.

- Transform our core via digitization
- Leverage partnerships to drive scale and extend reach
- Build new business models to create value

We have established Ventures as a separate client segment.

Our Stands
The severe impacts of climate change, stark inequality and unfair aspects of globalisation impact everyone on the planet. We are taking a stand, setting long-term ambitions for our role on these issues where they matter most. This works in unison with our strategy, stretching our thinking, our action and our leadership to accelerate our growth.

- We have defined three 'stands' – which is our name for long-term ambitions on societal challenges
- These are not separate from our strategy. They are integral to delivering and accelerating our strategy, because they will stretch our thinking, our action and our leadership
- We will use our unique abilities to connect the capital, people and ideas needed to address the significant socio-economic challenges and opportunities of our time
- Each of these stands will impact how we engage with our clients and define the future of our societies
- We already have significant progress to show in each area. And we will be setting long-term goals as we deliver near term change
- This is not philanthropy: we will drive scalable, sustainable commercial growth and transform our franchise. You will see us increasingly active in these areas

Accelerating Zero

We're helping emerging markets in our footprint reduce carbon emissions as fast as possible, without slowing development, putting the world on a sustainable path to net zero by 2050. We stand for a rapid, just transition to net zero where it matters most. Our plan to achieve net zero targets has three aims: reduce emissions, catalyse finance and partnerships, and accelerate new solutions.

- The world needs to reach net zero by 2050 or face a climate catastrophe with increasing extreme weather events and climate-induced migration
- We have a unique role to play in facilitating a just transition to net zero carbon where it matters most: across Asia, Africa and the Middle East
- We aim to reduce the emissions associated with PLC Group's financing activities to net zero by 2050, with 2030 interim targets in our most carbon-intensive sectors
- We aim to reduce absolute financed thermal coal-mining emissions for PLC Group by 85 per cent by 2030, in addition to a prohibition on financing new or expanding coal-fired power plants, and revenue-based carbon-intensity of 63 per cent for power, 33 per cent respectively for steel and mining (excluding thermal coal mining), 30 per cent for oil and gas
- We aim to catalyse finance and partnerships to scale impact, capital and climate solutions to where they are needed most, including a plan for PLC Group to mobilise USD300 billion in green and transition finance between 2022 and 2030
- We aim to accelerate new solutions to support a just transition in our markets, including a new dedicated Transition Acceleration Team to support clients in high-emitting sectors, and launch sustainable products
- We aim to reach net zero carbon emissions from PLC Group's own operations by 2025

Lifting Participation

PLC Group is determined to improve the lives of 1 billion people and their communities by unleashing the financial potential of women and small businesses in our core markets. We stand for equitable access to financial support for women and small business.

- Inequality, along with gaps in economic inclusion in our key markets, means that many young people, women and small businesses struggle to gain access to the financial system to save for their futures and grow their businesses. We want to democratise wealth management and make it easily accessible to the mass segment at low cost
- Through partnerships and technology, we can expand the reach and scale of financial services – driving accessible banking at scale and connecting clients to opportunities that promote access to finance and economic inclusion. By developing new digital business models, we're able to grow our business while unleashing opportunity for millions more people

Resetting Globalisation

It is PLC Group's goal to support 500,000 companies to improve working and environmental standards and give everyone the chance to participate in the world economy, so growth becomes fairer and more balanced. We stand for a new model of globalisation based on transparency, inclusion and dialogue.

Globalisation has lifted millions out of poverty, but too many people have been left behind, and division and inequality have grown, along with negative impacts on our planet.

We believe in the potential of globalisation to enable economic growth and increase participation in the world economy – but in its current form, it must be reimagined to ensure that it best serves all people, everywhere.

We advocate a new, more inclusive model of globalisation based on transparency and fairness, building trust, and promoting the exchange of views and innovation to solve the world's toughest problems.

As a leading trade bank, we can connect the capital, expertise and ideas needed to drive new standards and create innovative solutions for more equitable and sustainable growth.

Specifically, we aim to:

- Increase transparency across supply chains to enable consumer choice and drive responsible trade
- Bring enhanced levels of security, tracking and confidence to financial activity
- Provide access to the best and most innovative solutions to both private and public sector
- Support several companies to improve working and environmental standards and giving everyone the chance to participate in the world economy, so growth becomes fairer and more balanced
- Make global trade more equitable by improving access to finance for smaller suppliers who often lack adequate financing

Client segment reviews

Corporate, Commercial & Institutional Banking

Profit before taxation

$3,389m	$3,346m
Underlying basis	Statutory basis

Segment overview

Corporate, Commercial & Institutional Banking supports local and large corporations, governments, banks and investors with their transaction banking, financial markets and borrowing needs. We provide solutions to clients in some of the world's fastest-growing economies and most active trade corridors.

Our strong and deep local presence enables us to help co-create bespoke financing solutions and connect our clients multilaterally to investors, suppliers, buyers and sellers, enabling them to move capital, manage risk and invest to create wealth. Our clients represent a large and important part of the economies we serve. Corporate, Commercial and Institutional Banking is at the heart of the Group's shared Purpose to drive commerce and prosperity through our unique diversity.

We are also committed to promote sustainable finance in our markets and channelling capital to where the impact will be greatest. We are delivering on our ambition to support sustainable economic growth, increasing support and funding for financial offerings that have a positive impact on our communities and environment.

Performance highlights

- Underlying operating profit before taxation of $3,389 million up 48 per cent, primarily driven by higher income partly offset by higher expenses
- Underlying operating income of $7,024 million was up 23 per cent primarily due to higher Transaction Banking income (primarily cash) on account of higher interest margins, and stronger Financial Markets performance (largely Macro Trading) on the back of increased market volatility, partly offset by lower lending income due to RWA optimisation initiatives.
- Credit impairment is a net writeback, due to significant releases in Stage 3 and release of covid-19 overlays, partly offset by impairments from sovereign downgrades of some key markets.
- Risk-weighted assets is largely flat against prior year as impact of business growth has been offset by optimisation initiatives and favourable currency movements.

Consumer, Private & Business Banking

Profit before taxation

$933m	$900m
Underlying basis	Statutory basis

Segment overview

Consumer, Private and Business Banking serves individuals and small businesses, with a focus on affluent and emerging affluent in many of the world's fastest-growing cities. We provide digital banking services with a human touch to our clients, with services spanning across deposits, payments, financing products and Wealth Management. We also support our clients with their business banking needs. Private Banking offers a full range of investment, credit and wealth planning products to grow, and protect, the wealth of high net-worth individuals. We also support our small businesses clients with their business banking needs. We are closely integrated with the Group's other client segments; for example, we offer employee banking services to Corporate, Commercial & Institutional Banking clients, and Consumer, Private and Business Banking also provides a source of high-quality liquidity for the Group. Increasing levels of wealth across Asia, Africa and the Middle East support our opportunity to grow the business sustainably. We aim to continuously uplift client experience and improve productivity by driving end-to-end digitalisation and process simplification.

Performance highlights

- Underlying profit before taxation of $933 million up $365m driven by higher income, lower cost and lower credit impairments.
- Underlying operating income of $2,875 million was up 7 per cent, due to strong performance in Retail deposits on the back of improved interest margins, partly offset by lower Wealth Management income.
- Expenses were down 1 per cent year-on-year due to currency movements.
- Credit impairment dropped 89 per cent due to lower charge-offs from unsecured and business banking portfolios, improved delinquency flows and Covid-19 overlay release

Ventures

Profit before taxation

$(277)m Underlying basis

$(278)m Statutory basis

Segment overview

As part of the ongoing execution of its refreshed strategy, the Group has expanded and reorganised its reporting structure with the creation of Ventures, effective on 1 January 2022. Ventures is a consolidation of SC Ventures and its related entities as well as the Group's majority-owned digital bank: Trust in Singapore.

SC Ventures is the platform and catalyst for the Group to promote innovation, invest in disruptive financial technology and explore alternative business models.

Trust Bank was launched in Singapore, in a partnership with Fairprice Group, the nation's leading grocery retailer, in September 2022.

Performance highlights

- Underlying loss before tax of $277 million was up $89 million driven mainly by higher expenses as we continue to invest in new and existing Ventures
- Total assets of $900 million have increased $496 million mainly due to continued investment in new and existing ventures and minority interests.

Regional reviews

Asia

Profit before taxation

$2,033m Underlying basis

$2,024m Statutory basis

Region overview

The Asia region has a long-standing and deep franchise across the markets and some of the world's fastest-growing economies. The region generated 45 per cent of the Group's income benefitting from our extensive network of markets. Of these, Singapore and India contributed the highest income, underpinned by a diversified franchise and deeply rooted presence.

The region is highly interconnected, with China's economy at its core. Our global footprint and strong regional presence, distinctive proposition and continued investment position us strongly to capture opportunities as they arise from the continuing opening up of China's economy.

The region is benefiting from rising trade flows, continued strong investment, and a rising middle class which is driving consumption growth and improving digital connectivity.

Performance highlights

- Underlying operating profit before tax of $2,033 million was up 33 per cent due to higher income and lower credit impairment.
- Underlying operating income of $4,631 million up 8 per cent, due to higher TB and Retail Products income benefiting from interest rate rise, partially offset by lower Wealth Management and Lending income.
- Credit impairment down 154 per cent, due to reduced impairments and release of ECL overlays
- Total assets and liabilities down 7 per cent and 8 per cent respectively since 31 December 2021 largely due to FX depreciation.

Africa & Middle East

Profit before taxation

$828m	$799m
Underlying basis	Statutory basis

Region overview

We have a deep-rooted heritage in Africa & Middle East and are present in 25 markets, of which the UAE, Nigeria, Pakistan, Kenya, and Ghana are the largest by income. We are present in the largest number of sub-Saharan African markets of any international banking group.

A rich history, deep client relationships and a unique footprint in the region, as well as across centres in Asia, Europe and the Americas enable us to seamlessly support our clients. Africa & Middle East is an important element of global trade and investment corridors, including those on China's Belt and Road initiative and we are well placed to facilitate these flows.

Positive macro-trends (oil, commodity and UAE property prices) are driving market opportunities, but challenges and uncertainties exist in the near term. We're confident that the opportunities in the region will support long-term sustainable growth for the Group. We continue to invest selectively and drive efficiencies. We have strengthened our footprint with a branch set-up in Saudi in 2021. Positive macro-tends (oil, commodity and UAE property prices) & market opportunities, but challenges and uncertainties remain. We're confident that the opportunities in the region will support long-term sustainable growth for the Group. We continue to invest selectively and drive efficiencies.

Performance highlights

- Underlying operating profit before tax of $828 million was down 4 per cent driven by higher credit impairments and expenses, partly offset by higher income
- Underlying operating income of $2,582 million was up 6 per cent mainly due to growth in Transaction Banking and Financial Markets income, partly offset by lower Lending income.
- Total assets were 35 per cent lower than 31 December 2021 due to continuing RWA optimization activities and de-risking in markets with elevated macro-economic risk.

Europe & Americas

Profit before taxation

$1,204m	$1,192m
Underlying basis	Statutory basis

Region overview

The Group supports clients in Europe & Americas through hubs in London, Frankfurt and New York as well as a presence in several other markets in Europe and Latin America. Our expertise in Asia, Africa and the Middle East allows us to offer our clients in the region unique network and product capabilities.

The region generates significant income for the Group's Corporate, Commercial & Institutional Banking business. In addition to being a key origination centre for Corporate, Commercial & Institutional Banking, the region offers local, on-the-ground expertise and solutions to help internationally minded clients grow across Europe & Americas. The region is home to the Group's two biggest payment clearing centres and the largest trading floor. More than 80 per cent of the region's income derives from Financial Markets and Transaction Banking products.

Our Private Banking business focuses on serving clients with links to our footprint markets.

Performance highlights

- Underlying operating profit before taxation of $1,204 million improved 68 per cent driven by higher income, partly offset by higher costs and impairments
- Underlying operating income of $2,587 million was up 29 per cent largely due to higher Financial Markets (largely Macro trading) and Transaction Banking (Cash), partly offset by Treasury income due to lower accrual income and structural hedge losses
- Expenses increased 2 per cent due to increased investment spend and higher performance related pay
- Total assets and liabilities grew 13 per cent and 7 percent from 31 December 2021

Financial review

Summary of financial performance

	2022 $million	2021 $million	Change %
Net Interest income	**4,452**	4,056	10
Other income	**5,741**	4,858	18
Underlying operating income	**10,193**	8,914	14
Other underlying expenses	**(6,437)**	(6,104)	(5)
UK bank levy	**(102)**	(100)	(2)
Underlying operating expenses	**(6,539)**	(6,204)	(5)
Underlying operating profit before impairment and taxation	**3,654**	2,710	35
Credit impairment	**22**	28	(21)
Other impairment	**(84)**	9	nm[1]
Profit from associates and joint ventures	**(13)**	1	nm[1]
Underlying profit before taxation	**3,579**	2,748	30
Restructuring	**(115)**	(325)	65
Goodwill and other Impairment	**(10)**	–	nm[1]
Other items	**20**	(42)	nm[1]
Statutory profit before taxation	**3,474**	2,381	46
Taxation	**(1,122)**	(743)	(51)
Profit after tax	**2,352**	1,638	44
Underlying return on tangible equity (%)	**9.1**	6.9	
Common Equity Tier 1 (%)	**12.3**	12.3	

1 Not meaningful

Operating income increased 14 per cent or 16 per cent, normalising for a non-repeat of prior year $163 million IFRS9 interest income catch-up adjustment. Operating income growth was driven by double-digit growth in both net interest income and other income, on the back of higher net interest margins and strong financial markets performance respectively.

Net interest income increased 10 per cent or 14 per cent when adjusted for prior year IFRS9 adjustment. Net interest margin averaged 137 basis points and is 14 basis points higher year-on-year benefiting from rising interest rates.

Other income increased 18 per cent, due to higher Financial Markets (largely Macro trading), partly offset by lower Wealth Management income.

Operating expenses excluding the UK bank levy are up 5 per cent primarily reflecting the impact of a high-inflation environment, including salary increases, additional investment in transformational digital capabilities and post-covid normalisation of cost lines. The cost-to-income ratio (excluding the UK bank levy) decreased 5 percentage points to 63 per cent.

Credit impairment is a net credit of $22 million. This is driven primarily by significant releases and repayments in Stage 3 from a few clients and release of covid-19 overlays, partly offset by sovereign downgrades of some key markets.

Other impairment is a net charge of $84m and primarily relates to software

Charges relating to **restructuring and other items** reduced by $210 million and $62 million respectively, partly offset by a $10 million goodwill write off relating to Bangladesh.

Taxation of $1,122 million for the year represents an effective tax rate of 32 per cent and is higher than FY2022's effective tax rate of 31 per cent.

Underlying **Return on tangible equity** increased by 226 basis points to 9.1 per cent driven by higher profits and lower tangible equity.

Statutory financial performance summary

	2022 $million	2021 $million	Change %
Net Interest income	4,451	4,052	10
Other income	5,783	4,808	20
Statutory operating income	10,234	8,860	16
Statutory operating expenses	(6,662)	(6,480)	(3)
Statutory operating profit before impairment and taxation	3,572	2,380	50
Credit impairment	22	30	nm[1]
Goodwill and other impairment	(107)	(30)	(257)
(Loss)/profit from associates and joint ventures	(13)	1	nm[1]
Statutory profit before taxation	3,474	2,381	46
Taxation	(1,122)	(743)	(51)
Profit after tax	2,352	1,638	44
Statutory return on tangible equity (%)	8.8	5.5	

1 Not meaningful

Underlying profit/(loss) before tax by client segment and geographic region

	2022 $million	2021 (Restated)[1] $million	Change %
Corporate, Commercial & Institutional Banking[1]	3,389	2,289	48
Consumer, Private & Business Banking[1]	933	568	64
Ventures[2]	(277)	(188)	(47)
Central & other items (segment)	(466)	79	nm[3]
Underlying profit before taxation	3,579	2,748	30
Asia	2,033	1,527	33
Africa & Middle East	828	858	(3)
Europe & Americas	1,204	715	68
Central & other items (region)	(486)	(352)	(38)
Underlying profit before taxation	3,579	2,748	30

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment from 1 January 2022. Prior period has been restated

2 Ventures is comprised of Trust Bank Singapore & SC Ventures

3 Not meaningful

Net Interest Margin

	2022 $million	2021 (restated)[5] $million	Change[1] $million
Adjusted net interest income[2]	**4,695**	4,074	15
Average interest-earning assets	**343,947**	330,185	4
Average interest-bearing liabilities	**316,964**	298,221	6
Gross yield (%)[3]	**2.84**	1.87	97
Rate paid (%)[3]	**1.60**	0.71	89
Net interest margin (%) [3,4]	**1.37**	1.23	14

1 Variance is better/(worse) other than assets and liabilities which is increase/(decrease)
2 Adjusted net interest income is statutory net interest income less funding costs for the trading book and financial guarantee fees on interest earning assets
3 Change in the basis points (bps) difference between two periods rather than the percentage change
4 Adjusted net interest income divided by average interest-earning assets, annualised
5 Prior year adjusted net interest income has been restated for to reflect impact of funding costs for the trading book and financial guarantee fees on interest earning assets

Adjusted net interest income was up 15 per cent driven by higher net interest margin which increased 14 basis point year-on-year, and 16bps year-on-year when prior year benefit of $163 million from IFRS9 income adjustments is excluded, reflecting the impact of higher interest rates.

Average interest-earning assets increased 4 per cent driven by higher trade and treasury assets, partially offset by lower lending assets on the back of optimisation initiatives. Gross yields increased 97 basis points compared to the average in 2021 predominantly reflecting the impact of increase of key interest rates.

Average interest-bearing liabilities increased 7 per cent driven by growth in financial markets assets and retail term deposits. The rate paid on liabilities increased by 97 basis points year-on-year reflecting impact of interest rate hikes in key markets.

Credit quality

Asset quality remains strong, with an improvement in a number of underlying credit metrics. However, the Group continues to remain alert to an unpredictable and challenging external environment including commodity price volatility and the impact of the Russia-Ukraine war. This war in part contributed to both commodity price volatility and the accelerated trajectory of inflation and interest rate rises across our footprint, which in turn have supported both an increased risk of global recession and the appreciation of the US dollar versus the majority of developed and emerging market currencies. These factors have led to increased sovereign credit stress in a handful of our markets

Credit impairment was a net release of $22 million, reflecting the impact of significant releases and repayments in stage 3 from few clients and full release of COVID-19 overlay, partly offset by sovereign downgrades of Sri Lanka, Ghana and Pakistan.

Balance Sheet

	2022 $million	2021 $million	Change[1] %
Gross loans and advances to customers[2]	**162,158**	149,672	8
Of which stage 1	**148,213**	129,990	14
Of which stage 2	**7,743**	12,741	(39)
Of which stage 3	**6,202**	6,941	(11)
Expected credit loss provisions	**(4,032)**	(4,873)	(17)
Of which stage 1	**(268)**	(266)	1
Of which stage 2	**(187)**	(381)	(51)
Of which stage 3	**(3,577)**	(4,226)	(15)
Net loans and advances to customers	**158,126**	144,799	9
Of which stage 1	**147,945**	129,724	14
Of which stage 2	**7,556**	12,360	(39)
Of which stage 3	**2,625**	2,715	(3)
Cover ratio of stage 3 before/after collateral (%)[3]	**58/74**	61/78	(3)/(4)
Credit grade 12 accounts ($million)	**1,282**	1,639	(22)
Early alerts ($million)	**3,143**	4,285	(27)
Investment grade corporate exposures (%)[3]	**79**	71	8

1 Variance is increase/(decrease) comparing current reporting period to prior reporting period
2 Includes reverse repurchase agreements and other similar secured lending held at amortised cost of $15,586 million at 31 December 2022 (2021: $3,764 million)
3 Change is the percentage points difference between the two points rather than the percentage change

Restructuring and other items

The Group's statutory performance is adjusted for profits or losses of a capital nature, amounts consequent to investment transactions driven by strategic intent, other infrequent and/or exceptional transactions that are significant or material in the context of the Group's normal business earnings for the period and items which management and stakeholders would ordinarily identify separately when assessing underlying performance period-by period.

Restructuring charges of $115 million for 2022 reflect the impact of actions to transform the organisation to improve productivity, primarily redundancy related charges.

Goodwill impairment of $10 million relates to Bangladesh primarily due to lower economic growth forecasts and higher discount rates.

Other items include a $20 million fair value gain relating to the sale of a property in Thailand.

The Group has announced that it is exploring the exit of seven markets in the AME region and will focus solely on the CCIB segment in two more. It is expected that the results from the markets and businesses being exited will be reported in restructuring from 1 January 2023.

Restructuring, goodwill impairment and other items

	2022 $million			2021 $million		
	Restructuring	**Goodwill and other Impairment**	**Other items**	Restructuring	Goodwill and other Impairment	Other items
Operating income	**21**	**–**	**20**	(74)	–	20
Operating expenses	**(123)**	**–**	**–**	(214)	–	(62)
Credit impairment	**–**	**–**	**–**	2	–	–
Other impairment	**(13)**	**(10)**	**–**	(39)	–	–
(Loss)/profit before taxation	**(115)**	**(10)**	**20**	(325)	–	(42)

Balance sheet and liquidity

	2022 $million	2021 $million
Assets		
Loans and advances to banks	**27,383**	29,999
Loans and advances to customers	**158,126**	144,799
Other assets	**365,225**	369,993
Total assets	**550,734**	544,791
Liabilities		
Deposits by banks	**24,150**	25,205
Customer accounts	**243,075**	242,331
Other liabilities	**249,366**	241,818
Total liabilities	**516,591**	509,354
Equity	**34,143**	35,437
Total equity and liabilities	**550,734**	544,791
Advances-to-deposits ratio (%)[1]	**50%**	52%

SC Bank is not regulated for Liquidity Coverage Ratio (LCR), however, the bank and material subsidiaries in the consolidation have standalone LCR ratios above 100 per cent.

1 In calculating the advances-to-deposits ratio, the Group now excludes $20,798 million held with central banks (2021: $15,168 million) that have been confirmed as repayable at the point of stress

The Group's balance sheet is strong, highly liquid and diversified.

Loans and advances to customers increased 9 per cent since December 2021 to $158 billion driven mainly by growth in Financial Markets, partly offset by reduction from risk-weighted asset optimisation actions undertaken by CCIB.

Customer accounts of $243 billion increased slightly by 0.3 per cent since December 2021 driven largely by an increase in retail term deposits, partly offset by lower cash management volumes

Other assets decreased 1 percent since December 2021, driven by reduction in reverse repurchase agreement designated at fair value through profit or loss partly offset by an increase in derivative balances.

Other liabilities were 3 percent higher since December 2021, reflecting an increase in derivative balances

The advances-to-deposits ratio decreased to 50 per cent from 52 per cent at 31 December 2021 reflecting a reduction in loans and advances to customers excluding reverse repurchase agreement as a result of risk-weighted asset optimisation actions.

Capital base and ratios

	2022 $million	2021 $million
CET1 capital	**21,746**	23,884
Additional Tier 1 capital (AT1)	**5,403**	5,872
Tier 1 capital	**27,149**	29,756
Tier 2 capital	**12,439**	12,075
Total capital	**39,588**	41,831
CET1 capital ratio (%)	**12.3%**	12.3%
Total capital ratio (%)	**22.4%**	21.6%
Leverage ratio (%)	**4.8%**	4.5%

Standard Chartered Bank is authorised by the PRA and regulated by the Financial Conduct Authority and the PRA as Standard Chartered Bank (Solo Consolidated).

Standard Chartered Bank continues to operate through its branches and a number of subsidiaries, all of which remain well capitalised in line with their applicable Court-approved Risk Appetites which takes into account local regulations, Pillar 1 and 2 requirements and regulatory and management buffers as applicable.

The Group's CET1 capital ratio remained strong at 12.3 per cent at FY2022 with leverage at 4.8 per cent. The Group maintains high levels of loss absorbing capacity. Compared to 31 December 2021, the Group's CET1 capital ratio remained largely flat. RWAs decreased by $17.6 billion to $176.4 billion. CET1 capital decreased by $2.1 billion as profits of $2.4 billion were more than offset by distributions of $0.9 billion, a foreign currency translation impact of $1.2 billion, movement in other comprehensive income of $1.0 billion, removal of software benefit $0.7 billion and an increase in regulatory deductions and other movements of $0.7 billion. On 9 July 2021, the PRA published a policy statement on implementing Basel standards which confirmed that qualifying software assets would need to be deducted from CET1 capital from January 2022 with impact of 32 bps to CET1 ratio. From 1 January 2022 RWA increases due to post model adjustments following new PRA rules on IRB models and the introduction of standardised rules for counterparty credit risk on derivatives and other instruments.

Underlying versus statutory results reconciliations

Reconciliations between underlying and statutory results are set out in the tables below:

Operating income by client segment

	2022				
	Corporate, Commercial & Institutional Banking $million	Consumer, Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Underlying operating income	7,024	2,875	3	291	10,193
Restructuring	19	–	–	2	21
Other items	–	–	–	20	20
Statutory operating income	7,043	2,875	3	313	10,234

	2021 (Restated)[1]				
	Corporate, Commercial & Institutional Banking $million	Consumer, Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Underlying operating income	5,703	2,680	(21)	552	8,914
Restructuring	(33)	–	–	(41)	(74)
Other items	–	–	20	20	20
Statutory operating income	5,670	2,680	(1)	511	8,860

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment from 1 January 2022. Prior period has been restated

Operating income by region

	2022				
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Central & other items $million	Total $million
Underlying operating income	4,631	2,582	2,587	393	10,193
Restructuring	21	2	(1)	(1)	21
Other items	–	–	–	20	20
Statutory operating income	4,652	2,584	2,586	412	10,234

	2021				
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Central & other items $million	Total $million
Underlying operating income	4,274	2,435	2,006	199	8,914
Restructuring	(11)	3	(31)	(35)	(74)
Other items	–	–	–	20	20
Statutory operating income	4,263	2,438	1,975	184	8,860

Profit before taxation (PBT)

	2022						
	Underlying $million	Regulatory Fine $million	Restructuring $million	Net gain on businesses disposed/held for sale $million	Gains arising on repurchase of senior and subordinated liabilities $million	Goodwill and impairment $million	Statutory $million
Operating income	10,193	–	21	20	–	–	10,234
Operating expenses	(6,539)	–	(123)	–	–	–	(6,662)
Operating profit/(loss) before impairment losses and taxation	3,654	–	(102)	20	–	–	3,572
Credit impairment	22	–	–	–	–	–	22
Other impairment charge	(84)	–	(13)	–	–	(10)	(107)
Loss from associates and joint ventures	(13)	–	–	–	–	–	(13)
Profit/(loss) before taxation	3,579	–	(115)	20	–	(10)	3,474

	2021						
	Underlying $million	Regulatory Fine $million	Restructuring $million	Net gain on businesses disposed/held for sale $million	Losses arising on repurchase of senior and subordinated liabilities $million	Goodwill and other Impairment $million	Statutory $million
Operating income	8,914	–	(74)	20	–	–	8,860
Operating expenses	(6,204)	(62)	(214)	–	–	–	(6,480)
Operating profit/(loss) before impairment losses and taxation	2,710	(62)	(288)	20	–	–	2,380
Credit impairment	28	–	2	–	–	–	30
Other impairment release/(charge)	9	–	(39)	–	–	–	(30)
Profit from associates and joint ventures	1	–	–	–	–	–	1
Profit/(loss) before taxation	2,748	(62)	(325)	20	–	–	2,381

Profit before taxation (PBT) by client segment

	2022				
	Corporate, Commercial & Institutional Banking $million	Consumer, Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Operating income	7,024	2,875	3	291	10,193
External	6,428	2,321	3	1,441	10,193
Inter-segment	596	554	–	(1,150)	–
Operating expenses	(3,813)	(1,917)	(242)	(567)	(6,539)
Operating profit/(loss) before impairment losses and taxation	3,211	958	(239)	(276)	3,654
Credit impairment	186	(19)	(2)	(143)	22
Other impairment charge	(8)	(6)	(20)	(50)	(84)
Loss/(profit) from associates and joint ventures	–	–	(16)	3	(13)
Underlying profit/(loss) before taxation	3,389	933	(277)	(466)	3,579
Restructuring	(43)	(33)	(1)	(38)	(115)
Goodwill impairment and other items	–	–	–	10	10
Statutory profit/(loss) before taxation	3,346	900	(278)	(494)	3,474

	2021 (Restated)[1]				
	Corporate, Commercial & Institutional Banking $million	Consumer, Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Operating income	5,703	2,680	(21)	552	8,914
External	5,560	2,323	(21)	1,052	8,914
Inter-segment	143	357	–	(500)	–
Operating expenses	(3,591)	(1,943)	(167)	(503)	(6,204)
Operating profit before impairment losses and taxation	2,112	737	(188)	49	2,710
Credit impairment	216	(169)	–	(19)	28
Other impairment (charge)/release	(39)	–	–	48	9
Profit from associates and joint ventures	–	–	–	1	1
Underlying profit/(loss) before taxation	2,289	568	(188)	79	2,748
Restructuring	(108)	(47)	–	(170)	(325)
Goodwill impairment and other items	–	–	20	(62)	(42)
Statutory profit/(loss) before taxation	2,181	521	(168)	(153)	2,381

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment from 1 January 2022. Prior period has been restated

Profit before taxation (PBT) by region

	2022				
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Central & other items $million	Total $million
Operating income	4,631	2,582	2,587	393	10,193
Operating expenses	(2,655)	(1,638)	(1,473)	(773)	(6,539)
Operating profit/(loss) before impairment losses and taxation	1,976	944	1,114	(380)	3,654
Credit impairment	61	(118)	87	(8)	22
Other impairment (charge)/release	(4)	2	3	(85)	(84)
Loss from associates and joint ventures	–	–	–	(13)	(13)
Underlying profit/(loss) before taxation	2,033	828	1,204	(486)	3,579
Restructuring	(9)	(29)	(12)	(65)	(115)
Goodwill impairment and other items	–	–	–	10	10
Statutory profit/(loss) before taxation	2,024	799	1,192	(541)	3,474

	2021				
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Central & other items $million	Total $million
Operating income	4,274	2,435	2,006	199	8,914
Operating expenses	(2,635)	(1,610)	(1,444)	(515)	(6,204)
Operating profit/(loss) before impairment losses and taxation	1,639	825	562	(316)	2,710
Credit impairment	(112)	34	120	(14)	28
Other impairment (charge)/release	–	(1)	33	(23)	9
Profit from associates and joint ventures	–	–	–	1	1
Underlying profit/(loss) before taxation	1,527	858	715	(352)	2,748
Restructuring	(84)	(26)	(89)	(126)	(325)
Goodwill impairment and other items	–	–	–	(42)	(42)
Statutory profit/(loss) before taxation	1,443	832	626	(520)	2,381

Return on tangible equity (RoTE)

	2022 $million	2021 $million
Average parent company Shareholders' Equity	**28,858**	29,204
Less Preference share premium	**(1,500)**	(1,500)
Less Average intangible assets	**(3,847)**	(3,618)
Average Ordinary Shareholders' Tangible Equity	**23,511**	24,086
Profit for the year attributable to equity holders	**2,352**	1,638
Non-controlling interests	**18**	(29)
Dividend payable on preference shares and AT1 classified as equity	**(311)**	(292)
Profit for the year attributable to ordinary shareholders	**2,059**	1,317
Items normalised:		
Regulatory Fine	**–**	62
Restructuring	**115**	325
Goodwill Impairment	**10**	–
Net gains on sale of Businesses	**(20)**	(20)
Tax on normalised items	**(16)**	(27)
Underlying profit for the year attributable to ordinary shareholders	**2,148**	1,657
Underlying Return on Tangible Equity	**9.1%**	6.9%
Statutory Return on Tangible Equity	**8.8%**	5.5%

Return on tangible equity (RoTE) continued

	2022 %	2021 %
Underlying RoTE	**9.1**	6.9
Regulatory Fine	**–**	(0.3)
Restructuring		
Of which: Income	**0.1**	(0.3)
Of which: Expenses	**(0.5)**	(0.9)
Of which: Credit impairment	**–**	0.0
Of which: Other impairment	**(0.1)**	(0.1)
Net gains on disposal of available for sale instruments	**0.1**	0.1
Goodwill impairment	**(0.0)**	–
Unrealised gain/loss on FVOCI	**–**	–
Tax on normalised items	**0.1**	0.1
Statutory RoTE	**8.8**	5.5

Net charge-off ratio

	2022			2021		
	Credit impairment (charge)/ release for the year/period $million	Net average exposure $million	Net Charge-off Ratio %	Credit impairment (charge)/ release for the year/period $million	Net average exposure $million	Net Charge-off Ratio %
Stage 1	**68**	**162,956**	**0.04**	18	157,023	0.01
Stage 2	**(7)**	**9,235**	**(0.08)**	73	12,631	0.57
Stage 3	**57**	**2,440**	**2.34**	(61)	3,232	(1.89)
Total exposure	**118**	**174,631**	**0.07**	30	172,886	0.02

Alternative performance measures

An alternative performance measure is a financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined or specified in the applicable financial reporting framework. The following are key alternative performance measures used by the Group to assess financial performance and financial position.

Measure	Definition
Constant currency basis	A performance measure on a constant currency basis (ccy) is presented such that comparative periods are adjusted for the current year's functional currency rate. The following balances are presented on a constant currency basis when described as such: • Operating income • Operating expenses • Profit before tax • RWAs or Risk-weighted assets
Underlying/ Normalised	A performance measure is described as underlying/normalised if the statutory result has been adjusted for restructuring and other items representing profits or losses of a capital nature; amounts consequent to investment transactions driven by strategic intent, excluding amounts consequent to Ventures transactions, as these are considered part of the Group's ordinary course of business; and other infrequent and/or exceptional transactions that are significant or material in the context of the Group's normal business earnings for the period, and items which management and investors would ordinarily identify separately when assessing performance period-by-period. A reconciliation between underlying/normalised and statutory performance is contained in Note 2 to the financial statements. The following balances and measures are presented on an underlying basis when described as such: • Operating income • Operating expense • Profit before tax • Earnings per share (basic and diluted) • Cost-to-income ratio • Jaws • RoTE or Return on tangible equity
Advances-to-deposits/customer advances-to-deposits (ADR) ratio	The ratio of total loans and advances to customers relative to total customer accounts, excluding approved balances held with central banks, confirmed as repayable at the point of stress. A low advances-to-deposits ratio demonstrates that customer accounts exceed customer loans resulting from emphasis placed on generating a high level of stable funding from customers.
Cost-to-income ratio	The proportion of total operating expenses to total operating income.
Cover ratio	The ratio of impairment provisions for each stage to the gross loan exposure for each stage.
Cover ratio after collateral/cover ratio including collateral	The ratio of impairment provisions for Stage 3 loans and realisable value of collateral held against these non-performing loan exposures to the gross loan exposure of Stage 3 loans.
Gross yield	Statutory interest income divided by average interest earning assets.
Jaws	The difference between the rates of change in revenue and operating expenses. Positive jaws occurs when the percentage change in revenue is higher than, or less negative than, the corresponding rate for operating expenses.
Loan loss rate	Total credit impairment for loans and advances to customers over average loans and advances to customers.
Net charge-off ratio	Net credit impairment charge or release to average outstanding net exposures
Net tangible asset value per share	Ratio of net tangible assets (total tangible assets less total liabilities) to the number of ordinary shares outstanding at the end of a reporting period.
Net yield	Gross yield less rate paid.
NIM or Net interest margin	Net interest income adjusted for interest expense incurred on amortised cost liabilities used to fund the Financial Markets business, divided by average interest-earning assets excluding financial assets measured at fair value through profit or loss.
RAR per FTE or Risk adjusted revenue per full-time equivalent	Risk adjusted revenue (RAR) is defined as underlying operating income less underlying impairment over the past 12 months. RAR is then divided by the 12 month rolling average full-time equivalent (FTE) to determine RAR per FTE.
Rate paid	Statutory interest expense adjusted for interest expense incurred on amortised cost liabilities used to fund financial instruments held at fair value through profit or loss, divided by average interest bearing liabilities.
RoE or Return on equity	The ratio of the current year's profit available for distribution to ordinary shareholders to the weighted average ordinary shareholders' equity for the reporting period.
RoTE or Return on ordinary shareholders' tangible equity	The ratio of the current year's profit available for distribution to ordinary shareholders, to the weighted average tangible equity, being ordinary shareholders' equity less the average goodwill and intangible assets for the reporting period. Where a target RoTE is stated, this is based on profit and equity expectations for future periods.
Underlying ROTE	The ratio of the current year's profit for distribution to ordinary shareholders plus fair value on OCI equity movement relating to Ventures segment to the weighted average ordinary shareholders' equity for the reporting period.
TSR or Total shareholder return	The total return of the Group's equity (share price growth and dividends) to investors.

Risk Review

Resilience despite adverse macroeconomic environment and volatile global markets

The macroeconomic environment was challenging throughout the year for a number of markets in which the PLC Group operates. February 2022 saw Russia's invasion of Ukraine, impacting financial markets, commodity prices and supply chains. The PLC Group had very limited direct exposure to either country and we proactively managed risks that we faced through indirect exposure and second order impacts, such as increased energy and food prices or disrupted gas supplies for our clients and customers, the impact from sanctions on asset values and investments some of our clients have in Russia. The PLC Group also managed the increase in traded risks following increased volatility in other markets especially credit and commodities. Regular stress tests were performed during 2022 to assess the impact of the war across the PLC Group's portfolio.

In China, growth forecasts were revised downwards as it followed its 'zero-COVID' stance, exacerbating global supply chains bottlenecks. Pressures in China's commercial real estate industry remain with the timing of recovery still uncertain amidst recent government measures to support the sector. In the US, the Federal Reserve announced consecutive interest rate hikes to counter inflationary pressures and hinted at more tapered rate rises in 2023. This poses challenges to some emerging markets, as their currencies weaken relative to the strength of the US dollar, by rising commodity prices, stagflation and tighter liquidity.

The impact from the war, tightening of global financing conditions and idiosyncratic domestic political and policy issues, have placed pressure on sovereign credit ratings during 2022. Within the PLC Group's footprint, Sri Lanka and Ghana have embarked on sovereign debt restructuring operations, while Pakistan has been adversely impacted by flooding and continues to face external financing risks in light of large external payments coming due, while foreign exchange reserves have declined. The Country Risk Early Warning System (CREWS) is the principal process for tracking a deterioration in risk indicators and has worked effectively during the year. CREWS is a triage system which categorises countries based on a combined assessment of the likelihood of a downgrade and the financial impact of a potential downgrade. Markets in the highest risk category are subject to enhanced monitoring of qualitative and quantitative risk triggers and The PLC Group has exposure management strategies in place for the highest risk markets.

The PLC Group continues to scan the horizon for topical and emerging risks and collaborate with internal and external partners to mitigate risks as they are identified. Further details on how topical and emerging risks are managed can be found on pages 35 to 39.

Asset quality has been maintained though we remain vigilant in the face of volatile global markets. The PLC Group continues to demonstrate resilience as evidenced by strong capital and liquidity metrics. Non-financial risks areas such as Fraud, Data Management, Information and Cyber Security, Third Party, Technology, People and Change Management remain heightened. The PLC Group continues to enhance the operational resilience and defences against these risks through vigorous enhancement programmes. The Group remains vigilant of sovereign risks and acute challenges in the property sector in China and we continue to closely monitor and manage these across the PLC Group.

For PLC Group's Corporate, Commercial and Institutional Banking (CCIB) business, the PLC Group has identified vulnerable sovereigns with triggers and action plan for exposure management based on such triggers. We have closely monitored our clients which may face difficulties on account of increasing interest rate, foreign exchange movements, commodity volatility or increase in price of essential goods. Stress tests and portfolio reviews are also done to identify vulnerable exposures. These exposures are then tracked through our well-established Early Alert monitoring process. Actions which may be required if geo-political risks occur are also tracked so that the Bank could act quickly if these events do occur.

For the PLC Group's Consumer, Private and Business Banking (CPBB) business, the key focus in 2022 was on the potential wider effects of the deteriorating economic conditions across our markets. While CPBB conducts its business mainly in local currency, the continued strength of the US dollar has an impact in our markets across Asia, Africa and the Middle East and the PLC Group is monitoring the potential secondary impacts of a decline in sovereign credit quality in some of our markets. For the PLC Group's consumer credit portfolios, we are analysing and monitoring the impact on customer affordability through interest rate sensitivity analysis and tracking Consumer Price indices across our key markets. In the PLC Group's Business Banking portfolios, we have been focused on the risks to our clients associated with vulnerability to commodity supply chain issues, spikes in input costs and the effect of an overall decline in global demand. For Wealth Lending, which is secured by a largely liquid collateral pool, we have been proactively managing the portfolio through the continued market volatility monitoring for horizon risks to the collateral, such as reduced corporate earnings in the event of recession. Where appropriate, the PLC Group has tightened underwriting policies and collateral acceptance criteria.

An update on our key risk priorities

2022 continued to present a challenging risk landscape, however we faced this from an intrinsically strong position. Our risk management approach is at the heart of our business and is core to us achieving sustainable growth and performance. We have made progress on our key priorities, these being:

Strengthening the PLC Group's risk culture and conduct: We remain committed to promoting a healthy risk culture and driving the highest standards of conduct. Both risk culture and conduct are integral components of our Risk Management Framework (RMF). Our RMF sets out the guiding principles for our colleagues, enabling us to have integrated and holistic risk conversations across the PLC Group and the three lines of defence. It underpins an enterprise level ability to identify and assess, openly discuss, and take prompt action to address existing and emerging risks. Senior management across the PLC Group promote a healthy risk culture by rewarding risk-based thinking (including in remuneration decisions), challenging the status quo, and creating a transparent and safe environment for employees to communicate risk concerns. We strive to uphold the highest standards of conduct through delivery of conduct outcomes, acknowledging that while incidents cannot be entirely avoided, the PLC Group has no appetite for wilful or negligent misconduct. More broadly, we are continuing to focus on strengthening first-line Conduct Risk ownership, drawing enhanced Conduct Risk insights through the development of conduct analytics as part of the new Conduct Risk management standard. Furthermore, we have uplifted the PLC Group's Conduct Risk Management approach which has been achieved through a combination of providing better tools to enable consistent Conduct Risk oversight, increased engagement with the first and second line and targeted campaigns to improve Conduct Risk awareness across the PLC Group. As Conduct Risk may arise from anywhere in the PLC Group at any time, conduct outcomes should always be considered when material strategic decisions are made that may impact clients, investors, shareholders, counterparties, employees, markets, competition and the environment. The PLC Group is also working towards complying with the UK Consumer Duty requirements for in-scope clients; these requirements set higher and clearer standards of consumer protection.

Continuous enhancement of our information and cyber security (ICS) capabilities and governance: We have refreshed the PLC Group's ICS Risk Strategy by updating our ICS Target Operating Model to increase focus on accountability, risk ownership, change management and executive empowerment. Senior management is regularly engaged on our approach to managing ICS Risks and we have appointed an ICS Risk Special Advisor. We also perform table-top cyber crisis testing exercises to ensure a consistent view on how to respond to cyber incidents.

To assess the security of our ICS systems and processes, our ICS capabilities include a formal process for internal controls testing, vulnerability assessments and penetration testing (an authorised simulated attack on a computer system, performed to evaluate the security of the system). The PLC Group continues to deploy the Threat Scenario-led Risk Assessment which enables a more dynamic threat-led identification and management of ICS Risk by our businesses. Our ICS policies and standards are also aligned to a number of best practice global guidance, and we remain watchful on proposed new guidance.

Our ICS training programme includes annual mandatory learning and phishing readiness exercises, along with ongoing thematic campaigns which highlight the most prevalent threats and risks that colleagues face. We also deliver regular training on ICS risks. In addition to general ICS awareness, colleagues in roles identified as critical have additional training linked to their responsibilities.

Managing Climate Risk: Managing the risks from climate change is a core element of our strategy and stands. The PLC Group has made good progress this year in embedding Climate Risk considerations across the impacted Principal Risk Types, and by using the results from our scenario analysis, we are building a good understanding of the markets and industries where the effects of climate change will have the greatest impact. Climate Risk assessments are now considered as part of Reputational and Sustainability transaction reviews for impacted clients in high-carbon sectors, and integrated into the credit application process for approximately 70 per cent of our corporate client exposure and the physical risk identification of our CPBB mortgage portfolios in our largest markets. As part of our ongoing academic partnership with Imperial College London, we supported new climate research on the range of opportunities that exist for private investors in nature related investments and cross-sectoral implications of electrification of transport in India. Key focus areas for 2023 include establishing and clarifying the linkages between Net Zero portfolio management across high transition risk sectors and the impact thereof on Credit risk parameters, building and embedding our in-house Climate risk models, training and education, and working with our data providers and clients. All of these support the PLC Group's commitments made as part of Accelerating Zero.

> More details can be found at sc.com/sustainability and **sc.com/tcfd**

> Further details on our overall approach to net zero can be found at **sc.com/netzero**

Managing our environmental, social and governance (ESG) risk: The PLC Group continues to advance risk management across the organisation in both our CCIB and CPBB client segments with end-to-end reviews of inherent risks and controls in line with our internal Environmental and Social Risk Catalogue. In keeping with our sustainable and transition finance goals our risk management approach seeks to ensure that our Green, Sustainable and Transition Finance labels reflect the standards set out in our Green and Sustainable Product Framework, Transition Finance Framework and Task Force on Climate-related Financial Disclosures (TCFD).

Managing Financial Crime Risk: The PLC Group is managing its financial crime risk within acceptable levels as assessed under the PLC Group's risk assessment measures, including the Financial Crime Risk Type Framework, Risk and Control Self-Assessments and assurance reviews. However, some issues in 2022 have required remedial actions in order to avoid an unacceptable increase in Financial Crime Risk in certain areas. Russia-related sanctions have continued to escalate and are increasingly complex in nature to operationalise. Whilst the PLC Group has limited direct exposure to Russia-related sanctions, we continue to monitor and respond to changing sanctions requirements. The PLC Group continues to build and maintain partnerships with industry, government and the third sector to build consensus on effective efforts to combat financial crime and the damages it causes.

> More information about the PLC Group's commitment to fighting financial crime can be found at **sc.com/fightingfinancialcrime**

Technology and Innovation: The PLC Group's technology capabilities are delivering our strategy of being a digital driven second-line of defence function, supporting first-line driven risk management processes. We have expanded our Climate Risk reporting capabilities and integrated ESG factors to help streamline risk assessment across the client lifecycle. We have automated the model development lifecycle with a digitised model inventory and approval workflow and have deployed a single platform to support standardised model creation, review and validation. We have continued to expand our Enterprise Governance, Risk and Compliance with automated workflows in Operational Risk, Business Continuity, Assurance, and BCBS 239 assessments and peer reviews. Policy documentation management has been transitioned to a new platform and a significantly improved user experience. The PLC Group Risk assessment process has been transitioned to a Big Data technology stack that utilises data more effectively and improves turnaround time. We continue to build more intelligence into our self-service and case management tooling. The ASK Compliance platform serves as a single portal, where the first line of defence and our employees get answers to simple compliance queries using self-service tools, with an enhanced user experience launched in 2022. We will prioritise integrating relevant risk use cases into the existing self-service tools in 2023. Advisor Connect which is a configurable case management framework launched in Q3 2022 provides an auditable, consolidated view of cases and serves as a knowledge repository for the advisory teams. Advisor Connect is planned to be rolled out to prioritised group and country CFCC teams in 2023.

We continuously enhanced the country regulatory obligation management to improve the user experience and utilised the platform capabilities to deliver the Rules interpretation management system. We continue to explore the application of emerging technologies such as Artificial Intelligence, Machine Learning and Application build through configuration and remain focused on streamlining the identification of new regulations through horizon scanning, tracking amendments to existing regulations, and automating the mapping and impact analysis to policies and processes. Surveillance platforms are continuously enhanced with supervised model-based monitoring and voice and multilingual monitoring capabilities.

Digitalisation and technological development remain key items on the PLC Group's agenda as we pursue the execution of the PLC Group's strategy. We continue to ensure that our control frameworks and risk appetite evolve accordingly to keep pace with new business developments and asset classes.

Embedding and strengthening Digital Asset risk management capabilities: The PLC Group recognises the increasing prevalence of digital asset activity and associated risks. At present, the PLC Group has very limited, and immaterial, direct exposure to digital asset related activity. Any potential increase in activity or exposures will be subject to detailed review and enhanced due diligence in accordance with the PLC Group's Digital Asset Risk Management Approach. Notwithstanding the limited exposure, as a regulated global Bank with digital asset capabilities, we continue to strengthen our Digital Asset Risk management capabilities under the PLC Group's ERMF with consideration given to learnings from existing initiatives as well as external market developments.

An update on our risk management approach

Our Risk Management Framework (RMF) outlines how we manage risk across the Group, consistent with the PLC Group's risk management and governance approach. It gives us the structure to manage existing risks effectively in line with our Risk Appetite, as well as allowing for holistic risk identification. The RMF also sets out the roles and responsibilities and minimum governance requirements for the management of Principal and Integrated Risks.

Principal and Integrated Risk Types

Principal risks are risks inherent in our strategy and business model. These are formally defined in our RMF, which provides a structure for monitoring and controlling these risks through the Court-approved Risk Appetite. We will not compromise adherence to our Risk Appetite in order to pursue revenue growth or higher returns. The table below provides an overview of the Group's principal and integrated risks and risk appetite statement. In addition to principal risks, the Group has defined a Risk Appetite Statement for Climate Risk.

Further details can be found on pages 134 to 151 of our 2022 Annual Report.

Principal Risk Types	Risk Appetite Statement
Credit Risk	The Group manages its credit exposures following the principle of diversification across products, geographies, client segments and industry sectors.
Traded Risk	The Group should control its financial markets activities to ensure that Traded Risk losses do not cause material damage to the Group's or the PLC Group's franchise.
Treasury Risk	The Group should maintain sufficient capital, liquidity and funding to support its operations, and an interest rate profile ensuring that the reductions in earnings or value from movements in interest rates impacting banking book items does not cause material damage to the Group's franchise. In addition, the Group should ensure its pension plans are adequately funded.
Operational and Technology Risk	The Group aims to control Operational and Technology Risks to ensure that operational losses (financial or reputational), including any related to conduct of business matters, do not cause material damage to the Group's or the PLC Group's franchise.
Information and Cyber Security Risk	The Group has zero appetite for very High ICS residual risks and low appetite for High ICS residual risks which result in loss of services, data or funds. The Group will implement an effective ICS control environment and proactively identify and respond to emerging ICS threats in order to limit ICS incidents impacting the Group's or the PLC Group's franchise.
Compliance Risk	The Group has no appetite for breaches in laws and regulations related to regulatory non-compliance, recognising that whilst incidents are unwanted, they cannot be entirely avoided.
Financial Crime Risk	The Group has no appetite for breaches in laws and regulations related to financial crime, recognising that whilst incidents are unwanted, they cannot be entirely avoided.
Model Risk	The Group has no appetite for material adverse implications arising from misuse of models or errors in the development or implementation of models, whilst accepting model uncertainty.
Reputational and Sustainability Risk	The Group aims to protect the franchise from material damage to its reputation by ensuring that any business activity is satisfactorily assessed and managed by the appropriate level of management and governance oversight. This includes a potential failure to uphold responsible business conduct or lapses in our commitment to do no significant environmental and social harm.

Integrated Risk Types	Risk Appetite Statement
Climate Risk	The Group aims to measure and manage financial and non-financial risks from climate change, and reduce emissions related to our own activities and those related to the financing of clients, in alignment with the Paris Agreement.
Digital Asset Risk	This IRT is currently supported by Risk Appetite metrics embedded within relevant Principal Risk Types.
Third Party Risk	This IRT is currently supported by Risk Appetite metrics embedded within relevant Principal Risk Types.

Topical and Emerging Risks

In addition to our Principal Risk Types that we manage in line with the PLC Group Risk Type Frameworks, policies and the Court approved Risk Appetite, we also maintain an inventory of Topical and Emerging risks.

Topical Risks refer to themes that may have emerged but are still evolving rapidly and unpredictably, whilst Emerging Risks refer to unpredictable and uncontrollable outcomes from certain events which may have the potential to adversely impact our business.

As part of our continuous risk identification process, we have updated the PLC Group's Topical and Emerging Risks (TERs) from those disclosed in the 2021 Annual Report. We summarise these below, outlining the risk trend changes since the end of 2021, and the mitigating actions we are taking based on our current knowledge and assumptions. This reflects the latest internal assessment as performed by senior management.

The TER list is not exhaustive and there may be additional risks which could have an adverse effect on the PLC Group. Our mitigation approach for these risks may not eliminate them but shows the PLC Group's awareness and attempt to reduce or manage the risk. As certain risks develop and materialise over time, management will take appropriate steps to mitigate the risk based on its impact on the PLC Group.

The key changes to the TERs since the 2021 Annual Report are as follows.

- The PLC Group has added two new TERs: "High inflation and US dollar strength" and "Global economic downturn risk". This reflects that continued inflation and consequent rate hikes will impact global growth, with a chance of global recession in 2023.
- "Energy Security" has been broadened to "Energy security and shifting political alliances" to reflect those practicalities around energy security, that may reshape some political relationships, with a shift in power towards exporters
- "Supply chain dislocations" has been renamed as "Extended supply chain issues and key material shortages" due to continuing supply shortages and restrictions of some exports, the impact of Russia-Ukraine war and China-US rivalry, and the push for sustainable alternative supply chains
- "Social unrest" and "Adapting to endemic COVID-19 and a K-shaped recovery" are no longer presented as independent TERs; rather they are now considered as drivers for other overarching themes

Macroeconomic and Geopolitical Considerations

There is interconnectedness between risks due the importance of US dollar financing conditions for global markets, and the global or concentrated nature of key supply chains for energy, food, semiconductors and rare metals. The PLC Group is exposed directly through investments, or indirectly through its clients to these risks. While the main risk impacts are financial, other ramifications may exist for example reputational, compliance or operational considerations.

High inflation and US dollar strength

Inflation is now a global concern and a top policy issue in many countries which are experiencing the highest inflation levels in decades. Prices have surged due to a combination of customer demand and supply shortages.

The Federal Reserve's sustained fight against US inflation has led to US dollar appreciation against many other global currencies. This increases global import costs and debt servicing costs on US dollar denominated debt. There have been widespread price corrections for some asset classes. Some markets, especially emerging markets, have limited options to defend their currencies without causing other detrimental effects.

The operating environment is likely to be testing for the Non Bank Financial Institutions (NBFI) sector; segments within it could find it challenging to manage liquidity, credit, refinancing and market risk. The Archegos collapse of 2021 and the liability-driven investments volatility are the most notable recent examples. There are heightened expectations from major regulators with regard to the management of NBFI risks.

Price inflation for essential goods, such as food and fuel has prompted a cost-of-living crisis across both developed and emerging markets in which the PLC Group operates. This has sparked social unrest in some countries, with a heightened risk in emerging markets which experience disproportionate effects. However, the impact is felt across a wider bracket, including the vast global middle class, which raises the threat of instability even in traditionally less volatile countries.

Global economic downturn risk

Continued tightening of monetary policy to combat inflation in developed markets has contributed to the possibility of a global recession in 2023. Higher rates could increase debt distress levels across both developed and emerging economies.

Global growth slowed to 3.4 per cent in 2022, with the outlook for 2023 growth remaining muted at 2.9 per cent. Although China's reopening could lead to a faster than expected recovery, supply chain bottlenecks remain and severe COVID-19 outbreaks could lead to a reversal. Geopolitical escalation could also limit the speed of recovery, and supply chain restrictions may lead to deglobalisation and less efficient international trade.

The PLC Group is exposed to downturns in China, such as observed turbulence in the property development sector.

Expanding array of global tensions

The Russia-Ukraine war has catalysed a fundamental shift in power dynamics with a demarcation of underlying political alliances. Pressure is mounting on Russia, which may lead to increasingly desperate military and political actions.

Relations between China and other developed markets, particularly in the West, remain fragile, with sanctions being imposed by both sides. Increasing technological restrictions and potential escalations in relation to Taiwan's sovereignty are among a number of flashpoints. Economic geopolitical actions could also escalate distrust, decoupling, and increase inefficient production, potentially generating further inflationary pressures.

Election wins for extremist parties in a number of countries are adding to increased vulnerability and volatility – especially as economics is becoming subservient to politics. Volatility in traditionally stable economies could cause further disruption.

Rivalry between the US and China may have structural, operational and strategic impacts on business models for companies that straddle both.

Emerging markets sovereign risk

Emerging markets have been squeezed by escalating oil and food prices, high interest rates and the legacy of COVID-19 on key industries such as tourism.

Distress has already been observed across several of the Group's footprint markets, including defaults in Sri Lanka and Ghana, political instability in Pakistan, high inflation in Turkey, and issues across Africa, particularly economies that are sensitive to fuel prices.

For some countries with fragile governance frameworks, there is a heightened risk of failure to manage social demands which might culminate in increased political vulnerability. Furthermore, food and energy security challenges have the potential to drive other social impacts.

Tightening of financial conditions in developed markets has also led to local currency depreciations against the US dollar, increasing debt servicing costs, and potentially restricting debt re-financing. Foreign Exchange reserves have already been significantly depleted in some markets, and local monetary policy may undermine already weak growth.

Extended supply chain issues and key material shortages

Demand and supply imbalances in global supply chains have become persistent as they are increasingly structural in nature. The main dislocations are linked to conflict and political restrictions on trade or investment. Repercussions range from companies which are a party in the particular supply chain, to end consumers and sovereigns.

Concentrated impacts to specific key industries such as semi-conductors can have contagion effects. Political wrangling over technological supremacy further increases the risk of market disruption and a retreat from globalisation. Potential targeted restrictions on semiconductors could lead to complete restructuring of global supply chains, impacting most sectors.

This could lead to a shift in supply chains for the future, with increased contingency costs and production potentially moving closer to consumers. This is further compounded by increased scrutiny around the environmental and social impacts of supply chains.

Energy security and shifting political alliances

The Russia-Ukraine war has exacerbated an already strained energy supply model in developed markets, spurring a rapid pivot away from traditional supply lines. This came amid already increased tensions between nations as negotiating power shifted towards energy exporters.

Rising energy prices and potential supply shortfalls may cause a rise in social unrest, especially in countries where there is high dependence on energy imports.

In the wake of the conflict, a trade-off between pragmatism and environmentalism has materialised, with significant divergence as some countries have embraced the renewables opportunity while others have reversed, with rollbacks of green policies observed in some markets. Policymakers must balance supply and price pressures with climate goals, with a heightened risk of short-term crises diverting attention and resources away from longer term required climate action.

Rising material costs will also impact renewable energy development, potentially slowing the transition. The PLC Group's plans for sustainable finance business growth could be achieved slower than expected.

How these risks are mitigated/next steps

- The PLC Group conducts thematic stress tests and portfolio reviews at a Group, country, business and subsidiary level to assess the impact of extreme but plausible events and manage the portfolio accordingly
- Sensitive sectors are regularly reviewed and exposures to these sectors are managed as part of Credit Risk reviews
- Sovereign ratings, exposures, outlooks and country risk limits are regularly monitored, and mitigating actions taken as required
- Exposures that may result in material credit impairment and increased risk-weighted assets are closely monitored and managed.
- The PLC Group utilises Credit Risk mitigation techniques including credit insurance and collateral.
- The PLC Group tracks the participation of our footprint countries in G20's Common Framework Agreement and Debt Service Suspension Initiative for Debt Treatments and the associated exposure.
- We remain vigilant in monitoring geopolitical relationships. Increased scrutiny is applied when onboarding clients in sensitive industries and in ensuring compliance with sanctions.

Environmental and Social Considerations

ESG stakeholder expectations

Environmental targets are becoming embedded in global business models, with increased pressure to set ambitious sustainability goals or apply more restrictions on financing to sensitive sectors.

There is also an increase in stakeholder expectations around fair and balanced disclosures, including marketing campaigns. Scrutiny around greenwashing has accelerated with various regulatory developments, such as the Financial Conduct Authority's consultation on anti-greenwashing rules.

There is fragmentation in the pace and scale of adoption and regulation around the world, which adds complexity in managing a global business. Fragmentation in ESG taxonomies may also lead to unintended consequences, including misallocation of capital, political and litigation risks.

Human rights concerns are increasing in focus with scope expanding beyond direct abuses to cover other areas such as data management, technological advancement, and supply chains.

There are risks if the PLC Group is required to adapt to new fragmented regulations quickly, as well as meeting publicly stated sustainability goals and helping clients transition.

How these risks are mitigated/next steps

- Increased scrutiny is applied to environmental and social standards when providing services to clients.
- The PLC Group monitors regulatory developments in relation to sustainable finance and ESG risk management and provide feedback on consultations bilaterally and through industry groups on emerging topics.
- The PLC Group focuses on minimising our environmental impact and embedding our values through our strengthened Position Statements for sensitive sectors and a list of prohibited activities that the PLC Group will not finance.
- The PLC Group is integrating the management of greenwashing risks into our Reputational and Sustainability Risk Type Framework, policies and standards. Green, Sustainable and Transition Finance labels for products, clients and transactions reflect the standards set out in our Green and Sustainable Product Framework, Transition Finance Framework and TCFD reporting.
- The PLC Group regularly reviews these frameworks and annually obtain external verification on the Sustainable Finance asset pool.
- The PLC Group is committed to respecting universal human rights while assessing its clients and suppliers against various international principles, as well as through its social safeguards and supplier charter. More details can be found in the PLC Group's Modern Slavery Statement and Human Rights Position Statement.
- Detailed portfolio reviews and stress tests are conducted to test resilience to climate-related risks, in line with applicable regulatory requirements.
- Work is underway to embed Climate Risk considerations across all relevant Principal Risk Types. This includes stress testing/scenario analysis, integration of client climate risk assessments within the Credit process, building an internal modelling capability and linkages with our Net Zero targets to understand the financial risks and opportunities from climate change.

Technological Considerations

Data and Digital

Regulatory requirements and client expectations relating to data management and quality, including data protection and privacy, data sovereignty, the use of Artificial Intelligence (AI) and the ethical use of data are increasing. Regulation is also becoming more fragmented and complex, requiring more resources to ensure ongoing compliance.

Geopolitical tensions have added impetus to data sovereignty legislation, sometimes extraterritorial in nature. There can also be conflicting guidance within the same jurisdiction. There is heightened focus on economic sanctions and financial crime controls, reinforcing the need for robust control frameworks.

Data protection risks are increasingly driven by highly organised and sophisticated threat actors, with developments such as ransomware available as a service.

Data is becoming more concentrated in the hands of governments and big private companies, with relatively few providers of new technologies such as cloud services. Some third parties are reluctant to disclose AI model details, citing intellectual property, which increases model risk.

A balance between resilience and agility is required, as new technologies are onboarded while existing systems are maintained. Clear ownership, frameworks and oversight of new technologies is also required.

How these risks are mitigated/next steps

- The PLC Group monitors regulatory developments in relation to all aspects of data management, taking into account country specific requirements. We take a holistic view across data risks to facilitate an efficient and comprehensive risk control environment.
- The PLC Group has established a Data Management and Privacy Operations team to assist with compliance with data management regulations. This includes a dedicated AI governance forum which includes review of third party solutions.
- The PLC Group has an inflight programme of work to drive compliance to BCBS 239 requirements on effective risk data aggregation and risk reporting.
- The PLC Group continues to deliver new controls and capabilities to increase our ability to identify, detect, protect and respond to ICS threats.

New business structures, channels and competition

Failure to harness new technologies and new business models would place banks at a competitive disadvantage. However, these innovations require specialist skills, present new vectors for threats to materialise and require robust risk assessment accordingly. Differing access to new developments will also cause divergence and inequality to grow across countries and social groups.

Digital assets are gaining adoption and linked business models continue to increase in prominence. These present material opportunities for businesses and consumers, as well as potential risks as the space evolves, as evidenced by the recent collapse of Futures Exchange (FTX) and other recent events, further exacerbating digital asset market volatility.

Increasing use of partnerships and alliances increases exposure to third-party risk. There is also risk of inadequate risk assessments of new and unfamiliar activities.

How these risks are mitigated/next steps

- The PLC Group monitors emerging trends, opportunities and risk developments in technology that may have implications for the banking sector.
- Enhanced digital capabilities have been rolled out in CPBB, particularly around onboarding, sales, and marketing.
- A Digital Asset Risk Management Approach and policy has been implemented. This is regularly updated in response to evolving digital assets market activity.
- Strategic partnerships and alliances are being set up with Fintechs to enhance our competitiveness.

People Considerations

Talent pool of the future

The expectations of the workforce, especially skilled workers, are significantly shifting. The COVID-19 pandemic accelerated changes on how people work, connect and collaborate, with expectations on flexible working now a given. The focus is increasingly on 'what' work people do and 'how' they get to deliver it, which are becoming differentiators in the war for future skills. There is greater desire to seek meaning and personal fulfilment at work that is aligned to individual purpose.

These trends are even more distinct amongst Millennials and Gen Zs who make up an increasing proportion of the global talent pool, and as digital natives also possess the attributes and skills we seek to pursue our strategy.

With attrition increasing year on year, to sustainably attract, grow and retain talent, the PLC Group must continue to invest in and further strengthen our Employee Value Proposition (EVP), through both firm-wide interventions as well as targeted action.

How these risks are mitigated/next steps

- The PLC Group's culture and EVP work is designed to address the emerging expectations of the diverse talent we seek. The quarterly Brand and Culture Dashboard monitors our D&I Index and colleagues' perceptions of our EVP and whether we are living our Valued Behaviours. Local Management teams discuss the dashboard to identify actions, supported by a central library of interventions from across the PLC Group.
- The PLC Group's Future Workplace Now programme formalises hybrid working where suitable with flexi-working arrangements. We continue to monitor for potential people risks, and mitigating actions include hybrid learning festivals, watercooler moments toolkits, a social connections platform and people leader guidance.
- We are undertaking a multi-year journey of developing future-skills amongst colleagues by creating a culture of continuous learning, to balance appropriately between 'building' and 'inducting' skills. We are deploying technology that democratises access to learning content and developmental experiences.
- To address our talent pool's increased expectations of us being purpose-led, the PLC Group has published the Stands (Accelerating Zero, Lifting Participation, Resetting Globalisation) which guide our Strategy.

Stakeholders and responsibilities

As an international bank operating in 57 markets, stakeholder engagement is crucial in ensuring we understand local, regional and global perspectives and trends that inform how we do business.

This section forms our **Section 172** disclosure, describing how the directors considered the matters set out in section 172(1)(a) to (f) of the Companies Act 2006. It also forms the directors' statement required under section 414CZA of the Act.

This section sets out how:

- we engage stakeholders to understand their interests
- we engage employees and respond to their interests
- we respond to stakeholder interests through sustainable and responsible business.

This section also forms our key non-financial disclosures in relation to sections 414CA and 414CB of the Companies Act. Our non-financial information statement can be found at the end of this section.

Principal Court decision – market entries and exits

We are accelerating our strategy to deliver efficiencies, reduce complexity and drive scale. In April 2022, the Court approved a set of actions to focus resources within its AME region to those areas where it can have the greatest scale and growth potential, for the benefit of our shareholders, employees and customers. Subject to regulatory approval, we intend to exit onshore operations in seven markets in AME and in a further two markets focus solely on its CCIB business. The Group has invested heavily in recent years in the AME region, including fundamentally transforming its digital capabilities in its African markets. It has also been expanding its footprint to cover some of the largest and fastest growing economies, having recently opened its first branch in the Kingdom of Saudi Arabia and obtained preliminary approval for a banking license in the Arab Republic of Egypt. The seven markets where there will be a full exit of operations are Angola, Cameroon, Gambia, Jordan, Lebanon, Sierra Leone and Zimbabwe. In Tanzania and Cote d'Ivoire, the Consumer, Private and Business Banking businesses will be exited and the focus will turn solely to CCIB.

As part of the Court's decision-making, it recognised that there were a number of potential challenges, risks, costs and significantly impacted stakeholders to consider, which management was also acutely aware of. Carefully designed and executed engagement with regulators, governments and employees, as well as with other key stakeholder groups, was and continues to be crucial. The Court has received regular progress updates on these exists since the decision was made.

Engaging stakeholders

Listening and responding to stakeholder priorities and concerns is critical to achieving our Purpose and delivering on our brand promise, Here for good. We strive to maintain open and constructive relationships with a wide range of stakeholders including regulators, lawmakers, clients, investors, civil society, and community groups.

In 2022, we made improvements to some of our feedback processes, so that client needs could be addressed by relationship managers as they emerged. Our engagement took many forms, including one-to-one sessions using online channels and calls, virtual roundtables, written responses and targeted surveys. These conversations, and the issues that underpin them, help inform our business strategy and enable us to operate as a responsible and sustainable business. Stakeholder feedback is communicated internally to senior management through the relevant forums and governing committees such as the Sustainability Forum, and to the Board's Culture and Sustainability Committee (CSC) which oversees the Group's approach to its main relationships with stakeholders. We communicate progress regularly to external stakeholders through channels such as sc.com, established social media platforms and this report. More detailed information on material sustainability topics can be found in our sustainable and responsible business section

Clients

How we create value

We want to deliver easy, everyday banking solutions to our clients in a simple and cost-effective way with a great customer experience. We enable individuals to grow and protect their wealth; we help businesses trade, transact, invest and expand; and we help a variety of financial institutions, including banks, public sector and development organisations, with their banking needs.

How we serve and engage

In 2022, Corporate, Commercial & Institutional Banking (CCIB) strengthened its annual feedback process by capturing how clients feel about what we offer including advice, customer service and digital channels. CCIB also focused on building a consistent digital experience and accelerated delivery through Cash, Trade, Financial Markets and Data Solutions. We drove digital transformation and leveraged networks in service to our clients on our proprietary platform across our markets. This was further enabled with self-serve digital tools and capabilities such as chatbot, our mobile banking app, application programming interface (API) connectivity and data analytics, which reduced operating costs and improved client experience. Our agile working practices have also accelerated our speed of decision-making and change delivery to meet client needs faster. Refining our processes through continuous improvement has also enabled us to achieve benefits in revenue and costs savings by creating capacity and reducing client waiting times.

We also focused on delivering a consistent global experience for larger clients across our proprietary platforms, including digital and data initiatives across our markets. We have processes and guidelines in place, specific to each of our client businesses, to understand and respond to issues and promptly resolve complaints. Meanwhile, we continued to engage with our clients to help them expand across borders, using our international network to help them access existing and new trade corridors –. Our presence in high-growth markets – and ongoing roll-out of digital platforms – helps connect our clients to the global engines of trade and innovation. As part of our efforts to reach net-zero carbon emission by 2050, we have also been working closely with our clients in hard-to-abate sectors on their own transition planning. This is in addition to Group PLC's plan to mobilise $300 billion in green and transition finance between 2021 and 2030.We have also deployed a Transition Acceleration Team which is focused on launching new products and partnerships.

In Consumer, Private and Business Banking (CPBB), we take our responsibility to support all our clients including the more our responsibility to support all our clients including the more vulnerable ones, seriously. A global framework is in place to help ensure the fair treatment of vulnerable clients in product development and throughout the whole client journey. Training is provided to frontline staff across our branches, contact centres and digital channels to identify and appropriately handle vulnerable clients, and we have also implemented an educational training programme for those clients who require assistance in navigating online and mobile channels. Innovative products and digital straight through services underpin the push for best-in-class client experience. This includes building capability to protect our clients against evolving risks in the ecosystem like Fraud and Cyber security and comes with education and increased client communication. In order to act in the best interests of our clients, we use our client insights alongside our robust policies, procedures and the Group's Risk Appetite to design and offer products and services which meet client needs, regulatory requirements and Group performance targets, while contributing to a sustainable and resilient environment. Wealth and Personal Banking products have increased sustainable product options for distribution to our clients.

We now offer Sustainable deposits, green mortgages, sustainable investments and carbon neutral cards in some markets, All new products are subjected to a comprehensive approval process to test design effectiveness and robustness of the implementation process. For investment products sold to individuals, this includes risk scores which aid our assessment of client suitability. We consider each client's financial needs and personal circumstances to assist us in offering suitable product recommendations. We achieve this using a globally consistent methodology that takes into consideration local regulatory requirements to review product risks against the client's risk appetite, considering financial objectives, financial ability, and knowledge. Clients are also provided with clear and simple documentation that outlines key product features and risks prior to executing a transaction. Fees and charges are disclosed to clients in line with regulatory requirements and industry best practice, and where available, benchmarked against competitors. For Personal and Business Banking products, agreed interest rates, fees and other charges as billed to clients are monitored and assessed locally, with global oversight. Triggers for outlier fees and charges are defined and subject to annual review. A process is in place to review complaints prior to amendments to annual interest, fees and charges. We also continuously assess our product portfolio for new risks to ensure they remain appropriate for client needs and aligned to emerging regulation. These quantitative and qualitative assessments including Periodic Product Reviews enable a complete view of whether to continue, enhance, grow or retire products. Throughout 2022, we also maintained our sharp focus on improving client experience across the Bank. We engaged with clients to show them the opportunities trade corridors could bring and how using our network could help them flourish.

Our focus on Partnerships in CPBB is showing results with new Partnerships launched in Vietnam, Indonesia and more recently Singapore. These partnerships have incrementally acquired 1.2 million clients, many of whom have the potential to avail the full suite of other CPBB products. 2022 saw a significant increase in our digital wealth capabilities with the delivery of Online Equity platforms in Malaysia and the UAE. In 2023, we will continue to listen and respond to stakeholder priorities and concerns, addressing feedback as it emerges, strengthen our digital transformation and innovation capabilities and support our clients as they transition to net zero.

Their interests
- Differentiated product and service offering
- Digitally enabled and positive experience
- Sustainable finance
- Access to international markets

Regulators and Governments

How we create value
We engage with public authorities to play our part in supporting the effective functioning of the financial system and the broader economy.

How we serve and engage
We actively engage with governments, regulators and policymakers at a global, regional and national level to share insights and support the development of best practice and adoption of consistent approaches across our markets.

In 2022, we engaged with regulators, government officials and trade associations on a broad range of topics that included international trade, sustainability, data, cyber security, digital adoption, and innovation. We also engaged with officials on the financial services regulatory environment, in particular on prudential, financial markets, conduct and financial crime frameworks.

In support of this, we have a Group Public and Regulatory Affairs team responsible for engagement as well as identifying and analysing relevant policies, legislation and regulation. This work is overseen by various governance forums within the Bank which comprise senior executives representing business and control functions to ensure alignment between advocacy and business strategies.

Their interests
- Strong capital base and liquidity position
- Robust standards for conduct and financial crime
- Healthy economies and competitive markets
- Positive sustainable development
- Digital innovation in financial services

Investors

How we create value
We aim to deliver robust returns and long-term sustainable value for our investors.

How we serve and engage
We rely on capital from debt and equity investors to execute our business model. Whether they have short- or long-term investment horizons, we provide our investors with information about all aspects of progress against our strategic and financial frameworks.

Our footprint and the impact we can have where it matters the most through the execution of our sustainability agenda, provide our investors with exposure to opportunities in emerging markets. We believe that our integrated approach to ESG issues, as well as a strong risk and compliance culture, are key differentiators

The Group has delivered a strong performance in 2022, with Return on Tangible Equity back above pre-pandemic levels. We are executing well against the five strategic actions we set out earlier in the year whilst navigating through a challenging external environment. Our aim is to accelerate the delivery of our ambition of double-digit return on tangible equity.

Regular and transparent engagement with our investors, and the wider market, helps us understand investors' needs and tailor our public information accordingly. In addition to direct engagement from our Investor Relations team, we communicate through quarterly, half and full-year results, conferences, roadshows, investor days and media releases. There was continued adoption of virtual mediums during the year, coupled with a growing number of face-to-face interactions from the very low levels seen in the last two years. We hosted two capital market days focusing on our Financial Markets business and Consumer, Private & Business Banking Affluent Clients in June and November respectively.

Investor feedback, recommendations and requests are considered by the Court, whose members keep abreast of current topics of interest. The PLC Group Chairman, alongside some members of the Board, hosted a 'hybrid' stewardship event for institutional investors in November which provided a platform for shareholders to receive an update on a number of topics, which included sustainability, net zero and governance matters. The event included an open question and answer session across a range of key issues. An external Investor Sentiment survey was also conducted on an anonymous basis during the year with the intention of seeking insight into how the PLC Group was perceived, to identify areas of focus for investors and understand how the PLC Group could improve its investor communications. This was particularly important given the changes in the external environment and the evolution of the Group's strategy. The PLC Group Board discussed key areas which it should focus to address concerns which investors had highlighted and emerged from the report.

We continue to respond to growing interest from a wide range of stakeholders on ESG matters, including investors. We sought shareholder endorsement for our net zero pathway at the AGM intended as a means by which we will measure progress, through which we engage and gather views. We also work with sustainability analysts and participate in sustainability indices that benchmark our performance, including the Carbon Disclosure Product (CDP) Climate Change survey and Workforce Disclosure Initiative. In 2023, we will continue to engage with investors on progress against our strategic priorities and actions, and our financial framework as we progressively advance to our returns target.

Their interests
- Safe, strong and sustainable financial performance
- Facilitation of sustainable finance to meet the UN Sustainable Development Goals
- Progress on ESG matters, including advancing our net-zero agenda

Suppliers

How we create value
We engage sustainable and diverse suppliers, both locally and globally, to provide efficient and sustainable goods and services for our business

How we serve and engage
We follow a comprehensive and transparent supplier selection, due diligence and contract management process, guided by our Third-Party Risk Management Policy and Standards. In 2022 we further strengthened our supplier governance given potential increased risk and regulatory scrutiny. Our Supplier Charter sets out our aspirations in relation to ethics, human rights, diversity and inclusion (D&I), and environmental performance. The Charter is embedded in our supplier contract templates and we further encourage alignment to this by sending an annual letter to all our active suppliers that also includes guidance regarding our technology platforms, sustainability aspirations, payment processes and other relevant principles such as Anti Bribery and Corruption. We select and work with suppliers to ensure we provide efficient and value adding goods and services to our businesses both globally and locally. For example, during 2022, our PLC Group partnered closely with our credit/debit card manufacturing supplier Thales, who went the extra mile to accommodate our larger than anticipated demand amidst a scarcity of chips, etc. This resulted in the Bank being able to successfully fulfil the spike on demand, due to the very successful launch of our Singapore digital only bank – Trust, securing our market positioning and fulfilling customer expectations.

In 2022, we continued to make progress on our Supply Chain Sustainability agenda. In pursuit of our ambition of net zero in our operations, we continued to offset emissions from our business flights. In partnership with an independent climate consultancy, we continued refining the Scope 3 upstream emissions measurement methodology which was used to estimate our supplier emissions. Our Stands have served to further embed our supplier D&I approach. In 2022, we started to report and monitor supplier D&I indicators across our footprint, and most of our core markets now have supplier D&I programmes to help accelerate progress and impact in our local communities. So far more than 1,500 employees within our PLC Group have been trained internally to build capability to deliver our supplier D&I aims. In addition, we continue to partner with multiple local and global non-governmental organisations (NGOs) to identify and onboard more sustainable and diverse-owned suppliers across our core markets.

In Kenya we work with 'An-Nisa' Taxi Limited, who provide self-employed female driven taxi services to the Bank. This provides women employees and clients in Kenya, the option to work and travel in a safe environment. An-Nisa's overall vision is to increase employment opportunities for women in what is currently a male dominated sector. Working with An-Nisa means Standard Chartered can directly contribute to positively impacting the life of women who own and drive the taxi vehicles. In 2023, supply chain sustainability will continue to be a primary focus. We will progress integration of environmental and social risks into our Third-Party Risk Management Framework. Also, we will roll out new initiatives to help create social impact and further reduce carbon emissions within our own operations and supply chain.

Their interests
- Sustainability and diversity
- Open, transparent and consistent tendering process
- Willingness to adopt supplier-driven innovations
- Accurate and on-time payments

Society

How we create value
We strive to operate as a sustainable and responsible company, working with local partners to promote social and economic development.

How we serve and engage
We engage with a wide range of civil society and international and local NGOs, from those focused on environmental and public policy issues to partners delivering our community programmes. To shape our strategy, we aim for constructive dialogue that helps ensure we understand alternative perspectives and that our approach to doing business is understood. This includes working with NGOs that approach us about a specific client, transaction or policy. In 2022, climate change, our net zero pathway, human rights and biodiversity continued to underpin many of our conversations. We primarily received NGO feedback via our public inbox and responded to queries in line with our Reporting & Engagement Standard. For complex issues such as climate change, we held bilateral virtual meetings with NGOs to exchange perspectives in greater depth. In advance of PLC Group's AGM, we commissioned GlobeScan, a leading market research provider, to conduct 20 stakeholder interviews with leaders across NGOs, academia, business and specialty research institutes from seven countries to analyse how our net zero pathway aligns to external expectations. In 2023, we anticipate mapping our NGO relationships to identify topics and geographies where we can strengthen our engagement. We hosted a third edition of the Futuremakers Forum, bringing together over 1,700 clients, employers, NGOs, employees and project participants from 61 markets in PLC Group to build partnerships and create economic opportunities focused on young people. Through the two-day virtual event, we deepened our understanding of financial products and services young people want and need to unleash their full potential. To increase employee engagement, we launched Mentors Den for colleagues across some of our markets to provide career advice and support to Futuremakers participants.

Their interests

- Climate change and decarbonisation
- Biodiversity and animal welfare
- Human rights
- Financial inclusion
- Social impact

Employees

How we create value

We recognise that our workforce is key to driving our performance and productivity and that the diversity of our people, cultures and networks sets us apart. To lead the way in addressing the evolving needs of our clients and the advances in technology, we are developing a workforce that is futureready and are co-creating with our employees an inclusive, innovative and client-centric culture that drives ambition, action and accountability.

How we serve and engage

By engaging employees and fostering a positive experience for them, we can better serve our clients and deliver on our Purpose and Stands. A culture of inclusion and ambition enables us to unlock innovation, make better decisions, deliver our business strategy, live our valued behaviours and embody our brand promise: Here for good. We proactively assess and manage people-related risks, for example, organisation, capability and culture, as part of our PLC Group risk management framework.

Our People Strategy, which was approved by the PLC Board in mid-2019, stays relevant and future-focused, with the pandemic having accelerated many of the future of work trends which informed our approach.

Their interests

Translating our Here for good brand promise and purpose of 'Driving commerce and prosperity through our unique diversity' into our colleagues' day to day experience is critical to continue to be an employer of choice across our footprint. The research we have on our Employee Value Proposition (EVP) tells us that our employees, or potential employees, want to: have interesting and impactful jobs; innovate within a unique set of markets and clients; cultivate a brand that sustainably drives commerce and offers enriching careers and development; and be supported by great people leaders. They want these elements to be anchored in competitive rewards and a positive work–life balance. The employment proposition is a key input to our People Strategy which supports the delivery of our business strategy.

Listening to employees

Frequent feedback from employee surveys helps us identify and close gaps between colleagues' expectations and their experience. In addition to our annual survey, we use continuous listening mechanisms that capture colleague sentiment more frequently, through a rolling culture survey and through surveys at key moments for our employees such as when they join us, when they leave and when they return to work after parental leave.

This year our annual My Voice survey was conducted in May and June. Key measures of employee satisfaction have stayed stable in 2022, with an increase in employee Net Promoter Score (NPS) (which measures whether employees would recommend working for the us) and a slight drop in the employee engagement index. We are encouraged to see that 96 per cent of employees feel committed to doing what is required to help the Group succeed, 89 per cent feel proud about working for the Group and 82 per cent say that the Group meets or exceeds their expectations. The scores indicate that we have continued to improve as a place to work. In addition to leveraging inputs from employee surveys, the Court and Management also engage with and listen to the views of colleagues through interactive sessions.

Externally our PLC Group Glassdoor rating (out of five) has increased from 3.7 in 2019 to 3.9 in 2022, and 79 per cent would recommend working with us to friends. We also continue to be recognised as an employer of choice – in 2022, we ranked as one of the World's Best Employers in Forbes for the second time; ranked as a Diversity Leader for the third consecutive year in the Financial Times report on Diversity and Inclusion in Europe; ranked for the second time within the Top 100 organisations in the Refinitiv Diversity and Inclusion Index; and were also recognised in the Bloomberg Gender Equality Index for the seventh consecutive year.

All of this is indicative of our progress in further strengthening our employee value proposition to attract, retain and grow the skills and talent that are critical to delivering our strategy and outcomes for clients.

The health, safety, and resilience of our colleagues (including in worsening pandemic conditions in some markets or other crisis situations) continues to be a key priority. We are mindful that the levels of stress felt by employees increased in the 2022 My Voice survey from previous years. At the same time, the survey data also indicates that they feel more supported on their wellbeing needs, especially around their mental and physical health. Globally we offer colleagues access to a mental health app, a physical wellbeing online platform, an employee assistance programme, wellbeing toolkits, learning programmes on resilience as well as a growing network of trained Mental Health First Aiders. We also continue to aim to mitigate the causes of work-related stress, encourage focus on supportive behaviours within existing processes and decision-making, and seek to insert wellbeing skills-building across learning interventions.

Adapting to a hybrid world-of-work

2022 saw renewed optimism as pandemic-related restrictions eased in many of our markets, creating opportunities for employees to increasingly engage with clients, colleagues and communities in-person. We continue to implement the flexi-working model that was initiated in 2021, combining flexibility in working patterns and locations. The model has now been rolled out in 40 of our markets with 87 per cent of employees in these markets on agreed flexi-working arrangements. This has been a significant step towards leveraging the positive lessons learnt from the pandemic around productivity and employee experience. The model is enabling us to be more inclusive of the diverse needs of our workforce and support their wellbeing, and at the same time, consciously balance individual choice and flexibility with business priorities and client needs. Hybrid workers have expressed higher overall employee experience and work-life balance in the 2022 My Voice survey in comparison to employees working fully remotely or fully in the office.

As employees have started to experience their agreed hybrid working arrangements with the easing of pandemic-related restrictions, they have also been required to explore and adopt ways of working in a 'new normal' that balances the benefits of remote working with face-to-face interactions. Toolkits and guidance have been provided to individuals and leaders to help navigate hybrid working, including support on how to organise team and individual work in ways that maximise productivity and wellbeing; on leading in key moments such as onboarding new team members, returning from parental leave and during performance conversations; and on recreating 'water cooler' moments in hybrid work environments. We continue to imagine our physical workspaces with the relevant infrastructure and technology to provide hubs for teamwork, collaboration and learning.

> Read about our approach to hybrid working at **sc.com/hybridworking**

Strengthening our culture of high performance

As the Group transforms to achieve our strategic ambitions, we have refreshed the way we manage, recognise and reward performance (launched as myPerformance in 2022). We are building a strong culture of ambition, action and accountability by focusing on continuous feedback, coaching, and balanced two-way performance and development conversations. As we place even greater emphasis on recognising outperformance that is driven by collaboration and innovation, and encourage more flexibility and aspiration during goal-setting, we have removed individual performance ratings for all employees. Behavioural changes are already visible and we will further embed the cultural shift through a multi-year journey.

Strengthening leadership capability, specifically in our people leaders who are most directly responsible for the development of their teams, is a key enabler of our performance and culture. People leaders stepped up throughout the pandemic and we saw manager NPS continue to increase to 28.38 in 2022 (+3.36 points year-on-year). As the expectations that employees have of their people leaders continue to grow and evolve, we are also re-imagining how we embed leadership deep into the organization. With inputs from our colleagues, we have captured in our Leadership Agreement what we believe it takes to lead at Standard Chartered. We are asking each of us to Aspire, Inspire and Execute to take us from where we are today to where we have committed to be and to deliver on our Purpose. We are embedding this standard of leadership into how we induct, develop, measure and recognise our leaders. Our Leadership Agreement forms the foundation for a modernized leadership development offering that all people leaders will complete over the next three years. We are also encouraging leadership capability building across all employees through the Leadership Academy on our online learning platform diSCover, at our annual Global Learning Week, and through a 60-day Leadership Health journey of regular micro-learning activities.

> Read our Leadership Agreement at **sc.com/leadershipagreement**

Developing skills of future strategic value

The rapid changes in the world of work demand that our employees strengthen a combination of human and technical skills to keep pace. We are building a culture of continuous learning that empowers employees to grow and follow their aspirations. We are helping them to build the skills needed for high performance today, to re-skill and up-skill for tomorrow and to be global citizens who understand the changing nature of the world in which we operate.

We have continued to balance learning in classrooms with learning through our online learning platform diSCover, which is also accessible via a mobile app. Colleagues are using our Future Skills Academies to build skills in Data & Analytics, Digital, Cyber, Client Advisory, Sustainable Finance and Leadership, amongst others. Employees also have the opportunity to learn and practice new skills on-the-job through projects (often cross-functional and cross-location) and mentoring made available through our AI-enabled Talent MarketPlace platform.

We have further scaled the design and deployment of targeted upskilling and re-skilling programmes directed towards critical 'future' roles where our strategic workforce planning analysis has predicted the increasing need for talent, including universal banker, data translator, cloud security engineer and cyber security analyst. This approach has united our recruitment, talent management and learning efforts to target, upskill and deploy employees into new roles. We are strengthening and scaling our work on sustainability, innovation, performance, digital and leadership skills-building both across and within roles.

Creating an inclusive workplace

We believe that inclusion is how we will enable our diverse talent to truly deliver impact. Our progress in this space is reflected in our annual My Voice survey, where 82 per cent of employees reported positive sentiments around our culture of inclusion, which is higher than last year. This has been enabled by increasing awareness around diversity and inclusion principles, unconscious bias and micro behaviours as well as emphasising the importance of creating an inclusive environment – aspects that are covered in the 'When we're all included' learning programme.

Colleagues are also encouraged to join employee resource groups (ERG) aligned to shared characteristics or life experiences (including gender, ethnicity and nationality, generations, sexual orientation, and disability). ERGs across our markets provide additional learning, development and networking opportunities, especially for underrepresented populations, and are a valuable source for better understanding the lived experience of our workforce. This has already resulted in improvement through actions, such as the expansion of more accessible and assistive technology to support better access to necessary tools for work, launch of our SC Pride Charter to cultivate a respectful and safe work environment, and the release of an inclusive language guide to promote psychological safety and review business terms to be more inclusive.

> Read our inclusive language guide at **sc.com/inclusivelanguageguide**

Our gender diversity continues to grow with more women leaders moving up to more senior roles. By the numbers, women currently represent 54 per cent of the Court, and representation of women in senior leadership roles is at 28.3 per cent at the end of 2022. We are committed to continuous improvement in this area and aspire to have 35 per cent representation of women at the senior level across PLC Group by 2025. This aspiration is further supported by programmes such as our IGNITE Coaching programme, which develops our existing women talent in preparation for future roles.

We remain focused on building a workforce that is truly representative of our client base and footprint. We continue to work towards achieving our 2025 UK and US ethnicity senior leadership aspirations, including by developing strategic partnerships and extending our Futuremakers RISE programme to increase the diversity of our talent pipelines. We are also focussing on nurturing local talent in markets across Asia, Africa and the Middle East. We provide employees, where legally permissible, the ability to self-identify ethnicity data through our online systems and are increasing awareness on the value and purpose of collecting this information.

We recognise six key D&I[1] dates across the year and use these as focal points to facilitate open dialogue on inclusion internally and externally. Through these global campaigns we engage and strengthen relationships with clients and external stakeholders, collectively raising awareness, promoting best practices and committing to take practical steps to advance the D&I agenda in the community.

Driving a sustainable future

Creating our inaugural Chief Sustainability Office

Achieving economic, social and environmental sustainability is one of the greatest challenges of our generation and a priority for the Group. In 1987, the United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." Here at Standard Chartered, we are undertaking efforts to realise this definition and translate it into implementable investments and actions across the Group.

Our Purpose is to drive commerce and prosperity through our unique diversity. Through our valued behaviours to never settle, be better together, and do the right thing, we intend to truly live our brand promise to be here for good.

However, being 'here for good' just got harder. We are faced with worsening climate impacts, stark inequality, and unfair aspects of globalisation. Nowhere is this felt more keenly than in our core markets of Asia, Africa and the Middle East.

We are taking a stand to combat these challenges and setting long-term ambitions to help address the most pressing issues we face today when seeking to deliver sustainable, social and economic development across our business, operations and communities.

In 2021, we formally recognised Sustainability as a core component of our strategy, elevating it to a pillar of our PLC's Group Strategy. In July 2022, we took this a step further and appointed Marisa Drew as our Chief Sustainability Officer (CSO), to help drive our sustainability agenda and bring together our existing Sustainable Finance, Net Zero Programme Management and Sustainability Strategy Teams. The dedicated CSO office harmonises our existing efforts in sustainability and is responsible for creating and executing the PLC's Group-wide sustainability strategy, including delivery against our net zero pathway.

With a presence in parts of the world where sustainable finance can have the greatest impact, and a wealth of experience across the team in sustainable finance and environmental and social risk management, our CSO office is well placed to support our clients in their transition to net zero, mobilise capital at scale and help develop solutions.

We want to make the world a better, cleaner and safer place. We also want to contribute towards enabling a just transition – one where climate objectives are met without depriving emerging markets of their opportunity to grow and prosper.

1 International Day Against Homophobia, Transphobia and Biphobia, International Day of Persons with Disabilities, International Men's Day, International Women's Day, and World Day for Cultural Diversity for Dialogue and Development, World Mental Health Day

Measuring what matters most – understanding our materiality
Since 2016, our approach to striving towards a sustainable and responsible business has been underpinned by our suite of Sustainability Aspirations. These set out how we aim to promote social and economic development and deliver sustainable outcomes in the areas in which we believe we can make the most material contribution to the delivery of the UN Sustainable Development Goals (UN SDGs). We measure progress against the targets set out in our Sustainability Aspirations and incorporate selected Aspirations into the PLC's Group Scorecard to ensure consistent measurement, drive widespread awareness and subsequently support delivery.

'Materiality' is considered to be the threshold for significance of reporting ESG issues for users of financial statements: investors and other stakeholders. We take into consideration the guidance as provided by the IFRS Foundation Standards, understanding that material issues are those which could reasonably be expected to influence decisions of those users. We also note that materiality for ESG considers both quantitative aspects as well as qualitative information, including a regard for sustainable social and economic development. This will evolve over time, and we plan to continue to assess our approach and reporting based on relevance to our users. This will evolve over time, and we plan to continue to assess our approach and reporting based on relevance to our users.

Further detail on our forward-looking targets will be announced during 2023.

Accelerating zero: Our approach to climate change

We believe that climate change is one of the greatest challenges facing the world today and that its impact will hit hardest in the markets where we operate, namely Asia, the Middle East and Africa. Many of these markets are currently reliant on carbon-intensive industries for their continued economic growth. Achieving a just transition – one where climate objectives are met without depriving developing countries of their opportunity to grow and prosper – will require care, capital and specialised support. We are well placed to help by directing capital to emerging markets that have both the greatest opportunity to adopt low-carbon technology and some of the toughest transition-financing and climate challenges.

In recognition of the important role, we can play in the transition, and in line with our Stand to Accelerate Zero, in October 2021 we announced our roadmap to reach net zero across our operations, supply chain and financed emissions by 2050, as well as our plan to set ambitious interim targets to substantially reduce our financed carbon emissions by 2030. As a UK headquartered bank, our pathway is in line with the UK's commitment under the Paris Agreement to reduce GHG emissions by at least 100 per cent of 1990 levels by 2050, and to reduce economy-wide GHG emissions by at least 68 per cent by 2030. However, we are applying these targets and ambitions across our global footprint, despite a number of our footprint markets not having a commitment in place to reach net zero within this timeline at the time of our PLC group-wide net zero pathway publication "Whitepaper" in October 2021. See here – https://av.sc.com/corp-en/content/docs/SC-net-zero-whitepaper.pdf

Our net zero plan aims to accelerate new solutions to reduce our emissions, catalyse sustainable finance and partnerships, and mitigate the financial and non-financial risks associated with climate change.

Since 2018 we have been working on aligning our own operational and financed emissions activities to the Paris Agreement's goal of well below two degrees celsius of global warming by the end of the century. We focus on three areas within our strategy to reduce direct and financed emissions: our operations, those associated with our supply chain (indirect impacts in value chain) and our financed emissions associated with our clients.

Our operations- reducing our environmental footprint
We are mindful of the direct environmental impact of our branches and offices and are determined to reduce their impact.

We have measured and reduced our GHG emissions since 2008 and since 2018 we have been actively targeting a reduction in our Scope 1 and 2 emissions in line with a well-below two degrees Celsius scenario. In 2021, we enhanced this ambition, setting out targets to achieve net zero in our operations by 2025.

Our approach is simple. We intend to optimise our office and branch network, retiring unused and ineffective space to retain a working environment in line with modern requirements for home- and hybrid-working solutions.

In partnership with our long-term strategic real estate suppliers such as CBRE and JLL, we are continually working to maximise efficiency while leveraging clean and renewable power where appropriate, in line with our commitment to the global corporate renewable energy initiative, RE100, and to help us meet our own challenging targets.

While new ways of working have led to a direct reduction in our property requirements and associated emissions, we recognise that these emissions have simply been shifted. Throughout 2022, we have begun measuring additional categories of Scope 3 emissions including waste, employee commuting and downstream leased assets.

We are also committed to reducing waste in all its forms. In 2022, we reduced our overall waste and our waste per employee achieving our target to reduce waste to 40kg per employee per year – three years ahead of schedule. This was primarily due to new ways of working reducing employee presence in our buildings.

Recycling programmes remains a challenge in some of our markets, however we continue to work towards our PLC Group target to recycle 90 per cent of our waste by 2025. We have commenced the True Zero Waste programme across our top twenty buildings by size and expect to see the first results next year.

Water availability is a growing challenge in many of our markets. Although we did not face any issues sourcing potable water in 2022, we continue to take a responsible approach to managing water across the Group.

During 2023, we will continue to accelerate our True Zero Waste certification programme across more offices. This certifies 90 per cent of waste diverted from landfill or incineration and will require further investment and education in waste management and avoidance. Additionally, we will certify more single-use-plastic free buildings and promote more sustainable practices.

Our suppliers – reducing Scope 3 upstream
We recognise our contribution to climate impacts through the goods and services we procure and understand that severe weather events could result in material disruptions to our supply chain that may potentially impact our ability to serve our clients.

From 1 April 2022 all new and renewing material third-party corporate services arrangements in-scope for Business Continuity Management controls are subject to climate risk assessment as part of third-party continuity plans.

Through our Supplier Charter, we encourage our suppliers to support and promote standards in environmental protection and to manage and mitigate environmental risks.

In 2022, we continued to make progress against our supply chain sustainability agenda. We saw a decrease in our flight emissions in the period from October 2021 to September 2022, against our PLC Group-wide target to achieve and maintain flight emissions at 28 per cent lower than our October 2018 to September 2019 baseline and continued to offset these.

In partnership with an independent climate consultancy, we continued improving the accuracy of our methodology and estimated our supplier emissions. Due to a limited number of suppliers able to report emission figures to the PLC Group, our methodology relies primarily on emission factors combined with an increasing volume of data reported by suppliers via CDP climate change survey and emissions figures reported by suppliers to the PLC Group. We expect that both supplier emission calculations and our methodology will continue to evolve over time. Using these insights, we identified and engaged our key highest-emitting suppliers to better understand and align on sustainability actions, metrics and goals.

The process for Scope 3 upstream supplier emissions measurement is being embedded into our wider annual reporting process and is expected to be executed in the first quarter of each year based on the previous year's vendor spend.

It is noted that there is a lag on data obtained for vendor emissions. This is a result of necessary time taken for our suppliers to calculate and report their own carbon emission information.

Furthermore, we launched a global project to define strategies to address emissions related to Scope 3 Categories 1 (Purchased goods and services), 2 (Capital goods), 4 (Upstream transportation and distribution) and 6 (Business travel). Our internal targets cover reducing our emissions related to Upstream transportation and distribution and Business travel by 28 per cent against 2019 levels over the next seven years. Simultaneously, for Purchased goods and services and Capital goods categories, we plan to engage our suppliers to set science-based targets in the next five years.

In 2022, to build internal understanding of our supply chain sustainability aspirations and drive united engagement for our net zero goals, we delivered training and awareness sessions which were attended by participants from across the organisation.

Our clients – reducing our financed emissions
We are committed to supporting our clients in their own transitions to net zero and see our role in driving this alignment to the Paris Agreement goal as a critical part of our climate response plans. We aim to become net zero in our financing by 2050, with interim 2030 targets for our highest-emitting sectors.

In 2022, we made strong progress towards this goal, and set out to measure, manage and reduce emissions associated with our financing via the implementation of our net zero roadmap. In 2021, we announced that we expect all clients (beginning with those in high-carbon sectors) to have a strategy to transition to a low-carbon business model. Since then, we have focused on assessing clients in sectors where we have set 2030 net zero targets (Oil and Gas, Metals and Mining and Power).

In 2021, we measured the baseline and set targets for three sectors: Oil and Gas, Coal Mining, Steel, Other Metals and Mining and Power. In 2022 we added a further three sectors covering Automotive manufacturers, Aviation and Shipping. These targets have 2030 reduction targets, with the plan to be net zero by 2050.

The PLC Group has also developed an initial methodology for assessing the credibility of client transition plans throughout the PLC Group, though we expect this to evolve quickly.

Our methodology draws on information gathered from our client Climate Risk Assessments and considers the guidance on Credible Transition Plans by the Glasgow Financial Alliance for Net Zero (GFANZ) and the UK's Transition Plan Taskforce. In 2022, we tracked the existence of a transition plan for our corporate clients, and by the end of 2023 intend to have a view of credibility for our largest exposures. But we know that achieving net zero will not be a linear pathway; target-setting will evolve over time as methodologies are enhanced and the necessary data required to measure our emissions footprint becomes refined and available.

Catalysing finance and partnerships for transition

In recent years, sustainability has moved from a predominantly risk-based initiative to become a value driver for many banks as they seek to capitalise on the opportunities to finance the mitigation of the impact of climate change and tackle social issues.

Our Opportunity 2030 report (www.sc.com/opportunity2030, published in 2020) identified a USD 10 trillion investment opportunity in contributing to the SDGs, including clean energy. It is this opportunity which we are seeking to capitalise on through our low carbon products and services.

Being present in both developed markets and emerging markets, we recognise the unique role we have to play in delivering a just transition, directing capital and specialised support to the regions that need it most to drive sustainable economic growth.

We have focused on strengthening our capabilities in transition finance throughout 2022, including deploying a dedicated Transition Acceleration Team within the CSO organisation to support clients in high-carbon sectors. This team includes specialists with industry knowledge to advise our clients in their individual sustainable finance journeys.

We have set ourselves a PLC Group-wide target to mobilise $300bn of Sustainable Finance by 2030. This includes the facilitation of green and social bond raising, provision of funding commitments to green and social causes as outlined below, advisory services to support our clients on their own journeys to net zero and facilitation of Sustainability Linked Loans.

We continued to expand and develop our suite of sustainable products in line with our Sustainable Finance product frameworks. These frameworks, developed in collaboration with Sustainalytics, a leading provider of ESG and corporate governance research, are reviewed annually.

In 2022, we updated our Green and Sustainable Product Framework to update and expand the list of eligible activities.

In CCIB, new product launches included Sustainable Fiduciary Deposits, sustainability-linked sale and leaseback for aviation finance, impact subscription finance facilities, and ESG structured products with rates underlying.

Within CPBB, we connected retail clients with access to sustainable finance offerings, launching new products including structured notes, sustainable deposits and Green Mortgages. Throughout 2022, we increased the number of markets where we offer Green Mortgages through successful product launches.

A shared ambition – working in partnership

We have identified opportunities for the Group to play an active role in shaping global standards – ranging from net zero to carbon markets. Along these lines, we are actively involved in the leadership of several standard-setting or standard-influencing efforts.

For instance, we are part of the Glasgow Financial Alliance for Net Zero (GFANZ) Principles Group, an ambitious programme to generate the commitment, investment and alignment needed to drive forward the transition to net zero. Our Group CEO is the Co- Chair of the GFANZ Working Group on Capital Mobilisation to Emerging Markets and Developing Economies, and throughout 2022, our PLC Group Head, Conduct and Financial Crime and Compliance has chaired the Net Zero Banking Alliance (NZBA) – the industry-led banking element of GFANZ

Our PLC Group Chairman has co-chaired the United Nations' Global Investors for Sustainable Development (GISD) Alliance, which has set ambitious objectives to scale up long-term finance and investment in sustainable development; and our Global Head, Sustainable Finance has continued to hold the position of Chair of the Equator Principles Association. In 2023, we intend to support the Equator Principles Steering Committee as our term as Chair comes to an end. We are also joining the Roundtable on Sustainable Palm Oil as a member of the Board of Governors.

In addition, we are members of the UNEP Finance Initiative and the Climate Bonds Initiative, as well as one of the initial members of the Taskforce on Climate-Related Financial Disclosures (TCFD) and signatories of the Poseidon Principles, a global framework for assessing and disclosing the climate alignment of financial institutions' shipping portfolios. Our PLC Group's Global Head of Sustainability Strategy and Net Zero represents the Group on the Financial Net-Zero Expert Advisory Group (EAG).

Our PLC Group's Head of Carbon Markets Development is a Board member of the Integrity Council for the Voluntary Carbon Markets (IC-VCM), which is focused on developing a high-quality international carbon market. The IC-VCM carried out a consultation on its Core Carbon Principles over the summer, receiving over 350 responses and 5000 individual comments. We have been an integral player in the set-up of the IC-VCM and will remain involved in the development and trading of carbon markets around the world. Our Group CEO sits on the Distinguished Advisory Group.

Meanwhile, we increased our representation at COP27 and the G20 and were actively involved in the launch of several groundbreaking initiatives on the margins of each; these include the launch of the Africa Carbon Markets Initiative (ACMI) and Egypt's Nexus for Water, Food & Energy (NWFE) at COP27, the $20Billion USD commitment to advance Indonesia's Just Energy Transition Partnership (JETP) at the G20, and the $15.5Billion USD commitment to the Vietnam JETP.

The PLC Group participates in various industry initiatives, forums and roundtables, including the Climate Financial Risk Forum (CFRF) and Global Association of Risk Professionals (GARP) roundtable, to ensure we benchmark our risk management capabilities and stay abreast of changes.

Similarly, we are engaged at local and regional levels to share insights, comment on regulatory consultations, and better understand the regulatory landscape and practices across our footprint.

Investing in Climate Research
Our four-year partnership with Imperial College London covers long-term research on Climate Risk, advisory on shorter-term, internally focused projects to enhance Climate Risk capabilities and training of our colleagues, Group Management Team and PLC Board.

In 2022, we sponsored a research project on 'Investing in Nature to Tackle Biodiversity Loss and Enhance Food Security', which explored the risks and opportunities facing the global agricultural sector from climate change.

- Part 1 expanded on the known risks of climate change on the agriculture sector by examining the failings of major climate models, as well as the immediacy of the significant impacts of climate change upon the agriculture sector.
- Part 2 explored the potential for Nature based Solutions to tackle the interlinkages between agriculture, land-use, and climate change.
- Part 3 focused on the financial opportunities surrounding natural assets and sustainable agriculture.

In addition, we worked with Imperial College on three advisory projects during 2022, to develop a methodology to assess the impact of Climate Risk on sovereign ratings; develop Physical Risk report cards for sovereigns; and enhance the energy consumption calculation methodology and emission factor database for mortgage portfolios in our key markets.

Mitigating Environmental and Social Risk
While transitioning to a net zero economy creates clear opportunity, it also comes with risk. But before we can manage the risk, first we must be able to identify, assess its size and monitor it.

In the front line, our Environmental and Social Risk Management team within the Chief Sustainability Office aims to drive growth while managing the environmental and social (E&S) risks associated with our financing. Our approach is embedded directly into our credit approval process and supports us to work with our stakeholders to identify, manage, mitigate and monitor the potential impacts that stem from our financing decisions.

Our Position Statements, approved by the PLC Group Responsibility and Reputational Risk Committee (GRRRC), outline the standards we encourage and expect of ourselves and our clients and help us to identify and assess E&S risks related to our CCIB clients.

We use these statements – which draw on International Finance Corporation (IFC) Performance Standards, the Equator Principles (EP) and global best practice – to assess whether to provide financial services to clients operating in sensitive (including high-carbon) business sectors. In addition, we have specific guidance for clients operating in sectors with a high potential environmental or social impact.

In 2022, we reviewed clients and transactions that presented potential E&S risks. If we find a material E&S issue, we take steps to proactively engage the client to mitigate identified risks and impacts, and support and guide our clients to improve their E&S performance over time.

In relation to climate, we expect all clients in the power generation, mining and metals, and oil and gas sectors to have a strategy to transition their business, in line with the goals of the Paris Agreement. We review a client's approach to transition using the output from our client Climate Risk assessments. In particular, we utilise a client's Transition Risk mitigation score, which considers both quantitative inputs (e.g. emissions measurement data and reduction targets), and qualitative overlays through direct client conversations to confirm management focus and commitment.

We have a responsibility to support and guide our clients to a low-carbon pathway and offer them green and transition financing as the main levers to help us achieve our net zero targets. We will also be assessing our exposure to emissions intensive clients and/or assets and will seek to replace these over time by adding new low carbon intensity clients and/or assets to our portfolio.

This does not mean walking away from our existing clients, but instead working with them to finance investment in low carbon methods and technologies, particularly across Asia, Africa and the Middle East where investment could have the biggest impact. However, for clients who do not align with our Position Statements, we may look to withdraw financial services and exit the relationship if we cannot work with them to align over time.

We recognise just how important it is to get this right, so in support of our Sustainability Aspirations, we updated our E&S Risk Management Framework by introducing tighter restrictions based on our 2021 Position Statement refresh, and we expanded our capacity, establishing a team within our Global Business Service centre in Warsaw to conduct enhanced E&S due diligence on clients. In addition, all relationship managers and credit officers are offered training in assessing E&S risk, as well as having access to detailed online resources.

In 2022, we prioritised our approach to biodiversity by undertaking a pilot biodiversity risk assessment. This included a loan book analysis to identify impacts and dependencies from biodiversity-related risks at a sector, country and financial services level. We are continuing to develop our approach to biodiversity, expanding on the review conducted this year to gain a clearer view of the biodiversity risk associated with the PLC Group's activities.

In 2023, we plan to update our Position Statements covering all sensitive sectors, with the enhanced requirements to become effective the following year

Supporting our front line teams, we have a dedicated second line Climate Risk team. Our Climate Risk Appetite Statement (RAS) is approved annually by the PLC Board and is supported by the PLC Board and Management Team level risk appetite metrics, covering Credit – CCIB and CPBB, Reputational and Sustainability Risk (RSR), Traded Risk and Country Risk.

The metrics are approved by the PLC's Group Risk Committee (GRC) (for MT level risk appetite metrics) and the PLC Board (for Board level risk appetite metrics) annually. Monitoring of adherence to risk appetite metrics commenced in January 2022 and any breaches are reported to the GRC and BRC.

We are continuously expanding the scope and coverage of our risk appetite metrics for enhanced risk identification and management. Additional metrics to address our public targets across key sectors and a stress loss metric built on scenario outcomes have been identified and are being monitored for inclusion in risk appetite reporting in 2023. The focus for 2023 will be to increase the coverage of existing metrics and introduce new risk appetite metrics.

The uncertainties surrounding how and when Physical and Transition Risk will impact mean that no tool or methodology is perfectly able to estimate risks from climate change now or in the future. However, we need to move quickly so we are developing methodologies, engaging with clients and integrating Climate Risk into our mainstream risk management activities and assessments. We will adapt our approach as the impact from Climate Risk becomes clearer and the tools and methodologies to gather reliable data mature.

We have toolkits to quantitatively measure climate-related Physical and Transition Risk and in 2022, we continued to enhance our understanding of climate-related risks, and significantly strengthened our stress testing and scenario analysis capabilities for a range of management scenarios that are more plausible. We continue to engage with our corporate clients to understand their Transition and Physical Risks, as well as their plans to prepare for climate change.

The data we captured helped us develop our own client-level climate-risk assessments for both existing and new clients, improve our internal climate modelling capabilities and strengthen the risk measurement and monitoring of the portfolios.

Education and Training

Understanding Sustainability

We are encouraging all employees across our footprint to grow their understanding of sustainability and climate, how we embed it into our business, operations and communities, and how they can actively play their part in this journey. In April 2022, we launched our 'Understanding Sustainability' online learning with colleagues voluntarily completing this programme during the year.

To recognize their engagement, we planted a tree for each employee completing the training in our 'Standard Chartered Forest', which spans seven of our footprint markets and is tended by local NGOs.

Climate-related financial and non-financial risk training

For Climate Risk specifically, the PLC's Board were given training that provided an overview of how Climate Risk is being embedded across the three lines of defense, as well as what this means for our clients and colleagues.

In addition, we launched Risk-wide mandatory e-learnings, and provided bespoke classroom-based training for colleagues across CCIB, CPBB, Risk and Audit. Recordings of these sessions are available to all staff to access as convenient.

In Q1 2023, we intend to embed Climate Risk-related credit training material into both our first and second line Credit Risk curricula. In addition, in partnership with our academic partner, Imperial College London, we also aim to launch a detailed online training programme available to all impacted staff.

Sustainable Finance and ESRM training

In 2022, we focused on educating colleagues across all levels of the PLC Group on our net zero pathway and Sustainable Finance initiatives. We launched foundational sustainability and Sustainable Finance curricula across the PLC Group; provided dedicated training on our Sustainable Finance product suite and Position Statements; hosted panel discussions on key themes including greenwashing risk and ESG ratings and held topical sessions on net zero and Transition Finance concepts, such as carbon capture, utilization and storage, and decarbonization market trends.

In 2023, our Sustainable Finance education programmes will accelerate. This will include the rollout of a tiered practitioner-level learning curriculum, and further modularisation of our Sustainable Finance training to help us improve knowledge and awareness across our network.

Incentive Structure

Variable remuneration is applicable to employees through the PLC Group Scorecard and the Long-Term Incentive Plan (LTIP). This is overseen by the PLC's Board-level Remuneration Committee.

Selected sustainability targets, including those with a climate change dimension, are incorporated into our annual PLC Group Scorecard which informs variable remuneration for all colleagues under our Target Total Variable Compensation plan, including executive directors, PLC Group MT and Group MT.

In addition to the PLC Group Scorecard and LTIP performance measures, dedicated climate and sustainability related objectives apply across functional and regional scorecards including the Risk function, and individual objectives add a further link between sustainability and reward. Specifically, in relation to the delivery of core aspects of our climate change approach, several individuals and teams have objectives which impact variable remuneration.

Social Sustainability
While it's clear that our main impact on society and the environment is through the businesses we finance, we're determined to be a force for good for our clients, people and communities. To us, that not only means ensuring that we are minimising our own environmental impact, but also striving to be a responsible company: utilising our skills, experience and network to fight financial crime, embedding our values across the markets where we operate, and investing in our people and communities.

Driving Good Conduct and Ethics
Good conduct is critical to delivering positive outcomes for our clients, markets and stakeholders. It's fundamental to achieving our brand promise, Here for good.

Our Conduct Risk management approach has been strengthened since 2021 through several initiatives, including launching a new annual Conduct Risk management effectiveness review, which increased our ability to identify and mitigate against Conduct Risk and re-energising our engagement strategy.

Our Speaking Up whistleblowing programme is essential to upholding our Here for good brand promise and valued behaviours. The early disclosure of concerns reduces the risk of financial and reputational loss caused by misconduct. We encourage colleagues, contractors, clients, suppliers and members of the public to use our Speaking Up programme which offers secure, independent and confidential channels to report known or suspected misconduct without fear of retaliation. Examples of whistleblowing concerns include breaches of regulatory requirements, breaches of PLC Group policy or standards, or behaviour that has adverse effects on colleagues and/or our reputation.

The Speaking Up programme continues to be utilised across all Countries, Businesses, and Functions and our 2022 My Voice survey found that felt comfortable raising concerns through the channels. COVID-19 pandemic continued to influence internal reporting trends.

Throughout 2022, we hosted a series of awareness campaigns to ensure that our colleagues understand the importance of upholding our conduct standards and know how, and when, to Speak Up. To celebrate Whistleblowers' Day on 23 June, we held a month-long global campaign themed around 'Doing the Right Thing One Speak Up at a Time', and in October colleagues in Africa and the Middle East region ran a regional Conduct Week. In December we celebrated Conduct Month and UN Anti-Corruption Day, under the theme 'The Stands, Conduct and Me', highlighting the link between the day-to-day conduct of individual colleagues and the Bank's Stands. All campaigns included interactive messages from our senior leaders and live panel discussions designed to both set the tone from the top and nurture it from within.

The PLC's Group Code of Conduct (the Code) remains the primary tool through which we set our conduct expectations: it supports all our policies, setting minimum standards and reinforcing our valued and expected behaviours. It also outlines a framework to help colleagues make good decisions. To reinforce our shared commitment to the highest possible standards of conduct, each year we ask our colleagues to reconsider what the Code means to them through a refresher e-learning, and to reaffirm their commitment. In 2022, 99.4 per cent of our colleagues completed the mandatory training and affirmation. Colleagues who are overdue without a valid reason (i.e. for which they are given an exemption) are subject to a 40 per cent reduction in their annual variable compensation for the year they failed to attest.

In 2023, we plan to refresh the Code to improve alignment with our Stands, strengthen the link between ethics, culture and conduct, and intertwine the Code with the PLC's Group strategy. We also intend to take steps to make the Code more accessible and relatable to all colleagues.

Fighting Financial Crime
Access to the financial system helps transform lives around the world, helping to reduce poverty and spur economic development. But the financial system is also used by those involved in some of today's most damaging crimes – from human trafficking to terrorism, corruption and the drug trade. Our ambition is to help tackle these crimes by making the financial system a hostile environment for criminals and terrorists. We have no appetite for breaches in laws and regulations related to Financial Crime.

Our Conduct, Financial Crime & Compliance (CFCC) team sets our financial crime risk management framework. We seek to safeguard our clients and communities against money laundering (AML), terrorist financing, sanctions, fraud and other risks, applying core controls such as client due-diligence, screening and monitoring, and engaging our people. In addition, anti-bribery and corruption (ABC) controls aim to prevent colleagues, or third parties working on our behalf, from engaging in bribery.

A particular focus of our financial crime investigatory teams is the use of data analytics to identify those clients and cases which generate the greatest financial crime risk. In 2022, we increased coordinating and streamlining the work carried out by these individual teams. This has strengthened the second line of defence in support of colleagues in business lines and country teams across the PLC Group.

To mitigate the risk of financial crime, particularly laundering the proceeds of corruption, in the lead-up to, during and after major political elections in footprint markets, the PLC Group conducts enhanced monitoring designed to identify and investigate transactions of potential concern. In 2022, enhanced monitoring was conducted during major elections and times of political transition or conflict, for example in Kenya, Angola, Nepal, Philippines and Sri Lanka.

Since the beginning of the war in Ukraine on 24 February 2022, the authorities of the European Union, United Kingdom, United States, and several other nations have imposed multiple rounds of sanctions against Russia by targeting a wide range of Russian entities (state-owned and private) and a large number of Russian elites, oligarchs, political leaders, and officials. While the pace of change and the complexity of these sanctions against Russia are unprecedented and had the potential to create areas of uncertainty as to the scope of some of the regulatory prohibitions, we have sought to comply with these requirements fully and promptly. This work has been a significant area of focus for Financial Crime Compliance teams during 2022.

We have invested significantly to ensure our employees are properly equipped to combat financial crime. In 2022, colleagues and governance body members completed financial crime e-learnings which cover ABC, AML, sanctions and fraud topics. For those in high-risk roles and functions, additional targeted ABC training, masterclasses and forums were held to deepen understanding. We also shared our Supplier Charter, which sets out our aspirations and provides guidance related to ABC.

This was supported by our PLC Group-wide communication campaign, 'The whole story' which aimed to raise employee awareness of the real-life impact of financial crime and highlight the work we are doing individually and collectively to build a robust Risk Culture and lead in the fight against financial crime. In 2022, the theme for The Whole Story was 'Connecting the Dots' and focused on our efforts to fight crime by 'Connecting, Collaborating and Communicating', and building partnerships with government bodies, regulators and other global banks to strengthen our collective defences.

These public-private partnerships include initiatives with the International Center for Missing & Exploited Children which focuses on the use of crypto assets in the trade of child exploitation and abuse material; the National Cyber Forensics and Training Alliance which assists law enforcement in identifying significant organised groups engaged in business email compromise schemes; and US Customs and Border Protection which focuses on economic security, trade security, forced labour and other risk areas, such as Trade Based Money Laundering. These partnerships are producing material new insights about various criminal typologies and advances in how we collectively combat financial crime in an increasing number of jurisdictions.

Throughout 2022, we also engaged with peers in contributing to the ongoing dialogue to advance effectiveness in combating financial crime through our active participation in several of the leading industry groups, including the Wolfsberg Group of global Banks (Including our Global Head of FCC serving as co-chair and hosting the September meeting of the organisation), Madison Group and UK Finance. We also participated in discussions and forums with many external thought leaders including the World Economic Forum's Partnering Against Corruption Initiative (PACI).

Respecting Human Rights

We strive to be a responsible company and safeguard human rights across our business. We recognise that the global nature of our business may expose us to the risk of modern slavery and human trafficking (MSHT) in our operations, supply chain and customer and client relationships, and we are committed to identifying and mitigating these risks.

Our approach is guided by our Environment and Social Risk Management Framework and Position Statement on Human Rights. These documents outline the cross-sector standards that we expect of ourselves and our clients. They are informed by international best practice and the International Finance Corporation's Environmental and Social Performance Standards.

Our Modern Slavery Statement details our actions to tackle MSHT across our client base, supply chain and workforce. In 2022, we enhanced our human rights due diligence by requiring clients to provide evidence of their policies and processes to manage potential human rights risks in their operations or supply chains. We also developed more detailed guidance for clients on grievance mechanisms in line with IFC guidelines and UN Guiding Principles for Business and Human Rights. We continued to work with third parties, such as the Thun Group and Sustainable Shipping Initiative, to promote coordinated action against MSHT.

We completed a risk review of our supply chain and supplemented our MSHT assessment questionnaire with geopolitical analysis. As a result of the latter initiative, we are more closely scrutinising five markets for MSHT risk.

For our workforce, we introduced a refreshed set of Industrial Relations principles that take into consideration the fundamental ILO conventions. We also expanded pay gap reporting to include ethnicity data. Our ethnicity pay gap reporting this year covers the United Kingdom and United States of America, having achieved the minimum required levels of self-declaration of ethnicity in these regions to make pay gap analysis possible. This reporting will support our external commitment on ethnicity representation in these markets

Impact in our communities

Young people across the world – women and girls in particular – continue to face barriers to economic inclusion. Many fall short of their potential and become stuck in low-income poverty. The future of work also presents challenges – an estimated 50 per cent of employees worldwide will need reskilling by 2025[2], as adoption of technology increases. Accessing the relevant training will be vital for young people.

We amplify our social impact and continue to support communities through Futuremakers, our global initiative to tackle youth economic inclusion. Futuremakers supports disadvantaged young people, especially girls and people with visual impairments, to learn new skills and improve their chances of getting a job or starting their own business.

With our international and local partners including the Standard Chartered Foundation, in 2022 we continued to reach young people through Futuremakers, including providing financial education to unbanked or young people. In India, we continue to support eye health and water, sanitation and hygiene education (WASHE) in alignment with development priorities in the market.

Collective effort is needed to accelerate progress in tackling inequality and promoting economic growth. In 2022, we published insights from our partnership with Unilever supporting over 25,000 small-scale retailers affected by COVID-19 to build more resilient businesses through digitisation. We joined the UK Foreign and Commonwealth Development Office led Girls' Education Skills Partnership alongside ten other companies and agreed a partnership with Primark to design solutions to support the financial health of garment sector workers.

To inform access to finance solutions for young people, young people from our markets participated in research conducted with Business Fights Poverty and Cambridge University. The Futuremakers Insights Paper 2022 provided information and data for the third edition of the Futuremakers Forum. Stakeholders across our markets participated in this two-day virtual event to hear first-hand from Futuremakers participants, and to explore how to advance inclusive finance.

Our IGNITE programme aims to unlock the potential of female talent across the PLC Group. In 2022, we partnered with IGNITE to extend this coaching support to Futuremakers participants to help them change, challenge and stretch themselves in pursuit of their goals. We hosted Mentor's Den sessions across our markets, supporting young people with strategic advice on personal brand, future skills and banking services. We mobilised our colleagues to support families affected by the floods in Pakistan and increased our provision of three volunteering days annually to five per colleague in the Europe region to help support displaced people from Ukraine.

In 2023, we will set up a women entrepreneurs' network involving alumni of Futuremakers and expand our women's entrepreneurial support further across our footprint markets. Furthermore, in alignment with our commitment to the UN Principles for Responsible Banking, we will finalise our impact analysis to better understand our broader impact. This work will support us to shape our onwards Futuremakers strategy and further increase employee volunteering support for communities.

2 World Economic Forum, The Future of Jobs Report 2020, Page 6

Non-financial information statement

This table sets out where shareholders and stakeholders can find information about key non-financial matters in this report, in compliance with the non-financial reporting requirements contained in sections 414CA and 414 CB of the Companies Act 2006. Further disclosures are available on sc.com and in our 2022 ESG reporting index at sc.com/esgreport in Q1 2023.

Reporting requirement	Where to read more in this report about policies, impact (including risks, policy embedding, due diligence and outcomes)
Business model	Pages 11 to 13
Non-financial KPIs	Page 2
Risk Review (principal risks)	Pages 134 to 151
Environment	
• Sustainable & Responsible Business	Pages 46 to 54
• Directors Report	Pages 56 to 62
Employees	Pages 44 to 46
Human rights	Page 53
Social matters	Page 43 to 44
Anti-corruption and anti-bribery	Page 144

Authority

The strategic report up to page 55 has been issued by order of the Court.

Bill Winters
Director

16 February 2023

Company Reference Number: ZC18

Directors' Report

The directors present their report and the audited financial statements of Standard Chartered Bank and its subsidiaries (the 'Group') and Standard Chartered Bank (the 'Company') for the year ended 31 December 2022. The Company has chosen in accordance with Schedule 7 of the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (the Regulations), to include certain matters in its Strategic report (see pages 1 - 55) that would otherwise be disclosed in this Directors' report as required by paragraphs 2,6,10,11,12 of the Regulations.

Activities

The activities of the Group are banking and providing other financial services. The Group comprises a network of branches and offices in 57 markets. The Financial Review on pages 20 to 24 contains a review of the business during 2022.

Key stakeholders

The long-term success of the Group is dependent on its relationships with its key stakeholders. On pages 40 to 54 we outline the ways in which we have engaged with key stakeholders, the material issues that they have raised with us, and how these issues have been taken into account in the Court's decision-making processes.

Results and dividends

The results for the year are given in the income statement on page 167.

Dividends of $575 million were paid during the year to ordinary shareholders (2021 $1,511 million).

Share capital

Details of the Company's share capital are given in Note 27 to the accounts.

Loan capital

Details of the loan capital are given in Note 26 to the accounts.

Property, plant and equipment

Details of the property, plant and equipment of the Company are given in Note 17 to the accounts.

Financial instruments

Details of financial instruments are given in Note 12 to the accounts.

Details of exposure to credit, traded, liquidity and funding risk can be found in the Risk profile section (page 65 to 119) of the accounts.

Post balance sheet events

Details of post balance sheet events are given in Note 36 to the accounts.

Research and development

During the year, the Group invested in research and development, primarily relating to the planning, analysis, design, development, testing, integration, deployment and initial support of technology systems.

Future developments in the business of the Group

An indication of likely future developments in the business of the Group is provided in the Strategic report.

Directors and their interests

The directors of the Company during the year were as follows:

Mr A N Halford
Mr M Smith (Resigned 31 December 2022)
Mr W T Winters, CBE
Mr D P Conner (Resigned 8 December 2022)
Mrs C M Hodgson, CBE (Appointed 21 September 2022. Resigned 31 January 2023)
Ms J Hunt (Appointed 1 October 2022)
Ms G Huey Evans, CBE
Mr N Kheraj (Resigned 30 April 2022)
Ms R Lawther, CBE (Appointed 8 December 2022)
Mr D Tang
Mr C Tong (Resigned 8 December 2022)
Dr J Viñals
Ms J M Whitbread
Mr P Rivett
Ms M Ramos
Ms A McFadyen

Mr Shirish Apte and Dr Linda Yueh, CBE were appointed directors of the Company on 1 January 2023.

None of the directors have a beneficial or non-beneficial interest in the shares of the Company or in any of its subsidiary undertakings.

Details of directors' pay and benefits are disclosed in Note 38 to the accounts.

All of the directors as at 31 December 2022, except Ms McFadyen are directors of the Company's ultimate holding company, Standard Chartered PLC. Mrs Hodgson, CBE stepped down from the Group on 31 January 2023.

Director training

The induction programmes of Court directors are undertaken as part of Group level initiatives, which includes ongoing training and development and is tailored depending on their roles and responsibilities.

Going concern

In considering the going concern status of the Group, the directors have assessed the key factors, including the current and anticipated impact of COVID-19 likely to affect the Group's business model and strategic plan, future performance, capital adequacy, solvency and liquidity taking into account the emerging risks as well as the principal risks.

This year, the primary focus has been on the evolving macro-financial stress caused by the response of governments, businesses and individuals to COVID-19, with scenario analysis focused on mild, moderate, severe and extreme variants across the Group's footprint markets to ensure that the Group has sufficient capital to withstand this shock.

Under this range of scenarios, the results of these stress tests demonstrate that the Company and the Group as a whole have sufficient capital and liquidity to continue as a going concern and meet regulatory minimum capital and liquidity requirements.

Having made appropriate enquiries, the Court is satisfied that the Company and the Group as a whole have adequate resources to continue operational businesses for a period of at least 12 months from the date of this report and therefore continue to adopt the going concern basis in preparing the financial statements.

Political donations

The Group has a policy in place which prohibits donations being made that would: (i) improperly influence legislation or regulation, (ii) promote political views or ideologies, (iii) fund political causes. In alignment to this, no political donations were made in the year ended 31 December 2022.

Qualifying Third Party Indemnities

The Company has granted indemnities to all of its directors on terms consistent with the applicable statutory provisions. Qualifying third-party indemnity provisions for the purposes of section 234 of the Companies Act 2006 were accordingly in force during the course of the financial year ended 31 December 2022 and remain in force at the date of this report.

Qualifying Pension Scheme Indemnities

Qualifying pension scheme indemnity provisions (as defined by section 235 of the Companies Act 2006) were in force during the course of the financial year ended 31 December 2022 for the benefit of the directors of the UK's pension fund corporate trustee (Standard Chartered Trustees (UK) Limited) and remain in force at the date of this report.

Areas of operation

The Company operates through branches and subsidiaries in 57 markets across Asia, the Middle East, Africa, Europe and the Americas.

Related party transactions

Details of transactions with directors and officers and other related parties are set out in Note 35 to the financial statements.

Corporate governance statement

Following the consolidation of the Greater China and North Asia Hub ("GCNA") and the ASEAN and South Asia Hub ("ASA") which formed Asia, these countries operate under the Asia governance model. As the Group continues to cover the vast majority of PLC Group's total footprint, the governance arrangements of the Company and PLC similarly reflect this overlap and is represented by a predominately mirrored board structure between PLC and the Company.

As a wholly-owned subsidiary of a listed PLC and its governance structure as a company established by Royal Charter, the Company complies with expectations set for premium listed companies with respect to board leadership, responsibilities, composition (including succession and evaluation) to ensure that the Group is well managed, with appropriate oversight and control. Certain matters, such as remuneration, values, and external audit, are set at PLC Group level and considered or approved, if appropriate, by the Court. It is considered more appropriate for the purposes of Group wide consistency that principles are set at PLC Board level and then disseminated through the Group to be approved by subsidiary boards.

The Court is supported by 4 primary committees: Audit Committee; Board Risk Committee; Nomination Committee; and US Risk Committee. Each of the primary committees and the Court have implemented clear lines of responsibility and policies to support the Court in its effective decision making. The Court also has a Standing Committee with a remit to approve matters, on behalf of the Court, where a formal resolution is required for legal and regulatory purposes. The Court, and its Audit and Risk Committees have similar membership as the Board of PLC and its Audit and Risk Committees, with the appropriate balance, skills, background and experience to make a valued contribution. For further information on how the Audit Committee and Risk Committee operate, please see pages 163 to 169 and 170 to 175 of PLC's 2022 Annual Report.

The Court, together with the PLC Group, are committed to high standards of engagement with employees, suppliers and other stakeholders. For a description of how the directors engaged with stakeholders, including as to how such engagement has been considered in the Court's decision making, please refer to page 40.

Employee policies and engagement

We work hard to ensure that our employees are kept informed about matters affecting or of interest to them, and more importantly have the opportunities to provide feedback and engage in a dialogue.

We continue to listen and act on feedback from colleagues to ensure internal communications are timely, informative, meaningful, and in support of our strategy and transformation. In addition to the Bridge (our primary internal communications platform) which allows colleagues to receive key updates, exchange ideas and provide feedback, we also leverage a range of channels including email, digital newsletters with customised content for each employee segment, audio and video calls, virtual and face-to-face town halls, and other staff engagement and recognition events. To continue to improve the way we communicate and ensure our employee communications remain relevant, we also periodically analyse and measure the impact of our communications through a range of survey and feedback tools. We are currently assessing our suite of communication channels as we prepare to launch improved solutions and discontinue those that are less effective.

Our senior leaders and people leaders continue to play a critical role in engaging our teams across the network, ensuring that they are kept up to date on key business developments related to our performance and strategy. We provide additional support to our people leaders with specific calls and communications packs to help them provide context and guidance to their team members to better understand their role in executing and delivering our strategy.

Across the organisation, regular team meetings with people leaders, one-to-ones and various management meetings provide an important platform for colleagues to discuss and clarify key issues. Regular performance conversations provide the opportunity to discuss how individuals, the team and the business area have contributed to our overall performance and how any compensation awards relate to this. Senior leadership also regularly share global, business, function, region and market updates on performance, strategy, structural changes, HR programmes, community involvement and other campaigns.

The Court engages with and listens to the views of the workforce through several sources, including through interactive engagement sessions.

Employees, past, present and future can follow our progress through the PLC Group's LinkedIn network and Facebook page, as well as other social network channels including Instagram, which collectively have over 2.4 million followers.

The diverse range of internal and external communication tools and channels we have put in place ensure that all our colleagues receive timely and relevant information to support their effectiveness.

The wellbeing of our employees is central to our thinking about benefits and support, so that they can thrive at work and in their personal lives. Our Group minimum standards provide employees with a range of flexible working options, in relation to both location and working patterns. In terms of leave, at least thirty days' leave (through annual leave and public holidays), a minimum of twenty calendar weeks' fully paid maternity leave, a minimum of two calendar weeks of leave for spouses or partners, and two calendar weeks for adoption leave are provided. Combined, this is above the International Labour Organisation minimum standards.

We seek to build productive and enduring partnerships with various employee representative bodies (including unions and work councils). In our recognition and interactions, we are heavily influenced by the 1948 United Nations Universal Declaration of Human Rights (UDHR), and several International Labour Organisation (ILO) conventions including the Right to Organise and Collective Bargaining Convention, 1949 (No. 98) and the Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87).

The PLC Group Grievance Standard provides a formal framework for dealing with concerns that employees have in relation to their employment or another colleague, which affects them directly, and cannot be resolved through informal mechanisms, such as counselling, coaching or mediation. This can include concerns related to bullying, harassment, discrimination and victimisation, as well as concerns regarding conditions of employment (for example, health and safety, new working practices or the working environment). Employees can raise grievances to their People Leader or a Human Resources (HR) representative. The global process for addressing grievances involves an HR representative and a member of the business reviewing the grievance, conducting fact finding into the grievance and providing a written outcome to the aggrieved employee. If a grievance is upheld, the next steps might include remedying a policy or process, or initiating a disciplinary review of the conduct of the colleague who is the subject of the grievance. The PLC Group Grievance Standard and accompanying process is reviewed on a periodic basis in consultation with stakeholders across HR, Legal, Compliance and Shared Investigative Services. Grievance trends are reviewed on a quarterly basis and action is taken to address any concerning trends.

There is a distinct PLC Group Speaking Up Policy which covers instances where an employee wishes to 'blow the whistle' on actual, planned or potential wrongdoing by another employee or the Group.

The Group is committed to creating a fair, consistent, and transparent approach to making decisions in a disciplinary context. This commitment is codified in our Fair Accountability Principles, which underpin our PLC Group Disciplinary Standard. Dismissals due to misconduct issues and/or performance (where required by law to follow a disciplinary process) are governed by the PLC Group Disciplinary Standard. Where local law or regulation requires a different process with regards to dismissals and other disciplinary outcomes, we have country variances in place.

Diversity and Inclusion

Our PLC Group Diversity and Inclusion Standard has been developed to ensure a respectful workplace, with fair and equal treatment, diversity and inclusion, and the provision of opportunities for employees to participate fully and reach their full potential in an appropriate working environment. The Group aims to provide equality of opportunity for all, protect the dignity of employees and promote respect at work. All individuals are entitled to be treated with dignity and respect, and to be free from harassment, bullying, discrimination and victimisation. This helps to support productive working conditions, decreased staff attrition, positive employee morale and engagement, maintains employee wellbeing, and reduces people-related risk. All employees and contractors are required to take personal responsibility to comply with the Standard, including conducting themselves in a manner that demonstrates appropriate, non-discriminatory behaviours.

The Group is committed to provide equal opportunities and fair treatment in employment. We do not accept unlawful discrimination in our recruitment or employment practices on any grounds including but not limited to: sex, race, colour, nationality, ethnicity, national or indigenous origin, disability, age, marital or civil partner status, pregnancy or maternity, sexual orientation, gender identity, expression or reassignment, HIV or AIDS status, parental status, military and veterans status, flexibility of working arrangements, religion or belief. We strive for recruitment, appraisals, pay and conditions, training, development, succession planning, promotion, grievance/disciplinary procedures and employment termination practices that are inclusive and accessible; and that do not directly or indirectly discriminate. Recruitment, employment, training, development and promotion decisions are based on the skills, knowledge and behaviour required to perform the role to the Group's standards. Implied in all employment terms is the commitment to equal pay for equal work. We will also make reasonable workplace adjustments (including during the hiring process) to ensure all individuals feel supported and are able to participate fully and reach their potential. If employees become disabled, we will proactively seek to support them with appropriate training and workplace adjustments where possible and explore every opportunity to ensure their employment continues.

Health and safety

Our Health, Safety and Wellbeing (HSW) programme covers both mental and physical health and wellbeing. The Group complies with both external regulatory requirements and internal policy and standards for HSW in all markets. It is Group policy to ensure that the more stringent of the two requirements is always met, ensuring our HSW practices meet or exceed the regulatory minimum. Compliance rates are reported at least biannually to each country's Management Team.

HSW performance and risks are reported annually to the PLC Group Risk Committee and Board Risk Committee. We use a health and safety management system across all countries to ensure a consistently high level of health and safety reporting for all our colleagues and clients.

The Bank sponsors medical and healthcare services for all employees, except in markets where cover is provided through State-mandated healthcare, which represent less than 0.5 per cent of the PLC Group's employees. All staff also have access to professional counselling via our Employee Assistance Program, as well as to more proactive mental health support through our holistic wellbeing app and platform.

Furthermore, we consider and treat mental health in the same way that we would treat physical health. Our global Mental Health First Aid (MHFA) program offers help to someone developing a mental health problem, experiencing a worsening of an existing mental illness or a mental health crisis. The mental health support is given until appropriate professional help is received, or the crisis resolved.

In 2022, we recorded no work-related fatalities or serious long-term work-related health issues in our staff. Whilst not mandatory, we 'strongly encourage' vaccination against COVID-19 for employees and have held vaccination drives where possible to assist colleagues and their families to access vaccinations.

Over 100 of our largest premises were certified with the WELL Health & Safety Rating; an evidence-based, third-party certification that validates our efforts to address the hygiene and safety of our workspaces during COVID-19 and prepare our buildings for re-entry post-pandemic.

Throughout 2022, the COVID-19 pandemic reduced its impact, with lockdowns and restrictions easing across most markets and staff returning to the office in greater numbers. Although we still encourage flexible and hybrid work arrangements as part of our Future Work Now program.

A H&S online assessment tool is available for staff to assess their home working area for hazards, through a virtual assessment of the individual's work environment. All staff opting to work flexibly received an allowance to purchase ergonomic office equipment. Our work injury insurance also covers all staff working from home.

Health, Safety & Security training is mandatory for all colleagues training, and 2022 saw both our initial and annual refresher training packages completely updated and refreshed, with emphasis on mental health and wellbeing, as well as work from home aspects.

Supply Chain Management

To support the operation of our businesses we source a variety of goods and services governed through a third-party risk management framework which ensures that we follow the highest standards in terms of vendor selection, due diligence, and contract management.

For information about how the PLC Group engages with suppliers on environmental and social matters, please see our Supplier Charter and Supplier Diversity and Inclusion Standard.

As set out under the UK Modern Slavery Act 2015, the PLC Group is required to publish a Modern Slavery Statement annually. The PLC Group's 2022 Modern Slavery Statement will be issued at the same time as the Annual Report. This document will give further detail on how the PLC Group has prevented modern slavery and human trafficking in its operations, financing and supply chain during 2022.

> Our Supplier Charter and Supplier Diversity and Inclusion standard can be viewed at **sc.com/suppliers/**

Product responsibility

We aim to design and offer products based on client needs to ensure fair treatment and outcomes for clients.

The PLC Group has in place a risk framework, comprising policies and standards, to support these objectives in alignment with our Conduct Risk Framework. This framework covers sales practices, client communications, appropriateness and suitability, and post-sales practice. There are controls across all activities above and the controls as tested on a regular basis to provide assurance on the framework. As part of this, we ensure products sold are suitable for clients and comply with relevant laws and regulations. We also review our products on a periodic basis and refine them keeping them relevant to the changing needs of clients and regulators

We have processes and guidelines specific to each of our client businesses, to promptly resolve client complaints, understand and respond to client issues. Conduct considerations are given significant weighting in front-line incentive structures to drive the right behaviours.

For more information on our approach to product design, product pricing, treating customers fairly and protecting vulnerable customers, and incentivising our frontline employees, see pages 40 and 45. For more information on fraud identification see page 52.

Environmental impact of our operations

We aim to minimise the environmental impact of our operations as part of our commitment to be a responsible company. We report on energy, water and non-hazardous waste data which become the basis of our Greenhouse Gas (GHG) emissions management, as well as the targets we have set to reduce energy, water and waste consumption.

Our reporting methodology is based upon the World Resources Institute/ World Business Council for Sustainable Development Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (Revised Edition). We report on all emission sources required under the Companies Act 2006 (Strategic Report and Directors' Reports) Regulations.

Using conversion factors from the International Energy Agency 2021 Emissions Factors and the UK Government's Department for Business, Energy & Industrial Strategy, emissions are reported in metric tonnes of carbon dioxide equivalent (CO_2e), encompassing the six Kyoto gases.

Reporting period

The reporting period of our Scope 1 and 2, Scope 3 Category 6 (business flights), Scope 3 Category 1 (data centres) and environmental resource efficiency data is from 1 October 2021 to 30 September 2022. This allows sufficient time for independent assurance to be gained on our Scope 1 and 2 emissions prior to the publication of results. Our Scope 1 and 2 emissions are assured by an independent body, Global Documentation, against the requirements of ISO14064. Accordingly, the operating income used in this inventory corresponds to the same time period rather than the calendar year used in financial reporting.

Auditor

The Audit Committee reviews the appointment of the Group statutory auditor, its effectiveness and its relationship with the Group, which includes monitoring our use of the auditors for non-audit services and the balance of audit and non-audit fees paid. Each director believes that there is no relevant information of which our Group statutory auditor is unaware. Each has taken all reasonable steps necessary as a director to be aware of any relevant audit information and to establish that Ernst & Young LLP (EY) is made aware of any pertinent information. A resolution to re-appoint EY as auditor will be proposed at the 2023 PLC Annual General Meeting.

By order of the Court

Bill Winters
Director

16 February 2023

Company Reference Number: ZC18

Statement of directors' responsibilities

The directors are responsible for preparing the Directors' Report and the Group and Company Financial Statements in accordance with applicable law and regulations.

Company law requires the directors to prepare Group and Company financial statements for each financial year. Under that law they are required to prepare the Group financial statements in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006 and with International Financial Reporting Standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union (EU IFRS) and applicable law, and the Company financial statements in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006.

Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Company and of their profit or loss for that period. In preparing each of the Group and Company financial statements, the directors are required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgements and estimates that are reasonable, relevant and reliable;
- State whether they have been prepared in accordance international accounting standards in conformity with the requirements of the Companies Act 2006 and with EU IFRS;
- Assess the Group and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- Use the going concern basis of accounting unless they either intend to liquidate the Group or the Company or to cease operations or have no realistic alternative but to do so.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the directors are also responsible for preparing a Strategic Report and Directors' Report that complies with that law and those regulations.

Responsibility statement of the directors in respect of the Directors' Report and Financial Statements

We confirm that to the best of our knowledge:

- The financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole; and
- The Strategic Report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the emerging risks and uncertainties that they face.

We consider the Directors' Report and Financial Statements, taken as a whole, is fair, balanced and understandable and provides the information necessary to assess the Group's position and performance, business model and strategy.

By order of the Court

Andy Halford
Director

16 February 2023

Risk review and Capital review

The following parts of the Risk review and Capital review form part of these financial statements –

- **a) Risk review:** Disclosures marked as 'audited' from the start of Credit Risk section (page 65) to the end of other principal risks in the same section (page 127); and
- **b) Capital review:** Tables marked as 'audited' from the start of 'Capital base' to the end of 'Total capital' (page 153).

Credit Risk

Basis of preparation

Unless otherwise stated the balance sheet and income statement information presented within this section is based on the Group's management view. This is principally the location from which a client relationship is managed, which may differ from where it is financially booked and may be shared between businesses and/or regions. This view reflects how the client segments and regions are managed internally.

Loans and advances to customers and banks held at amortised cost in this Risk profile section include reverse repurchase agreement balances held at amortised cost, per Note 14 Reverse repurchase and repurchase agreements including other similar secured lending and borrowing.

Credit Risk overview

Credit Risk is the potential for loss due to the failure of a counterparty to meet its obligations to pay the Group. Credit exposures arise from both the banking and trading books.

Impairment model

IFRS 9 requires an impairment model that requires the recognition of expected credit losses (ECL) on all financial debt instruments held at amortised cost, fair value through other comprehensive income (FVOCI), undrawn loan commitments and financial guarantees.

Staging of financial instruments

Financial instruments that are not already credit-impaired are originated into stage 1 and a 12-month expected credit loss provision is recognised.

Instruments will remain in stage 1 until they are repaid, unless they experience significant credit deterioration (stage 2) or they become credit-impaired (stage 3).

Instruments will transfer to stage 2 and a lifetime expected credit loss provision recognised when there has been a significant change in the credit risk compared to what was expected at origination.

The framework used to determine a significant increase in credit risk is set out below.

Stage 1	Stage 2	Stage 3
• 12-month ECL • Performing	• Lifetime expected credit loss • Performing but has exhibited significant increase in Credit risk (SICR)	• Credit-impaired • Non-performing

IFRS 9 expected credit loss principles and approaches

The main methodology principles and approach adopted by the Group are set out in the following table.

Title	Description	Supplementary information	Page
Approach to determining expected credit losses	For material loan portfolios, the Group has adopted a statistical modelling approach for determining expected credit losses that makes extensive use of credit modelling. These models leveraged existing advanced Internal Ratings Based (IRB) models, where these were available. Where model performance breaches model monitoring thresholds or validation standards, a post-model adjustment may be required to correct for identified model issues, which will be removed once those issues have been remedied.	IFRS 9 methodology Determining lifetime expected credit loss for revolving products	105 105
Incorporation of forward-looking information	The determination of expected credit loss includes various assumptions and judgements in respect of forward-looking macroeconomic information. Refer to page 106 for incorporation of forward-looking information, forecast of key macroeconomic variables underlying the expected credit loss calculation and the impact on non-linearity and sensitivity of expected credit loss calculation to macroeconomic variables. Judgemental adjustments, including management overlays may also be used to capture risks not identified in the models.	Incorporation of forward-looking information Forecast of key macroeconomic variables underlying the expected credit loss calculation Judgemental adjustments and sensitivity to macroeconomic variables	106 106 108

Title	Description	Supplementary information	Page
Significant increase in credit risk (SICR)	Expected credit loss for financial assets will transfer from a 12-month basis (stage 1) to a lifetime basis (stage 2) when there is a significant increase in credit risk (SICR) relative to that which was expected at the time of origination, or when the asset becomes credit-impaired. On transfer to a lifetime basis, the expected credit loss for those assets will reflect the impact of a default event expected to occur over the remaining lifetime of the instrument rather than just over the 12 months from the reporting date. SICR is assessed by comparing the risk of default of an exposure at the reporting date with the risk of default at origination (after considering the passage of time). 'Significant' does not mean statistically significant nor is it reflective of the extent of the impact on the Group's financial statements. Whether a change in the risk of default is significant or not is assessed using quantitative and qualitative criteria, the weight of which will depend on the type of product and counterparty.	Quantitative criteria Significant increase in credit risk thresholds Specific qualitative and quantitative criteria per segment: Corporate, Commercial & Institutional Banking (CCIB) clients Consumer and Business Banking clients Private Banking clients Debt securities	110 110 111 111 111 111 112
Assessment of credit-impaired financial assets	Credit-impaired (stage 3) financial assets comprise those assets that have experienced an observed credit event and are in default. Default represents those assets that are at least 90 days past due in respect of principal and interest payments and/or where the assets are otherwise considered unlikely to pay. This definition is consistent with internal credit risk management and the regulatory definition of default. Unlikely to pay factors include objective conditions such as bankruptcy, debt restructuring, fraud or death. It also includes credit-related modifications of contractual cash flows due to significant financial difficulty (forbearance) where the Group has granted concessions that it would not ordinarily consider. Interest income for stage 3 assets is recognised by applying the original effective interest rate to the net asset amount (that is, net of credit impairment provisions). When financial assets are transferred from stage 3 to stage 2, any contractual interest recovered in excess of the interest income recognised while the asset was in stage 3 is reported within the credit impairment line.	Consumer and Business Banking clients CCIB and Private Banking clients	112 112
Transfers between stages	Assets will transfer from stage 3 to stage 2 when they are no longer considered to be credit-impaired. Assets will not be considered credit-impaired only if the customer makes payments such that they are paid to current in line with the original contractual terms. Assets may transfer to stage 1 if they are no longer considered to have experienced a significant increase in credit risk. This will be immediate when the original PD based transfer criteria are no longer met (and as long as none of the other transfer criteria apply). Where assets were transferred using other measures, the assets will only transfer back to stage 1 when the condition that caused the significant increase in credit risk no longer applies (and as long as none of the other transfer criteria apply).	Movement in loan exposures and expected credit losses	79
Modified financial assets	Where the contractual terms of a financial instrument have been modified, and this does not result in the instrument being derecognised, a modification gain or loss is recognised in the income statement representing the difference between the original cashflows and the modified cash flows, discounted at the effective interest rate. The modification gain/loss is directly applied to the gross carrying amount of the instrument. If the modification is credit related, such as forbearance or where the Group has granted concessions that it would not ordinarily consider, then it will be considered credit-impaired. Modifications that are not credit related will be subject to an assessment of whether the asset's credit risk has increased significantly since origination by comparing the remaining lifetime PD based on the modified terms to the remaining lifetime PD based on the original contractual terms.	COVID-19 relief measures Forbearance and other modified loans	88 89

Title	Description	Supplementary information	Page
Governance and application of expert credit judgement in respect of expected credit losses	The models used in determining ECL are reviewed and approved by the PLC Group Credit Model Assessment Committee and have been validated by Group model validation, which is independent of the business. A quarterly model monitoring process is in place that uses recent data to compare the differences between model predictions and actual outcomes against approved thresholds. Where a model's performance breaches the monitoring thresholds then an assessment of whether an ECL adjustment is required to correct for the identified model issue is completed. The determination of expected credit losses requires a significant degree of management judgement which had an impact on governance processes, with the output of the expected credit models assessed by the IFRS 9 Impairment Committee.	PLC Group Credit Model Assessment Committee IFRS 9 Impairment Committee	113 113

Maximum exposure to Credit Risk (audited)

The table below presents the Group's maximum exposure to Credit risk for its on-balance sheet and off-balance sheet financial instruments as at 31 December 2022, before and after taking into account any collateral held or other Credit risk mitigation. The Group's on-balance sheet maximum exposure to Credit Risk increased by $8 billion to $525 billion (31 December 2021: $517 billion).

Loans and advances to customers including reverse repurchase agreements increased by $13 billion to $158 billion (31 December 2021: $145 billion) and fair value loans and advances reverse repurchase agreements decreased by $16.7 billion to $62 billion (31 December 2021: $79 billion). This was offset by risk-weighted asset optimisation actions undertaken by CCIB and currency translation. Excluding reverse repurchase agreements, loans and advances to customers increased by $2 billion to $143 billion (31 December 2021: $141 billion).

Derivative exposures increased by $12 billion to $65 billion (31 December 2021: $53 billion) and investment debt securities increased by $10.7 billion to $112 billion (31 December 2021: $102 billion). This was offset by a decrease of $11.4 billion of cash and balances at central banks and a decrease of $2.6 billion in loans to banks. Off-balance sheet instruments increased by $5.8 billion to $156 billion (31 December 2021: $150 billion), from higher undrawn commitments.

Group

	2022				2021			
		Credit risk management				Credit risk management		
	Maximum exposure $million	Collateral[8] $million	Master netting agreements $million	Net exposure $million	Maximum exposure $million	Collateral[8] $million	Master netting agreements $million	Net exposure $million
On-balance sheet								
Cash and balances at central banks	50,531			50,531	61,963			61,963
Loans and advances to banks[1]	27,383	878		26,505	29,999	956		29,043
of which – reverse repurchase agreements and other similar secured lending[7]	878	878		–	956	956		–
Loans and advances to customers[1]	158,126	52,699		105,427	144,799	43,172		101,627
of which – reverse repurchase agreements and other similar secured lending[7]	15,586	15,586		–	3,764	3,764		–
Investment securities – Debt securities and other eligible bills[2]	112,425			112,425	101,705			101,705
Fair value through profit or loss[3,7]	80,668	62,333	–	18,335	101,944	78,986	–	22,958
Loans and advances to banks	859			859	3,622			3,622
Loans and advances to customers	4,065			4,065	3,932			3,932
Reverse repurchase agreements and other similar lending[7]	62,333	62,333		–	78,986	78,986		–
Investment securities – Debt securities and other eligible bills[2]	13,411			13,411	15,404			15,404
Derivative financial instruments[4,7]	65,050	8,304	52,827	3,919	53,245	7,757	42,577	2,911
Accrued income	1,858			1,858	996			996
Assets held for sale	1,388			1,388	52			52
Other assets[5]	27,210			27,210	22,281			22,281
Total balance sheet	524,639	124,214	52,827	347,598	516,984	130,871	42,577	343,536
Off-balance sheet[6]								
Undrawn Commitments	107,885	2,250		105,635	100,686	2,658		98,028
Financial Guarantees and other equivalents	47,799	2,229		45,570	49,235	1,813		47,422
Total off-balance sheet	155,684	4,479	–	151,205	149,921	4,471	–	145,450
Total	680,323	128,693	52,827	498,803	666,905	135,342	42,577	488,986

1 Net of credit impairment. An analysis of credit quality is set out in the credit quality analysis section (page 73). Further details of collateral held by client segment and stage are set out in the collateral analysis section (page 91)

2 Excludes equity and other investments of $603 million (31 December 2021: $575 million). Further details are set out in Note 12 Financial instruments

3 Excludes equity and other investments of $1,886 million (31 December 2021: $4,585 million). Further details are set out in Note 12 Financial instruments

4 The Group enters into master netting agreements, which in the event of default result in a single amount owed by or to the counterparty through netting the sum of the positive and negative mark-to-market values of applicable derivative transactions

5 Other assets include cash collateral, and acceptances, in addition to unsettled trades and other financial assets

6 Excludes ECL allowances which are reported under Provisions for liabilities and charges

7 Collateral capped at maximum exposure (over-collateralised)

8 Adjusted for over-collateralisation, which has been determined with reference to the drawn and undrawn component as this best reflects the effect on the amount arising from expected credit losses. Loans and advances to customers collateral now re-presented between on and off -balance sheet as it also includes guarantees

Company

	2022				2021			
		Credit risk management				Credit risk management		
	Maximum exposure $million	Collateral[8] $million	Master netting agreements $million	Net exposure $million	Maximum exposure $million	Collateral[8] $million	Master netting agreements $million	Net exposure $million
On-balance sheet								
Cash and balances at central banks	38,867			38,867	48,165			48,165
Loans and advances to banks[1]	18,548	184		18,364	16,117	438		15,679
of which – reverse repurchase agreements and other similar secured lending[7]	184	184		–	438	438		–
Loans and advances to customers[1]	80,611	26,889		53,722	71,161	17,053		54,108
of which – reverse repurchase agreements and other similar secured lending[7]	15,071	15,071		–	3,047	3,047		–
Investment securities – Debt securities and other eligible bills[2]	95,049			95,049	86,028			86,028
Fair value through profit or loss[3,7]	74,051	59,057	–	14,994	95,284	77,655	–	17,629
Loans and advances to banks	837			837	3,570			3,570
Loans and advances to customers	3,196			3,196	3,207			3,207
Reverse repurchase agreements and other similar lending[7]	59,057	59,057		–	77,655	77,655		–
Investment securities – debt securities and other eligible bills[2]	10,961			10,961	10,852			10,852
Derivative financial instruments[4,7]	65,481	7,710	53,810	3,961	53,478	7,033	43,788	2,657
Accrued income	1,342			1,342	659			659
Assets held for sale	544			544	49			49
Other assets[5]	23,625			23,625	19,860			19,860
Total balance sheet	398,118	93,840	53,810	250,468	390,801	102,179	43,788	244,834
Off-balance sheet[6]								
Undrawn Commitments	64,005	1,373		62,632	66,678	1,820		64,858
Financial Guarantees and other equivalents	37,890	1,965		35,925	37,465	1,581		35,884
Total off-balance sheet	101,895	3,338	–	98,557	104,143	3,401	–	100,742
Total	500,013	97,178	53,810	349,025	494,944	105,580	43,788	345,576

1 Net of credit impairment. An analysis of credit quality is set out in the credit quality analysis section (page 73]. Further details of collateral held by client segment and stage are set out in the collateral analysis section (page 91)

2 Excludes equity and other investments of $323 million (31 December 2021: $361 million). Further details are set out in Note 12 Financial instruments

3 Excludes equity and other investments of $1,741 million (31 December 2021: $4,421 million). Further details are set out in Note 12 Financial instruments

4 The Group enters into master netting agreements, which in the event of default result in a single amount owed by or to the counterparty through netting the sum of the positive and negative mark-to-market values of applicable derivative transactions

5 Other assets include cash collateral, and acceptances, in addition to unsettled trades and other financial assets

6 Excludes ECL allowances which are reported under Provisions for liabilities and charges

7 Collateral capped at maximum exposure (over-collateralised)

8 Adjusted for over-collateralisation, which has been determined with reference to the drawn and undrawn component as this best reflects the effect on the amount arising from expected credit losses. Loans and advances to customers collateral now re-presented between on and off -balance sheet as it also includes guarantees

Analysis of financial instrument by stage (audited)

This table shows financial instruments and off-balance sheet commitments by stage, along with the total credit impairment loss provision against each class of financial instrument.

The proportion of financial instruments held within stage 1 increased by 1.7 per cent to 94.8 per cent (31 December 2021: 93 per cent). Total stage 1 balances increased by $29 billion, of which around $18 billion was in loans and advances to customers, primarily due to increased levels of reverse repos in CCIB. CPBB remains broadly flat at $45 billion. Off-balance sheet exposures increased by $8 billion to $148 billion (31 December 2021: $140 billion) primarily in undrawn commitments.

Stage 2 financial instruments reduced by $7 billion to $21 billion (31 December 2021: $28 billion), $5 billion of which was in loans and advances to customers due to exposure changes and stage transfers in CCIB in the Energy, Transport, telecoms and utilities sectors. As a result, the proportion of loans and advances to customers classified in stage 2 reduced by 4 per cent to 5 per cent (31 December 2021: 9 per cent).

Stage 3 financial instruments reduced by $0.3 billion to $7.6 billion (31 December 2021: $8 billion) due to repayments and write-offs during the year.

Group

	2022											
	Stage 1			Stage 2			Stage 3			Total		
	Gross balance[1] $million	Total credit impairment $million	Net carrying value	Gross balance[1] $million	Total credit impairment $million	Net carrying value	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million
Cash and balances at central banks	49,911	–	49,911	333	(8)	325	295	–	295	50,539	(8)	50,531
Loans and advances to banks (amortised cost)	27,084	(7)	27,077	275	(3)	272	35	(1)	34	27,394	(11)	27,383
Loans and advances to customers (amortised cost)	148,213	(268)	147,945	7,743	(187)	7,556	6,202	(3,577)	2,625	162,158	(4,032)	158,126
Debt securities and other eligible bills[5]	106,886	(20)		5,455	(90)		144	(106)		112,485	(216)	
Amortised cost	41,512	(7)	41,505	271	(2)	269	78	(51)	27	41,861	(60)	41,801
FVOCI[2]	65,374	(13)		5,184	(88)		66	(55)		70,624	(156)	–
Accrued income (amortised cost)[4]	1,858		1,858			–			–	1,858	–	1,858
Assets held for sale	1,083	(6)	1,077	262	(4)	258	120	(67)	53	1,465	(77)	1,388
Other assets	27,213	(3)	27,210	–	–	–	3	(3)	–	27,216	(6)	27,210
Undrawn commitments[3]	103,644	(26)		4,133	(42)		128	–		107,885	(68)	
Financial guarantees, trade credits and irrevocable letter of credits[3]	44,252	(9)		2,883	(27)		664	(147)		47,799	(183)	
Total	510,144	(339)		21,064	(361)		7,591	(3,901)		538,799	(4,601)	

1 Gross carrying amount for off-balance sheet refers to notional values

2 These instruments are held at fair value on the balance sheet. The ECL provision in respect of debt securities measured at FVOCI is held within the OCI reserve

3 These are off-balance sheet instruments. Only the ECL is recorded on-balance sheet as a financial liability and therefore there is no "net carrying amount". ECL allowances on off-balance sheet instruments are held as liability provisions to the extent that the drawn and undrawn components of loan exposures can be separately identified. Otherwise they will be reported against the drawn component

4 Stage 1 ECL is not material

5 Stage 3 gross includes $28 million (2021: $33 million) originated credit-impaired debt securities with impairment of $13 million (2021: Nil)

	2021											
	Stage 1			Stage 2			Stage 3			Total		
	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million
Cash and balances at central banks	61,901	–	61,901	66	(4)	62	–	–	–	61,967	(4)	61,963
Loans and advances to banks (amortised cost)	29,422	(11)	29,411	561	(4)	557	31	–	31	30,014	(15)	29,999
Loans and advances to customers (amortised cost)	129,990	(266)	129,724	12,741	(381)	12,360	6,941	(4,226)	2,715	149,672	(4,873)	144,799
Debt securities and other eligible bills[5]	96,350	(58)		5,315	(42)		113	(66)		101,778	(166)	
Amortised cost	28,978	(10)	28,968	196	3	199	113	(66)	47	29,287	(73)	29,214
FVOCI[2]	67,372	(48)		5,119	(45)		–	–		72,491	(93)	
Accrued income (amortised cost)[4]	996		996			–			–	996	–	996
Assets held for sale[4]	52		52			–			–	52	–	52
Other assets	22,281	–	22,281	–	–	–	3	(3)	–	22,284	(3)	22,281
Undrawn commitments[3]	94,170	(23)		6,516	(53)		–	–		100,686	(76)	
Financial guarantees, trade credits and irrevocable letter of credits[3]	45,916	(12)		2,522	(21)		797	(207)		49,235	(240)	
Total	481,078	(370)		27,721	(505)		7,885	(4,502)		516,684	(5,377)	

1 Gross carrying amount for off-balance sheet refers to notional values

2 These instruments are held at fair value on the balance sheet. The ECL provision in respect of debt securities measured at FVOCI is held within the OCI reserve

3 These are off-balance sheet instruments. Only the ECL is recorded on-balance sheet as a financial liability and therefore there is no "net carrying amount". ECL allowances on off-balance sheet instruments are held as liability provisions to the extent that the drawn and undrawn components of loan exposures can be separately identified. Otherwise they will be reported against the drawn component

4 Stage 1 ECL is not material

5 Stage 3 gross includes $33 million originated credit-impaired debt securities and Nil impairment

Company

	2022											
	Stage 1			Stage 2			Stage 3			Total		
	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million
Cash and balances at central banks	38,847	–	38,847	10	–	10	10	–	10	38,867	–	38,867
Loans and advances to banks (amortised cost)	18,423	(3)	18,420	128	(1)	127	1	–	1	18,552	(4)	18,548
Loans and advances to customers (amortised cost)	73,476	(148)	73,328	5,296	(77)	5,219	4,685	(2,621)	2,064	83,457	(2,846)	80,611
Debt securities and other eligible bills[5]	93,243	(20)		1,785	(1)		78	(50)		95,106	(71)	
Amortised cost	38,011	(6)	38,005	10	(1)	9	78	(50)	28	38,099	(57)	38,042
FVOCI[2]	55,232	(14)		1,775	–		–	–		57,007	(14)	–
Accrued income (amortised cost)[4]	1,342		1,342			–			–	1,342	–	1,342
Assets held for sale	412	(1)	411	132	(2)	130	30	(27)	3	574	(30)	544
Other assets	23,625	–	23,625	–	–	–	–	–	–	23,625	–	23,625
Undrawn commitments[3]	60,727	(18)		3,150	(24)		128	–		64,005	(42)	
Financial guarantees, trade credits and irrevocable letter of credits[3]	34,894	(6)		2,453	(17)		543	(118)		37,890	(141)	
Total[6]	344,989	(196)		12,954	(122)		5,475	(2,816)		363,418	(3,134)	

1 Gross carrying amount for off-balance sheet refers to notional values

2 These instruments are held at fair value on the balance sheet. The ECL provision in respect of debt securities measured at FVOCI is held within the OCI reserve

3 These are off-balance sheet instruments. Only the ECL is recorded on-balance sheet as a financial liability and therefore there is no 'net carrying amount'. ECL allowances on off-balance sheet instruments are held as liability provisions to the extent that the drawn and undrawn components of loan exposures can be separately identified. Otherwise they will be reported against the drawn component

4 Stage 1 ECL is not material

5 Stage 3 includes gross of $28 million (2021: $33 million) originated credit-impaired debt securities with impairment of $13 million (2021: Nil)

6 Excludes 'Amounts due from subsidiary undertakings and other related parties' of $13,214 million. The amounts are held within stage 1 and rated as 'strong' at 31 December and is net of an expected credit loss of $5 million

	2021											
	Stage 1			Stage 2			Stage 3			Total		
	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million	Gross balance[1] $million	Total credit impairment $million	Net carrying value $million
Cash and balances at central banks	48,165	–	48,165	–	–	–	–	–	–	48,165	–	48,165
Loans and advances to banks (amortised cost)	15,882	(9)	15,873	247	(3)	244	–	–	–	16,129	(12)	16,117
Loans and advances to customers (amortised cost)	59,760	(151)	59,609	9,795	(235)	9,560	5,019	(3,027)	1,992	74,574	(3,413)	71,161
Debt securities and other eligible bills[5]	82,388	(32)		3,603	(21)		82	(36)		86,073	(89)	
Amortised cost	25,828	(8)	25,820	130	(1)	129	82	(36)	46	26,040	(45)	25,995
FVOCI[2]	56,560	(24)		3,473	(20)		–	–		60,033	(44)	
Accrued income (amortised cost)[4]	659		659			–			–	659	–	659
Assets held for sale[4]	49		49			–			–	49	–	49
Other assets	19,860	–	19,860	–	–	–	–	–	–	19,860	–	19,860
Undrawn commitments[3]	61,792	(9)		4,886	(35)		–	–		66,678	(44)	
Financial guarantees, trade credits and irrevocable letter of credits[3]	34,709	(9)		2,047	(17)		709	(175)		37,465	(201)	
Total[6]	323,264	(210)		20,578	(311)		5,810	(3,238)		349,652	(3,759)	

1 Gross carrying amount for off-balance sheet refers to notional values

2 These instruments are held at fair value on the balance sheet. The ECL provision in respect of debt securities measured at FVOCI is held within the OCI reserve

3 These are off-balance sheet instruments. Only the ECL is recorded on-balance sheet as a financial liability and therefore there is no 'net carrying amount'. ECL allowances on off-balance sheet instruments are held as liability provisions to the extent that the drawn and undrawn components of loan exposures can be separately identified. Otherwise they will be reported against the drawn component

4 Stage 1 ECL is not material

5 Stage 3 includes $33 million originated credit-impaired debt securities and Nil impairment

6 Excludes 'Amounts due from subsidiary undertakings and other related parties' of $10,741 million. The amounts are held within stage 1 and rated as 'strong' at 31 December and is net of an expected credit loss of $26 million

Credit quality analysis (audited)

Credit quality by client segment

For the CCIB portfolios, exposures are analysed by credit grade (CG), which plays a central role in the quality assessment and monitoring of risk. All loans are assigned a CG, which is reviewed periodically and amended in light of changes in the borrower's circumstances or behaviour. CGs 1 to 12 are assigned to stage 1 and stage 2 (performing) clients or accounts, while CGs 13 and 14 are assigned to stage 3 (credit-impaired) clients. The mapping of credit quality is as follows.

Mapping of credit quality

The Group uses the following internal risk mapping to determine the credit quality for loans.

	Corporate, Commercial & Institutional Banking			Private Banking[1]	Consumer and Business Banking[4]
Credit quality description	Internal Grade mapping	S&P external ratings equivalent	Regulatory PD range (%)	Internal ratings	Number of days past due
Strong	1A to 5B	AAA/AA+ to BBB-/BB+	0 to 0.425	Class I and Class IV	Current loans (no past dues nor impaired)
Satisfactory	6A to 11C	BB+/BB to B-/CCC+[2]	0.426 to 15.75	Class II and Class III	Loans past due till 29 days
Higher Risk	Grade 12	CCC+/C[3]	15.751-99.999	Stressed Assets Group (SAG) Managed	Past due loans 30 days and over till 90 days

1 For Private Banking, classes of risk represent the type of collateral held. Class I represents facilities with liquid collateral, such as cash and marketable securities. Class II represents unsecured/partially secured facilities and those with illiquid collateral, such as equity in private enterprises. Class III represents facilities with residential or Commercial real estate collateral. Class IV covers margin trading facilities

2 Banks' rating: BB to CCC/C

3 Banks' Rating: CCC to C

4 Medium enterprise clients within Business Banking are managed using the same internal credit grade as CCIB

The table overleaf sets out the gross loans and advances held at amortised cost, expected credit loss provisions and expected credit loss coverage by business segment and stage. Expected credit loss coverage represents the expected credit loss reported for each segment and stage as a proportion of the gross loan balance for each segment and stage.

Stage 1

Stage 1 gross loans and advances to customers increased by 14 per cent to $148 billion (31 December 2021: $130 billion) and represents 91 per cent (31 December 2021: 87 per cent) of loans and advances to customers. The stage 1 coverage ratio remained at 0.2 per cent compared with 31 December 2021.

In CCIB, stage 1 loans have increased by $12.5 billion to $79 billion (31 December 2021: $66 billion), increasing the proportion of investment grade stage 1 loans to 71 per cent (31 December 2021: 61 per cent). $11 billion of the increase was from a few notable clients in Financing, insurance and non-banking, and $2 billion was from Stage 2 upgrades of clients in Transport, telecom and utilities.

CPBB stage 1 loans was broadly stable at $45 billion, with the proportion rated as 'strong' remaining stable at 93 per cent.

Central and other items segment increased by $5.5 billion to $24 billion (31 December 2021: $19 billion) due to higher levels of lending to Governments.

Stage 2

Stage 2 loans and advances to customers decreased by $5 billion to $8 billion (31 December 2021: $13 billion), primarily in CCIB. $3.7 billion of this was due to exposure reductions and ratings upgrades in Energy, Transport, telecom and utilities sectors. The proportion of stage 2 loans also reduced to 4.8 per cent (31 December 2021: 8.5 per cent).

CPBB stage 2 loans reduced by $0.2 billion to $1 billion (31 December 2021: $1.2 billion) primarily due to the transfers into stage 1 from changes in significant increase in credit risk thresholds for certain credit card portfolios in Asia.

Stage 2 loans to customers classified as 'higher risk' was at $1.4 billion due to the downgrade of Pakistan. This was largely offset by downgrades to stage 3 primarily as a result of Sri Lanka and Ghana sovereign rating downgrade.

The overall stage 2 cover ratio reduced to 2.4 per cent (31 December 2021: 3.0 per cent) largely due to lower coverage in CPBB of 5.4 per cent (31 December 2021: 10.2 per cent), driven by the release of COVID-19 management overlays, together with lower coverage in CCIB primarily in higher risk exposures.

Stage 3

Gross stage 3 loans decreased by $0.7 billion to $6.2 billion (31 December 2021: $6.9 billion) as a result of upgrades and repayments in CCIB offset by the downgrade of Sri Lanka and Ghana Sovereign.

CPBB stage 3 loans decreased by $0.1 billion to $1.1 billion (31 December 2021: $1.2 billion), due to Secured wealth products and Mortgages.

Stage 3 cover ratio (excluding collateral) reduced to 57.7 per cent (31 December 2021: 60.9 per cent) largely due to lower levels of coverage on sovereign defaults in Sri Lanka and Ghana and from repayments.

Central and other items stage 3 balances increased to $248 million (31 December 2021: $nil) due to downgrade of local currency loans to Sri Lanka Sovereign.

Loans and advances by client segment (audited)

Group

	2022							
		Customers						
Amortised cost	Banks $million	Corporate, Commercial & Institutional Banking $million	Consumer, Private & Business Banking $million	Ventures $million	Central & other items $million	Customer Total $million	Undrawn commitments $million	Financial Guarantees $million
Stage 1	27,084	78,983	44,825	65	24,340	148,213	103,644	44,252
– Strong	16,722	56,167	41,683	63	24,340	122,253	92,418	29,973
– Satisfactory	10,362	22,816	3,142	2	–	25,960	11,226	14,279
Stage 2	275	6,762	980	1	–	7,743	4,113	2,883
– Strong	86	1,070	691	–	–	1,761	986	501
– Satisfactory	119	4,480	73	–	–	4,553	2,487	1,977
– Higher risk	70	1,212	216	1	–	1,429	640	405
Of which (stage 2):								
– Less than 30 days past due	5	100	75	–	–	175	–	–
– More than 30 days past due	6	22	217	1	–	240	–	–
Stage 3, credit-impaired financial assets	35	4,859	1,095	–	248	6,202	128	664
Gross balance[1]	27,394	90,604	46,900	66	24,588	162,158	107,885	47,799
Stage 1	(7)	(87)	(179)	(2)	–	(268)	(26)	(9)
– Strong	(2)	(29)	(117)	(2)	–	(148)	(16)	(2)
– Satisfactory	(5)	(58)	(62)	–	–	(120)	(10)	(7)
Stage 2	(3)	(134)	(53)	–	–	(187)	(42)	(27)
– Strong	–	(11)	(21)	–	–	(32)	(2)	–
– Satisfactory	(2)	(74)	(6)	–	–	(80)	(35)	(14)
– Higher risk	(1)	(49)	(26)	–	–	(75)	(5)	(13)
Of which (stage 2):								
– Less than 30 days past due	–	(1)	(11)	–	–	(12)	–	–
– More than 30 days past due	–	(1)	(26)	–	–	(27)	–	–
Stage 3, credit-impaired financial assets	(1)	(2,904)	(655)	–	(18)	(3,577)	–	(147)
Total credit impairment	(11)	(3,125)	(887)	(2)	(18)	(4,032)	(68)	(183)
Net carrying value	27,383	87,479	46,013	64	24,570	158,126		
Stage 1	0.0%	0.1%	0.4%	3.1%	0.0%	0.2%	0.0%	0.0%
– Strong	0.0%	0.1%	0.3%	3.2%	0.0%	0.1%	0.0%	0.0%
– Satisfactory	0.0%	0.3%	2.0%	0.0%	0.0%	0.5%	0.1%	0.0%
Stage 2	1.1%	2.0%	5.4%	0.0%	0.0%	2.4%	1.0%	0.9%
– Strong	0.0%	1.0%	3.0%	0.0%	0.0%	1.8%	0.2%	0.0%
– Satisfactory	1.7%	1.7%	8.2%	0.0%	0.0%	1.8%	1.4%	0.7%
– Higher risk	1.4%	4.0%	12.0%	0.0%	0.0%	5.2%	0.8%	3.2%
Of which (stage 2):								
– Less than 30 days past due	0.0%	1.0%	14.7%	0.0%	0.0%	6.9%	0.0%	0.0%
– More than 30 days past due	0.0%	4.5%	12.0%	0.0%	0.0%	11.3%	0.0%	0.0%
Stage 3, credit-impaired financial assets (S3)	2.9%	59.8%	59.8%	0.0%	7.3%	57.7%	0.0%	22.1%
Cover ratio	0.0%	3.4%	1.9%	3.0%	0.1%	2.5%	0.1%	0.4%
Fair value through profit or loss								
Performing	24,135	40,562	–	–	2,557	43,119	–	–
– Strong	20,656	33,256	–	–	2,409	35,665	–	–
– Satisfactory	3,479	7,306	–	–	148	7,454	–	–
– Higher risk	–	–	–	–	–	–	–	–
Defaulted (CG13-14)	–	3	–	–	–	3	–	–
Gross balance (FVTPL)[2]	24,135	40,565	–	–	2,557	43,122	–	–
Net carrying value (incl FVTPL)	51,518	128,044	46,013	64	27,127	201,248	–	–

1 Loans and advances includes reverse repurchase agreements and other similar secured lending of $15,586 million under Customers and of $878 million under Banks, held at amortised cost

2 Loans and advances includes reverse repurchase agreements and other similar secured lending of $39,057 million under Customers and of $23,276 million under Banks, held at fair value through profit or loss

Group

Amortised cost	Banks $million	Corporate, Commercial & Institutional Banking $million	Consumer, Private & Business Banking $million	Ventures $million	Central & other items $million	Customer Total $million	Undrawn commitments $million	Financial Guarantees $million
	2021 (Restated)[1]							
		Customers						
Stage 1	29,422	66,471	44,645	–	18,874	129,990	94,170	45,916
– Strong	17,582	40,699	41,598	–	18,768	101,065	82,108	31,200
– Satisfactory	11,840	25,772	3,047	–	106	28,925	12,062	14,716
Stage 2	561	11,421	1,210	–	110	12,741	6,516	2,522
– Strong	119	2,016	673	–	–	2,689	1,787	580
– Satisfactory	104	8,214	251	–	–	8,465	3,737	1,387
– Higher risk	338	1,191	286	–	110	1,587	992	555
Of which (stage 2):								
– Less than 30 days past due	–	77	251	–	–	328	–	–
– More than 30 days past due	–	49	286	–	–	335	–	–
Stage 3, credit-impaired financial assets	31	5,750	1,191	–	–	6,941	–	797
Gross balance[2]	30,014	83,642	47,046	–	18,984	149,672	100,686	49,235
Stage 1	(11)	(54)	(212)	–	–	(266)	(23)	(12)
– Strong	(3)	(23)	(129)	–	–	(152)	(10)	(3)
– Satisfactory	(8)	(31)	(83)	–	–	(114)	(13)	(9)
Stage 2	(4)	(258)	(123)	–	–	(381)	(53)	(21)
– Strong	(3)	(2)	(62)	–	–	(64)	(5)	(1)
– Satisfactory	(1)	(158)	(28)	–	–	(186)	(40)	(9)
– Higher risk	–	(98)	(33)	–	–	(131)	(8)	(11)
Of which (stage 2):								
– Less than 30 days past due	–	(2)	(28)	–	–	(30)	–	–
– More than 30 days past due	–	(3)	(33)	–	–	(36)	–	–
Stage 3, credit-impaired financial assets	–	(3,563)	(663)	–	–	(4,226)	–	(207)
Total credit impairment	(15)	(3,875)	(998)	–	–	(4,873)	(76)	(240)
Net carrying value	29,999	79,767	46,048	–	18,984	144,799		
Stage 1	0.0%	0.1%	0.5%	0.0%	0.0%	0.2%	0.0%	0.0%
– Strong	0.0%	0.1%	0.3%	0.0%	0.0%	0.2%	0.0%	0.0%
– Satisfactory	0.1%	0.1%	2.7%	0.0%	0.0%	0.4%	0.1%	0.1%
Stage 2	0.7%	2.3%	10.2%	0.0%	0.0%	3.0%	0.8%	0.8%
– Strong	2.5%	0.1%	9.2%	0.0%	0.0%	2.4%	0.3%	0.2%
– Satisfactory	1.0%	1.9%	11.2%	0.0%	0.0%	2.2%	1.1%	0.6%
– Higher risk	0.0%	8.2%	11.5%	0.0%	0.0%	8.3%	0.8%	2.0%
Of which (stage 2):								
– Less than 30 days past due	0.0%	2.6%	11.2%	0.0%	0.0%	9.1%	0.0%	0.0%
– More than 30 days past due	0.0%	6.1%	11.5%	0.0%	0.0%	10.7%	0.0%	0.0%
Stage 3, credit-impaired financial assets (S3)	0.0%	62.0%	55.7%	0.0%	0.0%	60.9%	0.0%	26.0%
Cover ratio	0.0%	4.6%	2.1%	0.0%	0.0%	3.3%	0.1%	0.5%
Fair value through profit or loss								
Performing	22,330	62,398	–	–	1,774	64,172	–	–
– Strong	19,888	48,426	–	–	1,772	50,198	–	–
– Satisfactory	2,442	13,972	–	–	2	13,974	–	–
– Higher risk	–	–	–	–	–	–	–	–
Defaulted (CG13-14)	–	38	–	–	–	38	–	–
Gross balance (FVTPL)[3]	22,330	62,436	–	–	1,774	64,210	–	–
Net carrying value (incl FVTPL)	52,329	142,203	46,048	–	20,758	209,009	–	–

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment from 1 January 2022. Prior period has been restated
2 Loans and advances includes reverse repurchase agreements and other similar secured lending of $3,764 million under Customers and of $956 million under Banks, held at amortised cost
3 Loans and advances includes reverse repurchase agreements and other similar secured lending of $60,278 million under Customers and of $18,708 million under Banks, held at fair value through profit and loss

Loans and advances by client segment (audited)

Company

	2022						
		Customers					
Amortised cost	Banks $million	Corporate, Commercial & Institutional Banking $million	Consumer, Private & Business Banking $million	Central & other items $million	Customer Total $million	Undrawn commitments $million	Financial Guarantees $million
Stage 1	18,423	59,561	11,115	2,800	73,476	60,727	34,894
– Strong	10,989	44,313	9,188	2,800	56,301	51,980	23,117
– Satisfactory	7,434	15,248	1,927	–	17,175	8,747	11,777
Stage 2	128	4,852	444	–	5,296	3,150	2,453
– Strong	4	763	294	–	1,057	532	446
– Satisfactory	96	3,392	55	–	3,447	2,023	1,666
– Higher risk	28	697	95	–	792	595	341
Of which (stage 2):							
– Less than 30 days past due	–	85	56	–	141	–	–
– More than 30 days past due	4	13	95	–	108	–	–
Stage 3, credit-impaired financial assets	1	3,810	627	248	4,685	128	543
Gross balance[1]	18,552	68,223	12,186	3,048	83,457	64,005	37,890
Stage 1	(3)	(51)	(97)	–	(148)	(18)	(6)
– Strong	(1)	(28)	(77)	–	(105)	(10)	(1)
– Satisfactory	(2)	(23)	(20)	–	(43)	(8)	(5)
Stage 2	(1)	(51)	(26)	–	(77)	(24)	(17)
– Strong	–	(10)	(4)	–	(14)	(2)	–
– Satisfactory	(1)	(22)	(8)	–	(30)	(18)	(9)
– Higher risk	–	(19)	(14)	–	(33)	(4)	(8)
Of which (stage 2):							
– Less than 30 days past due	–	(1)	(8)	–	(9)	–	–
– More than 30 days past due	–	–	(14)	–	(14)	–	–
Stage 3, credit-impaired financial assets	–	(2,201)	(402)	(18)	(2,621)	–	(118)
Total credit impairment	(4)	(2,303)	(525)	(18)	(2,846)	(42)	(141)
Net carrying value	18,548	65,920	11,661	3,030	80,611		
Stage 1	0.0%	0.1%	0.9%	0.0%	0.2%	0.0%	0.0%
– Strong	0.0%	0.1%	0.8%	0.0%	0.2%	0.0%	0.0%
– Satisfactory	0.0%	0.2%	1.0%	0.0%	0.3%	0.1%	0.0%
Stage 2	0.8%	1.1%	5.9%	0.0%	1.5%	0.8%	0.7%
– Strong	0.0%	1.3%	1.4%	0.0%	1.3%	0.4%	0.0%
– Satisfactory	1.0%	0.6%	14.5%	0.0%	0.9%	0.9%	0.5%
– Higher risk	0.0%	2.7%	14.7%	0.0%	4.2%	0.7%	2.3%
Of which (stage 2):							
– Less than 30 days past due	0.0%	1.2%	14.3%	0.0%	6.4%	0.0%	0.0%
– More than 30 days past due	0.0%	0.0%	14.7%	0.0%	13.0%	0.0%	0.0%
Stage 3, credit-impaired financial assets (S3)	0.0%	57.8%	64.1%	7.3%	55.9%	0.0%	21.7%
Cover ratio	0.0%	3.4%	4.3%	0.6%	3.4%	0.1%	0.4%
Fair value through profit or loss							
Performing	22,036	38,642	–	2,410	41,052	–	–
– Strong	18,558	32,000	–	2,409	34,409	–	–
– Satisfactory	3,478	6,642	–	1	6,643	–	–
– Higher risk	–	–	–	–	–	–	–
Defaulted (CG13-14)	–	2	–	–	2	–	–
Gross balance (FVTPL)[2]	22,036	38,644	–	2,410	41,054	–	–
Net carrying value (incl FVTPL)	40,584	104,564	11,661	5,440	121,665	–	–

1 Loans and advances include reverse repurchase agreements and other similar secured lending for $15,071 million under Customers and for $184 million under Banks, held at amortised cost

2 Loans and advances include reverse repurchase agreements and other similar secured lending for $37,858 million under Customers and for $21,199 million under Banks, held at fair value through profit and loss

Company

Amortised cost	Banks $million	Customers: Corporate, Commercial & Institutional Banking $million	Customers: Consumer, Private & Business Banking $million	Customers: Central & other items $million	Customers: Customer Total $million	Undrawn commitments $million	Financial Guarantees $million
	2022						
Stage 1	15,882	45,659	11,612	2,489	59,760	61,792	34,709
– Strong	8,566	28,908	9,767	2,412	41,087	52,276	24,136
– Satisfactory	7,316	16,751	1,845	77	18,673	9,516	10,573
Stage 2	247	9,194	491	110	9,795	4,886	2,047
– Strong	81	1,609	271	–	1,880	1,144	512
– Satisfactory	38	6,750	94	–	6,844	3,006	1,045
– Higher risk	128	835	126	110	1,071	736	490
Of which (stage 2):							
– Less than 30 days past due	–	69	94	–	163	–	–
– More than 30 days past due	–	36	126	–	152	–	–
Stage 3, credit-impaired financial assets	–	4,353	666	–	5,019	–	709
Gross balance[1]	16,129	59,206	12,769	2,599	74,574	66,678	37,465
Stage 1	(9)	(30)	(121)	–	(151)	(9)	(9)
– Strong	(3)	(13)	(63)	–	(76)	(5)	(4)
– Satisfactory	(6)	(17)	(58)	–	(75)	(4)	(5)
Stage 2	(3)	(178)	(57)	–	(235)	(35)	(17)
– Strong	(2)	(4)	(22)	–	(26)	(2)	–
– Satisfactory	(1)	(115)	(11)	–	(126)	(28)	(7)
– Higher risk	–	(59)	(24)	–	(83)	(5)	(10)
Of which (stage 2):							
– Less than 30 days past due	–	(2)	(11)	–	(13)	–	–
– More than 30 days past due	–	–	(24)	–	(24)	–	–
Stage 3, credit-impaired financial assets	–	(2,637)	(390)	–	(3,027)	–	(175)
Total credit impairment	(12)	(2,845)	(568)	–	(3,413)	(44)	(201)
Net carrying value	16,117	56,361	12,201	2,599	71,161		
Stage 1	0.1%	0.1%	1.0%	0.0%	0.3%	0.0%	0.0%
– Strong	0.0%	0.0%	0.6%	0.0%	0.2%	0.0%	0.0%
– Satisfactory	0.1%	0.1%	3.1%	0.0%	0.4%	0.0%	0.0%
Stage 2	1.2%	1.9%	11.6%	0.0%	2.4%	0.7%	0.8%
– Strong	2.5%	0.2%	8.1%	0.0%	1.4%	0.2%	0.0%
– Satisfactory	2.6%	1.7%	11.7%	0.0%	1.8%	0.9%	0.7%
– Higher risk	0.0%	7.1%	19.0%	0.0%	7.7%	0.7%	2.0%
Of which (stage 2):							
– Less than 30 days past due	0.0%	2.9%	11.7%	0.0%	8.0%	0.0%	0.0%
– More than 30 days past due	0.0%	0.0%	19.0%	0.0%	14.8%	0.0%	0.0%
Stage 3, credit-impaired financial assets (S3)	0.0%	60.6%	58.6%	0.0%	60.3%	0.0%	24.7%
Cover ratio	0.1%	4.8%	4.4%	0.0%	4.6%	0.1%	0.5%
Fair value through profit or loss							
Performing	21,950	60,672	–	1,774	62,446	–	–
– Strong	19,543	46,971	–	1,772	48,743	–	–
– Satisfactory	2,407	13,701	–	2	13,703	–	–
– Higher risk	–	–	–	–	–	–	–
Defaulted (CG13-14)	–	36	–	–	36	–	–
Gross balance (FVTPL)[2]	21,950	60,708	–	1,774	62,482	–	–
Net carrying value (incl FVTPL)	38,067	117,069	12,201	4,373	133,643	–	–

1 Loans and advances include reverse repurchase agreements and other similar secured lending of $3,047 million under Customers and of $438 million under Banks, held at amortised cost

2 Loans and advances include reverse repurchase agreements and other similar secured lending of $59,275 million under Customers and of $18,380 million under Banks, held at fair value through profit and loss

Movement in gross exposures and credit impairment for loans and advances, debt securities, undrawn commitments and financial guarantees (audited)

The tables overleaf set out the movement in gross exposures and credit impairment by stage in respect of amortised cost loans to banks and customers, undrawn commitments, financial guarantees and debt securities classified at amortised cost and FVOCI. The tables are presented for the Group and debt securities and other eligible bills.

Methodology

The movement lines within the tables are an aggregation of monthly movements over the year and will therefore reflect the accumulation of multiple trades during the year. The credit impairment charge in the income statement comprises the amounts within the boxes in the table below less recoveries of amounts previously written off. Discount unwind is reported in net interest income and related to stage 3 financial instruments only.

The approach for determining the key line items in the tables is set out below.

- **Transfers** – transfers between stages are deemed to occur at the beginning of a month based on prior month closing balances.
- **Net remeasurement from stage changes** – the remeasurement of credit impairment provisions arising from a change in stage is reported within the stage that the assets are transferred to. For example, assets transferred into stage 2 are remeasured from a 12 month to a lifetime expected credit loss, with the effect of remeasurement reported in stage 2. For stage 3, this represents the initial remeasurement from specific provisions recognised on individual assets transferred into stage 3 in the year.
- **Net changes in exposures** – new business written less repayments in the year. Within stage 1, new business written will attract up to 12 months of expected credit loss charges. Repayments of non-amortising loans (primarily within CCIB) will have low amounts of expected credit loss provisions attributed to them, due to the release of provisions over the term to maturity. In stages 2 and 3, the amounts principally reflect repayments although stage 2 may include new business written where clients are on non-purely precautionary early alert, are a credit grade 12, or when non-investment grade debt securities are acquired.
- **Changes in risk parameters** – for stages 1 and 2, this reflects changes in the probability of default (PD), loss given default (LGD) and exposure at default (EAD) of assets during the year, which includes the impact of releasing provisions over the term to maturity. It also includes the effect of changes in forecasts of macroeconomic variables during the year and movements in management overlays. In stage 3, this line represents additional specific provisions recognised on exposures held within stage 3.
- **Interest due but not paid** – change in contractual amount of interest due in stage 3 financial instruments but not paid, being the net of accruals, repayments and write-offs, together with the corresponding change in credit impairment.

Changes to ECL models, which incorporates changes to model approaches and methodologies, is not reported as a separate line item as it has an impact over a number of lines and stages.

Movements during the year

Stage 1 gross exposures increased by $34 billion to $430 billion (31 December 2021: $396 billion). $16 billion of the increase was due to loans out of which $11 billion was from financing, insurance and non-banking sectors from a few notable clients and $11 billion increase was due to debt securities.

Total stage 1 provisions decreased by $40 million to $330 million (31 December 2021: $370 million). This is due to reductions in risk parameters which includes a $65 million net release in the COVID-19 element of the management overlay in CPBB.

Stage 2 gross exposures decreased by $7 billion to $20.5 billion (31 December 2021: $27.7 billion). This was primarily driven by net outflows from exposure changes and transfers to stage 1 in CCIB, particularly in the Energy and Transport and telecom and utilities sectors. Debt securities increased by $0.1 billion due to the sovereign downgrade of Pakistan which was offset by upgrades.

Stage 2 provisions decreased by $152 million to $349 million (31 December 2021: $501 million). This was due to a $121 million net release in the COVID-19 element of the management overlays in CCIB and CPBB, SICR and model updates in CPBB. This was offset by normalised flows into CPBB and sovereign downgrades in CCIB and Central and other items segment.

Stage 3 exposures decreased by $0.7 billion to $7.2 billion (31 December 2021: $7.9 billion), primarily in CCIB which was driven by repayments and upgrades. Stage 3 provisions also decreased by $0.7 billion to $3.8 billion (31 December 2021: $4.5 billion) due to repayments offset by sovereign downgrades.

All segments – Group (audited)

Amortised cost and FVOCI	Stage 1 Gross balance[6] $million	Stage 1 Total credit impairment $million	Stage 1 Net $million	Stage 2 Gross balance[6] $million	Stage 2 Total credit impairment $million	Stage 2 Net $million	Stage 3[5] Gross balance[6] $million	Stage 3[5] Total credit impairment $million	Stage 3[5] Net $million	Total Gross balance[6] $million	Total Total credit impairment $million	Total Net $million
As at 1 January 2021	365,589	(430)	365,159	29,832	(746)	29,086	9,168	(5,219)	3,949	404,589	(6,395)	398,194
Transfers to stage 1	18,004	(452)	17,552	(17,956)	452	(17,504)	(48)	–	(48)	–	–	–
Transfers to stage 2	(40,145)	145	(40,000)	40,465	(154)	40,311	(320)	9	(311)	–	–	–
Transfers to stage 3	(126)	1	(125)	(2,166)	216	(1,950)	2,292	(217)	2,075	–	–	–
Net change in exposures	60,165	(87)	60,078	(22,135)	99	(22,036)	(2,180)	617	(1,563)	35,850	629	36,479
Net remeasurement from stage changes	–	46	46	–	(129)	(129)	–	(99)	(99)	–	(182)	(182)
Changes in risk parameters	–	51	51	–	98	98	–	(752)	(752)	–	(603)	(603)
Write-offs	–	–	–	–	–	–	(957)	957	–	(957)	957	–
Interest due but unpaid	–	–	–	–	–	–	(187)	187	–	(187)	187	–
Discount unwind	–	–	–	–	–	–	–	211	211	–	211	211
Exchange translation differences and other movements[1]	(7,639)	356	(7,283)	(385)	(337)	(722)	114	(193)	(79)	(7,910)	(174)	(8,084)
As at 31 December 2021[2]	395,848	(370)	395,478	27,655	(501)	27,154	7,882	(4,499)	3,383	431,385	(5,370)	426,015
Income statement ECL (charge)/release[3]		10			68			(234)			(156)	
Recoveries of amounts previously written off		–			–			186			186	
Total credit impairment (charge)/release		10			68			(48)			30	

All segments – Group (audited) continued

Amortised cost and FVOCI	Stage 1 Gross balance[6] $million	Stage 1 Total credit impairment $million	Stage 1 Net $million	Stage 2 Gross balance[6] $million	Stage 2 Total credit impairment $million	Stage 2 Net $million	Stage 3[5] Gross balance[6] $million	Stage 3[5] Total credit impairment $million	Stage 3[5] Net $million	Total Gross balance[6] $million	Total Total credit impairment $million	Total Net $million
As at 1 January 2022	395,848	(370)	395,478	27,655	(501)	27,154	7,882	(4,499)	3,383	431,385	(5,370)	426,015
Transfers to stage 1	18,477	(407)	18,070	(18,445)	407	(18,038)	(32)	–	(32)	–	–	–
Transfers to stage 2	(35,697)	180	(35,517)	36,198	(198)	36,000	(501)	18	(483)	–	–	–
Transfers to stage 3	(80)	–	(80)	(2,554)	205	(2,349)	2,634	(205)	2,429	–	–	–
Net change in exposures	66,022	(102)	65,920	(20,488)	73	(20,415)	(1,396)	300	(1,096)	44,138	271	44,409
Net remeasurement from stage changes	–	40	40	–	(90)	(90)	–	(81)	(81)	–	(131)	(131)
Changes in risk parameters	–	140	140	–	(79)	(79)	–	(355)	(355)	–	(294)	(294)
Write-offs	–	–	–	–	–	–	(633)	633	–	(633)	633	–
Interest due but unpaid	–	–	–	–	–	–	(168)	168	–	(168)	168	–
Discount unwind	–	–	–	–	–	–	–	119	119	–	119	119
Exchange translation differences and other movements[1]	(14,491)	189	(14,302)	(1,897)	(166)	(2,063)	(613)	71	(542)	(17,001)	94	(16,907)
As at 31 December 2022[2]	430,079	(330)	429,749	20,469	(349)	20,120	7,173	(3,831)	3,342	457,721	(4,510)	453,211
Income statement ECL (charge)/release[3]		78			(96)			(136)			(154)	
Recoveries of amounts previously written off		–			–			175			175	
Total credit impairment (charge)/release[4]		78			(96)			39			21	

1 Includes fair value adjustments and amortisation on debt securities

2 Excludes Cash and balances at central banks, Accrued income, Assets held for sale and Other assets

3 Does not include $1 million (31 December 2021: Nil) release relating to Other assets

4 Statutory basis

5 Stage 3 gross includes $28 million (2021: $33 million) originated credit-impaired debt securities with impairment of $13 million (2021: Nil)

6 The gross balance includes the notional amount of off balance sheet instruments

Of which movement of debt securities, alternative Tier 1 and other eligible bills (audited)

Amortised cost and FVOCI	Stage 1 Gross balance $million	Stage 1 Total credit impairment $million	Stage 1 Net $million	Stage 2 Gross balance $million	Stage 2 Total credit impairment $million	Stage 2 Net $million	Stage 3[2] Gross balance $million	Stage 3[2] Total credit impairment $million	Stage 3[2] Net $million	Total Gross balance $million	Total Total credit impairment $million	Total Net[3] $million
As at 1 January 2021	82,230	(50)	82,180	3,488	(26)	3,462	114	(58)	56	85,832	(134)	85,698
Transfers to stage 1	403	(11)	392	(403)	11	(392)	–	–	–	–	–	–
Transfers to stage 2	(2,358)	16	(2,342)	2,358	(16)	2,342	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–	–	–	–	–
Net change in exposures	18,789	(42)	18,747	(136)	(18)	(154)	–	1	1	18,653	(59)	18,594
Net remeasurement from stage changes	–	13	13	–	(26)	(26)	–	–	–	–	(13)	(13)
Changes in risk parameters	–	18	18	–	34	34	–	(3)	(3)	–	49	49
Write-offs	–	–	–	–	–	–	–	–	–	–	–	–
Interest due but unpaid	–	–	–	–	–	–	–	–	–	–	–	–
Exchange translation differences and other movements[1]	(2,714)	(2)	(2,716)	8	(1)	7	(1)	(6)	(7)	(2,707)	(9)	(2,716)
As at 31 December 2021	96,350	(58)	96,292	5,315	(42)	5,273	113	(66)	47	101,778	(166)	101,612
Income statement ECL (charge)/release[1]		(11)			(10)			(2)			(23)	
Recoveries of amounts previously written off		–			–			–			–	
Total credit impairment (charge)/release		(11)			(10)			(2)			(23)	

Of which movement of debt securities, alternative Tier 1 and other eligible bills (audited) continued

Amortised cost and FVOCI	Stage 1 Gross balance $million	Stage 1 Total credit impairment $million	Stage 1 Net $million	Stage 2 Gross balance $million	Stage 2 Total credit impairment $million	Stage 2 Net $million	Stage 3[2] Gross balance $million	Stage 3[2] Total credit impairment $million	Stage 3[2] Net $million	Total Gross balance $million	Total Total credit impairment $million	Total Net[3] $million
As at 1 January 2022	96,350	(58)	96,292	5,315	(42)	5,273	113	(66)	47	101,778	(166)	101,612
Transfers to stage 1	2,296	(22)	2,274	(2,296)	22	(2,274)	–	–	–	–	–	–
Transfers to stage 2	(3,942)	38	(3,904)	3,942	(38)	3,904		–	–	–	–	–
Transfers to stage 3	–	–	–	(66)	42	(24)	66	(42)	24	–	–	–
Net change in exposures	19,290	(44)	19,246	(752)	1	(751)	–	1	1	18,538	(42)	18,496
Net remeasurement from stage changes	–	11	11	–	(4)	(4)	–	(23)	(23)	–	(16)	(16)
Changes in risk parameters	–	39	39	–	(94)	(94)	–	(13)	(13)	–	(68)	(68)
Write-offs	–	–	–	–	–	–	(30)	30	–	(30)	30	–
Interest due but unpaid	–	–	–	–	–	–	–	–	–	–	–	–
Exchange translation differences and other movements[1]	(7,108)	16	(7,092)	(688)	23	(665)	(5)	7	2	(7,801)	46	(7,755)
As at 31 December 2022	106,886	(20)	106,866	5,455	(90)	5,365	144	(106)	38	112,485	(216)	112,269
Income statement ECL (charge)/release		6			(97)			(35)			(126)	
Recoveries of amounts previously written off		–			–			–			–	
Total credit impairment (charge)/release		6			(97)			(35)			(126)	

1 Includes fair value adjustments and amortisation on debt securities

2 Stage 3 gross includes $28 million (2021: $33 million) originated credit-impaired debt securities with impairment of $13 million (2021: Nil)

3 FVOCI instrument are not presented net of ECL. While the presentation is on a net basis for the table, the total net on-balance sheet amount is $112,425 million (31 December 2021: $101,705 million). Refer to the Analysis of financial instrument by stage table on page 69

All segments – Company (audited)

Amortised cost and FVOCI	Stage 1 Gross balance[6] $million	Stage 1 Total credit impairment $million	Stage 1 Net $million	Stage 2 Gross balance[6] $million	Stage 2 Total credit impairment $million	Stage 2 Net $million	Stage 3[5] Gross balance[6] $million	Stage 3[5] Total credit impairment $million	Stage 3[5] Net $million	Total Gross balance[6] $million	Total Total credit impairment $million	Total Net $million
As at 1 January 2021	241,561	(237)	241,324	20,758	(476)	20,282	6,761	(3,812)	2,949	269,080	(4,525)	264,555
Transfers to stage 1	13,549	(223)	13,326	(13,501)	223	(13,278)	(48)	–	(48)	–	–	–
Transfers to stage 2	(29,383)	47	(29,336)	29,594	(56)	29,538	(211)	9	(202)	–	–	–
Transfers to stage 3	(94)	1	(93)	(1,598)	171	(1,427)	1,692	(172)	1,520	–	–	–
Net change in exposures	34,059	(56)	34,003	(14,441)	80	(14,361)	(1,611)	407	(1,204)	18,007	431	18,438
Net remeasurement from stage changes	–	14	14	–	(57)	(57)	–	(79)	(79)	–	(122)	(122)
Changes in risk parameters	–	18	18	–	93	93	–	(449)	(449)	–	(338)	(338)
Write-offs	–	–	–	–	–	–	(592)	592	–	(592)	592	–
Interest due but unpaid	–	–	–	–	–	–	(143)	143	–	(143)	143	–
Discount unwind	–	–	–	–	–	–	–	170	170	–	170	170
Exchange translation differences and other movements[1]	(5,161)	226	(4,935)	(234)	(289)	(523)	(38)	(47)	(85)	(5,433)	(110)	(5,543)
As at 31 December 2021[2]	254,531	(210)	254,321	20,578	(311)	20,267	5,810	(3,238)	2,572	280,919	(3,759)	277,160
Income statement ECL (charge)/release		(24)			116			(121)			(29)	
Recoveries of amounts previously written off		–			–			67			67	
Total credit impairment (charge)/release		(24)			116			(54)			38	

All segments – Company (audited) continued

Amortised cost and FVOCI	Stage 1 Gross balance[6] $million	Stage 1 Total credit impairment $million	Stage 1 Net $million	Stage 2 Gross balance[6] $million	Stage 2 Total credit impairment $million	Stage 2 Net $million	Stage 3[5] Gross balance[6] $million	Stage 3[5] Total credit impairment $million	Stage 3[5] Net $million	Total Gross balance[6] $million	Total Total credit impairment $million	Total Net $million
As at 1 January 2022	254,531	(210)	254,321	20,578	(311)	20,267	5,810	(3,238)	2,572	280,919	(3,759)	277,160
Transfers to stage 1	13,424	(240)	13,184	(13,394)	240	(13,154)	(30)	–	(30)	–	–	–
Transfers to stage 2	(22,222)	126	(22,096)	22,653	(109)	22,544	(431)	(17)	(448)	–	–	–
Transfers to stage 3	–	–	–	(1,873)	(32)	(1,905)	1,873	32	1,905	–	–	–
Net change in exposures	47,019	(33)	46,986	(14,167)	54	(14,113)	(988)	190	(798)	31,864	211	32,075
Net remeasurement from stage changes	–	7	7	–	(12)	(12)	–	(49)	(49)	–	(54)	(54)
Changes in risk parameters	–	80	80	–	44	44	–	(166)	(166)	–	(42)	(42)
Write-offs	–	–	–	–	–	–	(369)	369	–	(369)	369	–
Interest due but unpaid	–	–	–	–	–	–	(130)	130	–	(130)	130	–
Discount unwind	–	–	–	–	–	–	–	74	74	–	74	74
Exchange translation differences and other movements[1]	(11,989)	75	(11,914)	(985)	6	(979)	(300)	(114)	(414)	(13,274)	(33)	(13,307)
As at 31 December 2022[2]	280,763	(195)	280,568	12,812	(120)	12,692	5,435	(2,789)	2,646	299,010	(3,104)	295,906
Income statement ECL (charge)/release[3]		54			86			(25)			115	
Recoveries of amounts previously written off		–			–			67			67	
Total credit impairment (charge)/release[4]		54			86			42			182	

1 Includes fair value adjustments and amortisation on debt securities

2 Excludes Cash and balances at central banks, Accrued income, Assets held for sale and Other assets

3 Does not include $1 million (31 December 2021: Nil) release relating to Other assets

4 Statutory basis

5 Stage 3 gross includes $28 million (2021: $33 million) originated credit-impaired debt securities with impairment of $13 million (2021: Nil)

6 The gross balance includes the notional amount of off balance sheet instruments

Of which Movement of debt securities – Company (audited)

Amortised cost and FVOCI	Stage 1 Gross balance $million	Stage 1 Total credit impairment $million	Stage 1 Net $million	Stage 2 Gross balance $million	Stage 2 Total credit impairment $million	Stage 2 Net $million	Stage 3[2] Gross balance $million	Stage 3[2] Total credit impairment $million	Stage 3[2] Net $million	Total Gross balance $million	Total Total credit impairment $million	Total Net[3] $million
As at 1 January 2021	68,742	(19)	68,723	2,083	(10)	2,073	84	(29)	55	70,909	(58)	70,851
Transfers to stage 1	265	(6)	259	(265)	6	(259)	–	–	–	–	–	–
Transfers to stage 2	(1,740)	5	(1,735)	1,740	(5)	1,735	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–	–	–	–	–
Net change in exposures	17,227	(25)	17,202	110	(1)	109	–	–	–	17,337	(26)	17,311
Net remeasurement from stage changes	–	4	4	–	(16)	(16)	–	–	–	–	(12)	(12)
Changes in risk parameters	–	19	19	–	(5)	(5)	–	(4)	(4)	–	10	10
Write-offs	–	–	–	–	–	–	–	–	–	–	–	–
Interest due but unpaid	–	–	–	–	–	–	–	–	–	–	–	–
Exchange translation differences and other movements[1]	(2,106)	(10)	(2,116)	(65)	10	(55)	(2)	(3)	(5)	(2,173)	(3)	(2,176)
As at 31 December 2021	82,388	(32)	82,356	3,603	(21)	3,582	82	(36)	46	86,073	(89)	85,984
Income statement ECL (charge)/release		(2)			(22)			(4)			(28)	
Recoveries of amounts previously written off		–			–			–			–	
Total credit impairment (charge)/release		(2)			(22)			(4)			(28)	

Of which Movement of debt securities – Company (audited) continued

Amortised cost and FVOCI	Stage 1 Gross balance $million	Stage 1 Total credit impairment $million	Stage 1 Net $million	Stage 2 Gross balance $million	Stage 2 Total credit impairment $million	Stage 2 Net $million	Stage 3[2] Gross balance $million	Stage 3[2] Total credit impairment $million	Stage 3[2] Net $million	Total Gross balance $million	Total Total credit impairment $million	Total Net[3] $million
As at 1 January 2022	82,388	(32)	82,356	3,603	(21)	3,582	82	(36)	46	86,073	(89)	85,984
Transfers to stage 1	1,604	(21)	1,583	(1,604)	21	(1,583)	–	–	–	–	–	–
Transfers to stage 2	(424)	3	(421)	424	(3)	421	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–	–	–	–	–
Net change in exposures	15,757	(11)	15,746	(173)	2	(171)	–	1	1	15,584	(8)	15,576
Net remeasurement from stage changes	–	2	2	–	7	7	–	–	–	–	9	9
Changes in risk parameters	–	16	16	–	8	8	–	(13)	(13)	–	11	11
Write-offs	–	–	–	–	–	–	–	–	–	–	–	–
Interest due but unpaid	–	–	–	–	–	–	–	–	–	–	–	–
Exchange translation differences and other movements[1]	(6,082)	23	(6,059)	(465)	(15)	(480)	(4)	(2)	(6)	(6,551)	6	(6,545)
As at 31 December 2022	93,243	(20)	93,223	1,785	(1)	1,784	78	(50)	28	95,106	(71)	95,035
Income statement ECL (charge)/release		7			17			(12)			12	
Recoveries of amounts previously written off		–			–			–			–	
Total credit impairment (charge)/release		7			17			(12)			12	

1 Includes fair value adjustments and amortisation on debt securities

2 Stage 3 gross includes $28 million (2021: $33 million) originated credit-impaired debt securities with impairment of $13 million (2021: Nil)

3 FVOCI instrument are not presented net of ECL. While the presentation is on a net basis for the table, the total net on-balance sheet amount is $95,049 million (31 December 2021: $86,028 million). Refer to the Analysis of financial instrument by stage table on page 72

Credit impairment charge (audited)

Ongoing credit impairment was a net release of $22 million (31 December 2021: $28 million), with a $40 million release in stage 3 partly offset by a charge of $18 million in stage 1 and 2.

CCIB Stage 1 and 2 was a net $71 million release, which included the full release of the remaining $94 million COVID-19 overlay. This was partly offset by the impact of sovereign downgrades of Pakistan and Ghana.

CCIB had a net $115 million release in stage 3 due to repayments and debt sales offset by the sovereign default of Sri Lanka and Ghana.

CPBB stage 1 and 2 net release of $18 million includes a net release of $93 million from the judgemental management overlay. Excluding overlay releases, the impact of higher delinquencies and adverse macroeconomic forecasts was offset by releases from methodology and model updates, primarily in Asia. Stage 3 charge of $37 million (31 December 2021: $192 million) was significantly lower mainly due to lower charge-offs from unsecured and business banking portfolios, improved delinquency flows and $15 million release from the management overlay. 2021 was impacted by post moratoria cliff effects and a significant charge for a Business Banking client.

Ventures was a charge of $2 million (31 December 2021: $nil) from impairments in Trust Bank Singapore.

Central and other items stage 1 and 2 charge of $105 million (31 December 2021: $21 million) is due to the sovereign downgrades during the year. Central and other items stage 3 charge of $38 million (31 December 2021: $nil) primarily relates to the sovereign downgrades in Ghana and Sri Lanka.

	2022			2021 (Restated)[1]		
	Stage 1 & 2 $million	**Stage 3 $million**	**Total $million**	Stage 1 & 2 $million	Stage 3 $million	Total $million
Ongoing business portfolio						
Corporate, Commercial & Institutional Banking	**(71)**	**(115)**	**(186)**	(74)	(144)	(218)
Consumer, Private & Business Banking[1]	**(18)**	**37**	**19**	(23)	192	169
Ventures[1]	**2**	**–**	**2**	–	–	–
Central & other items	**105**	**38**	**143**	21	–	21
Credit impairment charge	**18**	**(40)**	**(22)**	(76)	48	(28)
Restructuring business portfolio						
Others	**(1)**	**1**	**–**	(2)	–	(2)
Credit impairment charge[2]	**(1)**	**1**	**–**	(2)	–	(2)
Total credit impairment charge	**17**	**(39)**	**(22)**	(78)	48	(30)

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment from 1 January 2022. Prior period has been restated

2 There was no impairment release (31 December 2021: $2 million) from the Group's discontinued businesses

COVID-19 relief measures

Outstanding relief balance for CCIB are less than $100 million (31 December 2021: $1,195 million), and are less than $100 million (31 December 2021: $879 million) for CPBB and $nil (31 December 2021: $nil) for Ventures.

Problem credit management and provisioning

Forborne and other modified loans by client segment (audited)

A forborne loan arises when a concession has been made to the contractual terms of a loan in response to a customer's financial difficulties.

Net forborne loans decreased by $444 million to $872 million (31 December 2021: $1,316 million), of which $146 million decrease was in performing forborne loans and $298 million decrease was in non-performing forborne loans. Performing forborne loans reduction in CCIB was driven by COVID-19 relief measures in 2021 which have expired across most of our markets while non-performing forborne loans reduction was due a major repayment.

The table below presents loans with forbearance measures by segment.

Group

	2022				2021 (Restated)[1]			
Amortised cost	Corporate, Commercial & Institutional Banking $million	Consumer, Private & Business Banking $million	Ventures $million	Total $million	Corporate, Commercial & Institutional Banking $million	Consumer, Private & Business Banking $million	Ventures $million	Total $million
All loans with forbearance measures	1,596	279	–	1,875	2,334	271	–	2,605
Credit impairment (stage 1 and 2)	(2)	–	–	(2)	(4)	–	–	(4)
Credit impairment (stage 3)	(870)	(131)	–	(1,001)	(1,159)	(126)	–	(1,285)
Net carrying value	724	148	–	872	1,171	145	–	1,316
Included within the above table								
Gross performing forborne loans	90	54	–	144	238	53	–	291
Modification of terms and conditions[2]	90	54	–	144	238	53	–	291
Refinancing[3]	–	–	–	–	–	–	–	–
Impairment provisions	(2)	–	–	(2)	(3)	–	–	(3)
Modification of terms and conditions[2]	(2)	–	–	(2)	(3)	–	–	(3)
Refinancing[3]	–	–	–	–	–	–	–	–
Net performing forborne loans	88	54	–	142	235	53	–	288
Collateral	7	56	–	63	36	56	–	92
Gross non-performing forborne loans	1,506	225	–	1,731	2,095	218	–	2,313
Modification of terms and conditions[2]	1,463	225	–	1,688	1,937	218	–	2,155
Refinancing[3]	43	–	–	43	158	–	–	158
Impairment provisions	(870)	(131)	–	(1,001)	(1,159)	(126)	–	(1,285)
Modification of terms and conditions[2]	(827)	(131)	–	(958)	(1,028)	(126)	–	(1,154)
Refinancing[3]	(43)	–	–	(43)	(131)	–	–	(131)
Net non-performing forborne loans	636	94	–	730	936	92	–	1,028
Collateral	204	53	–	257	208	53	–	261

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment from 1 January 2022. Prior period has been restated

2 Modification of terms is any contractual change apart from refinancing, as a result of credit stress of the counterparty, i.e. interest reductions, loan covenant waivers

3 Refinancing is a new contract to a lender in credit stress, such that they are refinanced and can pay other debt contracts that they were unable to honour

Company

Amortised cost	2022 Corporate, Commercial & Institutional Banking $million	2022 Consumer, Private & Business Banking $million	2022 Total $million	2021 Corporate, Commercial & Institutional Banking $million	2021 Consumer, Private & Business Banking $million	2021 Total $million
All loans with forbearance measures	1,186	36	1,222	1,630	34	1,664
Credit impairment (stage 1 and 2)	(1)	–	(1)	(2)	–	(2)
Credit impairment (stage 3)	(629)	(2)	(631)	(789)	(2)	(791)
Net carrying value	556	34	590	839	32	871
Included within the above table						
Gross performing forborne loans	81	23	104	164	18	182
Modification of terms and conditions[1]	81	23	104	164	18	182
Refinancing[2]	–	–	–	–	–	–
Impairment provisions	(1)	–	(1)	(2)	–	(2)
Modification of terms and conditions[1]	(1)	–	(1)	(2)	–	(2)
Refinancing[2]	–	–	–	–	–	–
Net performing forborne loans	80	23	103	162	18	180
Collateral	7	24	31	32	18	50
Gross non-performing forborne loans	1,105	13	1,118	1,466	16	1,482
Modification of terms and conditions[1]	1,064	13	1,077	1,313	16	1,329
Refinancing[2]	41	–	41	153	–	153
Impairment provisions	(629)	(2)	(631)	(789)	(2)	(791)
Modification of terms and conditions[1]	(588)	(2)	(590)	(662)	(2)	(664)
Refinancing[2]	(41)	–	(41)	(127)	–	(127)
Net non-performing forborne loans	476	11	487	677	14	691
Collateral	148	7	155	130	13	143

1 Modification of terms is any contractual change apart from refinancing, as a result of credit stress of the counterparty, i.e. interest reductions, loan covenant waivers

2 Refinancing is a new contract to a lender in credit stress, such that they are refinanced and can pay other debt contracts that they were unable to honour

Credit-impaired (stage 3) loans and advances by client segment (audited)

Gross Stage 3 loans for the Group decreased by $0.7 billion to $6.2 billion (31 December 2021: $6.9 billion).

In CCIB, inflows were driven by higher risk category from Ghana and Sri Lanka sovereign downgrades. This was offset by outflows due to repayments and upgrades of a few significant clients and $0.1 billion business exits in Cameroon and Jordan.

CPBB stage 3 loans were materially unchanged at $1.1 billion (31 December 2021: $1.2 billion), with $0.1 billion decrease from secured wealth products and mortgages.

Central and other items include new inflows relating to local currency default of Sri Lanka.

Stage 3 cover ratio (audited)

The stage 3 cover ratio measures the proportion of stage 3 impairment provisions to gross stage 3 loans, and is a metric commonly used in considering impairment trends. This metric does not allow for variations in the composition of stage 3 loans and should be used in conjunction with other Credit Risk information provided, including the level of collateral cover.

The balance of stage 3 loans not covered by stage 3 impairment provisions represents the adjusted value of collateral held and the net outcome of any workout or recovery strategies.

Collateral provides risk mitigation to some degree in all client segments and supports the credit quality and cover ratio assessments post impairment provisions. Further information on collateral is provided in the Credit Risk mitigation section.

The CCIB cover ratio reduced by 2 percentage points to 60 per cent (31 December 2021: 62 per cent) due to write-offs, repayments and lower levels on coverage on sovereign default related exposures.

The CPBB cover ratio increased by 4 percentage points to 60 per cent (31 December 2021: 56 per cent) due to reduction in outstanding balances.

Group

Amortised cost	2022 Corporate, Commercial & Institutional Banking $million	2022 Consumer, Private & Business Banking $million	2022 Ventures $million	2022 Central & Others $million	2022 Total $million	2021 Corporate, Commercial & Institutional Banking $million	2021 Consumer, Private & Business Banking $million	2021 Ventures[1] $million	2021 Central & Others $million	2021 Total $million
Gross credit-impaired	4,859	1,095	–	248	6,202	5,750	1,191	–	–	6,941
Credit impairment provisions	(2,904)	(655)	–	(18)	(3,577)	(3,563)	(663)	–	–	(4,226)
Net credit-impaired	1,955	440	–	230	2,625	2,187	528	–	–	2,715
Cover ratio	60%	60%	–	7%	58%	62%	56%	–	–	61%
Collateral ($ million)	628	411	–	–	1,039	700	487	–	–	1,187
Cover ratio (after collateral)	73%	97%	–	7%	74%	74%	97%	–	–	78%

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment from 1 January 2022. Prior period disclosure has been re-presented.

Company

Amortised cost	2022 Corporate, Commercial & Institutional Banking $million	2022 Consumer, Private & Business Banking $million	2022 Central & Others $million	2022 Total $million	2021 Corporate, Commercial & Institutional Banking $million	2021 Consumer, Private & Business Banking $million	2021 Central & Others $million	2021 Total $million
Gross credit-impaired	3,810	627	248	4,685	4,353	666	–	5,019
Credit impairment provisions	(2,201)	(402)	(18)	(2,621)	(2,637)	(390)	–	(3,027)
Net credit-impaired	1,609	225	230	2,064	1,716	276	–	1,992
Cover ratio	58%	64%	7%	56%	61%	59%	–	60%
Collateral ($ million)	480	209	–	689	479	241	–	720
Cover ratio (after collateral)	70%	97%	7%	71%	72%	95%	–	75%

Credit risk mitigation

Potential credit losses from any given account, customer or portfolio are mitigated using a range of tools such as collateral, netting arrangements, credit insurance and credit derivatives, taking into account expected volatility and guarantees.

The reliance that can be placed on these mitigants is carefully assessed in light of issues such as legal certainty and enforceability, market valuation correlation and counterparty risk of the guarantor.

Collateral (audited)

The requirement for collateral is not a substitute for the ability to repay, which is the primary consideration for any lending decisions.

The collateral values in the table below (which covers loans and advances to banks and customers, excluding those held at fair value through profit or loss) are adjusted where appropriate in accordance with our risk mitigation policy and for the effect of over-collateralisation. The extent of over-collateralisation has been determined with reference to both the drawn and undrawn components of exposure as this best reflects the effect of collateral and other credit enhancements on the amounts arising from expected credit losses. We have remained prudent in the way we assess the value of collateral, which is calibrated for a severe downturn and backtested against our prior experience. On average, across all types of non-cash collateral, the value ascribed is approximately half of its current market value. In the CPBB segments, a secured loan is one where the borrower pledges an asset as collateral of which the Group is able to take possession in the event that the borrower defaults.

Collateral held on loans and advances (audited)

The table below details collateral held against exposures, separately disclosing stage 2 and stage 3 exposure and corresponding collateral.

Group

	2022								
	Net amount outstanding			Collateral			Net exposure		
Amortised cost	Total $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million	Total[2] $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million	Total $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million
Corporate, Commercial & Institutional Banking[1]	114,862	6,900	1,989	27,754	2,286	628	87,108	4,614	1,361
Consumer, Private & Business Banking	46,013	927	440	28,015	661	411	17,998	266	29
Ventures[3]	64	1	–	–	–	–	64	1	–
Central & other items	24,570	–	230	2,287	–	–	22,283	–	230
Total	185,509	7,828	2,659	58,056	2,947	1,039	127,453	4,881	1,620

	2021								
	Net amount outstanding			Collateral			Net exposure		
Amortised cost	Total $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million	Total[2] $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million	Total $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million
Corporate, Commercial & Institutional Banking[1]	109,766	11,720	2,218	18,463	3,479	700	91,303	8,241	1,518
Consumer, Private & Business Banking	46,048	1,087	528	27,322	707	487	18,726	380	41
Ventures[3]	–	–	–	–	–	–	–	–	–
Central & other items	18,984	110	–	2,814	–	–	16,170	110	–
Total	174,798	12,917	2,746	48,599	4,186	1,187	126,199	8,731	1,559

1 Includes loans and advances to banks

2 Adjusted for over-collateralisation based on the drawn and undrawn components of exposures

3 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment in 2022. Prior period disclosure has been re-presented

Company

Amortised cost	2022 Net amount outstanding Total $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million	Collateral Total[2] $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million	Net exposure Total $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million
Corporate, Commercial & Institutional Banking[1]	84,468	4,928	1,610	23,245	1,822	480	61,223	3,106	1,130
Consumer, Private & Business Banking	11,661	418	225	5,394	281	209	6,267	137	16
Central & other items	3,030	–	230	1,772	–	–	1,258	–	230
Total	**99,159**	**5,346**	**2,065**	**30,411**	**2,103**	**689**	**68,748**	**3,243**	**1,376**

Amortised cost	2021 Net amount outstanding Total $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million	Collateral Total[2] $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million	Net exposure Total $million	Stage 2 financial assets $million	Credit-impaired financial assets (S3) $million
Corporate, Commercial & Institutional Banking[1]	72,478	9,260	1,716	12,892	2,840	479	59,586	6,420	1,237
Consumer, Private & Business Banking	12,201	434	276	5,913	295	241	6,288	139	35
Central & other items	2,599	110	–	2,087	–	–	512	110	–
Total	87,278	9,804	1,992	20,892	3,135	720	66,386	6,669	1,272

1 Includes loans and advances to banks

2 Adjusted for over-collateralisation based on the drawn and undrawn components of exposures

Collateral – CCIB (audited)

78 per cent of tangible collateral excluding reverse repurchase agreements (31 December 2021: 76 per cent) held comprises physical assets or is property based, with the remainder held in cash. Overall collateral increased by $9 billion to $28 billion (31 December 2021: $18 billion) due to an increase in reverse repurchase agreements.

Non-tangible collateral such as guarantees and standby letters of credit is also held against corporate exposures, although the financial effect of this type of collateral is less significant in terms of recoveries. However, this is considered when determining probability of default and other credit-related factors. Collateral is also held against off-balance sheet exposures, including undrawn commitments and trade-related instruments.

The following table provides an analysis of the types of collateral held against CCIB loan exposures.

Group

Corporate, Commercial & Institutional Banking

Amortised cost	2022 $million	2021 $million
Maximum exposure	**114,862**	109,766
Property	**3,276**	4,004
Plant, machinery and other stock	**1,141**	1,331
Cash	**1,959**	2,595
Reverse repos	**14,213**	1,920
A- to AA+	**10,459**	–
BBB- to BBB+	**1,485**	483
Unrated	**2,269**	1,437
Financial guarantees and insurance	**4,494**	5,513
Commodities	**38**	36
Ships and aircraft	**2,635**	3,064
Total value of collateral[1]	**27,756**	18,463
Net exposure	**87,106**	91,303

Company

Corporate, Commercial & Institutional Banking

Amortised cost	2022 $million	2021 $million
Maximum exposure	**84,468**	72,478
Property	**2,143**	2,253
Plant, machinery and other stock	**801**	876
Cash	**1,355**	1,979
Reverse repos	**13,504**	1,387
A- to AA+	**10,459**	–
BBB- to BBB+	**822**	2
Unrated	**2,223**	1,385
Financial guarantees and insurance	**3,687**	4,327
Commodities	**29**	35
Ships and aircraft	**1,726**	2,035
Total value of collateral[1]	**23,245**	12,892
Net exposure	**61,223**	59,586

1 Adjusted for over-collateralisation based on the drawn and undrawn components of exposures

Group

Collateral – CPBB- Group (audited)

In CPBB, $39 billion which equates to 86 per cent of the portfolio is fully secured (31 December 2021: 84 per cent).

The following table presents an analysis of loans to individuals by product; split between fully secured, partially secured and unsecured:

	2022				2021 (Restated)[3]			
Amortised cost	Fully secured $million	Partially secured $million	Unsecured $million	Total $million	Fully secured $million	Partially secured $million	Unsecured $million	Total $million
Maximum exposure	39,493	160	6,360	46,013	38,916	856	6,276	46,048
Loans to individuals								
Mortgages	24,695	–	–	24,695	23,915	–	–	23,915
CCPL	205	–	5,929	6,134	148	–	5,738	5,886
Auto	502	–	–	502	542	–	–	542
Secured wealth products	14,024	–	–	14,024	14,196	–	–	14,196
Other	67	160	431	658	115	856	538	1,509
Total collateral[1]				28,015				27,322
Net exposure[2]				17,998				18,726
Percentage of total loans	86%	0%	14%		84%	2%	14%	

1 Collateral values are adjusted where appropriate in accordance with our risk mitigation policy and for the effect of over-collateralisation

2 Amounts net of ECL

3 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment in 2022. Prior period has been restated

Company

Collateral – CPBB (audited)

In CPBB, $9 billion which equates to 77 per cent of the portfolio is fully secured (31 December 2021: 72 per cent).

The following table presents an analysis of loans to individuals by product; split between fully secured, partially secured and unsecured:

	2022				2021			
Amortised cost	Fully secured $million	Partially secured $million	Unsecured $million	Total $million	Fully secured $million	Partially secured $million	Unsecured $million	Total $million
Maximum exposure	8,940	131	2,590	11,661	8,781	841	2,579	12,201
Loans to individuals								
Mortgages	4,848	–	–	4,848	4,802	–	–	4,802
CCPL	205	–	2,317	2,522	148	–	2,229	2,377
Auto	26	–	–	26	38	–	–	38
Secured wealth products	3,857	–	–	3,857	3,786	–	–	3,786
Other	4	131	273	408	7	841	350	1,198
Total collateral[1]				5,394				5,913
Net exposure[2]				6,267				6,288
Percentage of total loans	77%	1%	22%		72%	7%	21%	

1 Collateral values are adjusted where appropriate in accordance with our risk mitigation policy and for the effect of over-collateralisation

2 Amounts net of ECL

Mortgage loan-to-value ratios by geography (audited)

Loan-to-value (LTV) ratios measure the ratio of the current mortgage outstanding to the current fair value of the properties on which they are secured.

In mortgages, the value of property held as security significantly exceeds the value of mortgage loans. The average LTV of the overall mortgage portfolio is low at 45.8 per cent. Singapore, which represents 67 per cent of the retail mortgage portfolio as at 31 December 2022, has an average LTV of 42.9 per cent.

An analysis of LTV ratios by geography for the mortgage portfolio is presented in the table below.

	2022			
Amortised cost	Asia % Gross	Africa & Middle East % Gross	Europe & Americas % Gross	Total % Gross
Less than 50 per cent	50.0	43.0	32.2	48.2
50 per cent to 59 per cent	20.2	18.2	19.2	20.0
60 per cent to 69 per cent	19.5	16.8	31.3	20.1
70 per cent to 79 per cent	7.5	12.8	14.8	8.3
80 per cent to 89 per cent	2.6	5.1	1.1	2.6
90 per cent to 99 per cent	0.2	2.0	–	0.3
100 per cent and greater	0.1	2.2	1.3	0.4
Average portfolio loan-to-value	44.4	54.3	56.6	45.8
Loans to individuals – mortgages ($million)	21,435	1,388	1,872	24,695

	2021			
Amortised cost	Asia % Gross	Africa & Middle East % Gross	Europe & Americas % Gross	Total % Gross
Less than 50 per cent	43.9	27.6	16.8	40.7
50 per cent to 59 per cent	20.3	18.6	19.9	20.3
60 per cent to 69 per cent	20.2	19.6	37.5	21.4
70 per cent to 79 per cent	12.5	16.5	17.1	13.1
80 per cent to 89 per cent	2.5	9.1	8.7	3.4
90 per cent to 99 per cent	0.4	4.8	–	0.7
100 per cent and greater	0.2	3.8	–	0.4
Average portfolio loan-to-value	44.3	61.9	60.8	46.5
Loans to individuals – mortgages ($million)	20,455	1,651	1,808	23,914

Collateral and other credit enhancements possessed or called upon

The Group obtains assets by taking possession of collateral or calling upon other credit enhancements (such as guarantees). Repossessed properties are sold in an orderly fashion. Where the proceeds are in excess of the outstanding loan balance the excess is returned to the borrower.

Certain equity securities acquired may be held by the Group for investment purposes and are classified as fair value through profit or loss, and the related loan written off. The carrying value of collateral possessed and held by the Group as at 31 December 2022 is $14.9 million (31 December 2021: $11.8 million).

	2022 $million	2021 $million
Property, plant and equipment	9.6	5.8
Guarantees	5.3	6.0
Total	14.9	11.8

Other Credit Risk mitigation (audited)

Other forms of Credit Risk mitigation are set out below.

Credit default swaps

The Group has entered into credit default swaps for portfolio management purposes, referencing loan assets with a notional value of $5.1 billion (31 December 2021: $12.1 billion). These credit default swaps are accounted for as financial guarantees as per IFRS 9 as they will only reimburse the holder for an incurred loss on an underlying debt instrument. The Group continues to hold the underlying assets referenced in the credit default swaps and it continues to be exposed to related Credit and Foreign Exchange Risk on these assets.

Credit linked notes

The Group has issued credit linked notes for portfolio management purposes, referencing loan assets with a notional value of $13.5 billion (31 December 2021: $10.0 billion). The Group continues to hold the underlying assets for which the credit linked notes provide mitigation.

Derivative financial instruments

The Group enters into master netting agreements, which in the event of default result in a single amount owed by or to the counterparty through netting the sum of the positive and negative mark-to-market values of applicable derivative transactions. These are also set out under the Derivative financial instruments Credit Risk Mitigation section (page 116).

Off-balance sheet exposures

For certain types of exposures, such as letters of credit and guarantees, the Group obtains collateral such as cash depending on internal Credit Risk assessments, as well as in the case of letters of credit holding legal title to the underlying assets should a default take place.

Other portfolio analysis

This section provides maturity analysis of loans and advances by business segment.

Contractual maturity analysis of loans and advances by client segment (audited)

Loans and advances to the CCIB segments remain predominantly short-term, with 68 per cent (31 December 2021: 64 per cent) maturing in less than one year. 95 per cent (31 December 2021: 97 per cent) of loans to banks mature in less than one year. Shorter maturities give us the flexibility to respond promptly to events and rebalance or reduce our exposure to clients or sectors that are facing increased pressure or uncertainty.

The CPBB loan book continues to be longer-term in nature with 52 per cent (31 December 2021: 49 per cent) of the loans maturing over five years, as mortgages constitute the majority of this portfolio.

Group

	2022			
Amortised cost	One year or less $million	One to five years $million	Over five years $million	Total $million
Corporate, Commercial & Institutional Banking	61,972	20,863	7,769	90,604
Consumer, Private & Business Banking	17,045	5,402	24,453	46,900
Ventures	66	–	–	66
Central & other items	24,584	–	4	24,588
Gross loans and advances to customers	103,667	26,265	32,226	162,158
Impairment provisions	(3,558)	(404)	(70)	(4,032)
Net loans and advances to customers	100,109	25,861	32,156	158,126
Net loans and advances to banks	26,097	1,134	152	27,383

	2021 (Restated)[1]			
Amortised cost	One year or less $million	One to five years $million	Over five years $million	Total $million
Corporate, Commercial & Institutional Banking	53,449	20,973	9,220	83,642
Consumer, Private & Business Banking	18,702	5,471	22,873	47,046
Ventures	–	–	–	–
Central & other items	18,758	222	4	18,984
Gross loans and advances to customers	90,909	26,666	32,097	149,672
Impairment provisions	(4,409)	(355)	(109)	(4,873)
Net loans and advances to customers	86,500	26,311	31,988	144,799
Net loans and advances to banks	29,060	785	154	29,999

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment in 2022. Prior period has been restated

Company

Amortised cost	2022 One year or less $million	One to five years $million	Over five years $million	Total $million
Corporate, Commercial & Institutional Banking	47,258	14,840	6,125	68,223
Consumer, Private & Business Banking	5,357	2,594	4,235	12,186
Central & other items	3,048	–	–	3,048
Gross loans and advances to customers	55,663	17,434	10,360	83,457
Impairment provisions	(2,458)	(336)	(52)	(2,846)
Net loans and advances to customers	53,205	17,098	10,308	80,611
Net loans and advances to banks	17,403	992	153	18,548

Amortised cost	2021 One year or less $million	One to five years $million	Over five years $million	Total $million
Corporate, Commercial & Institutional Banking	36,691	14,561	7,954	59,206
Consumer, Private & Business Banking	5,840	3,045	3,884	12,769
Central & other items	2,598	–	1	2,599
Gross loans and advances to customers	45,129	17,606	11,839	74,574
Impairment provisions	(3,093)	(235)	(85)	(3,413)
Net loans and advances to customers	42,036	17,371	11,754	71,161
Net loans and advances to banks	15,321	642	154	16,117

Credit quality by industry

Loans and advances

This section provides an analysis of the Group's amortised cost portfolio by industry on a gross, total credit impairment and net basis.

From an industry perspective, gross loans and advances increased by $12.5 billion to $162 billion (31 December 2021: $150 billion), of which $12.6 billion is in CCIB and Central and other items segments. CPBB was largely flat at $47 billion.

Stage 1 loans increased by $18.2 billion to $148.2 billion (31 December 2021: $130 billion), primarily within the CCIB and Central and other items segments. Of this $11.3 billion was from an exposure increase in Financing, insurance and non-banking from a few notable clients and $4.9 billion was from an increased lending to Governments, mainly in Singapore. Transport, telecom and utilities increased by $2 billion due to upgrades.

In CPBB stage 1 loans increased by $0.2 billion to $44.9 billion (31 December 2021: $44.6 billion) mainly from credit cards following changes to criteria for transferring exposures into stage 2 and from mortgage portfolio.

Stage 2 loans decreased by $5 billion largely due to CCIB, $2.5 billion decrease in Transport, telecom and utilities from upgrades to Stage 1, and $1.1 billion decrease in Energy due to repayments.

Stage 3 loans reduced by $0.7 billion to $6.2 billion (31 December 2021: $6.9 billion) of which CPBB was broadly flat at $1.1 billion. CCIB and Central and other items fell by $0.6 billion to $5.1 billion (31 December 2021: $5.8 billion) as the impact of sovereign downgrades in Ghana and Sri Lanka were more than offset by repayments and upgrades.

Group

Amortised cost	Stage 1 Gross balance $million	Stage 1 Total credit impairment $million	Stage 1 Net carrying amount $million	Stage 2 Gross balance $million	Stage 2 Total credit impairment $million	Stage 2 Net carrying amount $million	Stage 3 Gross balance $million	Stage 3 Total credit impairment $million	Stage 3 Net carrying amount $million	Total Gross balance $million	Total Total credit impairment $million	Total Net carrying amount $million
	2022											
Industry:												
Energy	8,569	(8)	8,561	786	(9)	777	1,318	(612)	706	10,673	(629)	10,044
Manufacturing	10,839	(19)	10,820	645	(26)	619	649	(409)	240	12,133	(454)	11,679
Financing, insurance and non-banking	26,667	(7)	26,660	276	(2)	274	193	(174)	19	27,136	(183)	26,953
Transport, telecom and utilities	8,677	(18)	8,659	1,819	(34)	1,785	651	(219)	432	11,147	(271)	10,876
Food and household products	6,410	(20)	6,390	624	(20)	604	411	(252)	159	7,445	(292)	7,153
Commercial real estate	5,229	(4)	5,225	847	(12)	835	232	(160)	72	6,308	(176)	6,132
Mining and quarrying	3,598	(3)	3,595	380	(5)	375	241	(168)	73	4,219	(176)	4,043
Consumer durables	2,492	(3)	2,489	328	(15)	313	320	(289)	31	3,140	(307)	2,833
Construction	1,340	(1)	1,339	371	(5)	366	495	(410)	85	2,206	(416)	1,790
Trading companies & distributors	466	–	466	12	(1)	11	120	(77)	43	598	(78)	520
Government	26,566	(1)	26,565	533	(1)	532	168	(15)	153	27,267	(17)	27,250
Other	2,470	(3)	2,467	141	(4)	137	309	(137)	172	2,920	(144)	2,776
Retail Products:												
Mortgage	23,893	(10)	23,883	563	(6)	557	418	(163)	255	24,874	(179)	24,695
Credit Cards	2,925	(53)	2,872	88	(25)	63	40	(31)	9	3,053	(109)	2,944
Personal loans and other unsecured lending	3,213	(89)	3,124	80	(14)	66	167	(103)	64	3,460	(206)	3,254
Auto	501	–	501	1	–	1	–	–	–	502	–	502
Secured wealth products	13,749	(27)	13,722	219	(7)	212	380	(290)	90	14,348	(324)	14,024
Other	609	(2)	607	30	(1)	29	90	(68)	22	729	(71)	658
Net carrying value (customers)[1]	148,213	(268)	147,945	7,743	(187)	7,556	6,202	(3,577)	2,625	162,158	(4,032)	158,126

1 Includes reverse repurchase agreements and other similar secured lending held at amortised cost of $15,586 million

Amortised cost	2021											
	Stage 1			Stage 2			Stage 3			Total		
	Gross balance $million	Total credit impairment $million	Net carrying amount $million	Gross balance $million	Total credit impairment $million	Net carrying amount $million	Gross balance $million	Total credit impairment $million	Net carrying amount $million	Gross balance $million	Total credit impairment $million	Net carrying amount $million
Industry:												
Energy	9,219	(14)	9,205	1,898	(71)	1,827	889	(629)	260	12,006	(714)	11,292
Manufacturing	10,837	(6)	10,831	788	(26)	762	757	(510)	247	12,382	(542)	11,840
Financing, insurance and non-banking	15,338	(6)	15,332	720	(11)	709	247	(206)	41	16,305	(223)	16,082
Transport, telecom and utilities	6,691	(3)	6,688	4,368	(47)	4,321	938	(282)	656	11,997	(332)	11,665
Food and household products	6,048	(7)	6,041	563	(26)	537	370	(266)	104	6,981	(299)	6,682
Commercial real estate	5,876	(8)	5,868	695	(10)	685	385	(211)	174	6,956	(229)	6,727
Mining and quarrying	2,887	(2)	2,885	419	(19)	400	261	(179)	82	3,567	(200)	3,367
Consumer durables	2,203	(2)	2,201	251	(8)	243	360	(323)	37	2,814	(333)	2,481
Construction	1,171	(1)	1,170	491	(19)	472	914	(624)	290	2,576	(644)	1,932
Trading companies & distributors	554	–	554	20	(6)	14	159	(131)	28	733	(137)	596
Government	21,663	(2)	21,661	624	(2)	622	155	(8)	147	22,442	(12)	22,430
Other	2,860	(3)	2,857	694	(13)	681	316	(194)	122	3,870	(210)	3,660
Retail Products:												
Mortgage	23,156	(19)	23,137	506	(19)	487	449	(159)	290	24,111	(197)	23,914
Credit Cards[2]	2,515	(51)	2,464	288	(50)	238	43	(43)	–	2,846	(144)	2,702
Personal loans and other unsecured lending[2]	3,163	(90)	3,073	85	(25)	60	201	(150)	51	3,449	(265)	3,184
Auto	541	(1)	540	2	–	2	–	–	–	543	(1)	542
Secured wealth products	13,821	(44)	13,777	254	(9)	245	441	(267)	174	14,516	(320)	14,196
Other	1,447	(7)	1,440	75	(20)	55	56	(44)	12	1,578	(71)	1,507
Net carrying value (customers)[1]	129,990	(266)	129,724	12,741	(381)	12,360	6,941	(4,226)	2,715	149,672	(4,873)	144,799

1 Includes reverse repurchase agreements and other similar secured lending held at amortised cost of $3,764 million

2 Prior year has been re-presented to provide product granularity

Company

Amortised cost	Stage 1 Gross balance $million	Stage 1 Total credit impairment $million	Stage 1 Net carrying amount $million	Stage 2 Gross balance $million	Stage 2 Total credit impairment $million	Stage 2 Net carrying amount $million	Stage 3 Gross balance $million	Stage 3 Total credit impairment $million	Stage 3 Net carrying amount $million	Total Gross balance $million	Total Total credit impairment $million	Total Net carrying amount $million
	2022											
Industry:												
Energy	5,513	(4)	5,509	671	(1)	670	1,050	(360)	690	7,234	(365)	6,869
Manufacturing	7,076	(11)	7,065	364	(5)	359	527	(336)	191	7,967	(352)	7,615
Financing, insurance and non-banking	24,308	(3)	24,305	198	(2)	196	150	(132)	18	24,656	(137)	24,519
Transport, telecom and utilities	5,790	(14)	5,776	1,409	(20)	1,389	457	(117)	340	7,656	(151)	7,505
Food and household products	3,898	(7)	3,891	279	(2)	277	266	(157)	109	4,443	(166)	4,277
Commercial real estate	3,732	(3)	3,729	617	(4)	613	224	(156)	68	4,573	(163)	4,410
Mining and quarrying	2,799	(2)	2,797	223	(3)	220	158	(152)	6	3,180	(157)	3,023
Consumer durables	1,723	(3)	1,720	139	(9)	130	284	(254)	30	2,146	(266)	1,880
Construction	1,131	(1)	1,130	315	(3)	312	402	(345)	57	1,848	(349)	1,499
Trading companies & distributors	173	–	173	4	–	4	98	(65)	33	275	(65)	210
Government	4,635	(1)	4,634	524	(1)	523	168	(15)	153	5,327	(17)	5,310
Other	1,584	(2)	1,582	107	(1)	106	274	(130)	144	1,965	(133)	1,832
Retail Products:												
Mortgage	4,511	(6)	4,505	226	(3)	223	232	(112)	120	4,969	(121)	4,848
Credit Cards	619	(18)	601	53	(11)	42	11	(7)	4	683	(36)	647
Personal loans and other unsecured lending	1,875	(60)	1,815	60	(8)	52	23	(14)	9	1,958	(82)	1,876
Auto	26	–	26	–	–	–	–	–	–	26	–	26
Secured wealth products	3,718	(12)	3,706	90	(3)	87	320	(256)	64	4,128	(271)	3,857
Other	365	(1)	364	17	(1)	16	41	(13)	28	423	(15)	408
Net carrying value (customers)[1]	73,476	(148)	73,328	5,296	(77)	5,219	4,685	(2,621)	2,064	83,457	(2,846)	80,611

1 Includes reverse repurchase agreements and other similar secured lending held at amortised cost of $15,071 million

	2021											
	Stage 1			Stage 2			Stage 3			Total		
Amortised cost	Gross balance $million	Total credit impairment $million	Net carrying amount $million	Gross balance $million	Total credit impairment $million	Net carrying amount $million	Gross balance $million	Total credit impairment $million	Net carrying amount $million	Gross balance $million	Total credit impairment $million	Net carrying amount $million
Industry:												
Energy	6,519	(13)	6,506	1,518	(61)	1,457	559	(339)	220	8,596	(413)	8,183
Manufacturing	5,929	(3)	5,926	583	(16)	567	628	(402)	226	7,140	(421)	6,719
Financing, insurance and non-banking	13,229	(4)	13,225	440	(1)	439	204	(167)	37	13,873	(172)	13,701
Transport, telecom and utilities	3,674	(1)	3,673	4,004	(43)	3,961	696	(152)	544	8,374	(196)	8,178
Food and household products	3,310	(2)	3,308	342	(13)	329	174	(152)	22	3,826	(167)	3,659
Commercial real estate	3,934	(2)	3,932	436	(5)	431	353	(205)	148	4,723	(212)	4,511
Mining and quarrying	2,133	(1)	2,132	296	(17)	279	160	(152)	8	2,589	(170)	2,419
Consumer durables	1,363	(1)	1,362	156	(3)	153	315	(280)	35	1,834	(284)	1,550
Construction	847	(1)	846	410	(6)	404	804	(547)	257	2,061	(554)	1,507
Trading companies & distributors	246	–	246	9	(5)	4	75	(74)	1	330	(79)	251
Government	4,993	(1)	4,992	615	(2)	613	155	(7)	148	5,763	(10)	5,753
Other	1,971	(1)	1,970	495	(6)	489	231	(159)	72	2,697	(166)	2,531
Retail Products:												
Mortgage	4,468	(7)	4,461	205	(16)	189	259	(107)	152	4,932	(130)	4,802
Credit Cards[2]	631	(25)	606	106	(19)	87	13	(13)	–	750	(57)	693
Personal loans and other unsecured lending[2]	1,705	(61)	1,644	55	(15)	40	25	(25)	–	1,785	(101)	1,684
Auto	37	–	37	1	–	1	–	–	–	38	–	38
Secured wealth products	3,601	(23)	3,578	94	(6)	88	354	(234)	120	4,049	(263)	3,786
Other	1,170	(5)	1,165	30	(1)	29	14	(12)	2	1,214	(18)	1,196
Net carrying value (customers)[1]	59,760	(151)	59,609	9,795	(235)	9,560	5,019	(3,027)	1,992	74,574	(3,413)	71,161

1 Includes reverse repurchase agreements and other similar secured lending held at amortised cost of $3,047 million

2 Prior year has been re-presented to provide product granularity

Debt securities and other eligible bills (audited)

This section provides further detail on gross debt securities and treasury bills.

The standard credit ratings used by the Group are those used by Standard & Poor's or its equivalent. Debt securities held that have a short-term rating are reported against the long-term rating of the issuer. For securities that are unrated, the Group applies an internal credit rating, as described under the credit rating and measurement section on page 135.

Total gross debt securities and other eligible bills increased by $10.7 billion to $112 billion (31 December 2021: $102 billion).

Stage 1 gross balance increased by $10.5 billion to $107 billion (31 December 2021: $96 billion) of which $7 billion increase was unrated. Of the unrated securities, 97 per cent (31 December 2021: 88 per cent) are internally rated as Strong and 3 per cent (31 December 2021: 12 per cent) were internally rated as Satisfactory.

Stage 2 gross balance was broadly stable at $5.5 billion (31 December 2021: $5.3 billion) which includes the sovereign downgrade of Pakistan.

Stage 3 gross balance was at $0.1 billion (31 December 2021: $0.1 billion) which includes the sovereign downgrade of Ghana.

Group

	2022			2021		
Amortised cost and FVOCI	Gross $million	ECL $million	Net[2] $million	Gross $million	ECL $million	Net[2] $million
Stage 1	106,886	(20)	106,866	96,350	(58)	96,292
AAA	65,729	(7)	65,722	58,836	(18)	58,818
AA- to AA+	14,767	(3)	14,764	12,584	(5)	12,579
A- to A+	6,311	(2)	6,309	8,142	(2)	8,140
BBB- to BBB+	7,387	(1)	7,386	11,071	(27)	11,044
Lower than BBB-	1,047	(2)	1,045	1,123	(1)	1,122
Unrated	11,645	(5)	11,640	4,594	(5)	4,589
Stage 2	5,455	(90)	5,365	5,315	(42)	5,273
AAA	21	–	21	641	(7)	634
AA- to AA+	40	–	40	592	(3)	589
A- to A+	17	(1)	16	22	(1)	21
BBB- to BBB+	2,605	(15)	2,590	2,869	(9)	2,860
Lower than BBB-	2,485	(71)	2,414	809	(20)	789
Unrated	287	(3)	284	382	(2)	380
Stage 3	144	(106)	38	113	(66)	47
Lower than BBB-	66	(55)	11	–	–	–
Unrated	78	(51)	27	113	(66)	47
Gross balance[1]	112,485	(216)	112,269	101,778	(166)	101,612

1 Stage 3 gross includes $28 million (2021: $33 million) originated credit-impaired debt securities with impairment of $13 million (2021: Nil)

2 FVOCI instrument are not presented net of ECL. While the presentation is on a net basis for the table, the total net on-balance sheet amount is $112,425 million (31 December 2021: $101,705 million). Refer to the Analysis of financial instrument by stage table on page 70

Company

Amortised cost and FVOCI	2022 Gross $million	2022 ECL $million	2022 Net[2] $million	2021 Gross $million	2021 ECL $million	2021 Net[2] $million
Stage 1	**93,243**	**(20)**	**93,223**	82,388	(32)	82,356
AAA	**63,232**	**(7)**	**63,225**	56,041	(17)	56,024
AA- to AA+	**14,447**	**(3)**	**14,444**	10,585	(5)	10,580
A- to A+	**4,275**	**(2)**	**4,273**	6,450	(2)	6,448
BBB- to BBB+	**5,841**	**(5)**	**5,836**	6,263	(6)	6,257
Lower than BBB-	**1,047**	**(2)**	**1,045**	1,123	(1)	1,122
Unrated	**4,401**	**(1)**	**4,400**	1,926	(1)	1,925
Stage 2	**1,785**	**(1)**	**1,784**	3,603	(21)	3,582
AAA	**21**	**–**	**21**	641	(7)	634
AA- to AA+	**40**	**–**	**40**	592	(3)	589
A- to A+	**17**	**(1)**	**16**	22	(1)	21
BBB- to BBB+	**1,504**	**–**	**1,504**	1,672	(2)	1,670
Lower than BBB-	**203**	**–**	**203**	589	(7)	582
Unrated	**–**	**–**	**–**	87	(1)	86
Stage 3	**78**	**(50)**	**28**	82	(36)	46
Lower than BBB-	**–**	**–**	**–**	–	–	–
Unrated	**78**	**(50)**	**28**	82	(36)	46
Gross balance[1]	**95,106**	**(71)**	**95,035**	86,073	(89)	85,984

1 Stage 3 gross includes $28 million (2021: $33 million) originated credit-impaired debt securities with impairment of $13 million (2021: Nil)

2 FVOCI instrument are not presented net of ECL. While the presentation is on a net basis for the table, the total net on-balance sheet amount is $95,049 million (31 December 2021: $86,028 million). Refer to the Analysis of financial instrument by stage table on page 72

IFRS 9 expected credit loss methodology (audited)

Approach for determining expected credit losses

Credit loss terminology

Component	Definition
Probability of default (PD)	The probability that a counterparty will default, over the next 12 months from the reporting date (stage 1) or over the lifetime of the product (stage 2), incorporating the impact of forward-looking economic assumptions that have an effect on Credit Risk, such as unemployment rates and GDP forecasts. The PD estimates will Fluctuate in line with the economic cycle. The lifetime (or term structure) PDs are based on statistical models, calibrated using historical data and adjusted to incorporate forward-looking economic assumptions.
Loss given default (LGD)	The loss that is expected to arise on default, incorporating the impact of forward-looking economic assumptions where relevant, which represents the difference between the contractual cashFlows due and those that the bank expects to receive. The Group estimates LGD based on the history of recovery rates and considers the recovery of any collateral that is integral to the financial asset, taking into account forward-looking economic assumptions where relevant.
Exposure at default (EAD)	The expected balance sheet exposure at the time of default, taking into account expected changes over the lifetime of the exposure. This incorporates the impact of drawdowns of facilities with limits, principal and repayments of interest and amortisation.

To determine the expected credit loss, these components are multiplied together: PD for the reference period (up to 12 months or lifetime) x LGD x EAD and discounted to the balance sheet date using the effective interest rate as the discount rate.

IFRS 9 expected credit loss models have been developed for the CCIB business on a global basis, in line with their respective portfolios. However, for some of the key countries, country-specific models have also been developed.

The calibration of forward-looking information is assessed at a country or region level to take into account local macroeconomic conditions.

Retail expected credit loss models are country and product specific given the local nature of the retail business.

For less material retail portfolios, the Group has adopted less sophisticated approaches based on historical roll rates or loss rates:

- For medium-sized retail portfolios, a roll rate model is applied, which uses a matrix that gives the average loan migration rate between delinquency states from period to period. A matrix multiplication is then performed to generate the final PDs by delinquency bucket over different time horizons.
- For smaller retail portfolios, loss rate models are applied. These use an adjusted gross charge-off rate, developed using monthly write-off and recoveries over the preceding 12 months and total outstanding balances.
- While the loss rate models do not incorporate forward looking information, to the extent that there are significant changes in the macroeconomic forecasts an assessment will be completed on whether an adjustment to the modelled output is required.

For a limited number of exposures, proxy parameters or approaches are used where the data is not available to calculate the origination PDs for the purpose of applying the SICR criteria; or for some retail portfolios where a full history of LGD data is not available, estimates based on the loss experience from similar portfolios are used. The use of proxies is monitored and will reduce over time.

The following processes are in place to assess the ongoing performance of the models:

- Quarterly model monitoring that uses recent data to compare the differences between model predictions and actual outcomes against approved thresholds.
- Annual independent validations of the performance of material models by Group Model Valuation (GMV); an abridged validation is completed for non-material models.

Application of lifetime

Expected credit loss is estimated based on the period over which the Group is exposed to Credit Risk. For the majority of exposures this equates to the maximum contractual period. For retail credit cards and corporate overdraft facilities however, the Group does not typically enforce the contractual period, which can be as short as one day. As a result, the period over which the Group is exposed to Credit Risk for these instruments reflects their behavioural life, which incorporates expectations of customer behaviour and the extent to which Credit Risk management actions curtail the period of that exposure. The average behavioural life for retail credit cards is between 3 and 6 years across our footprint markets.

In 2022, the behavioural life for corporate overdraft facilities was re-estimated using recent data, and it was confirmed that the existing lifetime of 24 months remains appropriate.

Key assumptions and judgements in determining expected credit loss

Incorporation of forward-looking information

The evolving economic environment is a key determinant of the ability of a bank's clients to meet their obligations as they fall due. It is a fundamental principle of IFRS 9 that the provisions banks hold against potential future credit risk losses should depend not just on the health of the economy today but should also take into account potential changes to the economic environment. For example, if a bank were to anticipate a sharp slowdown in the world economy over the coming year, it should hold more provisions today to absorb the credit losses likely to occur in the near future.

To capture the effect of changes to the economic environment, the PDs and LGDs used to calculate ECL incorporate forward-looking information in the form of forecasts of the values of economic variables and asset prices that are likely to have an effect on the repayment ability of the Group's clients.

The 'Base Forecast' of the economic variables and asset prices is based on management's view of the five-year outlook, supported by projections from the Group's in-house research team and outputs from a third-party model that project specific economic variables and asset prices. The research team takes consensus views into consideration and senior management reviews projections for some core country variables against consensus when forming their view of the outlook. For the period beyond five years, management utilises the in-house research view and third-party model outputs, which allow for a reversion to long-term growth rates or norms. All projections are updated on a quarterly basis.

Forecast of key macroeconomic variables underlying the expected credit loss calculation and the impact on non-linearity

In the Base Forecast – management's view of the most likely outcome –the pace of growth of the world economy is expected to slow in the near term as central banks keep monetary policy restrictive. Global GDP is forecast to grow by less than 3 per cent in 2023. World GDP growth averaged 3.7 per cent for the 10 years prior to COVID-19 (between 2010 and 2019). The multitude of headwinds that have faced most economies in 2022 are likely to persist in the months ahead. However, a recovery in growth is expected to take hold in H2 2023.

The balance of risks to the 2023 outlook is to the downside. They include the impact from higher inflation and interest rates, ongoing geopolitical tensions, renewed lockdowns/restrictions to movement from the spread of COVID and severe corrections in property sectors in key countries.

While the quarterly Base Forecasts inform the Group's strategic plan, one key requirement of IFRS 9 is that the assessment of provisions should consider multiple future economic environments. For example, the global economy may grow more quickly or more slowly than the Base Forecast, and these variations would have different implications for the provisions that the Group should hold today. As the negative impact of an economic downturn on credit losses tends to be greater than the positive impact of an economic upturn, if the Group sets provisions only on the ECL under the Base Forecast it might maintain a level of provisions that does not appropriately capture the range of potential outcomes. To address this property of skewness (or non-linearity), IFRS 9 requires reported ECL to be a probability-weighted ECL calculated over a range of possible outcomes.

To assess the range of possible outcomes the Group simulates a set of 50 scenarios around the Base Forecast, calculates the ECL under each of them and assigns an equal weight of 2 per cent to each scenario outcome. These scenarios are generated by a Monte Carlo simulation, which addresses the challenges of crafting many realistic alternative scenarios in the many countries in which the Group operates by means of a model, which produces these alternative scenarios while considering the degree of historical uncertainty (or volatility) observed from Q1 1990 to Q3 2022 around economic outcomes and how these outcomes have tended to move in relation to one another (or correlation). This naturally means that each of the 50 scenarios do not have a specific narrative, although collectively they explore a range of hypothetical alternative outcomes for the global economy, including scenarios that turn out better than expected and scenarios that amplify anticipated stresses.

The tables on 106 provide a summary of the Group's Base Forecast for key markets. The peak/trough amounts in the tables show the highest and lowest points within the Base Forecast.

China's growth is expected to accelerate to 5.8 per cent in 2023 from less than 3.5 per cent in 2022. Consumption should start to recover as the country gradually eases its zero-COVID stance and starts to reopen. Recently announced policy support measures for the real estate sector are also expected to lift the outlook for the broader economy in H2 2023. Singapore's GDP growth is forecast to ease to 2.8 per cent in 2023 from around 3.5 per cent in 2022, largely due to a weak external outlook. Major economies such as the US and Europe are expected to slow sharply on account of monetary policy tightening and high inflation. Growth in India is also forecast to ease with GDP expected to grow by 5.5 per cent in FY24 (ending March 2024) from 7 per cent in FY23. Fading pent-up demand (especially in the services sector), rising interest rates, limited real wage hikes and easing global demand will weigh on activity. The economic expansion in the UAE is also forecast to slow on muted oil sector growth based on the OPEC+ decision to cut oil production at the end of 2022. GDP growth in the country is expected to moderate to 4.5 per cent in 2023 from around 7 per cent last year.

The slowdown in world GDP growth in the near term will translate to a softening in the growth of demand for commodities in 2023. Brent crude oil prices are expected to average around $91 in 2023 compared to around $100 in 2022. Despite this the five-year average price is over $100 up from the equivalent $64 in the 2021 annual report. This reflects recent supply shocks and the expectation that world GDP growth will recover from H2 2023.

2022

	China				UAE				Singapore				India			
	5 yr average base forecast	Base forecast peak/trough	Low[2]	High[3]	5 yr average base forecast	Base forecast peak/trough	Low[2]	High[3]	5 yr average base forecast	Base forecast peak/trough	Low[2]	High[3]	5 yr average base forecast	Base forecast peak/trough	Low[2]	High[3]
GDP growth (YoY%)	5.1	7.9/4.5	1.1	9.6	3.6	5.4/2.1	(1.5)	8.8	2.7	3.7/1.7	(3.4)	8.6	6.4	7.7/3.2	1.5	12.1
Unemployment (%)	3.9	4.1/3.8	3.4	4.3	N/A	N/A	N/A	N/A	3.0	3.2/3.0	2.1	4.5	N/A	N/A	N/A	N/A
3 month interest rates (%)	2.3	3.0/1.4	0.6	4.4	3.5	5.2/2.8	(0.4)	8.5	3.1	4.7/2.4	0.8	5.6	5.6	6.3/5.3	1.9	9.5
House prices (YoY%)	3.6	5.0/0.0	(3.4)	10.0	1.8	2.0/1.1	(14.7)	17.6	2.8	4.7/-2.4	(15.9)	20.4	5.7	7.2/1.6	(1.1)	13.0

2021

	China				UAE				Singapore				India			
	5 yr average base forecast	Base forecast peak/trough	Low[2]	High[3]	5 yr average base forecast	Base forecast peak/trough	Low[2]	High[3]	5 yr average base forecast	Base forecast peak/trough	Low[2]	High[3]	5 yr average base forecast	Base forecast peak/trough	Low[2]	High[3]
GDP growth (YoY%)	5.4	6.1/4.7	2.6	8.3	3.7	6.5/1.3	1.8	8.2	2.5	4.8/1.8	(4.0)	9.4	6.4	16.6/4.2	2.0	10.5
Unemployment (%)	3.4	3.4/3.4	3.3	3.5	N/A	N/A	N/A	N/A	3.1	3.4/3.0	2.1	4.5	N/A	N/A	N/A	N/A
3 month interest rates (%)	2.8	3.1/2.1	1.3	4.6	1.5	2.2/0.6	0.0	4.4	1.4	2.2/0.5	0.1	4.2	5.4	6.2/4.0	3.2	8.8
House prices (YoY%)	4.0	4.5/1.8	(2.8)	11.1	1.4	0.6/(1.0)	(4.4)	11.9	3.6	4.2/3.3	(4.1)	15.4	7.1	7.2/5.8	(1.9)	24.9

	2022				2021			
	5 yr average base forecast	Base forecast peak/trough	Low[2]	High[3]	5 yr average base forecast	Base forecast peak/trough	Low[2]	High[3]
Brent Crude, $ pb	106.6	118.8/88.0	42.4	204.2	63.7	73.5/60.0	8.9	211.4

1 N/A – Not available

2 Represents the 10th percentile in the range of economic scenarios used to determine non-linearity

3 Represents the 90th percentile in the range of economic scenarios used to determine non-linearity

4 Base forecasts are evaluated from Q1 2023 to Q4 2027. The forward-looking simulation starts from Q1 2022

Judgemental adjustments

As at 31 December 2022, the Group held a $41 million (31 December 2021: $233 million) management overlay, $9 million (31 December 2021: $93 million) of which relates to CCIB and $32 million (31 December 2021: $140 million) to CPBB.

The overlay is re-assessed quarterly and are reviewed and approved by the IFRS 9 Impairment Committee.

CCIB

The COVID-19 overlay of $93 million at 31 December 2021 has been fully released in 2022 and no overlay is held at 31 December 2022.

Sri Lanka

Due to the ongoing economic uncertainty following the Sri Lanka sovereign default in the first half of 2022, a judgemental overlay of $9 million (31 December 2021: $nil) is held against stage 3 exposures in Sri Lanka that have not yet been individually assessed for impairment.

CPBB

While industry wide government COVID-19 relief measures have ended for most markets, there are a few markets where either the schemes have recently ended or limited reliefs are still available. At 31 December $21 million (31 December 2021: $140 million) was held for residual COVID-19 related risks in these portfolios.

Overlays of $12 million (31 December 2021: $nil) have also been applied to capture operating environment challenges, in part caused by rising interest rates in certain markets, and the impact of sovereign defaults in the last quarter of 2022, both of which are not fully captured in the modelled outcomes

Stage 3 assets

Credit-impaired assets managed by Stressed Asset Risk incorporate forward-looking economic assumptions in respect of the recovery outcomes identified, and are assigned individual probability weightings. These assumptions are not based on a Monte Carlo simulation but are informed by the Base Forecast.

Sensitivity of expected credit loss calculation to macroeconomic variables

The ECL calculation relies on multiple variables and is inherently non-linear and portfolio-dependent, which implies that no single analysis can fully demonstrate the sensitivity of the ECL to changes in the macroeconomic variables. The Group has conducted a series of analyses with the aim of identifying the macroeconomic variables which might have the greatest impact on overall ECL. These encompassed single variable and multi-variable exercises, using simple up/down variation and extracts from actual calculation data, as well as bespoke scenario design and assessments.

The primary conclusion of these exercises is that no individual macroeconomic variable is materially influential. The Group believes this is plausible as the number of variables used in the ECL calculation is large. This does not mean that macroeconomic variables are uninfluential; rather, that the Group believes that consideration of macroeconomics should involve whole scenarios, as this aligns with the multi-variable nature of the calculation.

The Group faces downside risks in the operating environment related to the uncertainties surrounding the macroeconomic outlook. To explore this, a sensitivity analysis of ECL was undertaken to explore the effect of slower economic recoveries across the Group's footprint markets. Two downside scenarios were considered. The first scenario is based on the Bank of England's 2022 regulatory Annual Cyclical Scenario (ACS 2022) and is a deep synchronised global downturn characterised by significantly higher commodity prices relative to base, inflation and interest rates. In the second more modest downside scenario inflation in advanced economies surprises to the upside in the very near term as the supply-chain crisis intensifies and this prompts additional monetary tightening. Financial markets weaken with bond yields spiking and equities falling sharply. The deterioration in sentiment also leads to adjustments in property markets. Advanced economies are shocked more than emerging markets in the second scenario.

	Baseline		ACS 2022		Advanced Economic Downturn	
	Five year average	Peak/Trough	Five year average	Peak/Trough	Five year average	Peak/Trough
China GDP	5.1	7.9/4.5	3.1	4.7/(2.6)	4.9	7.2/3.7
China unemployment	3.9	4.1/3.8	5.2	5.6/4.6	4.1	4.3/3.8
China property prices	3.6	5.0/0.0	(6.5)	9.2/(22.1)	3.3	6.9/(1.8)
UAE GDP	3.6	5.4/2.1	2.1	3.9/(1.3)	3.5	5.4/2.1
UAE property prices	1.8	2.0/1.1	(4.6)	7.4/(16.4)	1.7	3.1/(0.6)
US GDP	1.7	3.1/(0.4)	0.1	2.4/(5.9)	1.6	3.9/(2.6)
Singapore GDP	2.7	3.7/1.7	1.1	4.6/(7.0)	2.6	3.1/1.4
India GDP	6.4	7.7/3.2	4.3	6.6/(0.2)	6.3	7.7/3.2
Crude Oil	106.6	118.8/88	140.3	148.4/118.8	90.2	104.9/77.3

The total reported stage 1 and 2 ECL provisions (including both on and off-balance sheet instruments) would be approximately $30 million higher under the Advanced Economy Downturn scenario and $269 million higher under the ACS 2022 scenario than the baseline ECL provisions (which excluded the impact of multiple economic scenarios and management overlays which may already capture some of the risks in these scenarios). The proportion of stage 2 assets would increase from 3.6 per cent in the base case to 3.8 per cent and 9.8 per cent respectively under the Advanced Economy Downturn and ACS 2022 scenarios. This includes the impact of exposures transferring to stage 2 from stage 1 but does not consider an increase in stage 3 defaults.

Under both scenarios the majority of the increase in CCIB came from the main corporate and project finance portfolios in the United Arab Emirates. For the CPBB portfolios most of the increases came from the unsecured retail portfolios with Singapore Credit Cards most impacted.

There was no material change in modelled stage 3 provisions as these primarily relate to unsecured retail exposures for which the LGD is not sensitive to changes in the macroeconomic forecasts. There is also no material change for non-modelled stage 3 exposures as these are more sensitive to client specific factors than to alternative macroeconomic scenarios.

The actual outcome of any scenario may be materially different due to, among other factors, the effect of management actions to mitigate potential increases in risk and changes in the underlying portfolio.

Modelled provisions

	Increase in ECL	
	ECL Advanced Economy Downturn $million	ECL ACS 2022 $ million
Stage 1		
CCIB	7	44
CPBB	6	42
Ventures	–	–
Central & Others	1	12
Total increase in stage 1 ECL	14	98
Stage 2		
CCIB	8	130
CPBB	1	40
Ventures	–	–
Central & Others	–	1
Total increase in stage 2 ECL	9	171
Total Stage 1 & 2		
CCIB	15	174
CPBB	7	82
Ventures	–	–
Central & Others	1	13
Total increase in stage 2 ECL	23	269

Significant increase in credit risk (SICR)

Quantitative criteria

SICR is assessed by comparing the risk of default at the reporting date to the risk of default at origination. Whether a change in the risk of default is significant or not is assessed using quantitative and qualitative criteria. These quantitative significant deterioration thresholds have been separately defined for each business and where meaningful are consistently applied across business lines.

Assets are considered to have experienced SICR if they have breached both relative and absolute thresholds for the change in the average annualised lifetime probability of default over the residual term of the exposure.

The absolute measure of increase in credit risk is used to capture instances where the IFRS9 PDs on exposures are relatively low at initial recognition as these may increase by several multiples without representing a significant increase in credit risk. Where IFRS9 PDs are relatively high at initial recognition, a relative measure is more appropriate in assessing whether there is a significant increase in credit risk, as the IFRS9 PDs increase more quickly.

The SICR thresholds have been calibrated based on the following principles:

- Stability – The thresholds are set to achieve a stable stage 2 population at a portfolio level, trying to minimise the number of accounts moving back and forth between stage 1 and stage 2 in a short period of time
- Accuracy – The thresholds are set such that there is a materially higher propensity for stage 2 exposures to eventually default than is the case for stage 1 exposures
- Dependency from backstops – The thresholds are stringent enough such that a high proportion of accounts transfer to stage 2 due to movements in forward-looking IFRS9 PDs rather than relying on backward-looking backstops such as arrears
- Relationship with business and product risk profiles – The thresholds reflect the relative risk differences between different products, and are aligned to business processes

For CCIB clients, the relative threshold is a 100 per cent increase in IFRS9 PD and the absolute change in IFRS9 PD is between 50 and 100 bps.

For Consumer and Business Banking clients, portfolio specific quantitative thresholds in Singapore, Malaysia and UAE have been introduced in 2022 for credit cards. The thresholds include relative and absolute increases in IFRS9 PD with average lifetime IFRS9 PD cut-offs for those exposures that are within a range of customer utilisation limits and differentiate between exposures that are current and those that are 1-29 days past due. The range of thresholds applied are:

Portfolio	Relative IFRS9 PD increase (%)	Absolute IFRS9 PD increase (%)	Customer utilisation (%)	Average IFRS9 PD (lifetime)
Credit cards – Current	50%–150%	3.5%–9.3%	15%–85%	4.15%–11.6%
Credit cards – 1-29 days past due	100%–180%	3.5%–6.1%	25%–47%	3.5%–18.5%

The impact of this change has been to transfer $183 million of credit cards balances from stage 2 to stage 1, which reduced ECL by a net $14 million.

For all other Consumer and Business Banking portfolios, the thresholds remained the same as 2021, with a relative threshold of 100 per cent increase in IFRS9 PD and an absolute change in IFRS9 PD is between 100 and 350 bps depending on the product.

Private Banking clients are assessed qualitatively, based on a delinquency measure relating to collateral top-ups or sell-downs.

Debt securities originated before 1 January 2018 with an internal credit rating mapped to an investment grade equivalent are allocated to stage 1 and all other debt securities to stage 2. Debt securities originated after 1 January 2018 apply the same approach and thresholds as for CCIB clients.

Qualitative criteria
Qualitative factors that indicate that there has been a significant increase in credit risk include processes linked to current risk management, such as placing loans on non-purely precautionary early alert.

Backstop
Across all portfolios, accounts that are 30 or more days past due (30 DPD) on contractual payments of principal and/or interest that have not been captured by the criteria above are considered to have experienced a significant increase in credit risk.

Expert credit judgement may be applied in assessing significant increase in credit risk to the extent that certain risks may not have been captured by the models or through the above criteria. Such instances are expected to be rare, for example due to events and material uncertainties arising close to the reporting date.

CCIB clients

Quantitative criteria
Exposures are assessed based on both the absolute and the relative movement in the IFRS9 PD from origination to the reporting date as described above.

To account for the fact that the mapping between internal credit grades (used in the origination process) and IFRS9 PDs is non-linear (e.g. a one-notch downgrade in the investment grade universe results in a much smaller IFRS9 PD increase than in the sub-investment grade universe), the absolute thresholds have been differentiated by credit quality at origination, as measured by internal credit grades being investment grade or sub-investment grade.

Qualitative criteria
All assets of clients that have been placed on early alert (for non-purely precautionary reasons) are deemed to have experienced a significant increase in credit risk.

An account is placed on non-purely precautionary early alert if it exhibits risk or potential weaknesses of a material nature requiring closer monitoring, supervision or attention by management. Weaknesses in such a borrower's account, if left uncorrected, could result in deterioration of repayment prospects and the likelihood of being downgraded. Indicators could include a rapid erosion of position within the industry, concerns over management's ability to manage operations, weak/deteriorating operating results, liquidity strain and overdue balances, among other factors.

All client assets that have been assigned a CG12 rating, equivalent to 'Higher risk', are deemed to have experienced a significant increase in credit risk. Accounts rated CG12 are primarily managed by relationship managers in the CCIB unit with support from SAG for certain accounts. All CCIB clients are placed in CG12 when they are 30 DPD unless they are granted a waiver through a strict governance process.

Consumer and Business Banking clients

Quantitative criteria
Material portfolios (defined as a combination of country and product) for which a statistical model has been built, are assessed based on both the absolute and relative movement in the IFRS9 PD from origination to the reporting date as described previously (page 105). For these portfolios, the original lifetime IFRS9 PD term structure is determined based on the original Application Score or Risk Segment of the client.

Qualitative criteria
Accounts that are 30 DPD that have not been captured by the quantitative criteria are considered to have experienced a significant increase in credit risk. For less material portfolios, which are modelled based on a roll-rate or loss-rate approach, SICR is primarily assessed through the 30 DPD trigger.

Private Banking clients
For Private Banking clients, SICR is assessed by referencing the nature and the level of collateral against which credit is extended (known as 'Classes of Risk').

Qualitative criteria
For all Private Banking classes, in line with risk management practice, an increase in credit risk is deemed to have occurred where margining or loan-to-value covenants have been breached.

For Class I assets (lending against diversified liquid collateral), if these margining requirements have not been met within 30 days of a trigger, a significant increase in credit risk is assumed to have occurred.

For Class I and Class III assets (real-estate lending), a significant increase in credit risk is assumed to have occurred where the bank is unable to 'sell down' the applicable assets to meet revised collateral requirements within five days of a trigger.

Class II assets are typically unsecured or partially secured, or secured against illiquid collateral such as shares in private companies. Significant credit deterioration of these assets is deemed to have occurred when any early alert trigger has been breached.

Debt securities

Quantitative criteria
For debt securities originated before 1 January 2018, the bank is utilising the low credit risk simplified approach, where debt securities with an internal credit rating mapped to an investment grade equivalent are allocated to stage 1 and all other debt securities are allocated to stage 2. Debt securities originated after 1 January 2018 are assessed based on the absolute and relative movements in IFRS9 PD from origination to the reporting date.

Qualitative criteria
Debt securities utilise the same qualitative criteria as the CCIB client segments, including being placed on early alert or being classified as CG12.

Assessment of credit-impaired financial assets

Consumer and Business Banking clients
The core components in determining credit-impaired expected credit loss provisions are the value of gross charge off and recoveries. Gross charge off and/or loss provisions are recognised when it is established that the account is unlikely to pay through the normal process. Recovery of unsecured debt post credit impairment is recognised based on actual cash collected, either directly from clients or through the sale of defaulted loans to third-party institutions. Release of credit impairment provisions for secured loans is recognised if the loan outstanding is paid in full (release of full provision), or the provision is higher than the loan outstanding (release of the excess provision).

CCIB, and Private Banking clients
Credit-impaired accounts are managed by the Group's specialist recovery unit, Stress Asset Risk (SAR), which is independent from its main businesses. Where any amount is considered irrecoverable, a stage 3 credit impairment provision is raised. This stage 3 provision is the difference between the loan-carrying amount and the probability-weighted present value of estimated future cash flows, reflecting a range of scenarios (typically the best, worst and most likely recovery outcomes). Where the cash flows include realisable collateral, the values used will incorporate the impact of forward-looking economic information.

The individual circumstances of each client are considered when SAR estimates future cash flows and the timing of future recoveries which involves significant judgement. All available sources, such as cash flow arising from operations, selling assets or subsidiaries, realising collateral or payments under guarantees are considered. In any decision relating to the raising of provisions, the Group attempts to balance economic conditions, local knowledge and experience, and the results of independent asset reviews.

Write-offs
Where it is considered that there is no realistic prospect of recovering a portion of an exposure against which an impairment provision has been raised, that amount will be written off.

Governance and application of expert credit judgement in respect of expected credit losses

The Group applies PLC Group's Credit Policy and Standards framework which details the requirements for continuous monitoring to identify any changes in credit quality and resultant ratings, as well as ensuring a consistent approach to monitoring, managing and mitigating credit risks. The framework aligns with the governance of ECL estimation through the early recognition of significant deteriorations in ratings which drive stage 2 and 3 ECL.

The Group relies on the PLC Group committees for the assessment of ECL. The models used in determining expected credit losses are reviewed and approved by the PLC Group Credit Model Assessment Committee (CMAC) which is appointed by the PLC Group Model Risk Committee. CMAC has the responsibility to assess and approve the use of models and to review all IFRS 9 interpretations related to models. CMAC also provides oversight on operational matters related to model development, performance monitoring and model validation activities including standards and regulatory matters.

Prior to submission to CMAC for approval, the models are validated by Group Model Validation (GMV), a function which is independent of the business and the model developers. GMV's analysis comprises review of model documentation, model design and methodology, data validation, review of the model development and calibration process, out-of-sample performance testing, and assessment of compliance review against IFRS 9 rules and internal standards.

A quarterly model monitoring process is in place that uses recent data to compare the differences between model predictions and actual outcomes against approved thresholds. Where a model's performance breaches the monitoring thresholds an assessment of whether a PMA is required to correct for the identified model issue is completed.

Key inputs into the calculation and resulting expected credit loss provisions are subject to review and approval by the IFRS 9 Impairment Committee (IIC) which is appointed by the PLC Group Risk Committee. The IIC consists of senior representatives from Risk, Finance, and Group Economic Research. It meets at least twice every quarter, once before the models are run to approve key inputs into the calculation, and once after the models are run to approve the expected credit loss provisions and any judgemental overrides that may be necessary.

The IFRS 9 Impairment Committee:

- Oversees the appropriateness of all Business Model Assessment and Solely Payments of Principal and Interest (SPPI) tests;
- Reviews and approves expected credit loss for financial assets classified as stages 1, 2 and 3 for each financial reporting period;
- Reviews and approves stage allocation rules and thresholds;
- Approves material adjustments in relation to expected credit loss for fair value through other comprehensive income (FVOCI) and amortised cost financial assets;
- Reviews, challenges and approves base macroeconomic forecasts and the multiple macroeconomic scenarios approach that are utilised in the forward-looking expected credit loss calculations

The IFRS 9 Impairment Committee is supported by an Expert Panel which also reviews and challenges the base case projections and multiple macroeconomic scenarios. The Expert Panel consists of members of Enterprise Risk Management (which includes the Scenario Design team), Finance, Group Economic Research and country representatives of major jurisdictions.

PMAs may be applied to account for identified weaknesses in model estimates. The processes for identifying the need for, calculating the level of, and approving PMAs are prescribed in the Credit Risk IFRS9 ECL Model Family Standards which are approved by the Global Head, Model Risk Management. PMA calculation methodologies are reviewed by GMV and submitted to CMAC as the model approver or the IIC. All PMAs have a remediation plan to fix the identified model weakness, and these plans are reported to and tracked at CMAC.

In addition, judgemental management adjustments account for events that are not captured in the Base Case Forecast or the resulting ECL calculated by the models. All judgemental management adjustments must be approved by the IIC having considered the nature of the event, why the risk is not captured in the model, and the basis on which the quantum of the overlay has been calculated. Judgemental management adjustments are subject to quarterly review and re-approval by the IIC and will be released when the risks are no longer relevant.

Traded Risk

Traded Risk is the potential for loss resulting from activities undertaken by the Group in Financial markets. The PLC Group's Traded Risk Type Framework, which is adopted by the Company through an addendum, brings together Market Risk, Counterparty Credit Risk and Algorithmic Trading. Traded Risk Management is the core risk management function supporting market-facing businesses, predominantly Financial Markets and Treasury Markets.

Market Risk (audited)

Market Risk is the potential for fair value loss due to adverse moves in financial markets. The Group's exposure to Market Risk arises predominantly from the following sources:

- Trading book: The Group provides clients access to financial markets, facilitation of which entails the Group taking moderate Market Risk positions. All trading teams support client activity; there are no proprietary trading teams. Hence, income earned from Market Risk-related activities is primarily driven by the volume of client activity rather than risk-taking.
- Non-trading book:
  - The Treasury Markets desk is required to hold a liquid assets buffer, much of which is held in high-quality marketable debt securities
  - The Group has capital invested and related income streams denominated in currencies other than US dollars. To the extent that these are not hedged, the Group is subject to Structural Foreign Exchange Risk which is reflected in reserves

A summary of our current policies and practices regarding Market Risk management is provided in the Principal Risks section (page 137 to 138).

The primary categories of Market Risk for the Group are:

- Interest Rate Risk: arising from changes in yield curves and implied volatilities on interest rate options
- Foreign Exchange Rate Risk: arising from changes in currency exchange rates and implied volatilities on foreign exchange options
- Commodity Risk: arising from changes in commodity prices and implied volatilities on commodity options; covering energy, precious metals, base metals and agriculture as well as commodity baskets
- Credit Spread Risk: arising from changes in the price of debt instruments and credit-linked derivatives, driven by factors other than the level of risk-free interest rates
- Equity Risk: arising from changes in the prices of equities, equity indices, equity baskets and implied volatilities on related options

Market risk changes (audited)

Value-at Risk (VaR) allows the Group to manage market risk across the trading book and most of the fair valued non-trading books.

The average level of total trading and non-trading VaR in 2022 was $40.6 million, 1.2 per cent lower than in 2021 ($41.1 million). The actual level of total trading and non-trading VaR as at the end of 2022 was $45.8 million, 51.7 per cent higher than in 2021 ($30.2 million) due to an increase in market volatility in H2 2022, driven by a number of Central Banks increasing interest rates to curb inflation.

Daily value at risk (VaR at 97.5%, one day) (audited)

	2022				2021			
Trading[1] and non-trading[2]	**Average $million**	**High $million**	**Low $million**	**Year End $million**	Average $million	High $million	Low $million	Year End $million
Interest Rate Risk	**21.2**	**31.9**	**15.9**	**18.5**	24.9	53.9	13.2	19.3
Credit Spread Risk	**27.3**	**39.7**	**15.0**	**25.9**	27.7	82.4	12.1	15.9
Foreign Exchange Risk	**6.4**	**9.5**	**4.7**	**7.4**	6.9	16.5	4.0	7.0
Commodity Risk	**6.9**	**12.1**	**3.5**	**7.9**	4.5	10.8	2.3	3.8
Equity Risk	**0.1**	**1.4**	**–**	**0.1**	1.3	1.7	1.0	1.4
Total	**40.6**	**51.8**	**29.8**	**45.8**	41.1	99.9	20.9	30.2

Trading[1]	2022 Average $million	2022 High $million	2022 Low $million	2022 Year End $million	2021 Average $million	2021 High $million	2021 Low $million	2021 Year End $million
Interest Rate Risk	**8.1**	**12.7**	**5.3**	**10.2**	7.1	9.4	5.1	6.2
Credit Spread Risk	**6.8**	**12.2**	**3.4**	**6.2**	7.4	17.0	3.9	5.0
Foreign Exchange Risk	**6.4**	**9.5**	**4.7**	**7.4**	6.9	16.5	4.0	7.0
Commodity Risk	**6.9**	**12.1**	**3.5**	**7.9**	4.5	10.8	2.3	3.8
Equity Risk	**–**	**–**	**–**	**–**	0.0	0.0	0.0	0.0
Total	**16.0**	**21.3**	**10.5**	**19.0**	15.6	28.7	11.4	14.0

Non-trading[2]	2022 Average $million	2022 High $million	2022 Low $million	2022 Year End $million	2021 Average $million	2021 High $million	2021 Low $million	2021 Year End $million
Interest Rate Risk	**20.5**	**31.5**	**14.6**	**16.4**	26.8	52.3	14.9	18.3
Credit Spread Risk	**23.5**	**31.9**	**14.0**	**23.9**	22.7	61.3	11.3	14.9
Equity Risk[3]	**0.1**	**1.4**	**0.0**	**0.1**	1.3	1.7	1.0	1.4
Total	**35.5**	**41.1**	**28.4**	**33.8**	36.3	78.7	19.5	28.8

The following table sets out how trading and non-trading VaR is distributed across the Group's products:

	2022 Average $million	2022 High $million	2022 Low $million	2022 Year End $million	2021 Average $million	2021 High $million	2021 Low $million	2021 Year End $million
Trading[1] and non-trading[2]	**40.6**	**51.8**	**29.8**	**45.8**	41.1	99.9	20.9	30.2
Trading[1]								
Rates	**6.8**	**10.0**	**4.5**	**8.7**	6.4	9.1	4.7	6.0
Foreign Exchange	**6.4**	**9.5**	**4.7**	**7.4**	6.9	16.5	4.0	7.0
Credit Trading & Capital Markets	**9.7**	**14.6**	**4.1**	**8.5**	6.8	18.2	3.5	4.9
Commodities	**6.9**	**12.1**	**3.5**	**7.9**	4.6	10.8	2.4	3.8
Equities	**–**	**–**	**–**	**–**	0.0	0.0	0.0	0.0
XVA	**4.5**	**6.4**	**2.8**	**5.5**	5.1	10.3	2.8	2.9
Total	**16.0**	**21.3**	**10.5**	**19.0**	15.6	28.7	11.4	14.0
Non-trading[2]								
Treasury Markets	**29.8**	**22.7**	**24**	**28.6**	29.5	64.0	16.5	26.7
Treasury Capital Management	**9.1**	**15.3**	**6.4**	**9.1**	9.2	22.7	4.9	6.5
Global Credit	**12.7**	**22.7**	**8.4**	**19.9**	12.4	24.8	4.1	8.7
Listed Private Equity	**0.1**	**1.4**	**0.0**	**0.1**	1.3	1.7	1.0	1.4
Total	**35.5**	**41.1**	**28.4**	**33.8**	36.3	78.7	19.5	28.8

1 The trading book for Market Risk is defined in accordance with the UK onshored Capital Requirements Regulation Part 3 Title I Chapter 3, which restricts the positions permitted in the trading book

2 The non-trading book VaR does not include syndicated loans

3 Non-trading Equity Risk VaR includes only listed equities

Average daily income earned from Market Risk-related activities[1]

Trading	2022 $million	2021 $million
Interest Rate Risk	2.8	1.6
Credit Spread Risk	1.0	0.6
Foreign Exchange Risk	4.6	3.4
Commodity Risk	0.9	0.6
Equity Risk	–	–
Total	9.3	6.2

Non-trading	$million	$million
Interest Rate Risk	0.1	0.3
Credit Spread Risk	0.1	(0.1)
Equity Risk	–	–
Total	0.2	0.2

1 Reflects total product income which is the sum of client income and own account income. Includes elements of trading income, interest income and other income which are generated from Market Risk-related activities. Rates, XVA and Treasury income are included under Interest Rate Risk whilst Credit Trading income is included under Credit Spread Risk.

Structural foreign exchange exposures

The table below sets out the principal structural foreign exchange exposures (net of investment hedges) of the Group

	2022 $million	2021 $million
Indian rupee	4,396	4,323
Singapore dollar	1,891	36
Malaysian ringgit	1,571	2,228
Thai baht	782	49
UAE dirham	664	643
Pakistani rupee	352	1,532
Indonesian rupiah	261	775
Renminbi	46	289
Taiwanese dollar	46	429
Other	4,937	4,976
	14,946	15,280

As at 31 December 2022, the Group had taken net investment hedges using derivative financial investments to partly cover its exposure to the Singapore dollar of $1,608 million (2021: 729 million), UAE dirham of $1,334 million (2021: 1,198 million) and Indian rupee of $621 million (2021: $656 million). An analysis has been performed on these exposures to assess the impact of a 1 per cent fall in the US dollar exchange rates, adjusted to incorporate the impacts of correlations of these currencies to the US dollar. The impact on the positions above would be an increase of $179 million (2021: $156 million). Changes in the valuation of these positions are taken to reserves.

For analysis of the Group's capital position and requirements, refer to the Capital Review (page 152).

Counterparty credit risk

Counterparty Credit Risk is the potential for loss in the event of the default of a derivative counterparty, after taking into account the value of eligible collaterals and risk mitigation techniques. The Group's counterparty credit exposures are included in the Credit Risk section.

Derivative financial instruments credit risk mitigation

The Group enters into master netting agreements, which in the event of default result in a single amount owed by or to the counterparty through netting the sum of the positive and negative mark-to-market values of applicable derivative transactions.

In addition, the Group enters into credit support annexes (CSAs) with counterparties where collateral is deemed a necessary or desirable mitigant to the exposure. Cash collateral includes collateral called under a variation margin process from counterparties if total uncollateralised mark-to-market exposure exceeds the threshold and minimum transfer amount specified in the CSA. With certain counterparties, the CSA is reciprocal and requires us to post collateral if the overall mark-to-market values of positions are in the counterparty's favour and exceed an agreed threshold.

Liquidity and Funding risk

Liquidity and Funding Risk is the risk that the Group may not have sufficient stable or diverse sources of funding to meet its obligations as they fall due.

The Group follows the PLC Group's Liquidity and Funding Risk framework, which requires each country to ensure that it operates within predefined liquidity limits and remains in compliance with PLC Group's liquidity policies and practices, as well as local regulatory requirements.

The table below shows the composition of liabilities in which customer deposits make up 54 per cent of total liabilities and equity as at 31 December 2022, the majority of which are current accounts, savings accounts and time deposits. The largest customer deposit base by geography is Europe & Americas which holds 50 per cent of Group customer accounts.

Composition of liabilities and equity	Percentage
Equity	6.2%
Subordinated liabilities and other borrowed funds	2.4%
Debt securities in issue	8.1%
Derivative financial instruments	12.5%
Customer accounts	53.6%
Deposit by banks	5.7%
Other liabilities	11.5%
Total	**100.0%**

Geographic distribution of customer accounts balances	Percentage
Asia	39.6%
Africa & Middle East	10.7%
Europe & Americas	49.7%
Total	**100.0%**

Liquidity and Funding risk metrics

The Group monitors key liquidity metrics regularly on a country basis.

The following liquidity and funding Board Risk Appetite metrics define the maximum amount and type of risk that the Group is willing to assume in pursuit of its strategy: liquidity coverage ratio (LCR), liquidity stress survival horizons, external wholesale borrowing, advances-to-deposits ratio, and net stable funding ratio (NSFR).

Liquidity coverage ratio (LCR)

The Liquidity Coverage Ratio (LCR) aims to ensure that a bank has sufficient unencumbered high-quality liquid assets to meet its liquidity needs in a 30-calendar-day liquidity stress scenario. SC Bank is not regulated for LCR, however, the bank and material subsidiaries in the consolidation have standalone LCR ratios above 100 per cent at 31 December 2022, calculated under the Liquidity Coverage Ratio (CRR) part of the PRA rulebook.

Stressed coverage

Stress testing and scenario analysis are used to assess the financial and management capability to continue to operate effectively under extreme, but plausible, operating conditions and to understand the potential threats to the PLC Group's liquidity and other financial resources.

The PLC Group's internal liquidity stress testing framework covers the following stress scenarios:

- Standard Chartered-specific – which captures the liquidity impact from an idiosyncratic event affecting Standard Chartered only, with the rest of the market assumed to be operating normally;
- Market wide – which captures the liquidity impact from a market wide crisis affecting all participants in a country, region or globally, and;
- Combined – which assumes both Standard Chartered-specific and Market-wide events affect the PLC Group simultaneously and hence is the most severe scenario.

All scenarios include, but are not limited to, modelled outflows for retail and wholesale funding, off-balance sheet funding risk, cross currency funding risk, intraday risk, franchise risk and risks associated with a deterioration of a firm's credit rating.

As of 31 December 2022, all entities within the Group follow a consistent approach and met their individual stress test requirements within risk appetite, and as a result, ensure Group has surplus liquidity on a consolidated basis.

External wholesale borrowing

This metric seeks to monitor and prevent excessive reliance on wholesale borrowing. Limits and targets are applied to branches and operating subsidiaries in the Group.

Advances-to-deposits ratio

This is defined as the ratio of total loans and advances to customers relative to total customer accounts. An advances-to-deposits ratio of below 100 per cent demonstrates that customer deposits exceed customer loans as a result of the emphasis placed on generating a high level of funding from customers. Limits and targets are applied to all branches and operating subsidiaries in the Group.

Advances-to-deposits ratio has decreased by 1.7 per cent to 50.4 per cent, driven primarily by a minor reduction in loans and advances alongside continued robust growth of deposits from corporate customers.

	2022 $million	2021 $million
Total loans and advances to customers[1,2]	125,807	129,799
Total customer accounts[3]	249,630	249,299
Advances-to-deposits ratio	50.4%	52.1%

1 Excludes reverse repurchase agreement and other similar secured lending of $15,586 million and includes loans and advances to customers held at fair value through profit and loss of $4,065 million

2 Loans and advances to customers for the purpose of the advances-to-deposits ratio excludes $20,798 million of approved balances held with central banks, confirmed as repayable at the point of stress.

3 Includes customer accounts held at fair value through profit or loss of $6,555 million (31 December 2021: $6,968 million)

Net stable funding ratio (NSFR)

The NSFR is a balance sheet metric which requires institutions to maintain a stable funding profile in relation to an assumed duration of their assets and off-balance sheet activities over a one-year horizon. It is the ratio between the amount of available stable funding (ASF) and the amount of required stable funding (RSF). ASF factors are applied to balance sheet liabilities and capital, based on their perceived stability and the amount of stable funding they provide. Likewise, RSF factors are applied to assets and off-balance sheet exposures according to the amount of stable funding they require. SC Bank is not regulated for NSFR, however the bank and material subsidiaries in the consolidation have standalone NSFR ratios above 100 per cent at 31 December 2022.

Liquidity pool

The liquidity value of the Group's LCR eligible liquidity pool at the reporting date was $131 billion. The figures in the below table account for haircuts, currency convertibility and portability constraints, and therefore are not directly comparable with the consolidated balance sheet. A liquidity pool is held to offset stress outflows as defined in the Liquidity Coverage Ratio (CRR) part of the PRA rulebook.

Group

	2022			
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Total $million
Level 1 securities				
Cash and balances at central banks	28,551	1,066	36,522	66,139
Central banks, governments/public sector entities	13,811	2,712	23,680	40,203
Multilateral development banks and international organisations	334	837	10,843	12,014
Other	37	7	1,430	1,474
Total Level 1 securities	42,733	4,622	72,475	119,830
Level 2A securities	4,044	139	6,033	10,216
Level 2B securities	71	21	1,103	1,195
Total LCR eligible assets	46,848	4,782	79,611	131,241

	2021			
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Total $million
Level 1 securities				
Cash and balances at central banks	20,626	890	46,973	68,489
Central Banks, governments/public sector entities	13,607	2,096	27,389	43,092
Multilateral development banks and international organisations	727	356	7,366	8,449
Other	–	–	478	478
Total Level 1 securities	34,960	3,342	82,206	120,508
Level 2A securities	3,447	187	5,047	8,681
Level 2B securities	114	–	1,620	1,734
Total LCR eligible assets	38,521	3,529	88,873	130,923

Company

	2022			
	Asia $million	**Africa & Middle East $million**	**Europe & Americas $million**	**Total $million**
Level 1 securities				
Cash and balances at central banks	**6,181**	**630**	**31,235**	**38,046**
Central banks, governments/public sector entities	**4,618**	**2,507**	**23,680**	**30,805**
Multilateral development banks and international organisations	**–**	**837**	**10,843**	**11,680**
Other	**–**	**7**	**1,430**	**1,437**
Total Level 1 securities	**10,799**	**3,981**	**67,188**	**81,968**
Level 2A securities	**2,271**	**139**	**6,033**	**8,443**
Level 2B securities	**–**	**21**	**1,103**	**1,124**
Total LCR eligible assets	**13,070**	**4,141**	**74,324**	**91,535**

	2021			
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Total $million
Level 1 securities				
Cash and balances at central banks	3,801	476	40,983	45,260
Central Banks, governments /public sector entities	6,599	1,608	27,388	35,595
Multilateral development banks and international organisations	–	356	7,366	7,722
Other	–	–	478	478
Total Level 1 securities	10,400	2,440	76,215	89,055
Level 2A securities	695	187	5,047	5,929
Level 2B securities	–	–	1,618	1,618
Total LCR eligible assets	11,095	2,627	82,880	96,602

Liquidity analysis of the Group's balance sheet (audited)

Contractual maturity of assets and liabilities

The following table presents assets and liabilities by maturity groupings based on the remaining period to the contractual maturity date as at the balance sheet date on a discounted basis. Contractual maturities do not necessarily reflect actual repayments or cashflows.

Within the tables below, cash and balances with central banks, interbank placements and investment securities that are fair value through other comprehensive income are used by the Group principally for liquidity management purposes.

As at the reporting date, assets remain predominantly short-dated, with 68 per cent maturing in one year. The less than three-month cumulative net funding position remained in surplus and the scale of the surplus is broadly in line with the previous year, largely due to the Group focus on improving the quality of its deposit base. In practice, these deposits are recognised as stable and have behavioural profiles that extend beyond their contractual maturities.

Group

	2022								
	One month or less $million	Between one month and three months $million	Between three months and six months $million	Between six months and nine months $million	Between nine months and one year $million	Between one year and two years $million	Between two years and five years $million	More than five years and undated $million	Total $million
Assets									
Cash and balances at central banks	47,025	–	–	–	–	–	–	3,506	50,531
Derivative financial instruments	24,108	9,640	7,304	3,704	2,830	5,225	7,495	4,744	65,050
Loans and advances to banks[1,2]	18,066	12,200	9,227	4,253	3,588	2,577	972	635	51,518
Loans and advances to customers[1,2]	59,599	44,981	20,247	6,999	7,248	9,746	19,212	33,216	201,248
Investment securities[1]	6,620	13,802	12,948	6,868	5,624	10,726	29,709	42,028	128,325
Other assets	12,388	28,182	1,066	170	529	89	23	5,228	47,675
Due from subsidiary undertakings and other related parties	6,387	–	–	–	–	–	–	–	6,387
Total assets	174,193	108,805	50,792	21,994	19,819	28,363	57,411	89,357	550,734
Liabilities									
Deposits by banks[1,3]	24,747	1,858	2,163	821	329	1,236	112	6	31,272
Customer accounts[1,4]	216,605	39,600	17,394	8,766	6,107	5,510	1,350	155	295,487
Derivative financial instruments	22,946	13,624	7,310	4,059	3,085	5,880	6,689	5,265	68,858
Senior debt[5]	96	308	234	395	399	2,481	5,050	3,704	12,667
Other debt securities in issue[1]	2,686	4,870	7,369	6,297	2,710	342	4,413	3,191	31,878
Due to parent companies and other related undertakings	28,102	–	–	–	–	–	–	–	28,102
Other liabilities	12,243	19,257	581	63	46	212	792	1,864	35,058
Subordinated liabilities and other borrowed funds	2,000	–	9	–	11	21	55	11,173	13,269
Total liabilities	309,425	79,517	35,060	20,401	12,687	15,682	18,461	25,358	516,591
Net liquidity gap	(135,232)	29,288	15,732	1,593	7,132	12,681	38,950	63,999	34,143

1 Loans and advances, investment securities, deposits by banks, customer accounts and debt securities in issue include financial instruments held at fair value through profit or loss, see Note 12 Financial instruments (pages 198 to 240)

2 Loans and advances include reverse repurchase agreements and other similar secured lending of $78.8 billion

3 Deposits by banks include repurchase agreements and other similar secured borrowing of $6.5 billion

4 Customer accounts include repurchase agreements and other similar secured borrowing of $45.8 billion

5 Senior debt maturity profiles are based upon contractual maturity, which may be later than call options over the debt held by the Group

	2021								
	One month or less $million	Between one month and three months $million	Between three months and six months $million	Between six months and nine months $million	Between nine months and one year $million	Between one year and two years $million	Between two years and five years $million	More than five years and undated $million	Total $million
Assets									
Cash and balances at central banks	58,904	–	–	–	–	–	–	3,059	61,963
Derivative financial instruments	16,174	9,643	6,531	3,159	2,509	4,246	5,927	5,056	53,245
Loans and advances to banks[1,2]	15,511	16,075	9,535	4,018	4,145	1,308	1,442	295	52,329
Loans and advances to customers[1,2]	64,975	51,711	17,984	6,817	6,639	11,320	17,572	31,991	209,009
Investment securities[1]	4,143	8,488	6,516	6,046	5,624	13,489	35,855	42,108	122,269
Other assets	16,757	16,438	702	66	288	34	32	5,424	39,741
Due from subsidiary undertakings and other related parties	6,235	–	–	–	–	–	–	–	6,235
Total assets	182,699	102,355	41,268	20,106	19,205	30,397	60,828	87,933	544,791
Liabilities									
Deposits by banks[1,3]	28,048	849	1,032	83	224	96	22	2	30,356
Customer accounts[1,4]	233,858	38,901	17,994	6,069	4,111	3,433	1,139	334	305,839
Derivative financial instruments	16,149	10,433	6,503	3,488	2,513	4,429	6,521	3,550	53,586
Senior debt[5]	187	473	563	314	299	456	1,289	2,060	5,641
Other debt securities in issue[1]	2,210	12,470	7,168	2,892	3,248	3,132	3,022	637	34,779
Due to parent companies and other related undertakings	30,998	–	–	–	–	–	–	–	30,998
Other liabilities	9,440	17,583	598	166	354	759	861	3,779	33,540
Subordinated liabilities and other borrowed funds	4	35	96	113	1,063	2,348	1,076	9,880	14,615
Total liabilities	320,894	80,744	33,954	13,125	11,812	14,653	13,930	20,242	509,354
Net liquidity gap	(138,195)	21,611	7,314	6,981	7,393	15,744	46,898	67,691	35,437

1 Loans and advances, investment securities, deposits by banks, customer accounts and debt securities in issue include financial instruments held at fair value through profit or loss, see Note 12 Financial instruments (pages 198 to 240)

2 Loans and advances include reverse repurchase agreements and other similar secured lending of $83.7 billion

3 Deposits by banks include repurchase agreements and other similar secured borrowing of $5.1 billion

4 Customer accounts include repurchase agreements and other similar secured borrowing of $56.5 billion

5 Senior debt maturity profiles are based upon contractual maturity, which may be later than call options over the debt held by the Group

Company

	2022								
	One month or less $million	Between one month and three months $million	Between three months and six months $million	Between six months and nine months $million	Between nine months and one year $million	Between one year and two years $million	Between two years and five years $million	More than five years and undated $million	Total $million
Assets									
Cash and balances at central banks	37,547	–	–	–	–	–	–	1,320	38,867
Derivative financial instruments	15,479	11,486	7,889	4,292	3,242	6,339	9,639	7,115	65,481
Loans and advances to banks[1,2]	13,015	9,713	7,658	3,566	2,940	2,192	865	635	40,584
Loans and advances to customers[1,2]	42,655	21,176	16,742	5,804	4,208	7,421	12,292	11,367	121,665
Investment securities[1]	3,894	7,049	10,294	6,204	4,393	8,883	26,789	40,568	108,074
Investment in subsidiary undertaking	–	–	–	–	–	–	–	10,300	10,300
Other assets	11,274	22,523	550	49	350	86	15	2,693	37,540
Due from subsidiary undertakings and other related parties	13,214	–	–	–	–	–	–	–	13,214
Total assets	137,078	71,947	43,133	19,915	15,133	24,921	49,600	73,998	435,725
Liabilities									
Deposits by banks[1,3]	18,814	1,472	2,108	818	302	1,063	106	5	24,688
Customer accounts[1,4]	135,238	28,308	13,749	5,195	2,426	3,287	1,087	144	189,434
Derivative financial instruments	15,644	15,056	7,836	4,502	3,516	7,065	8,827	6,757	69,203
Senior debt[5]	45	228	80	360	338	2,272	4,992	3,685	12,000
Other debt securities in issue[1]	2,633	4,332	7,184	6,297	2,544	342	4,413	2,518	30,263
Due to parent companies and other related undertakings	39,933	–	–	–	–	–	–	–	39,933
Other liabilities	10,604	13,856	563	56	42	128	442	813	26,504
Subordinated liabilities and other borrowed funds	2,000	–	9	–	11	21	55	10,633	12,729
Total liabilities	224,911	63,252	31,529	17,228	9,179	14,178	19,922	24,555	404,754
Net liquidity gap	(87,833)	8,695	11,604	2,687	5,954	10,743	29,678	49,443	30,971

1 Loans and advances, investment securities, deposits by banks, customer accounts and debt securities in issue include financial instruments held at fair value through profit or loss, see Note 12 Financial instruments (pages 198 to 240)

2 Loans and advances include reverse repurchase agreements and other similar secured lending of $74.3 billion

3 Deposits by banks include repurchase agreements and other similar secured borrowing of $6.2 billion

4 Customer accounts include repurchase agreements and other similar secured borrowing of $45.6 billion

5 Senior debt maturity profiles are based upon contractual maturity, which may be later than call options over the debt held by the Group

	2021								
	One month or less $million	Between one month and three months $million	Between three months and six months $million	Between six months and nine months $million	Between nine months and one year $million	Between one year and two years $million	Between two years and five years $million	More than five years and undated $million	Total $million
Assets									
Cash and balances at central banks	47,004	–	–	–	–	–	–	1,161	48,165
Derivative financial instruments	11,901	10,740	7,068	3,506	2,820	4,734	6,974	5,735	53,478
Loans and advances to banks[1,2]	10,742	12,682	6,314	2,817	2,810	1,133	1,274	295	38,067
Loans and advances to customers[1,2]	49,367	31,122	13,598	4,733	3,595	8,802	10,672	11,754	133,643
Investment securities[1]	2,257	4,479	4,418	4,335	4,091	10,367	31,343	40,372	101,662
Investment in subsidiary undertaking	–	–	–	–	–	–	–	9,694	9,694
Other assets	16,128	10,465	367	52	233	31	21	3,130	30,427
Due from subsidiary undertakings and other related parties	10,741	–	–	–	–	–	–	–	10,741
Total assets	148,140	69,488	31,765	15,443	13,549	25,067	50,284	72,141	425,877
Liabilities									
Deposits by banks[1,3]	21,971	364	991	80	188	52	20	–	23,666
Customer accounts[1,4]	145,292	27,787	15,276	4,380	2,420	2,130	911	323	198,519
Derivative financial instruments	11,941	11,743	6,985	3,894	2,666	4,888	7,488	4,230	53,835
Senior debt[5]	152	396	368	200	299	364	1,187	2,041	5,007
Other debt securities in issue[1]	2,010	12,447	6,184	2,892	3,248	1,682	3,022	1,420	32,905
Due to parent companies and other related undertakings	40,745	–	–	–	–	–	–	–	40,745
Other liabilities	8,474	11,262	516	130	309	643	666	3,477	25,477
Subordinated liabilities and other borrowed funds	4	35	96	113	1,063	2,348	1,076	9,341	14,076
Total liabilities	230,589	64,034	30,416	11,689	10,193	12,107	14,370	20,832	394,230
Net liquidity gap	(82,449)	5,454	1,349	3,754	3,356	12,960	35,914	51,309	31,647

1 Loans and advances, investment securities, deposits by banks, customer accounts and debt securities in issue include financial instruments held at fair value through profit or loss, see Note 12 Financial instruments (pages 198 to 240)

2 Loans and advances include reverse repurchase agreements and other similar secured lending of $81.1 billion

3 Deposits by banks include repurchase agreements and other similar secured borrowing of $4.7 billion

4 Customer accounts include repurchase agreements and other similar secured borrowing of $56.4 billion

5 Senior debt maturity profiles are based upon contractual maturity, which may be later than call options over the debt held by the Group

Behavioural maturity of financial assets and liabilities

The cashflows presented in the previous section reflect the cashflows that will be contractually payable over the residual maturity of the instruments. However, contractual maturities do not necessarily reflect the timing of actual repayments or cashflow. In practice, certain assets and liabilities behave differently from their contractual terms, especially for short-term customer accounts, credit card balances and overdrafts, which extend to a longer period than their contractual maturity. On the other hand, mortgage balances tend to have a shorter repayment period than their contractual maturity date. Expected customer behaviour is assessed and managed on a country basis using qualitative and quantitative techniques, including analysis of observed customer behaviour over time.

Maturity of financial liabilities on an undiscounted basis

The following table analyses the contractual cashflows payable for the Group's financial liabilities by remaining contractual maturities on an undiscounted basis. The financial liability balances in the table below will not agree to the balances reported in the consolidated balance sheet as the table incorporates all contractual cashflows, on an undiscounted basis, relating to both principal and interest payments. Derivatives not treated as hedging derivatives are included in the 'On demand' time bucket and not by contractual maturity.

Within the 'More than five years and undated' maturity band are undated financial liabilities, the majority of which relate to subordinated debt, on which interest payments are not included as this information would not be meaningful, given the instruments are undated. Interest payments on these instruments are included within the relevant maturities up to five year.

Group

	2022								
	One month or less $million	**Between one month and three months $million**	**Between three months and six months $million**	**Between six months and nine months $million**	**Between nine months and one year $million**	**Between one year and two years $million**	**Between two years and five years $million**	**More than five years and undated $million**	**Total $million**
Deposits by banks	**24,752**	**1,864**	**2,192**	**825**	**342**	**1,258**	**112**	**8**	**31,353**
Customer accounts	**216,983**	**39,828**	**17,625**	**8,934**	**6,297**	**5,585**	**1,396**	**158**	**296,806**
Derivative financial instruments[1]	**66,772**	**28**	**5**	**6**	**6**	**763**	**547**	**731**	**68,858**
Debt securities in issue	**2,801**	**5,204**	**7,811**	**6,836**	**3,257**	**2,329**	**10,072**	**11,544**	**49,854**
Due to parent companies and other related undertakings	**28,102**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**28,102**
Subordinated liabilities and other borrowed funds	**2,074**	**64**	**127**	**135**	**127**	**499**	**1,496**	**16,038**	**20,560**
Other liabilities	**10,961**	**20,402**	**577**	**61**	**44**	**203**	**650**	**954**	**33,852**
Total liabilities	**352,445**	**67,390**	**28,337**	**16,797**	**10,073**	**10,637**	**14,273**	**29,433**	**529,385**

	2021								
	One month or less $million	Between one month and three months $million	Between three months and six months $million	Between six months and nine months $million	Between nine months and one year $million	Between one year and two years $million	Between two years and five years $million	More than five years and undated $million	Total $million
Deposits by banks	28,048	850	1,032	83	224	96	22	3	30,358
Customer accounts	233,879	38,922	18,017	6,084	4,145	3,461	1,152	334	305,994
Derivative financial instruments[1]	53,377	7	19	5	3	23	73	79	53,586
Debt securities in issue	2,414	12,946	7,752	3,221	3,572	3,652	4,428	6,875	44,860
Due to parent companies and other related undertakings	30,998	–	–	–	–	–	–	–	30,998
Subordinated liabilities and other borrowed funds	37	59	129	125	1,089	2,423	1,252	16,483	21,597
Other liabilities	12,992	17,561	589	166	354	759	861	1,201	34,483
Total liabilities	361,745	70,345	27,538	9,684	9,387	10,414	7,788	24,975	521,876

1 Derivatives are on a discounted basis

Company

	2022								
	One month or less $million	Between one month and three months $million	Between three months and six months $million	Between six months and nine months $million	Between nine months and one year $million	Between one year and two years $million	Between two years and five years $million	More than five years and undated $million	Total $million
Deposits by banks	18,818	1,477	2,137	822	314	1,086	106	5	24,765
Customer accounts	135,456	28,477	13,933	5,309	2,532	3,349	1,122	139	190,317
Derivative financial instruments[1]	67,115	28	5	6	6	763	543	737	69,203
Debt securities in issue	2,696	4,586	7,467	6,799	3,026	2,904	10,014	6,348	43,840
Due to parent companies and other related undertakings	39,933	–	–	–	–	–	–	–	39,933
Subordinated liabilities and other borrowed funds	2,074	64	127	135	127	499	1,496	15,498	20,020
Other liabilities	10,174	14,183	563	56	42	128	442	520	26,108
Total liabilities	**276,266**	**48,815**	**24,232**	**13,127**	**6,047**	**8,729**	**13,723**	**23,247**	**414,186**

	2021								
	One month or less $million	Between one month and three months $million	Between three months and six months $million	Between six months and nine months $million	Between nine months and one year $million	Between one year and two years $million	Between two years and five years $million	More than five years and undated $million	Total $million
Deposits by banks	21,971	364	991	80	188	52	22	–	23,668
Customer accounts	145,311	27,800	15,289	4,391	2,429	2,151	915	322	198,608
Derivative financial instruments[1]	53,634	5	19	5	3	19	70	80	53,835
Debt securities in issue	2,179	12,846	6,570	3,105	3,572	2,110	4,326	3,490	38,198
Due to parent companies and other related undertakings	40,745	–	–	–	–	–	–	–	40,745
Subordinated liabilities and other borrowed funds	37	59	129	125	1,089	2,423	1,252	15,353	20,467
Other liabilities	11,716	11,249	516	130	309	643	666	717	25,946
Total liabilities	275,593	52,323	23,514	7,836	7,590	7,398	7,251	19,962	401,467

1 Derivatives are on a discounted basis

Interest Rate Risk in the Banking Book

The following table provides the estimated impact to a hypothetical base case projection of the Group's earnings under the following scenarios:

- A 50 basis point parallel interest rate shock (up and down) to the current market-implied path of rates, across all yield curves
- A 100 basis point parallel interest rate shock (up) to the current market-implied path of rates, across all yield curves

These interest rate shock scenarios assume all other economic variables remain constant. The sensitivities shown represent the estimated change to a hypothetical base case projected net interest income (NII), plus the change in interest rate implied income and expense from FX swaps used to manage banking book currency positions, under the different interest rate shock scenarios.

The base case projected NII is based on the current market-implied path of rates and forward rate expectations. The NII sensitivities below stress this base case by a further 50 or 100bps. Actual observed interest rate changes will lag behind market expectation. Accordingly, the shocked NII sensitivity does not represent a forecast of the Group's net interest income.

The interest rate sensitivities are indicative stress tests and based on simplified scenarios, estimating the aggregate impact of an unanticipated, instantaneous parallel shock across all yield curves over a one-year horizon, including the time taken to implement changes to pricing before becoming effective. The assessment assumes that the size and mix of the balance sheet remain constant and that there are no specific management actions in response to the change in rates. No assumptions are made in relation to the impact on credit spreads in a changing rate environment.

Significant modelling and behavioural assumptions are made regarding scenario simplification, market competition, pass-through rates, asset and liability re-pricing tenors, and price flooring. The assumptions that interest rates of all currencies and maturities shift by the same amount concurrently, and that no actions are taken to mitigate the impacts arising from this are considered unlikely. Reported sensitivities will vary over time due to a number of factors including changes in balance sheet composition, customer behaviour and risk management strategy, the interest rates assumed in setting the base case, and other market conditions. Therefore, while the NII sensitivities are a relevant measure of the Group's interest rate exposure, they should not be considered an income or profit forecast.

	2022			
Estimated one-year impact to earnings from a parallel shift in yield curves at the beginning of the period of:	USD bloc $million	SGD bloc $million	Other currency bloc $million	Total $million
+ 50 basis points	**70**	**40**	**120**	**230**
- 50 basis points	**(70)**	**(40)**	**(110)**	**(220)**
+ 100 basis points	**130**	**90**	**240**	**460**

	2021			
Estimated one-year impact to earnings from a parallel shift in yield curves at the beginning of the period of:	USD bloc $million	SGD bloc $million	Other currency bloc $million	Total $million
+ 50 basis points	140	70	90	300
- 50 basis points	(120)	(70)	(60)	(250)
+ 100 basis points	260	120	200	580

As at 31 December 2022, the estimated one-year impact of an instantaneous, parallel increase across all yield curves of 50 basis points to increase projected NII by $230 million. The equivalent impact from a parallel decrease of 50 basis points would result in a reduction in projected NII of $220 million. The estimated one-year impact of an instantaneous, parallel increase across all yield curves of 100 basis points to increase projected NII by $460 million.

The benefit from rising interest rates is primarily from reinvesting at higher yields and from assets re-pricing faster and to a greater extent than deposits. NII sensitivity in all scenarios has decreased versus 31 December 2021. The change in NII sensitivity reflects updates to the base case scenario to factor in higher interest rates as at 31 December 2022. In addition, NII sensitivities have reduced due to the dampening effect of USD hedging strategies intended to provide short term income certainty and smooth longer term NII volatility, and due to changes in modelling assumptions to reflect expected re-pricing activity on Retail and Transaction Banking current accounts and savings accounts in the current interest rate environment.

Operational and Technology Risk

Operational and Technology Risk is defined as the "Potential for loss from inadequate or failed internal processes, technology events, human error, or from the impact of external events (including legal risks)". The Group can be impacted from a range of operational risks which are inherent in the Group's strategy and business model.

Operational and Technology Risk profile

Risk management practices help the business grow safely and ensures governance and management of Operational and Technology Risk through the delivery and embedding of effective frameworks and policies, together with continuous oversight and assurance.

The Group continues to ensure the operational and technology risk framework supports the business and functions in effectively managing risk and controls within risk appetite to meet their strategic objectives.

Overall, the Group's Operational Risk profile has remained stable with the quality of risk understanding and identification improving. Operational and Technology Risks remain heightened in areas such as Fraud, Data Management, and Information and Cyber Security. Other focus risk areas are Third Party Risk, Technology Risk, People Risk and Change Management. The Group continues to enhance its operational resilience and defences against these risks, as well as continue to monitor impacts of the ongoing pandemic, through vigorous enhancement programmes.

Digitalisation and wider technological improvements remain a key focus for the Group, to keep pace with new business developments whilst ensuring control frameworks and Risk Appetite evolve accordingly.

Operational resilience

In line with regulatory expectations, the Standard Chartered PLC Board has approved the Group's Important Business Services, Impact Tolerance Statements and the Operational Resilience self-assessment. By 31 March 2025, the authorities expect the Group to complete mapping, continue scenario testing to identify vulnerabilities, remediate identified vulnerabilities, and embed sustainable governance, assurance and testing.

Operational Risk events and losses

Operational losses are one indicator of the effectiveness and robustness of the non-financial risk control environment.

The Group's profile of operational loss events in 2022 and 2021 is summarised in the table below. It shows the percentage distribution of gross operational losses by Basel business line.

	% Loss	
Distribution of Operational Losses by Basel business line	**2022**	2021[1]
Agency Services	**3.2%**	0.7%
Asset Management	**0.3%**	0.0%
Commercial Banking	**10.3%**	3.6%
Corporate Finance	**–**	3.4%
Corporate Items	**3.9%**	41.9%
Payment and Settlements	**54.4%**	35.7%
Retail Banking	**10.3%**	8.3%
Retail Brokerage	**0.0%**	0.0%
Trading and Sales	**17.5%**	6.4%

1 Losses in 2021 have been restated to include incremental events recognised in 2022

The Group's profile of operational loss events in 2022 and 2021 is also summarised by Basel event type in the table below. It shows the percentage distribution of gross operational losses by Basel event type.

	% Loss	
Distribution of Operational Losses by Basel event type	**2022**	2021[1]
Business disruption and system failures	**4.3%**	0.3%
Clients' products and business practices	**6.3%**	1.5%
Damage to physical assets	**0.0%**	0.0%
Employment practices and workplace safety	**0.2%**	0.0%
Execution delivery and process management	**83.3%**	91.6%
External fraud	**4.8%**	6.4%
Internal fraud	**1.2%**	0.2%

1 Losses in 2021 have been restated to include incremental events recognised in 2022

Other principal risks

Losses arising from operational failures for other principal and integrated risks are reported as operational losses. Operational losses do not include Operational Risk-related credit impairments.

Risk Management Framework

Effective risk management is essential in delivering consistent and sustainable performance for all of our stakeholders and is a central part of the financial and operational management of the Group. The Group adds value to clients and the communities in which they operate by taking and managing appropriate levels of risk, which in turn generates returns for shareholders.

The Risk Management Framework (RMF) enables the Group to manage enterprise-wide risks, with the objective of maximising risk-adjusted returns while remaining within our Risk Appetite. The RMF has been designed in accordance with the PLC Group's Enterprise Risk Management Framework (ERMF), and since its approval in June 2020, it has been implemented with the explicit goal of improving the Group's risk management. The RMF is reviewed annually and the latest version is effective from January 2023.

Risk culture

The Group's risk culture provides guiding principles for the behaviours expected from our people when managing risk. The Court has approved a risk culture statement that encourages the following behaviours and outcomes:

- An enterprise-level ability to identify and assess current and future risks, openly discuss these and take prompt actions.
- The highest level of integrity by being transparent and proactive in disclosing and managing all types of risks.
- A constructive and collaborative approach in providing oversight and challenge and taking decisions in a timely manner.
- Everyone to be accountable for their decisions and feel safe in using their judgement to make these considered decisions.

We acknowledge that banking inherently involves risk-taking and undesired outcomes will occur from time to time; however, we shall take the opportunity to learn from our experience and formalise what we can do to improve. We expect managers to demonstrate a high awareness of risk and control by self-identifying issues and managing them in a manner that will deliver lasting change.

Strategic risk management

The Group approaches strategic risk management as follows:

- By conducting an impact analysis on the risk profile from growth plans, strategic initiatives and business model vulnerabilities, with the aim of proactively identifying and managing new risks or existing risks that need to be reprioritised as part of the strategy review process.
- By confirming that growth plans and strategic initiatives can be delivered within the approved Risk Appetite and/or proposing additional Risk Appetite for Court consideration as part of the strategy review process.
- By validating the Corporate Plan against the approved or proposed Risk Appetite Statement to the Court. The Court approves the strategy review and the five-year Corporate Plan with a confirmation from the Group Chief Risk Officer (GCRO) that it is aligned with the RMF and the Group Risk Appetite Statement where projections allow.
- Country Risk management approach and Country Risk reviews are used to ensure the country limits and exposures are reasonable and in line with Group strategy, country strategy, and the operating environment, considering the identified risks. The Group leverages the PLC Group's framework for country risk management.

Roles and responsibilities

Senior Managers Regime[1]

Roles and responsibilities under the RMF are aligned to the objectives of the Senior Managers Regime. The GCRO is responsible for the overall development and maintenance of the Group's RMF and for identifying material risk types to which the Group may be potentially exposed. The GCRO delegates effective implementation of the PLC Group Risk Type Frameworks (RTFs) through the RMF to Risk Framework Owners who provide second line of defence oversight for the Principal Risk Types (PRTs). In addition, the GCRO has been formally identified as the relevant senior manager responsible for the development of the Group's Digital Asset Risk Assessment Approach, as well as the senior manager responsible for Climate Risk management as it relates to financial and non-financial risks to the Group arising from climate change. This does not include elements of corporate social responsibility, the Group's contribution to climate change and the Sustainable Finance strategy supporting a low-carbon transition, which are the responsibility of other relevant senior managers.

1 Senior managers refer to individuals designated as senior management functions under the FCA and PRA Senior Managers Regime (SMR).

The Risk function

The Risk function is responsible for the sustainability of our business through good management of risk across the Group by providing oversight and challenge, thereby ensuring that business is conducted in line with regulatory expectations.

The GCRO directly manages the Risk function, which is separate and independent from the origination, trading and sales functions of the businesses. The Risk function is responsible for:

- Maintaining the RMF, ensuring that it remains relevant and appropriate to the Group's business activities, and is effectively communicated and implemented across the Group, and administering related governance and reporting processes
- Upholding the overall integrity of the Group's risk and return decisions to ensure that risks are properly assessed that these decisions are made transparently on the basis of proper assessments and that risks are controlled in accordance with the PLC Group's standards and Risk Appetite
- Overseeing and challenging the management of PRTs and Integrated Risk Types under the RMF

The independence of the Risk function ensures that the necessary balance in making risk and return decisions is not compromised by short-term pressures to generate revenues.

In addition, the Risk function is a centre of excellence that provides specialist capabilities relevant to risk management processes in the broader organisation.

The Risk function supports the Group's commitment to be 'Here for good' by building a sustainable framework that places regulatory and compliance standards and a culture of appropriate conduct at the forefront of the Group's agenda, in a manner proportionate to the nature, scale and complexity of the Group's business.

Conduct, Financial Crime and Compliance (CFCC), under the Management Team leadership of the Group Head, CFCC, works alongside the Risk function within the framework of the RMF to deliver a unified second line of defence.

Three lines of defence model

Roles and responsibilities for risk management are defined under a three lines of defence model. Each line of defence has a specific set of responsibilities for risk management and control as shown, in the table below.

Lines of defence	Definition	Key responsibilities include
1st	The businesses and functions engaged in or supporting revenue-generating activities that own and manage the risks	• Propose the risks required to undertake revenue-generating activities • Identify, assess, monitor and escalate risks and issues to the second line and senior management[1] and promote a healthy risk culture and good conduct • Validate and self-assess compliance to RTFs and policies, confirm the quality of validation, and provide evidence-based affirmation to the second line • Manage risks within Risk Appetite, set and execute remediation plans and ensure laws and regulations are being complied with • Ensure systems meet risk data aggregation, risk reporting and data quality requirements set by the second line
2nd	The control functions independent of the first line that provide oversight and challenge of risk management to provide confidence to the GCRO, senior management and the Court	• Identify, monitor and escalate risks and issues to the GCRO, senior management and the Court and promote a healthy risk culture and good conduct • Oversee and challenge first-line risk-taking activities and review first-line risk proposals • Propose Risk Appetite to the Court, monitor and report adherence to Risk Appetite and intervene to curtail business if it is not in line with an existing or adjusted Risk Appetite, there is material non-compliance with policy requirements or when operational controls do not effectively manage risk • Set risk data aggregation, risk reporting and data quality requirements • Ensure that there are appropriate controls to comply with applicable laws and regulations, and escalate significant non-compliance matters to senior management and the appropriate committees
3rd	The Group Internal Audit function provides independent assurance on the effectiveness of controls that support first line's risk management of business activities, and the processes maintained by the second line	• Independently assess whether management has identified the key risks in the businesses and whether these are reported and governed in line with the established risk management processes • Independently assess the adequacy of the design of controls and their operating effectiveness

1 Senior management in this table refers to individuals designated as senior management functions under the FCA and PRA Senior Managers Regime (SMR)

Risk Appetite and profile

We recognise the following constraints which determine the risks that we are willing to take in pursuit of our strategy and the development of a sustainable business:

- Risk capacity is the maximum level of risk the Group can assume, before breaching constraints determined by capital and liquidity requirements and internal operational environment, or otherwise failing to meet the expectations of regulators and law enforcement agencies.
- Risk Appetite is defined by the Group and approved by the Court. It is the maximum amount and type of risk the Group is willing to assume in pursuit of its strategy. Risk Appetite cannot exceed risk capacity.

The Court is responsible for approving the Risk Appetite Statement, which is underpinned by a set of financial and operational control parameters known as Risk Appetite metrics and their associated thresholds. These directly constrain the aggregate risk exposures that can be taken across the Group.

The Group Risk Appetite is reviewed at least on an annual basis to ensure that it is fit for purpose and aligned with strategy, and focus is given to emerging or new risks. The Risk Appetite Statement is supplemented by an overarching statement outlining the Group's Risk Appetite principles.

Risk Appetite principles

The Group Risk Appetite is defined in accordance with risk management principles that inform our overall approach to risk management and our risk culture. We follow the highest ethical standards and ensure a fair outcome for our clients, as well as facilitating the effective operation of financial markets, while at the same time meeting the expectations of regulators and law enforcement agencies. We set our Risk Appetite to enable us to grow sustainably and to avoid shocks to earnings or our general financial health, as well as manage our Reputational Risk in a way that does not materially undermine the confidence of our investors and all internal and external stakeholders.

Risk Appetite Statement

The Group will not compromise adherence to its Risk Appetite in order to pursue revenue growth or higher returns. The Group Risk Appetite is supplemented by risk control tools such as granular level limits, policies, standards and other operational control parameters that are used to keep the Group's risk profile within Risk Appetite. The Group's risk profile is its overall exposure to risk at a given point in time, covering all applicable risk types. Status against Risk Appetite is reported to the Court, Court Risk Committee and the Standard Chartered Bank Executive Risk Committee, including the status of breaches and remediation plans where applicable.

The Standard Chartered Bank Executive Risk Committee and the Solo & Standard Chartered Bank UK (Branch) Asset and Liability Management Committee are responsible for ensuring that our risk profile is managed in compliance with the Risk Appetite set by the Court. The Court Risk Committee advises the Court on and monitors the Group's compliance with the Risk Appetite Statement.

The individual PRTs' Risk Appetite Statements approved by the Court are set out in the **Principal Risks** section **pages 134 to 151**.

Risk identification and assessment

Identification and assessment of potentially adverse risk events is an essential first step in managing the risks of any business or activity. To ensure consistency in communication, we use PRTs to classify our risk exposures.

Nevertheless, we also recognise the need to maintain a holistic perspective since a single transaction or activity may give rise to multiple types of risk exposure, risk concentrations may arise from multiple exposures that are closely correlated, and a given risk exposure may change its form from one risk type to another. There are also sources of risk that arise beyond our own operations, such as the Group's dependency on suppliers for the provision of services and technology.

As the Group remains accountable for risks arising from the actions of such third parties, failure to adequately monitor and manage these relationships could materially impact the Group's ability to operate and could have an impact on our ability to continue to provide services that are material to the Group.

To facilitate risk identification and assessment, the Group leverages the PLC Group's dynamic risk-scanning process with inputs on the internal and external risk environment, as well as potential threats and opportunities from the business and client perspectives. The Group maintains a taxonomy of the PRTs, Integrated Risk Types and risk sub-types that are inherent to the strategy and business model; as well as a Topical and Emerging Risks (TERs) inventory that includes near-term as well as longer-term uncertainties. Near-term risks are those that are on the horizon and can be measured and mitigated to some extent, while uncertainties are longer-term matters that should be on the radar but are not yet fully measurable.

The GCRO and the Standard Chartered Bank Executive Risk Committee review regular reports on the risk profile for the PRTs, adherence to the approved Risk Appetite and the Group risk inventory including emerging risks and uncertainties. They use this information to escalate material developments in each risk event and make recommendations to the Court annually on any potential changes to our Corporate Plan.

Further information on the Group's **topical and emerging risks** can be found on **pages 35 to 39**.

Stress testing

The objective of stress testing is to support the PLC Group in assessing that it:

- does not have a portfolio with excessive risk concentration that could produce unacceptably high losses under severe but plausible scenarios;
- has sufficient financial resources to withstand severe but plausible scenarios;
- has the financial flexibility to respond to extreme but plausible scenarios; and
- understands the PLC Group's key business Model Risks and considers what kind of event might crystallise those risks – even if extreme with a low likelihood of occurring – and identifies as required, actions to mitigate the likelihood or impact of those events

The PLC Group enterprise stress tests incorporate Capital and Liquidity Adequacy Stress Tests, including in the context of capital adequacy, recovery and resolution, and stress tests that assess scenarios where our business model becomes challenged, such as the Bank of England Biennial Exploratory Scenario, or unviable, such as reverse stress tests.

Stress tests are performed at PLC Group, Solo, country, business and portfolio level under a wide range of risks and at varying degrees of severity. Unless set by the Bank of England, scenario design is a bespoke process that aims to explore risks that can adversely impact the PLC Group.

The Group relies on these stress tests to understand the Group level vulnerabilities. Based on the stress test results, the Group Chief Financial Officer (CFO) and GCRO can recommend strategic actions to the Court to ensure that the Group strategy remains within the Court-approved Risk Appetite.

PRTs

PRTs are those risks that are inherent in our strategy and business model and have been formally defined in the Group's RMF. These risks are managed in line with the PLC Group RTFs which are adopted by the Company via an addendum to each RTF.

The PRTs and associated Risk Appetite Statements are approved by the Court.

The Group currently recognises Climate Risk, Digital Asset Risk and Third-Party Risk as Integrated Risk Types. Climate Risk is defined as "the potential for financial loss and non-financial detriments arising from climate change and society's response to it"; Digital Asset Risk is defined as "the potential for regulatory penalties, financial loss and or reputational damage to the Group resulting from digital asset exposure or digital asset related activities arising from the Group's Clients, Products and Projects" and Third-Party Risk is defined as "the potential for loss or adverse impact from failure to manage multiple risks arising from the use of third-parties, and is the aggregate of these risks."

In future reviews, we will continue to consider if existing PRTs or incremental risks should be treated as Integrated Risk Types.

The table below shows the Group's current PRTs.

PRTs	Definition
Credit Risk	• Potential for loss due to the failure of a counterparty to meet its agreed obligations to pay the Group
Traded Risk	• Potential for loss resulting from activities undertaken by the Group in financial markets
Treasury Risk	• Potential for insufficient capital, liquidity or funding to support our operations, the risk of reductions in earnings or value from movements in interest rates impacting banking book items and the potential for losses from a shortfall in the Group's pension plans.
Operational and Technology Risk	• Potential for loss resulting from inadequate or failed internal processes, technology events, human error, or from the impact of external events (including legal risks)
Information and Cyber Security Risk	• Risk to the Group's assets, operations and individuals due to the potential for unauthorised access, use, disclosure, disruption, modification, or destruction of information assets and/or information systems
Compliance Risk	• Potential for penalties or loss to the Group or for an adverse impact to our clients, stakeholders or to the integrity of the markets we operate in through a failure on our part to comply with laws or regulations
Financial Crime Risk	• Potential for legal or regulatory penalties, material financial loss or reputational damage resulting from the failure to comply with applicable laws and regulations relating to International Sanctions, Anti-Money Laundering, Anti-Bribery and Corruption and Fraud
Model Risk	• Potential loss that may occur as a consequence of decisions or the risk of misestimation that could be principally based on the output of models, due to errors in the development, implementation or use of such models
Reputational and Sustainability Risk	• Potential for damage to the franchise (such as loss of trust, earnings or market capitalisation) because of stakeholders taking a negative view of the Group through actual or perceived actions or inactions, including a failure to uphold responsible business conduct or lapses in our commitment to do no significant environmental and social harm through our client, third-party relationships or our own operations

Further details of our principal risks and how these are being managed are set out in the **Principal Risks** section **pages 134 to 151**.

RMF effectiveness reviews

Effectiveness review of the RMF is managed as part of the PLC Group ERMF effectiveness review. At Group level, a self-assessment is conducted to assess the overall effectiveness of the RMF, and the results are taken into consideration in the ERMF effectiveness review. The GCRO is responsible for annually affirming the effectiveness of the RMF to the Court Risk Committee.

The RMF effectiveness review is conducted annually since its implementation in 2020 and enables measurement of progress against the 2020 baseline. Ongoing ERMF effectiveness reviews allows for a structured approach to identify improvement opportunities and build plans to address them. Over the course of 2023, the Group aims to further strengthen its risk management practises by further improving on the management of non-financial risks and integrated risks within its businesses and functions.

Executive and Court risk oversight

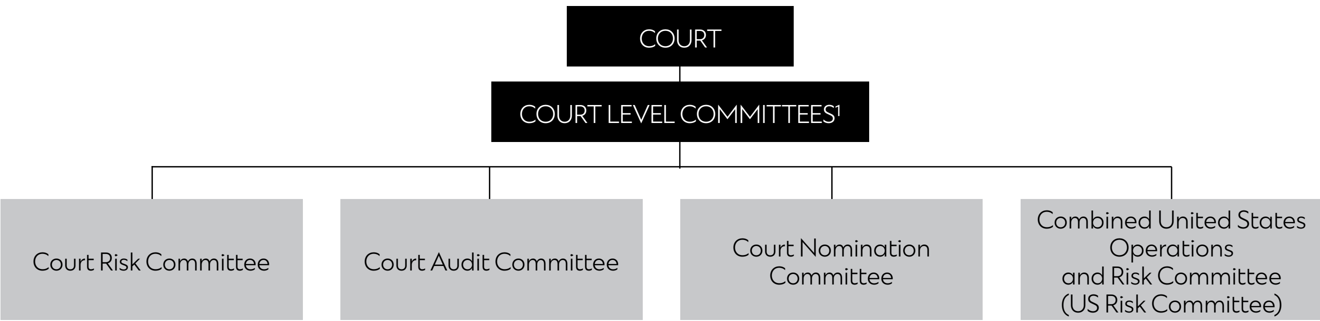
Overview

The Court comprises of the majority of the independent non-executive directors from the PLC Board, executive directors from the PLC Board as well as an executive director and non-executive director who are appointed solely to the Court with the specific purpose of providing independent decision making at the Court meetings.

The Court discharges its responsibilities directly or, in order to assist it in carrying out its function of ensuring effective independent oversight, delegates specific responsibilities to its four primary committees. The Court has ultimate responsibility for risk management and approves the RMF based on the recommendation from the Court Risk Committee, which also recommends the Group Risk Appetite Statement for all PRTs.

Court and Executive level risk committee governance structure

The Committee governance structure below presents the view as of 2022.



Court Risk Committee:

The Court Risk Committee is concerned with the oversight and review of principal risks.

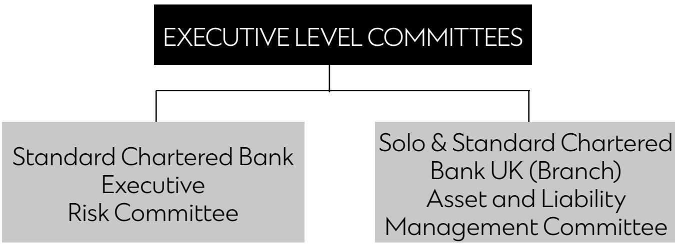
Court Audit Committee:

The Court Audit Committee is concerned with the oversight and review of financial, audit, internal control and non-financial crime issues.

Combined United States Operations and Risk Committee (US Risk Committee):

The US Risk Committee is required to meet the requirements of the Dodd-Frank Act Section 165 Enhanced Prudential Standard Final Rules as released by the Federal Reserve Bank. It has prescribed responsibilities in relation to overseeing the risk management framework, approving and overseeing the implementation of the risk management policies and also specific review and approval responsibilities in relation to liquidity risk management. Membership of the Committee is comprised of directors of the Company or PLC, including at least one independent non-executive director and one with significant risk management experience.

1 The Court also has a Standing Committee with a remit to approve matters, on behalf of the Court, where a formal resolution is required for legal and regulatory purposes



The Company's Management Team comprises of the members of the PLC Group Management Team including the Group Chief Executive Officer (CEO), the Group Chief Risk Officer and the Group CFO. Their responsibilities under the Senior Managers Regime cover both the PLC Group and the Group.

The Group has two management level committees, namely the Standard Chartered Bank Executive Risk Committee and Solo & Standard Chartered Bank UK (Branch) Asset and Liability Management Committee.

Standard Chartered Bank Executive Risk Committee

The Standard Chartered Bank Executive Risk Committee is responsible for ensuring the effective management of risk throughout the Group in support of the Group's strategy. The GCRO chairs the Committee, whose members are drawn from the Group's Management Team. The Committee oversees the implementation of the Standard Chartered Bank RMF, including the delegation of any part of its authorities to appropriate individuals or properly constituted sub-committees. Standard Chartered Bank Executive Risk Committee relies on joint meetings with the PLC Group Risk Committee and its sub-committees to provide oversight of the PRTs and Integrated Risk Types across clients, businesses, products and functions. The Committee requests and receives relevant information to fulfil its governance mandates relating to the risks to which the Group is exposed, and alert management when risk reports do not meet its requirements.

Solo & Standard Chartered Bank UK (Branch) Asset and Liability Management Committee

The Solo & Standard Chartered Bank UK (Branch) Asset and Liability Management Committee is chaired by the CEO, Corporate, Commercial and Institutional Banking (CCIB), Europe & Americas. The Committee is responsible for determining the Group's approach to balance sheet management and ensuring that, in executing the Group's strategy, the Group operates within the internally approved Risk Appetite and external requirements relating to capital, loss-absorbing capacity, liquidity, leverage, Interest Rate Risk in the Banking Book, Banking Book Basis Risk and Structural Foreign Exchange Risk as well as monitoring the structural impact of decisions around sustainable finance, Net Zero and Climate Risk. The Committee is also responsible for ensuring that internal and external recovery planning requirements are met.

The Standard Chartered Bank Executive Risk Committee and Solo & Standard Chartered Bank UK (Branch) Asset and Liability Management Committee receive reports that include information on risk measures, Risk Appetite metrics and thresholds, risk concentrations, forward-looking assessments, updates on specific risk situations and actions agreed by these committees to reduce or manage risk.

Principal risks

We manage and control our PRTs in line with the PLC Group Risk Type Frameworks, policies and Court-approved Risk Appetite. These are implemented at the Company level via addenda to the PLC Group Risk Type Frameworks.

Credit Risk

The Group defines Credit Risk as the potential for loss due to the failure of a counterparty to meet its agreed obligations to pay the Group.

Risk Appetite Statement

The Group manages its credit exposures following the principle of diversification across products, geographies, client segments and industry sectors.

Roles and responsibilities

The Company addenda to the Credit Risk Type Frameworks for the Group are set and owned by the Chief Risk Officers for the business segments. The Credit Risk function is the second-line control function responsible for independent challenge, monitoring and oversight of the Credit Risk management practices of the business and functions engaged in or supporting revenue-generating activities which constitute the first line of defence. In addition, they ensure that Credit Risks are properly assessed and transparent; and that credit decisions are controlled in accordance with the Group's Risk Appetite, PLC Group's credit policies and standards.

Mitigation

We apply segment-specific PLC Group policies for the management of Credit Risk. The Credit Policy for CCIB Client Coverage sets the principles that must be followed for the end-to-end credit process, including credit initiation, credit grading, credit assessment, product structuring, Credit Risk mitigation, monitoring and control, and documentation.

The CPBB Credit Risk Management Policy sets the principles for the management of Consumer, Private and Business Banking (CPBB) segments, that must be followed for end-to-end credit process, including credit initiation, credit assessment and monitoring for lending to these segments.

In addition, there are other PLC Group-wide policies integral to Credit Risk management such as those relating to Risk Appetite, Model Risk, Stress Testing, and Impairment Provisioning.

We also apply the PLC Group standards for the eligibility, enforceability and effectiveness of Credit Risk mitigation arrangements. Potential credit losses from a given account, client or portfolio are mitigated using a range of tools, such as collateral, netting agreements, credit insurance, credit derivatives and guarantees.

Risk mitigants are also carefully assessed for their market value, legal enforceability, correlation and counterparty risk of the protection provider.

Collateral must be valued prior to drawdown and regularly thereafter as required, to reflect current market conditions, the probability of recovery and the period of time to realise the collateral in the event of liquidation. We also seek to diversify our collateral holdings across asset classes and markets.

Where guarantees, credit insurance, standby letters of credit or credit derivatives are used as Credit Risk mitigation, the creditworthiness of the protection provider is assessed and monitored using the same credit approval process applied to the obligor.

Governance committee oversight

At Court level, the Court Risk Committee oversees the effective management of Credit Risk among other risks within the bank.

At the executive level, the Standard Chartered Bank Executive Risk Committee is responsible for the management of all risk types including Credit Risk for the Group, and relies on other key PLC Group committees – in particular the Corporate, Commercial and Institutional Banking Risk Committee (CCIBRC), Consumer, Private and Business Banking Risk Committee (CPBBRC), and the regional risk committees for Asia, and Africa & Middle East.

These committees are responsible for overseeing all Risk profiles including Credit Risk for the Group within the respective business areas and regions.

Decision-making authorities and delegation

The Credit Risk Type Frameworks are the formal mechanism by which delegate Credit Risk authorities cascading from the GCRO, as the Senior Manager of the Credit Risk Type, to individuals such as the business segments' Chief Risk Officers. Named individuals further delegate credit authorities to individual credit officers based on risk-adjusted scales by customer type or portfolio. The decision-making authorities and delegations are set out at the Group level via the Company addenda to the Credit Risk Type Frameworks.

Credit Risk authorities are reviewed at least annually to ensure that they remain appropriate. In CCIB Client Coverage, the individuals delegating the Credit Risk authorities perform oversight by reviewing a sample of the limit applications approved by the delegated credit officers on a monthly basis. In CPBB, where credit decision systems and tools (e.g. application scorecards) are used for credit decisioning, such risk models are subject to performance monitoring and periodic validation. Where manual or discretionary credit decisions are applied, periodic quality control assessments and assurance checks are performed by the individuals delegating the Credit Risk authorities.

Monitoring

We regularly monitor credit exposures, portfolio performance, external trends and emerging risks that may impact risk management outcomes. Internal risk management reports that are presented to risk committees contain information on key political and economic trends across major portfolios and countries, portfolio delinquency and loan impairment performance.

The Industry Portfolio Mandate, developed jointly by the CCIB Client Coverage business and the Risk function, provides a forward-looking assessment of risk using a platform from which business strategy, risk considerations and client planning are performed with one consensus view of the external industry outlook, portfolio overviews, Risk Appetite, underwriting principles and stress test insights.

In CCIB Client Coverage, clients and portfolios are subjected to additional review when they display signs of actual or potential weakness; for example, where there is a decline in the client's position within the industry, financial deterioration, a breach of covenants, or non-performance of an obligation within the stipulated period. Such accounts are subjected to a dedicated process overseen by the Credit Issues Committees in the relevant countries where client account strategies and credit grades are re-evaluated. In addition, remedial actions, including placing accounts on early alert for increased scrutiny, exposure reduction, security enhancement or exiting the account, could be undertaken. Certain accounts could also be transferred into the control management of the Stressed Assets Group (SAG), which is our specialist recovery unit for CCIB Client Coverage that operates independently from our main business.

Any material in-country developments that may impact the sovereign ratings are monitored closely by the Country Risk Team. A Country Risk Early Warning system, a triage-based risk identification system was developed to categorise countries based on a forward looking view of a possible downgrade and expected incremental RWA impact of a potential downgrade.

For CPBB, exposures and collateral monitoring are performed at the counterparty and/or portfolio level across different client segments to ensure transactions and portfolio exposures remain within Risk Appetite. Portfolio delinquency trends are monitored on an ongoing basis. Accounts that are past due (or perceived as high risk but not yet past due) are subject to a collections or recovery process managed by a specialist function independent from the origination function. In some countries, aspects of collections and recovery activities are outsourced. Oversight and assurance are undertaken in risk committees and various governance forums. For discretionary lending portfolios, similar processes as those of Commercial client coverage are followed.

In addition, an independent Credit Risk Review team (part of Enterprise Risk Management) performs judgement-based assessments of the Credit Risk profiles at various portfolio levels, with focus on selected countries and segments through deep dives, comparative analysis, and review and challenge of the basis of credit approvals. The review ensures that the evolving Credit Risk profiles of CCIB and CPBB are well managed within our Risk Appetite and policies through prompt and forward-looking mitigating actions.

Credit rating and measurement

All credit proposals are subject to a robust Credit Risk assessment. It includes a comprehensive evaluation of the client's credit quality, including willingness, ability and capacity to repay. The primary lending consideration is based on the client's credit quality and the repayment capacity from operating cashflows for counterparties; and personal income or wealth for individual borrowers. The risk assessment gives due consideration to the client's liquidity and leverage position. Where applicable, the assessment includes a detailed analysis of the Credit Risk mitigation arrangements to determine the level of reliance on such arrangements as the secondary source of repayment in the event of a significant deterioration in a client's credit quality leading to default. For Wealth Lending, Collateral is considered primary source of repayment whereby loan agreement envisages that the repayment of loan is based on sale of collateral provided.

Risk measurement plays a central role, along with judgement and experience, in informing risk-taking and portfolio management decisions. We adopt the advanced internal ratings-based approach under the Basel regulatory framework to calculate Credit Risk capital requirements. The PLC Group has also established a global programme to undertake a comprehensive assessment of capital requirements necessary to be implemented to meet the latest revised Basel III finalisation (Basel IV) regulations.

A standard alphanumeric Credit Risk grade system is used for CCIB Client Coverage. The numeric grades run from 1 to 14 and some of the grades are further sub-classified. Lower numeric credit grades are indicative of a lower likelihood of default. Credit grades 1 to 12 are assigned to performing customers, while credit grades 13 and 14 are assigned to non-performing or defaulted customers.

CPBB internal ratings-based portfolios use application and behavioural credit scores that are calibrated to generate a probability of default. Risk Decision Framework (RDF) as a credit rating system supports the delivery of optimum risk-adjusted-returns with controlled volatility and is used to define the portfolio/new booking segmentation, shape and decision criteria for unsecured consumer business segment.

Advanced internal ratings-based models cover a substantial majority of our exposures and are used in assessing risks at a customer and portfolio level, setting strategy and optimising our risk-return decisions. Material internal ratings-based risk measurement models are approved by the PLC Group Model Risk Committee. Prior to review and approval, all internal ratings-based models are validated in detail by a model validation team, which is separate from the teams that develop and maintain the models. Models undergo annual validation by an independent model validation team. Reviews are also triggered if the performance of a model deteriorates materially against predetermined thresholds during the ongoing model performance monitoring process which takes place between the annual validations.

Credit Concentration Risk
Credit Concentration Risk may arise from a single large exposure to a counterparty or a group of connected counterparties, or from multiple exposures across the portfolio that are closely correlated. Large exposure Concentration Risk is managed through concentration limits set for a counterparty or a group of connected counterparties based on control and economic dependence criteria. Risk Appetite metrics are set at portfolio level and monitored to control concentrations, where appropriate, by industry, specific products, tenor, collateralisation level, top clients and exposure to holding companies. Single name credit concentration thresholds are set by client group depending on credit grade, and by customer segment. For concentrations that are material at a Group level, breaches and potential breaches are monitored by the respective governance committees and reported to the Standard Chartered Bank Executive Risk Committee and Court Risk Committees.

Credit impairment
Expected credit losses (ECL) are determined for all financial assets that are classified as amortised cost or fair value through other comprehensive income. ECL is computed as an unbiased, probability-weighted provision determined by evaluating a range of plausible outcomes, the time value of money, and forward-looking information such as critical global or country-specific macroeconomic variables. For more detailed information on macroeconomic data feeding into IFRS 9 ECL calculations, please refer to the Risk profile section in pages 105 to 113.

At the time of origination or purchase of a non-credit- impaired financial asset (stage 1), ECL represent cash shortfalls arising from possible default events up to 12 months into the future from the balance sheet date. ECL continue to be determined on this basis until there is a significant increase in the Credit Risk of the asset (stage 2), in which case an ECL is recognised for default events that may occur over the lifetime of the asset. If there is observed objective evidence of credit impairment or default (stage 3), ECL continue to be measured on a lifetime basis.

In CCIB Client Coverage, a loan is considered credit- impaired where analysis and review indicate that full payment of either interest or principal, including the timeliness of such payment, is questionable, or as soon as payment of interest or principal is 90 days overdue. These credit-impaired accounts are managed by our specialist recovery unit, SAG.

In CPBB, a loan to individuals and small businesses is considered credit-impaired as soon as payment of interest or principal is 90 days overdue or meets other objective evidence of impairment such as bankruptcy, debt restructuring, fraud or death. Financial assets are written-off when it meets certain threshold conditions which are set at the point where empirical evidence suggests that the client is unlikely to meet their contractual obligations, or a loss of principal is expected.

Estimating the amount and timing of future recoveries involves significant judgement and considers the assessment of matters such as future economic conditions and the value of collateral, for which there may not be a readily accessible market. The total amount of the Group's impairment provision is inherently uncertain, being sensitive to changes in economic and credit conditions across the regions in which the Group operates. For further details on sensitivity analysis of expected credit losses under IFRS 9, please refer to page 108.

Stress testing
Stress testing is a forward-looking risk management tool that constitutes a key input into the identification, monitoring and mitigation of Credit Risk, as well as contributing to Risk Appetite calibration. Periodic stress tests are performed on credit portfolios/segments to anticipate vulnerabilities from stressed conditions and initiate timely right-sizing and mitigation plans. Additionally, multiple enterprise-wide and country-level stress tests are mandated by regulators to assess the ability of the PLC Group and its subsidiaries to continue to meet their capital requirements during a plausible, adverse shock to the business. These regulatory stress tests are conducted in line with the principles stated in the Enterprise Stress Testing Policy. The Group relies on these stress tests to understand the Group level vulnerabilities given the significant overlap between Group and PLC Group Credit Risk profile.

Traded Risk

The Group defines Traded Risk as the potential for loss resulting from activities undertaken in financial markets.

Risk Appetite Statement

The Group should control its financial markets activities to ensure that Traded Risk losses do not cause material damage to the Group's or PLC Group's franchise.

The Group principles to manage Traded Risk are set in the Traded Risk Type Framework (TRTF). The TRTF covers three risk sub-types: Market Risk, Counterparty Credit Risk and Algorithmic Trading.

Roles and responsibilities

The addendum to the TRTF, which sets the roles and responsibilities in respect of Traded Risk for the Group, is owned by the Global Head, TRM. The business, acting as first line of defence, is responsible for the effective management of risks within the scope of its direct organisational responsibilities set by the Court.

Traded Risk Management (TRM) is the core second-line control function that performs independent challenge, monitoring and oversight of the Traded Risk management practices of the first line of defence, predominantly Financial Markets and Treasury Markets. The first and second lines of defence are supported by the organisation structure, job descriptions and authorities delegated by Traded Risk control owners.

Mitigation

The Country addendum to the TRTF requires that Traded Risk limits are defined at a level appropriate to ensure that the Group remains within Risk Appetite. All businesses incurring Traded Risk must comply with the TRTF. The Traded Risk Policy sets the principles that must be followed for the end-to-end Traded Risk management process including limit setting, risk capture and measurement, limit monitoring and escalation, risk mitigation and stress testing. Policies and standards ensure that these Traded Risk limits are implemented. Policies are reviewed and approved by the Global Head, TRM every two years to ensure their ongoing effectiveness.

Governance committee oversight

At Court level, the Court Risk Committee oversees the effective management of Traded Risk. At the executive level, the Standard Chartered Bank Executive Risk Committee is responsible for the governance and oversight of Traded Risk for the Group, and relies on other key PLC Group committees for the management of Traded Risk – in particular CCIBRC, the Underwriting Committee and the Model Risk Committee. For subsidiaries, the authority for setting Traded Risk limits is delegated from the local board to the local risk committee, Country Chief Risk Officer and Traded Risk managers. Meetings are held regularly, and the committees monitor all material Traded Risk exposures, as well as key internal developments and external trends, and ensure that appropriate action is taken.

Decision-making authorities and delegation

The TRTF is the formal mechanism which delegate Traded Risk authorities cascading from the GCRO, as the Senior Manager of the Traded Risk Type, to the Global Head, TRM who further delegates authorities to named individuals.

Traded Risk authorities are reviewed at least annually to ensure that they remain appropriate and to assess the quality of decisions taken by the authorised person. Key risk-taking decisions are made only by certain individuals with the skills, judgement and perspective to ensure that the Group's control standards and risk-return objectives are met.

Market Risk

The Group uses a Value at Risk (VaR) model to measure the risk of losses arising from future potential adverse movements in market rates, prices and volatilities. VaR is a quantitative measure of Market Risk that applies recent historical market conditions to estimate the potential future loss in market value that will not be exceeded in a set time period at a set statistical confidence level. VaR provides a consistent measure that can be applied across trading businesses and products over time and can be set against actual daily trading profit and loss outcomes.

For day-to-day risk management, VaR is calculated as at the close of business, generally at UK time for expected market movements over one business day and to a confidence level of 97.5 per cent. Intra-day risk levels may vary from those reported at the end of the day.

The Group applies two VaR methodologies:

- Historical simulation: this involves the revaluation of all existing positions to reflect the effect of historically observed changes in Market Risk factors on the valuation of the current portfolio. This approach is applied for general Market Risk factors and the majority of specific (credit spread) risk VaRs.
- Monte Carlo simulation: this methodology is similar to historical simulation but with considerably more input risk factor observations. These are generated by random sampling techniques, but the results retain the essential variability and correlations of historically observed risk factor changes. This approach is applied for some of the specific (credit spread) risk VaRs in relation to idiosyncratic exposures in credit markets.

A one-year historical observation period is applied in both methods.

As an input to regulatory capital, trading book VaR is calculated for expected movements over 10 business days and to a confidence level of 99 per cent. Some types of Market Risk are not captured in the regulatory VaR measure, and these Risks not in VaR (RNIVs) are subject to capital add-ons.

An analysis of VaR results in 2022 is available in the Risk profile section pages 114 to 116.

Counterparty Credit Risk
The Group uses a Potential Future Exposure (PFE) model to measure the credit exposure arising from the positive mark-to-market of traded products and future potential movements in market rates, prices and volatilities. PFE is a quantitative measure of Counterparty Credit Risk that applies recent historical market conditions to estimate the potential future credit exposure that will not be exceeded in a set time period at a confidence level of 97.5 per cent. PFE is calculated for expected market movements over different time horizons based on the tenor of the transactions.

The Group applies two PFE methodologies: simulation based, which is predominantly used, and an add-on based PFE methodology.

Monitoring
TRM monitors the overall portfolio risk and ensures that it is within specified limits and therefore Risk Appetite. Limits are typically reviewed twice a year. Most of the Traded Risk exposures are monitored daily against approved limits. Traded Risk limits apply at all times unless separate intra-day limits have been set. Limit excess approval decisions are based on an assessment of the circumstances driving the excess and of the proposed remediation plan. Limits and excesses can only be approved by a Traded Risk manager with the appropriate delegated authority.

Stress testing
The VaR and PFE measurements are complemented by stress testing of Market Risk and Counterparty Credit Risk to highlight the potential risk that may arise from severe but plausible market events.

Stress testing is an integral part of the Traded Risk management framework and considers both historical market events and forward-looking scenarios. A consistent stress testing methodology is applied to trading and non-trading books. The stress testing methodology assumes that management action would be limited during a stress event, reflecting the expected decrease in market liquidity. Stress test scenarios are applied to interest rates, credit spreads, exchange rates, commodity prices and equity prices. Stress scenarios are regularly reviewed and updated where necessary to reflect changes in risk profile and economic events.

TRM reviews the stress testing results and, where necessary, enforces reductions in overall Traded Risk exposures. The Standard Chartered Bank Executive Risk Committee considers the results of stress tests as part of its supervision of Risk Appetite. PLC Group and business-wide stress testing are supplemented by legal entity stress testing, subject to the relevant local governance.

Treasury Risk
Treasury Risk is defined as the "potential for insufficient capital, liquidity or funding to support our operations, the risk of reductions in earnings or value from movements in interest rates impacting banking book items and the potential for losses from a shortfall in the Group's pension plans".

Risk Appetite Statement
Individual regulated entities within SC Bank should maintain sufficient capital, liquidity and funding to support their operations, and an interest rate profile ensuring that the reductions in earnings or value from movements in interest rates impacting banking book items does not cause material damage to their franchise. In addition, they should ensure its Pension plans are adequately funded.

Roles and responsibilities
The Global Head, Enterprise Risk Management is the Risk Framework Owner for Treasury Risk under the Risk Management Framework.

The Company addendum to the Treasury Risk Type Framework sets the roles and responsibilities in respect of Treasury Risk, and it is owned by the Global Head, Enterprise Risk Management.

The Group Treasurer is supported by teams in Treasury and Finance to implement the Treasury Risk Type Framework as the first line of defence, and is responsible for managing Treasury Risk.

Treasury Chief Risk Officer for Treasury Risk (except Pension Risk) and Head of Pensions for Pension Risk are responsible for overseeing and challenging the first line of defence.

Mitigation
We apply the PLC Group policies for the management of material Treasury risks and closely monitor our risk profile through Risk Appetite metrics set at Solo and country level.

Capital Risk

In order to manage Capital Risk, strategic business and capital plans (Corporate Plan) are drawn up covering a five-year horizon which are approved by the Court annually. The plan ensures that adequate levels of capital, including loss-absorbing capacity, and an efficient mix of the different components of capital are maintained to support our strategy and business plans.

Treasury is responsible for the ongoing assessment of the demand for capital and the updating of the Solo's capital plan.

Solo level Risk Appetite metrics including capital, leverage, and minimum requirement for own funds and eligible liability (MREL) are assessed within the Corporate Plan to ensure that the strategy can be achieved within risk tolerances.

Structural FX Risk

The Group's structural position results from the Company's non-US dollar investment in the share capital and reserves of subsidiaries and branches. The FX translation gains, or losses are recorded in the Company's translation reserves with a direct impact on the PLC Group and Solo's Common Equity Tier 1 ratio.

Structural FX position is monitored and managed at PLC Group level as part of overall PLC Group foreign exchange exposure.

Liquidity and Funding Risk

At Solo and country level we implement various risk appetite metrics and monitor these against Limits and Management Action Triggers. In addition to these, where relevant, Monitoring Metrics are also set against specific risks. This ensures that the Group entities maintain an adequate and well-diversified liquidity buffer, as well as a stable funding base, and that they meet their liquidity and funding regulatory requirements.

Interest Rate Risk in the Banking Book

At Solo level, we implement risk appetite for Economic Value of Equity (EVE) and NII sensitivities and monitor these against limits and management action triggers. IRRBB arises from differences in the repricing profile, interest rate basis, and optionality of banking book assets, liabilities and off-balance sheet items. IRRBB represents an economic and commercial risk to the Group and its capital adequacy.

Pension Risk

Pension Risk is the potential for loss due to having to meet an actuarially assessed shortfall in the Group's pension plans. Pension obligation risk to a firm arises from its contractual or other liabilities to or with respect to an occupational pension plan or other long term benefit obligation. For a funded plan it represents the risk that additional contributions will need to be made because of a future shortfall in the funding of the plan or, for unfunded obligations, it represents the risk that the cost of meeting future benefit payments is greater than currently anticipated.

Recovery and Resolution Planning

In line with PRA requirements, the PLC Group maintains a Recovery Plan which is a live document to be used by management in the event of stress in order to restore the PLC Group to a stable and sustainable position. The Recovery Plan includes a set of Recovery Indicators, an escalation framework, and a set of management actions capable of being implemented in a stress. A Recovery Plan is also maintained within each major entity including those under Solo, and all recovery plans are subject to periodic fire-drill testing. The Group follows the PLC Group's Recovery Plan.

As the UK resolution authority, the Bank of England is required to set a preferred resolution strategy for the PLC Group. The Bank of England's preferred resolution strategy is whole PLC Group single point of entry bail-in at the ultimate holding company level (Standard Chartered PLC) and would be led by the Bank of England as the PLC Group's home resolution authority. In support of this strategy, the PLC Group has been developing a set of capabilities, arrangements and resources to achieve the required outcomes. On 10 June 2022, the PLC Group and other major UK banks published their resolvability disclosures, alongside the Bank of England's public assessment of the industry's preparations for resolution. No deficiencies were identified by the Bank of England on the PLC Group's resolution capability, but there were some shortcomings and areas for further enhancement identified. Addressing these points remains a key priority for the PLC Group. Significant progress has been made and PLC Group is on track to meet the commitments made to the Bank of England.

Governance committee oversight

At Court level, the Court Risk Committee oversees the effective management of Treasury Risk. At the executive level, the Solo & Standard Chartered Bank UK (Branch) Asset and Liability Management Committee ensures the effective management of risk throughout the Group in support of the Group's strategy, guides the Group's strategy on balance sheet optimisation and ensures that the Group operates within the internally approved Risk Appetite and other internal and external requirements relating to Treasury Risk (except Pension Risk). The Group relies on the PLC Group Risk Committee and Regional Risk Committees for management of Pension Risk.

Regional and country oversight resides with regional and country Asset and Liability Committees. Regions and countries must ensure that they remain in compliance with PLC Group Treasury policies and practices, as well as local regulatory requirements.

Decision-making authorities and delegation
The Group CFO has responsibility for capital, funding and liquidity under the Senior Managers Regime.
The GCRO has delegated the Risk Framework Owner responsibilities associated with Treasury Risk to the Global Head, Enterprise Risk Management. The Global Head, Enterprise Risk Management delegates second-line oversight and challenge responsibilities to the Treasury Chief Risk Officer for Capital Risk, Liquidity and Funding Risk and Interest Rate Risk in the Banking Book, and to Head of Pensions for management of Pension Risk.

Monitoring
On a day-to-day basis, Treasury Risk is managed by Treasury, Finance and Country Chief Executive Officers. The Group regularly reports and monitors Treasury Risk inherent in its business activities and those that arise from internal and external events.

Internal risk management reports covering the balance sheet and the capital and liquidity position are presented to the Solo & Standard Chartered Bank UK (Branch) Asset and Liability Management Committee. The reports contain key information on balance sheet trends, exposures against Risk Appetite and supporting risk measures which enable members to make informed decisions around the overall management of the balance sheet.

In addition, an independent Treasury Chief Risk Officer as part of Enterprise Risk Management reviews the prudency and effectiveness of Treasury Risk management.

Pension Risk is actively managed by the Head of Pensions and monitored by the Head of Country Risk, Scenario Analysis, Insurable & Pension Risk. The Head of Pensions ensures that accurate, complete and timely updates on Pension Risk are shared with the Head of Country Risk, Scenario Analysis & Pension Risk; Treasury CRO and the Global Head, ERM on a periodic basis.

Stress Testing
Stress testing and scenario analysis are an integral part of the Treasury Risk framework and are used to ensure that the PLC Group and Solo's internal assessment of capital and liquidity considers the impact of extreme but plausible scenarios on its risk profile. A number of stress scenarios, some designed internally, some required by regulators, are run periodically.

They provide an insight into the potential impact of significant adverse events on the PLC Group and Solo's capital and liquidity position and how this could be mitigated through appropriate management actions to ensure that the PLC Group and Solo remain within the approved Risk Appetite and regulatory limits.

Daily liquidity stress scenarios are also run to ensure that the PLC Group and Solo hold sufficient high-quality liquid assets to withstand extreme liquidity events. The Group relies on these stress tests to understand the Group level vulnerabilities given the significant overlap between the Group and PLC Group's Treasury Risk.

Operational and Technology Risk
The Group defines Operational and Technology Risk as the potential for loss resulting from inadequate or failed internal processes, technology events, human error or from the impact of external events (including legal risks).

Risk Appetite Statement
The Group aims to control Operational and Technology Risks to ensure that operational losses (financial or reputational), including any related to conduct of business matters, do not cause material damage to the Group or PLC Group's franchise.

Roles and responsibilities
The Company addendum to the Operational and Technology Risk Type Framework (O&T RTF) sets the roles and responsibilities in respect of Operational Risk for the Group, and is owned by the Global Head of Risk, Functions and Operational Risk (GHRFOR). This framework collectively defines the Group's Operational Risk sub-types which have not been classified as PRTs and sets standards for the identification, control, monitoring and treatment of risks. These standards are applicable across all PRTs and risk sub-types in the O&T RTF. These risk sub-types relate to execution capability, governance, reporting and obligations, legal enforceability, and operational resilience (including client service, change management, people management, safety and security, and technology risk).

The O&T RTF reinforces clear accountability for managing risk throughout the PLC Group and delegates second line of defence responsibilities to identified subject matter experts. For each risk sub-type, the expert sets policies and standards for the organisation to comply with, and provides guidance, oversight and challenge over the activities of the PLC Group. They ensure that key risk decisions are only taken by individuals with the requisite skills, judgement, and perspective to ensure that the PLC Group's risk-return objectives are met.

Mitigation
The Company addendum to the O&T RTF sets out the Group's overall approach to the management of Operational Risk in line with the Group's Operational and Technology Risk Appetite. This is supported by Risk and Control Self-Assessment (RCSA) which defines roles and responsibilities for the identification, control and monitoring of risks (applicable to all PRTs, risk sub-types and integrated risk types).

The RCSA is used to determine the design strength and reliability of each process, and requires:

- the recording of processes run by client segments, products, and functions into a process universe
- the identification of potential breakdowns to these processes and the related risks of such breakdowns
- an assessment of the impact of the identified risks based on a consistent scale
- the design and monitoring of controls to mitigate prioritised risks
- assessments of residual risk and timely actions for elevated risks.

Risks that exceed the Group's Operational and Technology Risk Appetite require treatment plans to address underlying causes.

Governance committee oversight
At Court level, the Court Risk Committee oversees the effective management of Operational Risk. At the executive level, the Standard Chartered Bank Executive Risk Committee is responsible for the governance and oversight of Operational Risk for the Group, monitors the Group's Operational and Technology Risk Appetite and relies on other key PLC Group committees for the management of Operational Risk in particular the PLC Group Non-Financial Risk Committee (GNFRC).

Regional business segments and functional committees also provide enterprise oversight of their respective processes and related operational risks. In addition, Country Non-Financial Risk Committees (CNFRCs) oversee the management of Operational Risk at the country (or entity) level. In smaller countries, the responsibilities of the CNFRC may be exercised directly by the Country Risk Committee (for branches) or Executive Risk Committee (for subsidiaries).

Decision-making authorities and delegation
The Company addendum to the O&T RTF is the formal mechanism through which the delegation of Operational Risk authorities is made. The GHRFOR places reliance on the respective Senior Managers who are outside the Risk function for second-line oversight of the risk sub-types through this Company addendum. The Senior Managers may further delegate their second-line responsibilities to designated individuals at a global business, product and function level, as well as regional or country level.

Monitoring
To deliver services to clients and to participate in the financial services sector, the Group runs processes which are exposed to operational risks. The Group prioritises and manages risks which are significant to clients and to the financial services sectors. Control indicators are regularly monitored to determine the residual risk the Group is exposed to.

The residual risk assessments and reporting of events form the Group's Operational Risk profile. The completeness of the Operational Risk profile ensures appropriate prioritisation and timeliness of risk decisions, including risk acceptances with treatment plans for risks that exceed acceptable thresholds.

The Court is informed on adherence to Operational and Technology Risk Appetite through metrics reported for selected risks. These metrics are monitored, and escalation thresholds are devised based on the materiality and significance of the risk. These Operational and Technology Risk Appetite metrics are consolidated on a regular basis and reported to the Standard Chartered Bank Executive Risk Committee and Court Risk Committee. This provides senior management with the relevant information to inform their risk decisions.

Stress testing
Stress testing and scenario analysis are used to assess capital requirements for operational risks. This approach considers the impact of extreme but plausible scenarios on the PLC Group's Operational Risk profile. A number of scenarios have been identified to test the robustness of the PLC Group's processes and assess the potential impact on the PLC Group. These scenarios include anti-money laundering, sanctions, as well as information and cyber security. The Group relies on these stress tests to understand the Group-level vulnerabilities given the significant overlap between the Group and PLC Group operational risk profile.

Information and Cyber Security Risk

The Group defines Information and Cyber Security Risk as the risk to the Group's assets, operations and individuals due to the potential for unauthorised access, use, disclosure, disruption, modification, or destruction of information assets and/or information systems.

Risk Appetite Statement

The Group has zero appetite for very high Information and Cyber Security (ICS) residual risks and low appetite for High ICS residual risks which result in loss of services, data or funds. The Group will implement an effective ICS control environment and proactively identify and respond to emerging ICS threats in order to limit ICS incidents impacting the Group's franchise.

Roles and responsibilities

The Group's Information and Cyber Security Risk Type Framework (ICS RTF) defines the roles and responsibilities of the first and second lines of defence in managing and governing ICS Risk across the Group. It emphasises business ownership and individual accountability.

The Group Chief Transformation, Technology & Operations Officer (CTTO) has overall first line of defence responsibility for ICS Risk and is accountable for the Group's ICS strategy. The Group Chief Information Security Officer (CISO) leads the development and execution of the ICS strategy. The first line also manages all key ICS Risks, breaches and risk treatment plans with oversight from Group Chief Information Security Risk Officer (CISRO). ICS Risk posture, Risk Appetite breaches and remediation status are reported at Board and Executive committees, alongside Business, Function and Country governance committees.

The CISRO function within Group Risk, led by the Group CISRO, is the second line of defence and sets the framework, policy, standards and methodology for assessing, scoring and prioritising ICS Risks across the Group. This function has overall responsibility for governance, oversight and independent challenge of first line's pursuit of the ICS strategy. Group ICS Risk Framework Strategy remains the responsibility of the ICS Risk Framework Owner (RFO), delegated from the GCRO to the Group CISRO.

Mitigation

ICS Risk is managed through the structured ICS Risk Type Framework, comprising a risk assessment methodology and supporting policy, standards and methodologies. These are aligned to industry recommended practice. We undertake an annual ICS Effectiveness Review to evaluate ICS Risk management practices in alignment with the Enterprise Risk Management Framework.

In 2022, we uplifted the ICS RTF to include an updated ICS end-to-end Risk Management and Governance approach and continued the roll out of the threat-led scenario risk assessment across the Group. The Group CISRO function monitors compliance to the ICS RTF by reviewing Group CISO's risk assessments and conducting independent assurance reviews.

Governance committee oversight

At Court level, the Court Risk Committee oversees the effective management of ICS Risk. The Standard Chartered Bank Executive Risk Committee is responsible for the governance and oversight of ICS Risk for the Group, and relies on other key PLC Group Committees and fora to ensure effective implementation of the ICS RTF – in particular, the PLC Group Non-Financial Risk Committee and the Cyber Security Advisory Forum. The Standard Chartered Bank Executive Risk Committee and PLC Group GNFRC are responsible for oversight of ICS Risk posture and Risk Appetite breaches rated very high and high. Sub-committees of the GNFRC have oversight of ICS Risk management arising from business, country and functional areas.

Decision-making authorities and delegation

The ICS RTF defines how the Group manages ICS Risk. The Group CISRO delegates authority to designated individuals through the ICS RTF, including second-line ownership at a Business, Function, Region and Country level.

The Group CISO is responsible for implementing ICS Risk Management within the Group, leveraging Group Process Owners and Business CISOs. These stakeholders cascade ICS Risk Management into the Businesses, Functions and Countries to comply with the ICS RTF, policy and standards.

Monitoring

Group CISO perform a threat-led risk assessment to identify key threats, in-scope applications and key controls required to ensure the Group remains within Risk Appetite.

The ICS Risk postures of all businesses, functions and countries are consolidated to present a holistic Group-level ICS Risk posture for ongoing monitoring.

During these reviews, the status of each risk is assessed against the Group's controls to identify any changes to impact and likelihood, which affects the overall risk rating.

Group CISO and Group CISRO monitor the ICS Risk profile and ensure that breaches of Risk Appetite are escalated to the appropriate governance committee or authority levels for adequate remediation and tracking. A dedicated Group CISRO team is supporting this work by executing offensive security testing exercises, which shows wider picture of risk security posture what leads to better visibility on potential risks "in flight".

Stress Testing
Stress testing and scenario analysis are used to assess capital requirements for ICS Risk. Specific scenarios are developed annually in collaboration between first- and second-line ICS teams, incorporating extreme but plausible ICS Risk events.

Compliance Risk
The Group defines Compliance Risk as the potential for penalties or loss to the Group or for an adverse impact to our clients, stakeholders or to the integrity of the markets we operate in through a failure on our part to comply with laws, or regulations.

Risk Appetite Statement
The Group has no appetite for breaches in laws and regulations related to regulatory non-compliance; recognising that whilst incidents are unwanted, they cannot be entirely avoided.

Roles and responsibilities
The Group Head, Conduct, Financial Crime and Compliance (Group Head, CFCC) as Risk Framework Owner for Compliance Risk provides support to senior management on regulatory and compliance matters. The Group Head, CFCC also performs the Financial Conduct Authority (FCA) controlled function and senior management function of Compliance Risk Oversight in accordance with the requirements set out by the FCA.

The Company addendum to the PLC Group Compliance RTF sets out the Group's overall approach to the management of Compliance Risk and the roles and responsibilities. All activities that the Group engages in must be designed to comply with the applicable laws and regulations in the countries in which we operate. The CFCC function is the second-line that provides oversight and challenge of the first-line risk management activities that relate to Compliance Risk.

Where Compliance Risk arises, or could arise, from failure to manage another PRT or sub-type, the Compliance RTF outlines that the responsibility rests with the respective Risk Framework Owner or control function to ensure that effective oversight and challenge of the first line can be provided by the appropriate second-line function.

Each of the assigned second-line functions has responsibilities including monitoring relevant regulatory developments from Non-Financial Services regulators at both Group and country levels, policy development, implementation, and validation as well as oversight and challenge of first-line processes and controls.

In addition, the role of CFCC has been further clarified in 2022 in relation to Compliance risk and the boundary of responsibilities with other PRTs.

Mitigation
We apply the PLC Group's policies for management of Compliance Risk. The CFCC function develops and deploys relevant policies and standards setting out requirements and controls for adherence by the Group to ensure continued compliance with applicable laws and regulations. Through a combination of standard setting, risk assessment, control monitoring and assurance activities, the Compliance Risk Framework Owner seeks to ensure that all policies are operating as expected to mitigate the risk that they cover. The installation of appropriate processes and controls is the primary tool for the mitigation of Compliance Risk. In this, the requirements of the Operational and Technology Risk Type Framework are followed to ensure a consistent approach to the management of processes and controls. Deployment of technological solutions to improve efficiencies and simplify processes has continued in 2022. These include launch of the MyComplianceOffice platform to manage conflict review for Outside Business Activity, Personal Account Dealing, Close Financial Relationship and Deals/ Reportable Events, and alongside digital chatbots, Advisor Connect to connect with an Advisor for complex queries.

Governance committee oversight
At a management level, the Standard Chartered Bank Executive Risk Committee is responsible for the governance and oversight of Compliance Risk, and relies on other key PLC Group level committees for the management of Compliance Risk – in particular, the PLC Group Non-Financial Risk Committee and the Risk and CFCC Non-Financial Risk Committee. Compliance Risk and the risk of non-compliance with laws and regulations resulting from failed processes and controls are overseen by the respective Country, Business, Product and Function Non-Financial Risk Committees including the Risk and CFCC Non-Financial Risk Committee for CFCC owned processes. Relevant matters, as required, are further escalated to the PLC Group Non-Financial Risk Committee and Standard Chartered Bank Executive Risk Committee. The Group also relies on the PLC Group CFCC Oversight Group, while not a formal committee, to provide oversight of CFCC risks including the effective implementation of the Compliance RTF. The Compliance Risk Framework Owner established a Regulatory Change Oversight Forum to have visibility and oversight of material and/or complex large-scale regulatory change emanating from financial services regulators impacting Non-Financial Risks. A CFCC Policy Council has also been established to provide oversight, challenge and direction to Compliance and FCC Policy Owners on material changes and positions taken in CFCC-owned Policies, including issues relating to regulatory interpretation and Group's CFCC risk appetite.

At Court level, oversight of Compliance Risk is primarily provided by the Court Audit Committee, and also by the Court Risk Committee for relevant issues.

Decision-making authorities and delegation
The Company addendum to the Compliance Risk Type Framework is the formal mechanism through which the delegation of Compliance Risk authorities is made. The Group Head, CABM has the authority to delegate second-line responsibilities within the CFCC function to relevant and suitably qualified individuals.

Monitoring
The monitoring of controls designed to mitigate the risk of regulatory non-compliance in processes is governed in line with the Operational and Technology Risk Type Framework. The Group has a monitoring and reporting process in place for Compliance Risk, which includes escalation and reporting to Risk and CFCC Non-Financial Risk Committee, PLC Group Non-Financial Risk Committee, Standard Chartered Bank Executive Risk Committee, Court Risk Committee and Court Audit Committee, as appropriate.

Stress testing
Stress testing and scenario analysis are used to assess capital requirements for Compliance Risk and form part of the overall scenario analysis portfolio managed under the Operational and Technology Risk Type Framework. Specific scenarios are developed annually with collaboration between the business, which owns and manages the risk, and the CFCC function, which is second line to incorporate significant Compliance Risk tail events. This approach considers the impact of extreme but plausible scenarios on the PLC Group's Compliance Risk profile. The Group relies on these stress tests to understand the Group-level vulnerabilities given the significant overlap between the Group and PLC Group activities.

Financial Crime Risk
The Group defines Financial Crime Risk as the potential for legal or regulatory penalties, material financial loss or reputational damage resulting from the failure to comply with applicable laws and regulations relating to international sanctions, anti-money laundering, anti-bribery & corruption, and fraud.

Risk Appetite Statement
The Group has no appetite for breaches in laws and regulations related to financial crime, recognising that while incidents are unwanted, they cannot be entirely avoided.

Roles and responsibilities
The Group Head, CFCC has overall responsibility for Financial Crime Risk and is responsible for the establishment and maintenance of effective systems and controls to meet legal and regulatory obligations in respect of Financial Crime Risk. The Group Head, CFCC is the Group's Compliance and Money-Laundering Reporting Officer and performs the FCA controlled function and senior management function in accordance with the requirements set out by the FCA, including those set out in their handbook on systems and controls. As the first line, the business unit process owners have responsibility for the application of policy controls and the identification and measurement of risks relating to financial crime. Business units must communicate risks and any policy non-compliance to the second line for review and approval following the model for delegation of authority.

Mitigation
We apply the four PLC Group policies in support of the Financial Crime Risk Type Framework

- Group Anti-Bribery and Corruption Policy
- Group Anti-Money Laundering and Counter Terrorist Financing Policy
- Group Sanctions Policy
- Group Fraud Risk Management Policy

The PLC Group operates risk-based assessments and controls in support of its Financial Crime Risk programme, including (but not limited to):

- Group Risk Assessment – the PLC Group monitors enterprise-wide Financial Crime Risks through the CFCC Risk Assessment process consisting of Financial Crime Risk and Compliance Risk assessments. The Financial Crime Risk assessment is a PLC Group-wide risk assessment undertaken annually to assess the inherent Financial Crime Risk exposures, and the associated processes and controls by which these exposures are mitigated.
- Financial Crime Surveillance – risk-based systems and processes to prevent and detect financial crime.

The strength of controls is tested and assessed through the PLC Group's Operational and Technology RTF, in addition to oversight by CFCC Assurance.

Governance committee oversight
At Court level, the Court Risk Committee oversees the effective management of Financial Crime Risk. At the executive level, the Standard Chartered Bank Executive Risk Committee is responsible for the governance and oversight of Financial Crime Risk for the Group, and relies on other key PLC Group committees for the management of Financial Crime Risk, in particular the PLC Group Financial Crime Risk Committee and the PLC Group Non-Financial Risk Committee for Fraud Risk. Both committees are responsible for ensuring effective oversight of Operational Risk relating to Financial Crime Risk and Fraud Risk, respectively, throughout the PLC Group.

Decision-making authorities and delegation

The Company addendum to the PLC Group Financial Crime Risk Type Framework is the formal mechanism through which the delegation of Financial Crime Risk authorities is made. The Group Head, CFCC is the Risk Framework Owner for Financial Crime Risk under the Group's Risk Management Framework. Certain aspects of Financial Crime Compliance, second-line oversight and challenge, are delegated within the CFCC function. Approval frameworks are in place to allow for risk-based decisions on client onboarding, potential breaches of sanctions regulation or policy, situations of potential money laundering (and terrorist financing), bribery and corruption or internal and external fraud.

Monitoring

The Group monitors Financial Crime Risk compliance against a set of Risk Appetite metrics that are approved by the Court. These metrics are reviewed periodically and reported regularly to the Standard Chartered Bank Executive Risk Committee and Court Risk Committee.

Stress testing

The assessment of Financial Crime vulnerabilities under stressed conditions or extreme events with a low likelihood of occurring is carried out through enterprise stress testing conducted at PLC Group level. The Group relies on these stress tests to understand the Group level vulnerabilities given the significant overlap between the Group and PLC Group activities.

Model Risk

The Group defines Model Risk as potential loss that may occur as a consequence of decisions or the risk of mis-estimation that could be principally based on the output of models, due to errors in the development, implementation or use of such models.

Risk Appetite Statement

The Group has no appetite for material adverse implications arising from misuse of models or errors in the development or implementation of models; whilst accepting model uncertainty.

Roles and responsibilities

The Global Head, Enterprise Risk Management is the Risk Framework Owner for Model Risk under the Group's Risk Management Framework. Responsibility for the oversight and implementation of the Model Risk Type Framework is delegated to the Global Head, Model Risk Management.

The PLC Group's Model Risk Type Framework sets out clear accountability and roles for Model Risk management through a Three Lines of Defence model. First-line ownership of Model Risk resides with Model Sponsors, who are business or function heads and assign a Model Owner for each model and provide oversight of Model Owner activities. Model Owners are the accountable executive for the model development process, represent model users, and are responsible for the overall model design process including engagement with Model Users to solicit feedback on the proposed model solution. Model Owners also coordinate the submission of models for validation and approval and ensure appropriate model implementation and use. Model Developers are responsible for the development of models, acting as a delegate of the Model Owner, and are responsible for documenting and testing the model in accordance with Policy requirements, and for engaging with Model Users as part of the development process. Second-line oversight is provided by Model Risk Management, which comprises Group Model Validation (GMV) and Model Risk Policy and Governance.

The PLC Group adopts an industry standard model definition as specified in the PLC Group's Model Risk Policy, together with a scope of applicability represented by defined model family types as detailed within the PLC Group's Model Risk Type Framework. Model Owners are accountable for ensuring that all models under their purview have been independently validated by GMV. Models must be validated before use and then on an ongoing basis, with schedule determined by the perceived level of Model Risk associated with the model, or more frequently if there are specific regulatory requirements

GMV independently reviews and grades models, in line with design objectives, business uses and compliance requirements, and highlights identified Model Risks by raising model related issues. The Model Risk Policy and Governance team provide oversight of Model Risk activities, performing regular Model Risk Assessment and risk profile reporting to senior management.

For countries or legal entities that are in scope of the Model Risk Type Framework, the Group Model Risk Policy specifies the Country Model Risk Framework Owner, delegated to the Country Chief Risk Officer, as accountable for ensuring model usage is correctly identified within the country or legal entity and a suitable local governance process is established to accommodate models requiring local regulatory approval and for any other specific local regulatory requirements at the country or legal entity level. Group Model Validation will take into consideration any country or legal entity specific considerations when validating a model, the model would be endorsed at Group level and then approved for use in the country or legal entity via the local governance process.

We will rely on the PLC Group's workplan and embed Model Risk into the Group's Risk Management approach accordingly.

Mitigation
We apply the PLC Group policies for Model Risk Management. The Model Risk policy and standards define requirements for model development and validation activities, including regular model performance monitoring. Any model issues or deficiencies identified through the validation process are mitigated through the application of model monitoring, model overlays and/or a model redevelopment plan, which undergo robust review, challenge and approval. Operational controls govern all Model Risk-related processes, with regular risk assessments performed to assess appropriateness and effectiveness of those controls, in line with the Operational and Technology Risk Type Framework, with remediation plans implemented where necessary.

Governance committee oversight
At Court level, the Court Risk Committee exercises oversight of Model Risk within the Group. At the executive level, the Standard Chartered Bank Executive Risk Committee is responsible for the governance and oversight of Model Risk for the Group and relies on other PLC Group committees to ensure effective measurement and management of Model Risk, in particular the Model Risk Committee. Sub-committees such as the Credit Model Assessment Committee, Traded Risk Model Assessment Committee and Financial Crime Compliance Model Assessment Committee oversee their respective in-scope models and escalate material Model Risks to the Model Risk Committee. In parallel, business and function-level risk committees provide governance oversight of the models used in their respective processes.

Decision-making authorities and delegation
The Company addendum to the PLC Group Model Risk Type Framework is the formal mechanism through which the delegation of Model Risk authorities is made. The Global Head, Enterprise Risk Management delegates authorities to designated individuals or Policy Owners through the Company addendum to the Risk Type Framework. The Model Risk Committee is responsible for approving models for use. Model approval authority is also delegated to the Credit Model Assessment Committee, Traded Risk Model Assessment Committee, Financial Crime Compliance Model Assessment Committee and individual designated model approvers for less material models.

Monitoring
The Court approved the Risk Appetite metrics for Model Risk in 2022. Adherence to Model Risk Appetite and any threshold breaches will be reported regularly to the Court Risk Committee and SC Bank Executive Risk Committee. These metrics and thresholds will be reviewed on an annual basis to ensure that threshold calibration remains appropriate and the themes adequately cover the current risks.

Models undergo regular monitoring based on their level of perceived Model Risk, with monitoring results and breaches presented to Model Risk Management and delegated model approvers. Model Risk Management produces Model Risk reports covering the model landscape, which include performance metrics, identified model issues and remediation plans. These are presented for discussion at the Model Risk governance committees on a regular basis.

Stress testing
Models play an integral role in the PLC Group's stress testing and are rigorously user-tested to ensure that they are fit-for-use under stressed market conditions. Compliance with Model Risk management requirements and regulatory guidelines are also assessed as part of each stress test, with any identified gaps mitigated through model overlays and defined remediation plans.

Reputational & Sustainability Risk
The Group defines Reputational and Sustainability Risk as the potential for damage to the franchise (such as loss of trust, earnings, or market capitalisation), because of stakeholders taking a negative view through actual or perceived actions or inactions, including a failure to uphold responsible business conduct or lapses in our commitment to do no significant environmental and social harm through our client, third-party relationships or our own operations.

Risk Appetite Statement
The Group aims to protect the franchise from material damage to its reputation by ensuring that any business activity is satisfactorily assessed and managed by the appropriate level of management and governance oversight. This includes a potential failure to uphold responsible business conduct or lapses in our commitment to do no significant environmental and social harm.

Reputational and Sustainability Risk continues to be an area of growing importance, driving a need for strategic transformation across business activities and risk management to ensure that we uphold the principles of Responsible Business Conduct and continue to do the right thing for our stakeholders, the environment and affected communities. The PLC Group's policy frameworks and Position Statements integrate our values into our core working practices by articulating our approach to clients in sensitive sectors and our commitments to climate change and human rights. The PLC Group continues to progress on transformation agenda, driving Net Zero commitments and building a leading sustainable franchise. The PLC Group's progress to date includes the setting of public Net Zero targets, leadership in voluntary carbon markets, and ongoing support of innovation in green, transition, and social finance.

The growth of Sustainable Finance products offering across the banking industry has prompted stronger and more robust regulations to prevent greenwashing. The PLC Group is moving quickly to integrate anti-greenwashing policies, standards and controls into our risk management activities. As the PLC Group prepares for the varying regulatory developments across our footprint, we continue to invest in data and infrastructure to reinforce our compliance efforts and are actively engaging with several of our regulatory supervisors. In 2022, the PLC Group has increased capabilities in horizon scanning and focused on developing an effective operating model to manage regulatory change to bolster our efforts to systematically track emerging risks across our business operations and supply chains.

Roles and responsibilities

The Global Head, Enterprise Risk Management is the Risk Framework Owner for Reputational and Sustainability Risk under the Group's Risk Management Framework.

The responsibility for Reputational and Sustainability Risk management is delegated to Reputational and Sustainability Risk Leads in ERM as well as Chief Risk Officers at region, country and client-business levels. They constitute the second line of defence, overseeing and challenging the first line of defence, which resides with the Chief Executive Officers, Business Heads, Product Heads and Function Heads in respect of risk management activities of reputational and sustainability-related risks respectively.

In the first line of defence, the PLC Group has in 2022 appointed a Chief Sustainability Officer (CSO) whose remit spans across both Sustainability strategy and client solutions. Reporting to the CSO is PLC Group Sustainability team, who manages the overall PLC Group Sustainability strategy and engagement. On client solutions, the Sustainable Finance team is responsible for pan-bank sustainable finance products and frameworks to help identify green and sustainable finance and transition finance opportunities to aid our clients on their sustainability journey. Furthermore, the Environmental and Social Risk Management team (ESRM) provides dedicated advisory and challenge to businesses on the management of environmental and social risks and impacts arising from the PLC Group's client relationships and transactions.

Mitigation

In line with the principles of Responsible Business Conduct and Do No Significant Harm, the Group deems Reputational and Sustainability Risk to be driven by:

- negative shifts in stakeholder perceptions due to decisions related to clients, products, transactions, third parties and strategic coverage
- potential material harm or degradation to the natural environment (environmental) through actions/inactions of the Group
- potential material harm to individuals or communities (social) risks through actions/inactions of the Group

We apply the PLC Group's policies for management of Reputational and Sustainability Risk.

The PLC Group's Reputational Risk policy sets out the principal sources of Reputational Risk driven by negative shifts in stakeholder perceptions as well as responsibilities, control and oversight standards for identifying, assessing, escalating and effectively managing Reputational Risk. The PLC Group takes a structured approach to the assessment of risks associated with how individual client, transaction, product and strategic coverage decisions may affect perceptions of the organisation and its activities, based on explicit principles including, but not limited to human rights, gambling, defence and dual use goods. Whenever potential for stakeholder concerns is identified, issues are subject to prior approval by a management authority commensurate with the materiality of matters being considered. Such authorities may accept or decline the risk or impose conditions upon proposals, to protect the PLC Group's reputation. In 2022, the Reputational Risk Policy was enhanced to include more rigorous assessment of clients operating in sectors which have heightened Climate Risk.

The PLC Group's Sustainability Risk policy sets out the requirements and responsibilities for managing environmental and social risks for the Group's clients, third parties and in our own operations, as guided by various industry standards such as the OECD's Due Diligence Guidance for Responsible Business Conduct, Equator Principles, UN Sustainable Development Goals and the Paris Agreement.

- Clients are expected to adhere to minimum regulatory and compliance requirements, including criteria from the PLC Group's Position Statements. In 2022, the Sustainability Risk Policy was enhanced to include the monitoring of inherent risks related to Sustainable Finance products and transactions and clients through-out their lifecycle – from labelling to disclosures.
- Third parties such as suppliers must comply with the PLC Group's Supplier Charter which sets out the PLC Group's expectations on ethics, anti-bribery and corruption, human rights, environmental, health and safety standards, labour and protection of the environment.
- Within our operations, the PLC Group seeks to minimise its impact on the environment and have targets to reduce energy, water and waste.

Reputational and Sustainability Risk policies and standards are applicable to all PLC Group entities. However, local regulators in some markets may impose additional requirements on how banks manage and track Reputational and Sustainability Risk. In such cases, these are complied with in addition to PLC Group policies and standards.

Governance committee oversight
The PLC Group's Culture and Sustainability Committee provides oversight across PLC Group for our Sustainability strategy while the Court Risk Committee oversees Reputational and Sustainability Risk as part of the Group RMF. The Standard Chartered Bank Executive Risk Committee provides executive-level committee oversight and relies on other key PLC Group committees for the effective management of Reputational and Sustainability Risk in particular the PLC Group Responsibility and Reputational Risk Committee (GRRRC), the Sustainable Finance Governance Committee and the PLC Group Non-Financial Risk Committee.

Decision-making authorities and delegation
The addendum to the PLC Group's Reputational and Sustainability RTF is the formal mechanism through which the delegation of Reputational and Sustainability Risk authorities is made. The Global Head, Enterprise Risk Management delegates risk acceptance authorities for stakeholder perception risks to designated individuals in the first line and second line or to Committees such as the GRRRC via risk authority matrices.

These risk authority matrices are tiered at country, regional, business segment or Group levels and are established for risks incurred in strategic coverage, clients, products or transactions. For environmental and social risks, the ESRM team must review and support the risk assessments for clients and transactions and escalate to the Reputational and Sustainability Risk leads as required.

Monitoring
Exposure to stakeholder perception risks arising from transactions, clients, products and strategic coverage are monitored through established triggers outlined in risk materiality matrices to prompt the right levels of risk-based consideration by the first line and escalations to the second line where necessary. Risk acceptance decisions and thematic trends are also being reviewed on a periodic basis.

Exposure to Sustainability Risk is monitored through triggers embedded within the first-line processes where environmental and social risks are considered for clients and transactions via the Environmental and Social Risk Assessments and considered for vendors in our supply chain through the Modern Slavery questionnaires.

Furthermore, monitoring and reporting on the risk appetite metrics at PLC Group level ensures that there is appropriate oversight over performance and breaches of thresholds across key metrices namely in concentration of material reputational risk, level of alignment with PLC Group's Net Zero aspirations and Position Statements, and modern slavery risks in our suppliers.

Stress testing
Reputational Risk outcomes are taken into account in enterprise stress tests and incorporated into the PLC Group's stress testing scenarios. For example, the PLC Group might consider what impact a hypothetical event leading to loss of confidence among liquidity providers in a particular market might have, or what the implications might be for supporting part of the organisation in order to protect the brand. As Sustainability Risk continues to evolve as an area of emerging regulatory focus with various markets developing ESG regulatory guidance, we are keeping pace with external developments to enable us to explore meaningful scenario analysis in the future with the aim of advancing Reputational and Sustainability Risk management.

Climate Risk
The Group recognises Climate Risk as an integrated risk type. Climate Risk is defined as the potential for financial loss and non-financial detriments arising from climate change and society's response to it.

Risk Appetite Statement
The Group aims to measure and manage financial and non-financial risks from climate change, and reduce emissions related to our own activities and those related to the financing of clients in alignment with the Paris Agreement.

Climate Risk has been recognised by the PLC Group as an emerging risk since 2017 and was elevated to an integrated risk type (previously known as a material cross-cutting risk) within our central risk management framework in 2019. The PLC Group has introduced Climate Risk into mainstream risk management processes in alignment with the Bank of England's Supervisory Statement 3/19 requirements. We have made further progress this year in embedding Climate Risk considerations across the impacted PRTs, and by using the results from our management scenario analysis, we are building a good understanding of the markets and industries where the effects of climate change will have the greatest impact. However, it is still a relatively nascent risk area which will mature and develop over time. We will rely on the PLC Group's workplan and integrate Climate Risk into the Bank's risk management approach accordingly.

Roles and responsibilities
The three lines of defence model as per the Group's Risk Management Framework applies to Climate Risk. The GCRO has the ultimate second-line and senior management responsibility for Climate Risk. The GCRO is supported by the Global Head, Enterprise Risk Management who has day-to-day oversight and central responsibility for second-line Climate Risk activities. As Climate Risk is integrated into the relevant PRTs, second-line responsibilities lie with the Risk Framework Owner (at Group, regional and country level), with subject matter expertise support from the central Climate Risk team.

Mitigation

As an integrated risk type manifests through other PRTs, risk mitigation activities are specific to individual PRTs. The Group has made progress to integrate Climate Risk into PRT processes. Climate Risk assessments are considered as part of Reputational and Sustainability transaction reviews for clients and transactions in high carbon sectors. We have directly engaged with clients on their adaptation and mitigation plans using client level Climate Risk questionnaires and integrated climate risk into the credit process for ~70 per cent of our corporate client exposure in CCIB. As part of quarterly credit portfolio reviews in CPBB, physical risk assessments for the residential mortgage portfolios are also being monitored for concentration levels. The Traded Risk stress testing framework covers market impacts from Climate Risk – this includes a transition risk and two physical risk scenarios. Physical and transition risk ratings for sovereigns are widely used across the Group for risk management and reporting purposes. The focus for Operational and Technology Risk was originally on Property, Resilience and Third-Party Risk management, and is now being expanded to material technology arrangements. We have also completed liquidity risk assessments for our top liquidity providers. Relevant policies and standards across PRTs have been updated to factor in Climate Risk considerations and a focus area for 2022 was to build out our risk management, data and modelling capabilities.

Governance committee oversight

Board-level oversight is exercised through the SC Bank Court Risk Committee (CRC), and regular Climate Risk updates are provided to the Court and CRC. At the executive level, the Standard Chartered Bank Executive Risk Committee oversees implementation of the Climate Risk workplan and relies on other key PLC Group committees and fora for the management of Climate Risk, including the Climate Risk Management Committee. The Climate Risk Management Committee, appointed by the GCRO, consists of senior representatives from the Business, Risk, Strategy and other functions such as Compliance, Audit and Finance. The Climate Risk Management Committee meets at least six times a year to oversee the implementation of the Group's Climate Risk workplan and progress in meeting regulatory requirements, monitor the Climate Risk profile of the Group and review Climate Risk-related disclosures and stress tests. The PLC Group has also strengthened country and regional governance oversight for the Climate Risk profile across our key markets in 2022.

Tools and methodologies

Applying existing risk management tools to quantify Climate Risk is challenging given inherent data and methodology challenges, including the need to be forward-looking over long time horizons. To quantify climate physical and transition risk we leverage and have invested in a number of areas, including tools and partnerships at the PLC Group level.

- Munich Re – we are using Munich Re's physical risk assessment tool, which is built on extensive re-insurance experience
- Baringa Partners – we are using Baringa's flagship climate models to understand climate scenarios, and compute transition risk and temperature alignment
- Standard & Poor – we are leveraging S&P and Trucost's wealth of climate data covering asset locations, energy mixes and emissions
- Imperial College – we are leveraging Imperial's academic expertise to advance our understanding of climate science, upskill our staff and senior management, and progress the state of independent research on climate risks with an acute focus on emerging markets
- Deloitte – we are working with Deloitte to build internal IFRS 9 and stress testing models.

Decision-making authorities and delegation

The Global Head, Enterprise Risk Management is supported by a centralised Climate Risk team within the ERM function. The Global Head, Climate Risk and Net Zero Oversight is responsible for ensuring and executing the delivery of the Climate Risk workplan which will define decision-making authorities and delegations across the PLC Group.

Monitoring

The Climate Risk Appetite Statement is approved and reviewed annually by the Court, following the recommendation of the Court Risk Committee.

The PLC Group has developed its first-generation Climate Risk reporting and Board/Management Team Level Risk Appetite metrics and this will continue to be enhanced in 2023. Management information and Risk Appetite metrics are also being progressively rolled out at the regional and country level.

Stress testing

As Climate Risk intensifies over time, the future global temperature rises will depend on today's transition pathway. Considering different transition scenarios is crucial to assessing Climate Risk over the next 10, 20 and 50 years. Stress testing and scenario analysis are used to assess capital requirements for Climate Risk and since 2020 physical and transition risks have been included in the PLC Group Internal Capital Adequacy Assessment Process (ICAAP). In 2022, the PLC Group undertook a number of Climate Risk stress tests, including by the Monetary Authority of Singapore and internal management scenario analysis. We will rely on these stress tests to understand the Group level vulnerabilities given the significant overlap between SC Bank and PLC Group's activities.

In 2023, the PLC Group intends to extend its management scenario capabilities, which will strengthen business strategy and financial planning and support the PLC Group's Net Zero journey.

Digital Assets Risk

Digital Assets (DA) Risk has been managed under the Digital Assets Risk Management Approach since 2020 and was formalised as an Integrated Risk Type (previously known as material cross cutting risk) within the RMF. Digital Assets Risk follows the prescribed, robust risk management practices across the PRTs, with specific expertise applied from Digital Assets experts. Risk management practices take guidance from the "Dear CEO" letters published by the Prudential Regulatory Authority and the Financial Conduct Authority in June 2018, with updated notices in June 2022. This is a developing risk area which will mature and stabilise over time as the technology and associated research becomes more established.

Risk Appetite Statement
As Digital Assets Risk manifests through the various PRTs, the specific Risk Appetite statements for the PRTs apply.

Roles and responsibilities
The three lines of defence model defined in the RMF applies to Digital Assets Risk. The GCRO has the second-line and senior management responsibility for Digital Assets Risk with respect to the framework. The respective Business Segments Senior Managers are responsible for the overall management of Digital Assets initiatives within their segments.

The GCRO is supported by the Global Head, Enterprise Risk Management and the Global Head, Digital Assets Risk Management who have day-to-day oversight and central responsibility for second line Digital Assets Risk activities. As Digital Assets Risk is integrated into the relevant PRTs, Risk Framework Owners and dedicated Subject Matter Experts (SMEs) across the PRTs also have second line responsibilities for Digital Assets Risk.

Mitigation
The Group deploys a DA specific policy to outline incremental risk management requirements for DA related activities. The Group's policies for other PRTs also include DA requirements where relevant Risk mitigation activities are also specific to individual PRTs and the Group has undertaken development and integration of Digital Assets Risk into the PRT processes. Digital Assets Risk Assessments are conducted on certain higher-risk DA related Projects and Products. These specific risk assessments detail the specific inherent risks, residual risks, controls and mitigants across the PRTs and are reviewed and supported by the respective Risk Framework Owners and DA SMEs.

Governance committee oversight
Board-level oversight is exercised through the Board Risk Committee (BRC), and DA Risk updates are provided to the Board and BRC, as requested. At the executive level, the Group Risk Committee (GRC) oversees the risk management of DA. The GCRO has also appointed a dedicated Digital Assets Risk Committee (DRC) consisting of senior representatives, Risk Framework Owners and SMEs across the Group including the business, risk, and other functions such as legal. The DRC meets at the pre-defined frequency, a minimum of four times per year, to review and assess the detailed risk assessments related to DA Projects and Products, discuss development and implementation of the DA risk management, and to provide structured governance around DA.

Decision-making authorities and delegation
The Global Head, Enterprise Risk Management is supported by a centralised DA team within the ERM function and is responsible for the DA framework. The respective PRT Risk Framework Owners and SMEs utilise decision making authorities granted to them within their respective PRTs or in individual capacities.

Monitoring
Digital Assets are monitored through the existing Group Risk Appetite metrics across the PRTs. In addition, specific Digital Assets Risk Appetite metrics are approved and reviewed annually by GRC. DA decisions relating to other PRTs are taken within the authorities for the respective PRT.

Stress testing
Stress testing and scenario analysis are used to help assess capital requirements for Digital Assets Risk and form part of the overall scenario analysis portfolio managed under the Operational and Technology Risk Type Framework. Specific scenarios are developed annually with collaboration between the business, which owns and manages the risk, and the DA Risk function, to consider relevant DA scenarios. This approach considers the impact of extreme but plausible scenarios on the PLC Group's capital profile with respect to DA.

Third Party Risk

The Group recognises Third Party Risk as an Integrated Risk Type. Third Party Risk is defined as the potential for loss or adverse impact from failure to manage multiple risks arising from the use of Third Parties, and is the aggregate of these risks.

The engagement of Third Parties in providing products, services and goods is essential for the Group to operate efficiently and effectively, however we also understand that doing so may introduce incremental risks which, if not managed correctly, could result in regulatory non-compliance, financial loss and or adverse impact to clients. We continue to enhance our policies, standards, processes and controls to ensure we safely manage any incremental risks introduced by the use of Third Parties.

Risk Appetite Statement

As Third Party Risk manifests through the various PRTs, the specific Risk Appetite statements for the PRTs apply. Third Party Risk does not carry a standalone Risk Appetite statement.

Roles and responsibilities

The Global Head of Risk, Functions and Operational Risk has second line oversight responsibility for Third Party Risk as defined in the Enterprise Risk Management Framework. The three lines of defence model applies to Third Party Risk, and roles and responsibilities are further defined in the Third Party Risk Management Policy and Standard. It is important to note that as an Integrated Risk Type, the risks associated with the management of Third Parties materialise across multiple PRTs. The Risk Framework Owners for the PRTs are therefore responsible for embedding requirements to manage Third Party Risk within their Risk Type Frameworks, Policies and Standards as appropriate, and ensuring compliance to the minimum requirements defined by the Global Head of Risk, Functions and Operational Risk.

Mitigation

To ensure we continue to prioritise the engagement of Third Parties, while safely managing any risks, the Third Party Risk Management Policy and Standard, in conjunction with the PRT Policies and Standards, holistically set out the Group's minimum controls requirements for the identification, mitigation and management of risks arising from the use of Third Parties. These minimum control requirements have been enhanced in 2022 to ensure compliance with new requirements issued by our regulators.

The Group aims to manage its risk profile within Risk Appetite, and in order to do so, Risk Appetite metrics for Third Party Risk are embedded within the respective PRTs including Information and Cyber Security, Compliance, Financial Crime and Operational and Technology Risk. To further supplement this, additional work is underway to enhance the Group's approach to concentration risk. Where appropriate, Risk Appetite metrics are cascaded to countries.

Governance committee oversight

At the Board level, the Board Risk Committee oversees the effective management of Third Party Risk. At the executive level, the Group Risk Committee is responsible for the governance and oversight of Third Party Risk for the Group. The Group Third Party Risk Management Committee (GTPRMC), established under the Group Non-Financial Risk Committee, is responsible for overseeing all Third Party Risk types and associated risks across the Group, as well as the effective embedding of Third Party Risk across the respective PRTs.

The management of Third Party Risk is overseen at a Country or entity level by the Country Third Party Risk Management Committee (CTPRMC). In smaller markets the responsibilities are exercised directly by the Executive Risk Committee (for subsidiaries) or Country Risk Committee (for branches).

Decision-making authorities and delegation

The GCRO has second line responsibility for Third Party Risk under the Senior Managers Regime. The GCRO has delegated the Integrated Risk Framework Owner responsibilities associated with Third Party Risk to the Global Head of Risk, Functions and Operational Risk, through the Enterprise Risk Management Framework. Second line oversight and challenge responsibilities for Third Party Risk at a Country or entity level are delegated to the Country Chief Risk Officers.

Monitoring

The monitoring of Third Party Risk within the Group's Process Universe is managed in accordance with the Operational and Technology Risk Type Framework.

The Third Party Risk management profile is reported to the GTPRMC, and includes the monitoring and oversight on Risk Appetite, assessment of new Third Party arrangements, on-going performance monitoring of Third Party arrangements, internal and external events and elevated risks with appropriate treatment plans.

Stress testing

Stress testing and scenario analysis are used to assess capital requirements, and for Third Party Risk, form part of the overall scenario analysis portfolio managed under the Operational and Technology Risk Type Framework. Specific scenarios are developed annually with collaboration between the business, which owns and manages the risk, and the second line of defence. This approach considers the impact of extreme but plausible scenarios on the Group's Risk profile.

Capital review

Capital management and governance

The Group's capital and leverage position is managed within the Court-approved Risk Appetite framework. Further detail is provided within the Risk Management Framework section on (page 128).

Standard Chartered Bank is authorised by the PRA and regulated by the Financial Conduct Authority and the PRA as Standard Chartered Bank (Solo Consolidated). Standard Chartered Bank continues to operate through its branches and a number of subsidiaries, all of which remain well capitalised in line with their applicable Court-approved Risk Appetites which takes into account local regulations, Pillar 1 and 2 requirements and regulatory and management buffers as applicable.

The Group's CET1 ratio remained strong at 12.3 per cent at FY2022 with leverage at 4.8 per cent. The Group maintains high levels of loss absorbing capacity. Compared to 31 December 2021, the Group's CET1 ratio remained largely flat. RWAs decreased by $17.6 billion to $176.4 billion. CET1 capital decreased by $2.1bn as profits of $2.4 billion were more than offset by distributions of $0.9 billion, a foreign currency translation impact of $1.2 billion, movement in other comprehensive income of $1.0 billion, removal of software benefit $0.7bn and an increase in regulatory deductions and other movements of $0.7 billion.

On 9 July 2021, the PRA published a policy statement on implementing Basel standards which confirmed that qualifying software assets would need to be deducted from CET1 capital from January 2022 with impact of 32 basis points to CET1 ratio.

From 1 January 2022 RWA increases due to post model adjustments following new PRA rules on IRB models and the introduction of standardised rules for counterparty credit risk on derivatives and other instruments.

Capital ratios

	2022	2021
CET1	**12.3%**	12.3%
Tier 1 capital	**15.4%**	15.3%
Total Capital	**22.4%**	21.6%

Capital base[1] (audited)

	2022 $million	2021 $million
CET1 capital instruments and reserves		
Capital instruments and the related share premium accounts	20,893	20,893
Of which: share premium accounts	296	296
Retained earnings[2]	10,467	9,831
Accumulated other comprehensive income (and other reserves)	(6,965)	(4,245)
Non-controlling interests (amount allowed in consolidated CET1)	145	179
Independently audited year-end profits	2,410	1,639
Foreseeable dividends	(189)	(186)
CET1 capital before regulatory adjustments	**26,761**	28,111
CET1 regulatory adjustments		
Additional value adjustments (prudential valuation adjustments)	(626)	(453)
Intangible assets (net of related tax liability)	(4,002)	(3,037)
Deferred tax assets that rely on future profitability (excludes those arising from temporary differences)	(66)	(141)
Fair value reserves related to net losses on cash flow hedges	513	11
Deduction of amounts resulting from the calculation of excess expected loss	(627)	(416)
Net gains on liabilities at fair value resulting from changes in own credit risk	26	3
Defined-benefit pension fund assets	(69)	(114)
Fair value gains arising from the institution's own credit risk related to derivative liabilities	(74)	(51)
Exposure amounts which could qualify for risk weighting of 1250%	(61)	(29)
Other regulatory adjustments to CET1 capital[3]	(29)	–
Total regulatory adjustments to CET1	(5,015)	(4,227)
CET1 capital	**21,746**	23,884
Additional Tier 1 capital (AT1) instruments	**5,423**	5,892
AT1 regulatory adjustments	**(20)**	(20)
Tier 1 capital	**27,149**	29,756
Tier 2 capital instruments	**12,469**	12,105
Tier 2 regulatory adjustments	**(30)**	(30)
Tier 2 capital	**12,439**	12,075
Total capital	**39,588**	41,831
Total risk-weighted assets (unaudited)	**176,355**	193,988

1 Capital base is prepared on the regulatory scope of consolidation

2 Retained earnings include IFRS9 capital relief (Transitional) of $106 million

3 Other regulatory adjustments to CET1 capital includes Insufficient coverage for non-performing exposures of $(29) million

Leverage ratio

Capital and total exposures	2022 $million	2021 $million
Tier 1 capital	**27,149**	29,258
Total leverage ratio exposures	**569,172**	653,396
Leverage ratio	**4.8%**	4.5%

Independent Auditor's report
to the members of Standard Chartered Bank

Opinion
In our opinion:

- the financial statements of Standard Chartered Bank (the 'Company' or the 'Parent Company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the Company's affairs as at 31 December 2022 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with UK adopted International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) as adopted by the European Union (EU IFRS);
- the Company financial statements been properly prepared in accordance with UK adopted IAS as applied in accordance with section 408 of the Companies Act 2006; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements of the Group and the Company for the year ended 31 December 2022 which comprise:

Group	Company
Consolidated income statement for the year ended 31 December 2022;	Balance sheet as at 31 December 2022;
Consolidated statement of comprehensive income for the year ended;	Cash flow statement for the year then ended;
Consolidated balance sheet as at 31 December 2022;	Company statement of changes in equity for the year ended 31 December 2022; and
Consolidated statement of changes in equity for the year then ended;	Related notes 1 to 39, where relevant to the financial statements, including a summary of significant accounting policies.
Consolidated Cash flow statement for the year then ended;	
Related notes 1 to 39 to the financial statements, including a summary of significant accounting policies; and	
Risk and capital disclosures marked as 'audited' from page 63 to page 153.	

The financial reporting framework that has been applied in their preparation is applicable law and UK adopted IAS and EU IFRS; and as regards the Parent Company financial statements, UK adopted IAS as applied in accordance with section 408 of the Companies Act 2006.

Basis for opinion
We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence
We are independent of the Group and the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Company and we remain independent of the Group and the Company in conducting the audit.

Conclusions relating to going concern
In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate. Our evaluation of the directors' assessment of the Group and Parent Company's ability to continue to adopt the going concern basis of accounting included:

- Performing a risk assessment to identify factors that could impact the going concern basis of accounting, including the impact of external risks such as geopolitical risk.
- Assessing the Group's forecast capital, liquidity, and leverage ratios over the period of twelve months from 16 February 2023 to evaluate the headroom against the minimum regulatory requirements and the risk appetite set by the directors.
- Engaging internal valuation and economic specialists to assess the reasonableness of assumptions used to develop the forecasts in the Corporate Plan and evaluating the accuracy of historical forecasting.
- Inspecting the Group's funding plan and repayment plan for funding instruments maturing over the period of twelve months from 16 February 2023.
- Understanding and evaluating credit rating agency ratings and actions.

- Assessing the results of management's stress testing, including consideration of principal and emerging risks, on funding, liquidity, and regulatory capital.
- Reviewing correspondence with prudential regulators and authorities for matters that may impact the going concern assessment; and
- Evaluating the appropriateness of the going concern disclosure included in note 1 to the financial statements.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group and the Company's ability to continue as a going concern for a period of twelve months from 16 February 2023.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's ability to continue as a going concern.

Overview of our audit approach

Audit scope	• We performed an audit of the complete financial information of 10 components across 8 countries and audit procedures on specific balances for a further 8 components across 8 countries. • The components where we performed full or specific audit procedures accounted for 76% of absolute adjusted profit before tax (PBT) measure used to calculate materiality, 83% of absolute operating income and 92% of total assets.
Key audit matters	• Credit impairment • User access management • Impairment of Goodwill and Investments in subsidiary undertakings • Valuation of financial instruments held at fair value with higher risk characteristics
Materiality	• Overall group materiality of $178m which represents 5% of adjusted PBT.

An overview of the scope of the Parent Company and Group audits

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each component within the Group. Taken together, this enables us to form an opinion on the consolidated financial statements. We took into account the size, risk profile, the organisation of the Group and effectiveness of control environment, changes in the business environment and other factors such as the level of issues and misstatements noted in prior period when assessing the level of work to be performed at each component.

In assessing the risk of material misstatement to the consolidated financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, of the 266 reporting units of the Group, we selected 21 reporting units which represent 18 components in 16 countries: Bangladesh, Cameroon, India, Indonesia, Japan, Kenya, Malaysia, Nigeria, Pakistan, Republic of South Africa, Singapore, Sri Lanka, United Arab Emirates, United Kingdom, United States of America and Zambia. The definition of a component is aligned with the structure of the Group's consolidation system, typically these are either a branch, group of branches, group of subsidiaries, a subsidiary or an associate.

We took a centralised approach to auditing certain processes and controls, as well as the substantive testing of specific balances. This included audit work over Group's Global Business Services shared services centre, Commercial, Corporate and Institutional Banking, Credit Impairment and Technology.

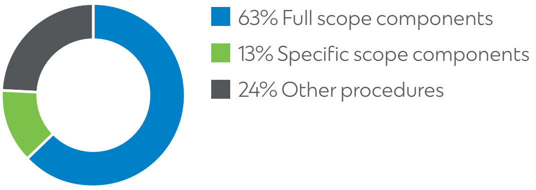
Of the 18 components selected in 16 countries, we performed an audit of the complete financial information of 10 components in 8 countries ('full scope components') which were selected based on their size or risk characteristics. For the remaining 8 components in 8 countries ('specific scope components'), we performed audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the Group financial statements either because of the size of these accounts or their risk profile.

The reporting components where we performed audit procedures accounted for 76% (2021: 76%) of the Group's absolute adjusted PBT, 83% (2021: 83%) of the Group's absolute operating income and 92% (2021: 93%) of the Group's total assets. For the current year, the full scope components contributed 63% (2021: 68%) of the Group's absolute adjusted PBT, 68% (2021: 73%) of the Group's absolute operating income and 80% (2021: 82%) of the Group's total assets. The specific scope components contributed 13% (2021: 8%) of the Group's absolute adjusted PBT, 15% (2021: 10%) of the Group's absolute operating income and 12% (2021: 11%) of the Group's total assets. The audit scope of these components may not have included testing of all significant accounts of the component but will have contributed to the coverage of significant accounts tested for the Group overall.

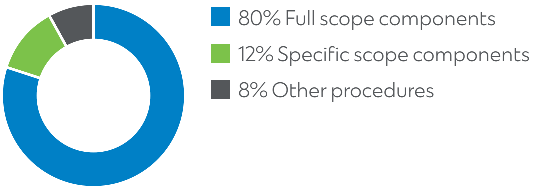
Of the remaining 245 reporting units that together represent 24% of the Group's absolute adjusted PBT, none individually contributed more than 3% of the Group's absolute adjusted PBT. For the components represented by these reporting units, we performed other procedures at a Group level which included: performing analytical reviews at a Group financial statement line item level, testing entity level controls, performing audit procedures on the centralised shared service centres, testing of consolidation journals and intercompany eliminations, inquiring with overseas EY teams on the outcome of prior year local statutory audits (where audited by EY) to identify any potential risks of material misstatement to the Group financial statements.

The charts below illustrate the coverage obtained from the work performed by our audit teams.

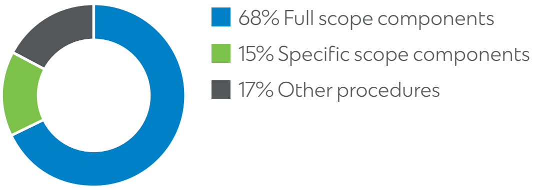
Absolute adjusted Profit before tax



Total assets



Absolute operating income



Changes from the prior year

We assessed our 2022 audit scope with consideration of history or expectation of unusual or complex transactions and potential for material misstatements. We also kept our audit scope under review throughout the year.

One component (Germany) which was included in our prior year audit scope and assigned full scope, which has a less than 1% contribution to current year absolute adjusted PBT, 1.9% of the Group's total assets and 1.1% of the Group's absolute operating income, was excluded from the Group audit scope in the current year based on our updated risk assessment. For this component as well as Philippines, Uganda and Jordan, the Primary Audit Team performed certain procedures centrally over the cash balances as at 31 December 2022. Nigeria and Bangladesh were full scope components in the prior year but were designated as specific scope components in the current year based on our updated risk assessment.

In 2022 we assigned a specific scope to Cameroon, Sri Lanka, South Africa and Zambia components that are significant based on risk. These components were not in-scope in the prior year.

Involvement with component teams

In establishing our overall approach to the Group audit, we determined the type of work that needed to be undertaken at each of the components by us, as the Group audit engagement team, or by component auditors from other EY global network firms.

Of the 10 full scope components, audit procedures were performed on 1 of these (the audit of the Company) directly by the Primary Audit Team (EY London) in the United Kingdom. For 2 specific scope components, the audit procedures were performed by the Primary Audit Team. Where components were audited by the Primary Team, this was under the direction and supervision of the Senior Statutory Auditor.

For the remaining 15 components, where the work was performed by component auditors, we determined the appropriate level of involvement to enable us to determine that sufficient audit evidence had been obtained as a basis for our audit opinion on the Group as a whole. In addition, the Group has centralised processes and controls over key areas in its shared service centres. Members of the Primary Audit Team undertook direct oversight, review and coordination of our shared service centre audits.

The Primary Audit Team undertook visits to component teams and shared services centres. During the current year's audit cycle, visits were undertaken by the Primary Audit Team to the component teams in the following locations:

- Bangladesh
- India (including the shared services centre)
- Singapore (including the shared services centre)
- Malaysia (including the shared services centre)
- Indonesia
- United Arab Emirates
- United States of America

These visits involved oversight of work undertaken at those locations, discussion of the audit approach and any issues arising from their work, meeting with local management, and reviewing relevant audit working papers on key risk areas.

In addition to the site visits, the Primary Audit Team interacted regularly with the component and shared services centre audit teams where appropriate during the audit, reviewed relevant working papers remotely and were responsible for the overall scoping and direction of the audit process.

The programme of our visits to shared service centres located in China was impacted by the travel restrictions and other imposed government measures which are still in place from the prior year as a result of the ongoing COVID-19 pandemic (albeit less so when compared to the prior year). For this location, oversight of the work was performed remotely through established EY software collaboration platforms for the secure and timely delivery of requested audit evidence.

We also undertook video conference meetings with local audit teams and management. These virtual meetings involved discussing the audit approach with the component and shared service centres team and any issues arising from their work and performing remote reviews of key audit workpapers.

This, together with the additional procedures performed at Group level, gave us appropriate evidence for our opinion on the Group and Company financial statements.

Climate change

Stakeholders are increasingly interested in how climate change will impact the economy, including the banking sector, and further how this may consequently impact the valuation of assets and liabilities held on bank balance sheets. The Group has determined climate risk to be a Primary Integrated Risk Type and the assessment of that risk is explained on pages 146 - 149 in Risk Review and Capital Review and on pages 32 - 51 in the strategic report, where they have also explained their climate commitments.

All of these disclosures form part of the "Other information", rather than the audited financial statements. Our procedures on these unaudited disclosures therefore consisted solely of considering whether they are materially inconsistent with the financial statements or our knowledge obtained in the course of the audit or otherwise appear to be materially misstated, in line with our responsibilities on "Other information".

In planning and performing our audit we assessed the potential impacts of climate change on the Group's business and any consequential material impact on its financial statements.

The Group has explained in the strategic report how they have reflected the impact of climate change in their financial statements, including how this aligns with their commitment to the aspirations of the Paris Agreement to achieve net zero emissions by 2050. Significant judgements and estimates relating to climate change are included in the section "Significant accounting estimates and critical judgements" of note 1 to the financial statements, which also provides the narrative explanation of the impact of climate risk on credit risk and lending portfolios under the requirements of UK adopted IAS and EU IFRS. As presented in these disclosures, the Group, having acknowledged the limitations of current data available, increasing sophistication of models, and the evolving and nascent nature of climate impacts on internal and client assets, has concluded climate risk to have limited quantitative impact in the immediate term.

Our audit effort in considering the impact of climate change on the financial statements was focused on evaluating whether management's assessment of the impact of climate risk, physical and transition, their climate commitments, and the significant judgements and estimates disclosed in note 1 have been appropriately reflected in the valuation of assets and liabilities, where these can be reliably measured, following the requirements of UK adopted IAS and EU IFRS. This was in the context of the Group's process being limited, given that this is an emerging area, as a result of limitations in the data available and the availability of sophisticated models, and as the Group considers how it further embeds its climate ambitions into the planning process.

As part of this evaluation, we performed our own risk assessment, supported by our climate change internal specialists, to determine the risks of material misstatement in the financial statements from climate change which needed to be considered in our audit.

We also challenged the Directors' considerations of climate change risks in their assessment of going concern and viability, and the associated disclosures. Where considerations of climate change were relevant to our assessment of going concern, these are described above.

Based on our work, we have considered the impact of climate change on the financial statements to impact the key audit matter of Credit Impairment. Details of our procedures and findings are included in our explanation of key audit matters below.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in our opinion thereon, and we do not provide a separate opinion on these matters.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Credit Impairment Accounting policies (page 187); Note 8 of the financial statements; and relevant credit risk disclosures (including pages 70 and 72) At 31 December 2022, the Group reported total credit impairment balance sheet provision of $4,601 million (2021: $5,377 million). Management's judgements and estimates are especially subjective due to significant uncertainty associated with the estimation of expected future losses. Assumptions with increased complexity in respect of the timing and measurement of expected credit losses (ECL) include: • **Staging** – the determination of significant increase in credit risk and resultant timely allocation of assets to the appropriate stage in accordance with IFRS 9; • **Model output and adjustments** – Accounting interpretations, modelling assumptions and data used to build and run the models that calculate the ECL, including the appropriateness, completeness and valuation of post-model adjustments applied to model output to address risks not fully captured by the models; • **Economic scenarios** – Significant judgements involved with the determination of parameters used in the Monte Carlo Simulation and the evaluation of the appropriateness of the output from the model in terms of the extent to which it adequately generated non-linearity, including the assessment of any Post Model adjustments; • **Management overlays** – Appropriateness, completeness and valuation of risk event overlays to capture risks not identified by the credit impairment models, including the consideration of the risk of management override; and • **Individually assessed ECL allowance**s – Measurement of individual provisions including the assessment of probability weighted recovery scenarios, exit strategies, collateral valuations and time to collect. In 2022, the most material factors impacting the ECL were in relation to the sovereign downgrades, the enhanced Monte Carlo model and the impact of the global economic environment including the impact of relaxing pandemic restrictions. In addition, where relevant we considered the impact of climate on the impairment provisions. We consider that the combination of these factors has increased the risk of a material misstatement to the ECL.	We evaluated the design of controls relevant to the Group's processes over material ECL balances, including the judgements and estimates noted, involving EY specialists to assist us in performing our procedures to the extent it was appropriate. Based on our evaluation we selected the controls upon which we intended to rely and tested those for operating effectiveness. We performed an overall stand-back assessment of the ECL allowance levels by stage to determine if they were reasonable by considering the overall credit quality of the Group's portfolios, risk profile and the impact of sovereign downgrades. Our assessment also included the evaluation of the macroeconomic environment by considering trends in the economies and countries to which the Group is exposed, and the consequences of the easing of global restrictions from the pandemic. We performed peer benchmarking where available to assess overall staging and provision coverage levels. **Staging** – We evaluated the criteria used to determine significant increase in credit risk including quantitative backstops with the resultant allocation of financial assets to stage 1, 2 or 3 in accordance with IFRS 9. We reperformed the staging distribution for a sample of financial assets and assessed the reasonableness of staging downgrades applied by management. To test credit monitoring which largely drives the probability of default estimates used in the staging calculation, we challenged the risk ratings (including appropriate operation of quantitative backstops) for a sample of performing accounts and other accounts exhibiting risk characteristics such as financial difficulties, deferment of payment, late payment and watchlist. We also considered the vulnerable sectors (as defined by the PLC Group). **Modelled output and adjustments** – We performed a risk assessment on models involved in the ECL calculation using EY independently determined criteria to select a sample of models to test. We engaged our modelling specialists to evaluate a sample of ECL models by assessing the reasonableness of underpinning assumptions, inputs and formulae used. This included a combination of assessing the appropriateness of model design, formulae and algorithms, alternative modelling techniques and recalculating the Probability of Default, Loss Given Default and Exposure at Default parameters. Together with our modelling specialists, we also assessed material post-model adjustments which were applied as a response to risks not fully captured by the models, including the completeness and appropriateness of these adjustments, for which we considered the applied judgments and methodology, and governance thereon. In response to the new or enhanced models implemented this year to address known weaknesses in previous models, we performed substantive testing procedures, including code review and implementation testing. We reperformed model monitoring procedures for models classified as higher risk in accordance with our EY independent risk assessment. To evaluate data quality, we agreed a sample of ECL calculation data points to source systems, including, among other data points, balance sheet data used to run the models. We also tested a sample of the ECL data points from the calculation engine through to the general ledger and disclosures.	We highlighted the following matters to the Audit Committee: • the pathway to achieve a controls reliance audit for the Group's models; • our evaluation of management's high-level assessment of the potential impact on ECL from climate change; • our assessment of the Group's enhanced Monte Carlo approach including benchmarking the impact of non-linearity from the baseline ECL against UK peers and the non-linearity overlay for retail exposures; and • our assessment of the appropriateness of the Group's methodology used to determine the ECL in relation to sovereign downgrades including the completeness and rationale for country downgrades and the resultant overlays and ECL impact. We concluded that management's methodology, judgements and assumptions used in calculating credit impairment are materially in accordance with the accounting standard.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Credit Impairment (continued)	**Economic scenarios** – For new material models implemented in 2022, in collaboration with our economists and modelling specialists, we challenged the completeness and appropriateness of the macroeconomic variables used as inputs to these models. For existing material models, we evaluated the output from our independent model monitoring procedures to assess whether the findings indicated that the macro-economic variables were outside of accepted tolerances. Additionally, we involved our economic specialists to assist us in evaluating the reasonableness of the base forecast for sample of macroeconomic variables most relevant for the Group's ECL calculation influenced by the above assessment. Procedures performed included benchmarking the forecast for a sample of macroeconomic variables to a variety of global external sources. We assessed the reasonableness of the non-linearity impact on ECL allowances. By engaging our economists and modelling specialists, we assessed the Group's choice of scenarios to determine sensitivity analysis of the ECL on page 108 in the annual report. We also performed a stand-back assessment by benchmarking the uplift and overall ECL charge and provision coverage to peers. We evaluated the appropriateness of the non-linearity overlay for retail exposures. **Management overlays** – We challenged the completeness and appropriateness of overlays used for risks not captured by the models, particularly regarding the worsening economic environment impacting sovereign/country level credit grades with a focus on Sri Lanka and Ghana which defaulted during the year, and other countries that suffered significant credit downgrades. Our procedures included evaluating the underpinning assumptions and judgments as to whether they are appropriate in prevailing market conditions. **Individually assessed ECL allowances** – Our procedures included challenging management's forward-looking economic assumptions of the recovery outcomes identified and assigned individual probability weightings, and recalculating a sample of individually assessed provisions. We also engaged our valuation specialists to test the value of the collateral used in management's calculations. Our sample was based on quantitative thresholds and qualitative factors, including exposure to vulnerable and cyclical sectors. Where relevant, with input from our climate specialists, we considered the potential impact of climate change in the determination of each element of the ECL provisions.	

Risk	Our response to the risk	Key observations communicated to the Audit Committee
User Access Management – Privileged Access Management IT General Controls (ITGCs) support the continuous operation of the automated and other IT dependent controls within the business processes related to financial reporting. Effective IT general controls are needed to ensure that IT applications process business data as expected and that changes are made in an appropriate manner. During the 2020 and 2021 audits, a number of significant privileged identity management (PIM) control deficiencies were identified by us. Similar deficiencies were identified by Group Internal Audit (GIA) and the predecessor auditor in 2018 and 2019. The possibility of IT application users gaining access privileges beyond those necessary to perform their assigned duties may result in breaches in segregation of duties, including inappropriate manual intervention, unauthorised changes to systems or programmes. These deficiencies are still in the process of being fully remediated. During the current year audit, we made further observations relating to the effectiveness of remediation activities. The risk has decreased in the current year due to management's remediation program, which is still in progress as at the year-end date.	We evaluated the results of management's remediation program and risk assessment for applications in our audit scope. We also tested IT controls (including IT compensating controls) where possible, and also performed additional IT substantive procedures to assess the impact of risks associated with the reported deficiencies, on the financial statements. We assessed the impact of the results of the above on our audit procedures over the financial statements for the year ended 31 December 2022.	• We communicated a weakness in internal control to the Audit Committee throughout the audit, in respect of the effectiveness of privileged identity management controls. • We explained the results of the additional audit procedures performed. As a result of the procedures performed, we have reduced the risk that our audit has not identified a material error in the Group and Company financial statements, related to privileged access management, to an appropriate level.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Impairment assessment of goodwill and investments in subsidiary undertakings Refer to the following: a) Impairment of Goodwill: Accounting policies (page 264); and Note 16 of the financial statements b) Impairment of investments in subsidiary undertakings: Accounting policies (page 297); and Note 31 of the financial statements. At 31 December 2022 the Group reported a goodwill balance of $1,323 million (2021: $1,379 million). In the Parent Company financial statements, investment in subsidiary undertakings balance comprised $10,300 million (2021: $9,694 million). During the year the Group impaired Goodwill by $10 million (2021: nil), and, in the Parent Company financial statements, recognised a reversal of impairment of investment in subsidiary undertakings of $249 million (2021: impairment charge of $2 million). On an annual basis, management is required to perform an impairment assessment for goodwill, and to assess for indicators of impairment in respect of investments in subsidiary undertakings; where indicators of impairment are identified, the recoverable amount of the investment should be estimated. Impairment assessment of goodwill is performed by calculating value-in-use (VIU) as the recoverable amount of the related cash generating unit (CGU). The Group identified indicators of impairment of investments in subsidiary undertakings, including macroeconomic and geopolitical factors which have an impact on the financial position and performance of the subsidiaries. In assessing for indicators of impairment, among other procedures, management compares the Net Asset Value (NAV) of the subsidiary to the carrying value of each direct subsidiary of the Parent Company. Where the net assets did not support the carrying value, the recoverable amount is estimated by determining the higher of the VIU or fair value less cost to sell. Where the recoverable amount is based on the VIU, this is modelled by reference to future cashflow forecasts (profit forecast including a regulatory capital haircut adjustment), discount rates and macroeconomic assumptions such as long-term growth rates. Where the recoverable amount is based on fair value less costs to sell (FVLCS), this is based on third party valuation reports. There is a risk that if the judgements and assumptions underpinning the impairment assessments are inappropriate, then the goodwill and investments in subsidiaries balances may be misstated. The level of risk remains consistent with the prior year.	We obtained an understanding of management's process and evaluated the design of controls. Our audit strategy was fully substantive. We assessed the appropriateness of the Group's methodology for testing the impairment of goodwill and investments in subsidiary undertakings for compliance with the accounting standards. For goodwill, we assessed the appropriateness of the cash-generating units identified by management. We agreed the inputs in the VIU model with their source and tested the mathematical accuracy of the VIU model. We engaged EY specialists to support the audit team in assessing reasonableness of the regulatory haircut adjustment to future profitability forecasts and calculating an independent range for assumptions underlying the VIU calculations, such as the discount rate and long-term growth rate for each cash generating unit. We also reconciled the future profitability forecasts of each CGU to the Group's approved Corporate Plan ('the Plan'). We engaged our specialist team to determine the reasonableness of the forward macroeconomic inputs used in the Plan and to assess their implementation in the modelled calculation underpinning the Plan. In addition, our specialist team benchmarked certain aspects of the Plan with other comparable businesses. We performed audit procedures to assess the reasonableness of the forecasts by understanding the Group Strategy, challenging key assumptions underpinning the Plan, assessing the feasibility of management actions necessary to achieve the Plan and testing the reliability of the Group's historical forecasting by comparing with the actual performance. We performed a stand back assessment to evaluate the appropriateness of the audit evidence obtained and our conclusion in relation to these estimates. In addition to this, we also engaged our specialist team to perform a sensitivity analysis of the key inputs in the VIU model. We agreed the NAV of the subsidiaries against their carrying value in the Parent Company balance sheet. We also challenged the rationale for the impairment reversal. We performed audit procedures to assess the reasonableness of the recoverable amount of the investment in subsidiary, whether it was determined with reference to the VIU model or FVLCS. We assessed the appropriateness of the disclosures in respect of goodwill and investments in subsidiary undertakings.	**Our conclusions** We concluded that the goodwill balance as at 31 December 2022 and the related disclosures, are not materially misstated. We concluded that the disclosures in the annual report appropriately reflect the sensitivity of the carrying value of goodwill to reasonably possible changes in key assumptions, noting that these downside sensitivities could require an adjustment to the carrying amount of goodwill in future. We also concluded that the investments in subsidiary undertakings reported in the Parent Company financial statements and the associated disclosures, are not materially misstated as at 31 December 2022.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Valuation of financial instruments held at fair value with higher risk characteristics Refer to the accounting policies (page 198) and Note 12 to the financial statements. At 31 December 2022, the Group reported financial assets measured at fair value of $218,831 million (2021: $232,840 million), and financial liabilities at fair value of $136,266 million (2021: $129,138 million), of which financial assets of $4,744 million (2021: $2,883 million) and financial liabilities of $888 million (2021: $1,264 million) are classified as Level 3 in the fair value hierarchy. The fair value of financial instruments with higher risk characteristics involves the use of management judgement in the selection of valuation models and techniques, pricing inputs and assumptions and fair value adjustments. A higher level of estimation uncertainty is involved for financial instruments valued using complex models, pricing inputs that have limited observability, and fair value adjustments, including the Credit Valuation Adjustment, Funding Valuation Adjustment, Debit Valuation Adjustment and Own Credit Adjustment. We considered the following portfolios presented a higher level of estimation uncertainty: • Level 3 derivatives and debt securities in issue and a portfolio of Level 2 financial instruments whose valuation involves the use of complex models, and • Unlisted equity investments, loans at fair value, debt and other financial instruments classified in Level 3 with unobservable pricing inputs. The level of risk remains consistent with the prior year.	We evaluated the design and operating effectiveness of controls relating to the valuation of financial instruments, including independent price verification, model review and approval, fair value adjustments, income statement analysis and reporting. Among other procedures, we engaged our valuation specialists to assist the audit team in performing the following procedures: • Test complex model-dependent valuations by independently revaluing a sample of Level 3 and complex Level 2 derivative financial instruments and debt securities in issue, in order to assess the appropriateness of models and the adequacy of assumptions and inputs used by the Group; • Test valuations of other financial instruments with higher estimation uncertainty, such as unlisted equity investments, loans at fair value, debt and other financial instruments. We compared management's valuation to our own independently developed range, where appropriate; • Assessed the appropriateness of pricing inputs as part of the Independent Price Verification process; and • Compared the methodology used for fair value adjustments to current market practice. We revalued a sample of valuation adjustments, compared funding and credit spreads to third party data and challenged the basis for determining illiquid credit spreads. Where differences between our independent valuation and management's valuation were outside our thresholds, we performed additional testing to assess the impact on the valuation of financial instruments. Throughout our audit procedures we considered the continuing uncertainty arising from the current macro-economic environment including market volatility. In addition, we assessed whether there were any indicators of aggregate bias in financial instrument marking and methodology assumptions.	We concluded that assumptions used by management to estimate the fair value of financial instruments with higher risk characteristics and the recognition of related income were reasonable. We highlighted the following matters to the Audit Committee: • Complex model-dependent valuations were appropriate based on the output of our independent revaluations; • Fair values of derivative transactions, debt securities in issue, unlisted equity investments, loans, debt and other financial instruments valued using pricing information with limited observability were not materially misstated as at 31 December 2022, based on the output of our independent calculations; and • Valuation adjustments in respect of credit, funding, own credit and other risks were appropriate, based on our analysis of market data and benchmarking of pricing information.

The key audit matters remain consistent from prior year.

Our application of materiality

We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

Materiality

The magnitude of an omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined materiality for the Group to be $178 million (2021: $137 million), which is 5% (2021: 5%) of adjusted PBT. This reflects actual PBT adjusted for non-recurring items relating to restructuring costs. We believe that adjusted PBT provides us with the most appropriate measure for the users of the financial statements, given the Group is profit making, it is consistent with the wider industry, it is the standard for listed and regulated entities and we believe it reflects the most relevant measure for users of the financial statements. We also believe that the adjustments are appropriate as they relate to material non-recurring items.

Starting basis

- Statutory profit before tax – $3,474m

Adjustments

- Restructuring costs – $89m

Materiality

- Totals $3,563m Adjusted PBT
- Materiality of $178m (5% of Adjusted PBT)

We determined materiality for the Company to be $178 million (2021: $137 million), which is aligned to the materiality of the Group.

During the course of our audit, we performed a reassessment of our initial materiality. This assessment resulted in higher final materiality calculated based on the actual financial performance of the Group for the year. There were no changes to the basis for materiality calculation from the planning stage.

Performance materiality

The application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

On the basis of our risk assessments, together with our assessment of the Group's overall control environment, our judgement was that performance materiality was 50% (2021: 50%) of our planning materiality, namely $89 million (2021: $69 million). We have set performance materiality at this percentage based on a variety of risk assessment factors such as the expectation of misstatements, internal control environment considerations and other factors such as the global complexity of the Group.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative size and risk of the component to the Group as a whole and our assessment of the risk of misstatement at that component. In the current year, the range of performance materiality allocated to components was $8.8 million to $34.1 million (2021: $8 million to $18 million).

Reporting threshold

An amount below which identified misstatements are considered as being clearly trivial.

We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of $8 million (2021: $7 million), which is set at 5% of planning materiality, as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds.

When forming our opinion, we evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above as well as other relevant qualitative criteria.

Other information

The other information comprises the information included in the Annual Report set out on pages 1 to 153, including the Strategic report (pages 1 to 55), the Directors' report (page 56 to 61), the Statement of directors' responsibilities (page 62), and the information not marked as 'audited' in the Risk review and Capital review section (page 63 to 153), and the Supplementary information (page 321 to 327), other than the financial statements and our auditor's report thereon. The directors are responsible for the other information contained within the annual report.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the Group and the Parent Company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement set out on page 62, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group and Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Explanation as to what extent the audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect irregularities, including fraud. The risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below.

However, the primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the Company and management.

- We obtained an understanding of the legal and regulatory frameworks that are applicable to the Group and determined that the most significant are those that relate to the reporting framework (UK-adopted IAS and EU IFRS, the Companies Act 2006), regulations and supervisory requirements of the Prudential Regulation Authority (PRA), FRC, FCA and other overseas regulatory requirements, including but not limited to regulations in its major markets such as India, Singapore, the United States of America, and the relevant tax compliance regulations in the jurisdictions in which the Group operates. In addition, we concluded that there are certain significant laws and regulations that may have an effect on the determination of the amounts and disclosures in the financial statements and those laws and regulations relating to regulatory capital and liquidity, conduct, financial crime including anti-money laundering, sanctions and market abuse recognising the financial and regulated nature of the Group's activities.
- We understood how the Group is complying with those frameworks by performing a combination of inquiries of senior management and those charged with governance as required by auditing standards, review of board and certain committee meeting minutes, gaining an understanding of the Group's approach to governance, inspection of regulatory correspondence in the year and engaging with internal and external legal counsel. We also engaged EY financial crime and forensics specialists to perform procedures on areas relating to anti-money laundering, whistleblowing, and sanctions compliance. Through these procedures, we became aware of actual or suspected non-compliance. The identified actual or suspected non-compliance was not sufficiently significant to our audit that would have resulted in being identified as a key audit matter.
- We assessed the susceptibility of the Group's financial statements to material misstatement, including how fraud might occur by considering the controls that the Group has established to address risks identified by the entity, or that otherwise seek to prevent, deter or detect fraud. Our procedures to address the risks identified also included incorporation of unpredictability into the nature, timing and/or extent of our testing, challenging assumptions and judgements made by management in their significant accounting estimates and journal entry testing.
- Based on this understanding, we designed our audit procedures to identify non-compliance with such laws and regulations. Our procedures involved inquiries of the Group's internal and external legal counsel, money laundering reporting officer, internal audit, certain senior management executives and focused testing on a sample basis, including journal entry testing. We also performed inspection of key regulatory correspondence from the relevant regulatory authorities as well as review of board and committee minutes.
- For instances of actual or suspected non-compliance with laws and regulations, which have a material impact on the financial statements, these were communicated by management to the Group audit engagement team and component teams (where applicable) who performed audit procedures such as inquiries with management, sending confirmations to external legal counsel, substantive testing and meeting with regulators. Where appropriate, we involved specialists from our firm to support the audit team.
- The Group is authorised to provide banking, insurance, mortgages and home finance, consumer credit, pensions, investments and other activities. The Group operates in the banking industry which is a highly regulated environment. As such, the Senior Statutory Auditor considered the experience and expertise of the Group audit engagement team, the component teams and the shared service centre teams to ensure that the team had the appropriate competence and capabilities, which included the use of specialists where appropriate.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at https://www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Other matters we are required to address

- Following the recommendation from the Audit Committee, we were re-appointed by the Company at the Annual General Meeting on 4 May 2022 to audit the financial statements for the year ending 31 December 2022 and subsequent financial periods.
- The period of total uninterrupted engagement is three years, covering the years ended 31 December 2020 to 31 December 2022.
- The audit opinion is consistent with the additional report to the Audit Committee.

Use of our report

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Ernst & Young LLP

David Canning-Jones (Senior statutory auditor)
For and on behalf of Ernst & Young LLP, Statutory Auditor
London
16 February 2023

Consolidated income statement
For the year ended 31 December 2022

	Notes	2022 $million	2021 $million
Interest income		9,765	6,185
Interest expense		(5,314)	(2,133)
Net interest income	3	4,451	4,052
Fees and commission income		2,863	2,972
Fees and commission expense		(709)	(576)
Net fees and commission income	4	2,154	2,396
Net trading income	5	3,743	2,280
Other operating income	6	(114)	132
Operating income		10,234	8,860
Staff costs		(5,748)	(5,591)
Premises costs		(228)	(224)
General administrative expenses		(75)	(71)
Depreciation and amortisation		(611)	(594)
Operating expenses	7	(6,662)	(6,480)
Operating profit before impairment losses and taxation		3,572	2,380
Credit impairment	8	22	30
Goodwill, property, plant and equipment and other impairment	9	(107)	(30)
Profit from associates and joint ventures	31	(13)	1
Profit before taxation		3,474	2,381
Taxation	10	(1,122)	(743)
Profit for the year		2,352	1,638
Profit attributable to:			
Non-controlling interests	28	(18)	29
Parent company shareholders		2,370	1,609
Profit for the year		2,352	1,638

The notes on pages 174 to 321 form an integral part of these financial statements.

Consolidated statement of comprehensive income

For the year ended 31 December 2022

	Notes	2022 $million	2021 $million
Profit for the year		**2,352**	1,638
Other comprehensive loss			
Items that will not be reclassified to income statement:		**(27)**	270
Own credit (losses)/gains on financial liabilities designated at fair value through profit or loss		**(26)**	28
Equity instruments at fair value through other comprehensive income		**(41)**	161
Actuarial gains on retirement benefit obligations	29	**23**	157
Taxation relating to components of other comprehensive income	10	**17**	(76)
Items that may be reclassified subsequently to income statement:		**(2,739)**	(869)
Exchange differences on translation of foreign operations:			
Net losses taken to equity		**(1,328)**	(502)
Net gains/(losses) on net investment hedges		**54**	(19)
Share of other comprehensive income from associates and joint ventures		**–**	3
Debt instruments at fair value through other comprehensive income:			
Net valuation losses taken to equity		**(1,285)**	(331)
Reclassified to income statement		**157**	(96)
Net impact of expected credit losses		**120**	29
Cash flow hedges:			
Net movement in cash flow hedge reserve[1]	13	**(592)**	(21)
Taxation relating to components of other comprehensive income	10	**135**	68
Other comprehensive loss for the year, net of taxation		**(2,766)**	(599)
Total comprehensive (loss)/income for the year		**(414)**	1,039
Total comprehensive (loss)/income attributable to:			
Non-controlling interests	28	**(56)**	4
Parent company shareholders		**(358)**	1,035
Total comprehensive (loss)/income for the year		**(414)**	1,039

1 This line item has been represented in 2022 as a net balance of all movements in the cash flow hedge reserve

Consolidated balance sheet
As at 31 December 2022

	Notes	Group 2022 $million	Group 2021 $million	Company 2022 $million	Company 2021 $million
Assets					
Cash and balances at central banks	12, 34	**50,531**	61,963	**38,867**	48,165
Financial assets held at fair value through profit or loss	12	**82,554**	106,529	**75,792**	99,705
Derivative financial instruments	12, 13	**65,050**	53,245	**65,481**	53,478
Loans and advances to banks	12, 14	**27,383**	29,999	**18,548**	16,117
Loans and advances to customers	12, 14	**158,126**	144,799	**80,611**	71,161
Investment securities	12	**113,028**	102,280	**95,372**	86,389
Other assets	19	**37,641**	31,970	**31,715**	25,688
Due from subsidiary undertakings and other related parties		**6,387**	6,235	**13,214**	10,741
Current tax assets	10	**446**	648	**347**	487
Prepayments and accrued income		**2,172**	1,317	**1,598**	905
Interests in associates and joint ventures	31	**143**	156	**–**	–
Investments in subsidiary undertakings	31	**–**	–	**10,300**	9,694
Goodwill and intangible assets	16	**4,052**	3,800	**2,279**	2,121
Property, plant and equipment	17	**994**	1,071	**430**	627
Deferred tax assets	10	**741**	681	**579**	508
Assets classified as held for sale	20	**1,486**	98	**592**	91
Total assets		**550,734**	544,791	**435,725**	425,877
Liabilities					
Deposits by banks	12	**24,150**	25,205	**17,900**	18,870
Customer accounts	12	**243,075**	242,331	**137,422**	135,478
Repurchase agreements and other similar secured borrowing	12, 15	**1,991**	325	**1,723**	283
Financial liabilities held at fair value through profit or loss	12	**67,408**	75,552	**66,189**	73,902
Derivative financial instruments	12, 13	**68,858**	53,586	**69,203**	53,835
Debt securities in issue	12,21	**36,982**	36,060	**34,992**	33,826
Other liabilities	22	**25,925**	26,013	**20,990**	20,460
Due to parent companies, subsidiary undertakings & other related parties		**28,102**	30,998	**39,933**	40,745
Current tax liabilities	10	**556**	336	**329**	168
Accruals and deferred income		**3,890**	3,064	**2,140**	1,550
Subordinated liabilities and other borrowed funds	12, 26	**13,269**	14,615	**12,729**	14,076
Deferred tax liabilities	10	**577**	669	**486**	583
Provisions for liabilities and charges	23	**335**	396	**249**	298
Retirement benefit obligations	29	**166**	204	**124**	156
Liabilities included in disposal groups held for sale	20	**1,307**	–	**345**	–
Total liabilities		**516,591**	509,354	**404,754**	394,230
Equity					
Share capital and share premium account	27	**22,393**	22,393	**22,393**	22,393
Other reserves		**(6,965)**	(4,231)	**(4,252)**	(2,089)
Retained earnings		**12,801**	11,278	**8,080**	6,594
Total parent company shareholders' equity		**28,229**	29,440	**26,221**	26,898
Other equity instruments	27	**4,750**	4,749	**4,750**	4,749
Total equity excluding non-controlling interests		**32,979**	34,189	**30,971**	31,647
Non-controlling interests	28	**1,164**	1,248	**–**	–
Total equity		**34,143**	35,437	**30,971**	31,647
Total equity and liabilities		**550,734**	544,791	**435,725**	425,877

The Company has taken advantage of the exemption in section 408 of the Companies Act 2006 not to present its individual statement of comprehensive income and related notes that form a part of these financial statements. The Company profit for the year after tax is $2,372 million (2021: Profit after tax $2,146 million).

The notes on pages 174 to 321 form an integral part of these financial statements

These financial statements were approved by the Court of Directors and authorised for issue on 16 February 2023 and signed on its behalf by:

Bill Winters, Director

Andy Halford, Director

Consolidated statement of changes in equity
For the year ended 31 December 2022

	Share capital and share premium account $million	Capital and merger reserves[1] $million	Own credit adjustment reserve $million	Fair value through other comprehensive income reserve – debt $million	Fair value through other comprehensive income reserve – equity $million	Cash flow hedge reserve $million	Translation reserve $million	Retained earnings $million	Parent company shareholders' equity $million	Other equity instruments $million	Non-controlling interests $million	Total $million
As at 1 January 2021	21,120	40	(28)	442	82	5	(4,053)	11,367	28,975	3,000	1,254	33,229
Profit for the year	–	–	–	–	–	–	–	1,609	1,609	–	29	1,638
Other comprehensive income/(loss)	–	–	25	(330)	93	(16)	(501)	155[2]	(574)	–	(25)	(599)
Distributions	–	–	–	–	–	–	–	–	–	–	(83)	(83)
Shares issued, net of expenses	1,273	–	–	–	–	–	–	–	1,273	–	–	1,273
Other equity instruments, net of expenses	–	–	–	–	–	–	–	–	–	2,750	–	2,750
Redemption of other equity instruments	–	–	–	–	–	–	–	(41)	(41)	(1,001)	–	(1,042)
Share option expenses	–	–	–	–	–	–	–	137	137	–	–	137
Dividends on ordinary shares	–	–	–	–	–	–	–	(1,511)	(1,511)	–	–	(1,511)
Dividends on preference shares and AT1 securities	–	–	–	–	–	–	–	(292)	(292)	–	–	(292)
Deemed distribution to parent[3]	–	–	–	–	–	–	–	(136)	(136)	–	–	(136)
Other movements	–	–	–	–	–	–	10	(10)[4]	–	–	73[5]	73
As at 31 December 2021	**22,393**	**40**	**(3)**	**112**	**175**	**(11)**	**(4,544)**	**11,278**	**29,440**	**4,749**	**1,248**	**35,437**
Profit for the year	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**2,370**	**2,370**	**–**	**(18)**	**2,352**
Other comprehensive (loss)/income	**–**	**–**	**(23)**	**(963)**	**(9)**	**(502)**	**(1,249)**	**18[2]**	**(2,728)**	**–**	**(38)**	**(2,766)**
Distributions	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(87)**	**(87)**
Other equity instruments issued, net of expenses	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,000**	**–**	**1,000**
Redemption of other equity instruments	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(999)**	**–**	**(999)**
Share option expenses	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**152**	**152**	**–**	**–**	**152**
Dividends on ordinary shares	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(575)**	**(575)**	**–**	**–**	**(575)**
Dividends on preference shares and AT1 securities	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(311)**	**(311)**	**–**	**–**	**(311)**
Deemed distribution to parent[3]	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(159)**	**(159)**	**–**	**–**	**(159)**
Other movements	**–**	**–**	**–**	**–**	**–**	**–**	**12[4]**	**28[6]**	**40**	**–**	**59[7]**	**99**
As at 31 December 2022	**22,393**	**40**	**(26)**	**(851)**	**166**	**(513)**	**(5,781)**	**12,801**	**28,229**	**4,750**	**1,164**	**34,143**

1 Includes capital reserve of $35 million, capital redemption reserve of $5 million

2 Comprises actuarial gain/(loss), net of taxation on Group defined benefit schemes

3 Relates to deemed capital contribution from parent company arising from share-based payment net of taxation of $159 million (2021: $136 million deemed capital contribution arising from share-based payment net of taxation)

4 Movement related to Translation adjustment

5 Movements related to non-controlling interest from Trust Bank Singapore Limited ($70 million) and Zodia Markets ($3 million)

6 Movement relating to $21million NCI on Power2SME Pte limited and $8 million on Currency fair

7 Movements related to non-controlling interest from Trust Bank Singapore Limited ($47 million), Power2SME Pte limited ($9 million) and Zodia Markets Holdings Limited ($3 million)

Note 27 includes a description of each reserve.

The notes on pages 174 to 321 form an integral part of these financial statements.

Cash flow statement

For the year ended 31 December 2022

	Notes	Group 2022 $million	Group 2021 $million	Company 2022 $million	Company 2021 $million
Cash flows from operating activities:					
Profit before taxation		**3,474**	2,381	**2,996**	2,496
Adjustments for non-cash items and other adjustments included within income statement[1]	33	**1,900**	888	**381**	(659)
Change in operating assets	33	**(2,158)**	(13,364)	**(5,451)**	(1,178)
Change in operating liabilities[1]	33	**6,954**	37,185	**4,521**	18,903
Contributions to defined benefit schemes	29	**(46)**	(94)	**(36)**	(83)
UK and overseas taxes paid	10	**(782)**	(557)	**(359)**	(274)
Net cash from operating activities		**9,342**	26,439	**2,052**	19,205
Cash flows from investing activities:					
Internally generated Capitalised Software	16	**(761)**	(738)	**(501)**	(503)
Purchase of property, plant and equipment	17	**(139)**	(134)	**(59)**	(67)
Disposal of property, plant and equipment	17	**30**	25	**14**	6
Acquisition of investment in subsidiaries, associates, and joint ventures, net of cash acquired	31	**(25)**	(35)	**–**	–
Dividends received from subsidiaries, associates and joint ventures	31	**6**	–	**1,046**	1,626
Purchase of investment securities		**(156,905)**	(171,609)	**(114,671)**	(131,168)
Disposal and maturity of investment securities		**138,165**	153,093	**98,999**	113,905
Net cash used in investing activities		**(19,629)**	(19,398)	**(15,172)**	(16,201)
Cash flows from financing activities:					
Issue of ordinary and preference share capital, net of expenses	27	**–**	1,273	**–**	1,273
Premises and equipment lease liability principal payment		**(129)**	(112)	**(78)**	(72)
Issue of Additional Tier 1 capital, net of expenses	27	**1,000**	2,750	**1,000**	2,750
Redemption of Tier 1 capital	27	**(999)**	(1,042)	**(999)**	(1,042)
Gross proceeds from issue of subordinated liabilities	33	**750**	–	**750**	–
Interest paid on subordinated liabilities	33	**(424)**	(479)	**(378)**	(456)
Repayment of subordinated liabilities	33	**(1,008)**	(16)	**(1,008)**	(16)
Proceeds from issue of senior debts	33	**5,316**	2,833	**4,091**	660
Repayment of senior debts	33	**(1,490)**	(3,250)	**(298)**	(422)
Interest paid on senior debts	33	**(1)**	(16)	**(1)**	(16)
Net cash inflow from non-controlling interest	28	**59**	73	**–**	–
Distributions and dividends paid to non-controlling interests, preference shareholders and AT1 securities		**(398)**	(375)	**(311)**	(292)
Dividends paid to ordinary shareholders		**(575)**	(1,511)	**(575)**	(1,511)
Net cash from financing activities		**2,101**	128	**2,193**	856
Net (decrease)/increase in cash and cash equivalents		**(8,186)**	7,169	**(10,927)**	3,860
Cash and cash equivalents at beginning of the year		**81,427**	75,910	**59,406**	56,151
Effect of exchange rate movements on cash and cash equivalents		**(2,171)**	(1,652)	**(861)**	(605)
Cash and cash equivalents at end of the year	34	**71,070**	81,427	**47,618**	59,406

1 The 2021 comparative figures have been restated to reclassify $418 million of interest paid on subordinated liabilities, previously included in 'Change in operating liabilities', to 'Adjustments for non-cash items'

For Bank Group, Interest received was $8,897 million (2021: $6,063 million) , interest paid was $4,356 million (2021: $2,216 million).

For Bank Company Interest received was $5,355 million (2021: $3,583 million), interest paid was $3,394 million (2021: $1,627 million).

Company statement of changes in equity
For the year ended 31 December 2022

	Share capital and share premium account $million	Capital and merger reserves[1] $million	Own credit adjustment reserve $million	Fair value through other comprehensive income reserve – debt $million	Fair value through other comprehensive income reserve – equity $million	Cash flow hedge reserve $million	Translation reserve $million	Retained earnings $million	Parent company shareholders' equity $million	Other equity instruments $million	Total $million
As at 1 January 2021	21,120	40	(25)	168	76	(32)	(1,963)	6,157	25,541	3,000	28,541
Profit for the year	–	–	–	–	–	–	–	2,146	2,146	–	2,146
Other comprehensive income/(loss)	–	–	26	(258)	72	(7)	(186)	146[2]	(207)	–	(207)
Shares issued, net of expenses	1,273	–	–	–	–	–	–	–	1,273	–	1,273
Other equity instruments issues, net of expenses	–	–	–	–	–	–	–	–	–	2,750	2,750
Redemption of other equity instruments	–	–	–	–	–	–	–	(41)	(41)	(1,001)	(1,042)
Share option expenses	–	–	–	–	–	–	–	86	86	–	86
Dividends on ordinary shares	–	–	–	–	–	–	–	(1,511)	(1,511)	–	(1,511)
Dividends on preference shares and AT1 securities	–	–	–	–	–	–	–	(292)	(292)	–	(292)
Deemed distribution to parent[3]	–	–	–	–	–	–	–	(85)	(85)	–	(85)
Other movements	–	–	–	–	–	–	–	(12)[4]	(12)	–	(12)
As at 31 December 2021	**22,393**	**40**	**1**	**(90)**	**148**	**(39)**	**(2,149)**	**6,594**	**26,898**	**4,749**	**31,647**
Profit for the year	–	–	–	–	–	–	–	2,372	2,372	–	2,372
Other comprehensive (loss)/income	–	–	(25)	(950)	(1)	(483)	(704)	6[2]	(2,157)	–	(2,157)
Other equity instruments issued, net of expenses	–	–	–	–	–	–	–	–	–	1,000	1,000
Redemption of other equity instruments	–	–	–	–	–	–	–	–	–	(999)	(999)
Share option expenses	–	–	–	–	–	–	–	98	98	–	98
Dividends on ordinary shares	–	–	–	–	–	–	–	(575)	(575)	–	(575)
Dividends on preference shares and AT1 securities	–	–	–	–	–	–	–	(311)	(311)	–	(311)
Deemed distribution to parent[3]	–	–	–	–	–	–	–	(104)	(104)	–	(104)
Other movements	–	–	–	–	–	–	–	–	–	–	–
As at 31 December 2022	**22,393**	**40**	**(24)**	**(1,040)**	**147**	**(522)**	**(2,853)**	**8,080**	**26,221**	**4,750**	**30,971**

1 Includes capital reserve of $35 million, capital redemption reserve of $5 million

2 Comprises actuarial gain/(loss), net of taxation on Group defined benefit schemes

3 Relates to deemed capital contribution from parent company arising from share-based payment net of taxation of $104 million (2021: $85 million deemed capital contribution arising from share-based payment net of taxation)

4 Standard Chartered bank Saudi Arabia start-up costs $12 million

Note 27 includes a description of each reserve.

The notes on pages 174 to 321 form an integral part of these financial statements.

Contents – Notes to the financial statements

1. Accounting policies

Statement of compliance

The Group financial statements consolidate Standard Chartered Bank (the Company) and its subsidiaries (together referred to as the Group) and equity account the Group's interests in associates and jointly controlled entities.

The parent company financial statements present information about the Company as a separate entity.

The Group financial statements have been prepared and approved by the directors in accordance with UK- adopted international accounting standards in conformity with the requirements of the Companies Act 2006 and with international financial reporting standards adopted pursuant to Regulation (EC) No 1606/2002 as it applies in the European Union (EU IFRS). There are no significant differences between UK-adopted international accounting standards and EU IFRS. The Company financial statements have been prepared in accordance with UK-adopted international accounting standards as applied in conformity with section 408 of the Companies Act 2006.

The following parts of the Risk review and Capital review form part of these financial statements:

a) From the start of Risk profile section (page 63) to the end of other principal risks in the same section (page 127) excluding:

- Liquidity coverage ratio (LCR), (page 117)
- Stressed coverage, (page 117)
- Net stable funding ratio (NSFR), (page 118)
- Liquidity pool, (page 118)
- Interest Rate Risk in the Banking Book, (page 125)
- Operational risk, (page 127)
- Other principal risks, (page 127)

b) Capital review: from the start of 'Capital Requirements Directive (CRD) capital base' to the end of 'movement in total capital', excluding capital ratios and risk-weighted assets (RWA)

Basis of preparation

The consolidated and Company financial statements have been prepared on a going concern basis and under the historical cost convention, as modified by the revaluation of cash-settled share-based payments, fair value through other comprehensive income, and financial assets and liabilities (including derivatives) at fair value through profit or loss.

The consolidated financial statements are presented in United States dollars ($), being the presentation currency of the Group and functional currency of the Company, and all values are rounded to the nearest million dollars, except when otherwise indicated.

Significant accounting estimates and judgements

In determining the carrying amounts of certain assets and liabilities, the Group makes assumptions of the effects of uncertain future events on those assets and liabilities at the balance sheet date. The Group's estimates and assumptions are based on historical experience and expectation of future events and are reviewed periodically. Further information about key assumptions concerning the future, and other key sources of estimation uncertainty and judgement, are set out in the relevant disclosure notes for the areas set out under the relevant headings below:

Significant and other accounting estimates and critical judgements

Significant accounting estimates and judgements represent those items which have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next year. Significant accounting estimates and judgement are:

- Credit impairment, including evaluation of management overlays and post-model adjustments, and determination of probability weightings for Stage 3 individually assessed provisions (Note 8)
- Financial instruments measured at fair value (Note 12)
- Investments in subsidiary undertakings, joint ventures and associates (Note 31)

1. Accounting policies continued

Other areas of accounting estimate and judgement

Other areas of accounting estimate and judgement do not meet the definition under IAS 1 of significant accounting estimates or critical accounting judgements, but the recognition of certain material assets and liabilities are based on assumptions and/or are subject to long-term uncertainties. The other areas of accounting estimate and judgement are:

- Taxation (Note 10)
- Goodwill impairment (Note 16)
- Property, plant and equipment (Note 17)
- Provisions for liabilities and charges (Note 23)
- Retirement benefit obligations (Note 29)
- Share-based payments (Note 30)

Climate impact on the Group's balance sheet

Climate, and the impact of climate on the Group's balance sheet is considered as an area of accounting estimate and judgement through the uncertainty of future events and the impact of that uncertainty on the Group's assets and liabilities. It is noted that although not currently quantitatively material, the Group considers climate to be qualitatively material to the Group but with the impact crystalising over the longer term.

The PLC Group has assessed the impact of climate risk on the financial report. This is set out within the Sustainable and Responsible Business chapter on pages 64 to 66 in the PLC Annual Report which incorporates the Group's Climate-related Financial Disclosures which align with the recommendations from the Task Force for Climate related Financial Disclosures (TCFD). Further risk disclosure has been provided on pages 148 and 149 of the Principal Risks and Uncertainties section of the Annual Report where the Group has described how it manages climate risk as an Integrated Risk Type.

The areas of impact and where judgements and the use of estimates have been applied were credit risk and the impact on lending portfolios; ESG features within issued loans and bonds; physical risk on our mortgage lending portfolio; and, the corporate plan, in respect of which forward looking cash flows impact the recoverability of certain assets, including of goodwill, deferred tax assets and investments in subsidiary undertakings.

This assessment on the corporate loan portfolio was undertaken by considering the maturity profile of the loan portfolio which is majority shorter term. Transition risk, as our clients move to lower carbon emitting revenues, (either by virtue of legislation or changing end customer preference) is considered with reference to client transition pathways and manifests over a longer term than the maturity of the loan book (up to 2050). Further transition risk is managed through reviews of clients with ESG risk by the Group's Risk function, and through an ongoing process of identifying clients which have transition pathways that are Paris 1.5 degree compliant and congruent with the Groups.

Physical risk is already included within the majority of our mortgage lending and we have applied scenario analysis against the pathways of different temperature additions and country policy scenarios. We also assess the impact of climate risk on the classification of financial instruments under IFRS 9, when Environmental, Sustainability or Governance (ESG) triggers may affect the cash flows received by the Group under the contractual terms of the instrument.

The PLC Group Climate Risk team have performed a top-down quantitative assessment of the impact of climate risk on the IFRS 9 ECL provision at the PLC Group level. This assessment has been performed across both the CCIB and CPBB portfolios. CCIB includes Corporates, Sovereign, Asset Backed Securities, Commercial and Specialised Lending. CPBB includes Mortgages, Personal Loans and Credit Cards. The climate adjusted ECL was estimated by adding climate scalars (multiplicative adjustments) to the business as usual ECL. The scalars, such as LGD increases, have been informed by the judgement of using the three pathways/scenarios within the Bank of England 2021 Climate Biennial Exploratory Scenario (CBES), being Early Action, Late Action and No Additional Action. These pathways have been probability weighted and generally include the addition of carbon charges/taxes over time to model transition risk. The impact assessment which is considered a resulted in an marginal ECL increase across CCIB and CPBB which, will not be recorded as an overlay for The Group or PLC Group at the 2022 year end.

The PLC Groups corporate plan has a 5 year outlook and already includes where we have committed to transitioning away from certain high carbon sectors (i.e. coal), offset by transition finance opportunities. This is shorter term than many of the climate scenario outlooks but seeks to capture the nearer term performance as required by recoverability models. We have for the first time in the 2023 corporate plan included anticipated ECL charges linked to climate for three sectors (Oil and Gas, Metals and Mining and Power) over the 5 years. This addition of ECL has not in itself, impacted the recoverability of assets supported by discounted cash flow models (such as Value in Use) which utilise the Corporate plan.

With the aim to enhance our internal scenario analysis capabilities in line with our Risk Appetite Statement, in 2022 the PLC Group assessed the impact on our CCIB corporate client portfolio based on three International Energy Agency (IEA) scenarios and three Phase 2 scenarios from the NGFS (Which align to the CBES scenarios) and participated in the Monetary Authority of Singapore Industry-Wide Stress Test. We also assessed the impact of sea level rises under various Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCP) scenarios to explore the Physical Risk impact on the Consumer, Private and Business Banking (CPBB) residential mortgage portfolio over short- and long-term time horizons for internal risk management purposes. Notwithstanding these challenges, our work to date, using certain assumptions and proxies, indicates that our business is resilient to all Network of Central Banks and Supervisors for Greening the Financial System (NGFS) and IEA scenarios that were explored.

The Group, although acknowledging the limitations of current data available, increasing sophistication of models evolving and nascent nature of climate impacts on internal and client assets, considers Climate Risk to have limited quantitative impact in the immediate term and as a longer term risk will be addressed through its business strategy and financial planning as the PLC Group implements its net zero journey.

Comparatives
Certain comparatives have been represented in line with current year disclosures. Details of these changes are set out in the relevant sections and notes below:

- Note 2 Segmental information
- Note 3 Net interest income
- Note 4 Net fees and commission
- Note 12 Financial instruments
- Note 13 Derivative financial instruments
- Note 32 Structured entities
- Note 33 Cash flow statement
- Risk review: various credit risk tables for new segment Ventures
- Risk review: Operational Risk events and losses

New accounting standards in issue but not yet effective
IFRS 17 Insurance Contracts
IFRS 17 Insurance Contracts was issued in May 2017 (and subsequently amended in June 2020) to replace IFRS 4 Insurance Contracts and to establish a comprehensive standard for inceptors of insurance policies. The Group will apply IFRS 17 for annual reporting periods beginning on January 1, 2023. IFRS 17 will not have a material impact on the Group's financial statements.

Going concern
These financial statements were approved by the Board of directors on 16 February 2023. The directors have made an assessment of the Group's ability to continue as a going concern. This assessment has been made having considered the impact of COVID-19, macroeconomic and geopolitical headwinds, including:

- Review of the Group Strategy and Corporate Plan
- An assessment of the actual performance to date, loan book quality, credit impairment, legal, regulatory and compliance matters, and the updated annual budget
- Consideration of stress testing performed, including both the Bank of England annual stress test and a Group Recovery and Resolution Plan (RRP) as submitted to the PRA. Both these submissions include the application of stressed scenarios including; COVID additional waves with the accompanying economic shocks, credit impact and short term liquidity shocks. Under the tests and through the range of scenarios, the results of these exercises and the RRP demonstrate that the Group has sufficient capital and liquidity to continue as a going concern and meet minimum regulatory capital and liquidity requirements
- Analysis of the capital, funding and liquidity position of the Group, including the capital and leverage ratios, and ICAAP which summarises the Group's capital and risk assessment processes, assesses its capital requirements and the adequacy of resources to meet them. Further, funding and liquidity was considered in the context of the risk appetite metrics, including the ADR and LCR ratios
- The Group's Internal Liquidity Adequacy Assessment Process (ILAAP), which considers the Group's liquidity position, its framework and whether sufficient liquidity resources are being maintained to meet liabilities as they fall due, was also reviewed
- The level of debt in issue, including redemptions and issuances during the year, debt falling due for repayment in the next 12 months and further planned debt issuances, including the appetite in the market for the Group's debt
- A detailed review of all principal and emerging risks

Based on the analysis performed, the directors confirm they are satisfied that the Group has adequate resources to continue in business for a period of at least 12 months from 16 February 2023. For this reason, the Group continues to adopt the going concern basis of accounting for preparing the financial statements.

2. Segmental information

Basis of preparation

The analysis reflects how the client segments and geographic regions are managed internally. This is described as the Management View (on an underlying basis) and is principally the location from which a client relationship is managed, which may differ from where it is financially booked and may be shared between businesses and/or regions. In certain instances this approach is not appropriate and a Financial View is disclosed, that is, the location in which the transaction or balance was booked. Typically, the Financial View is used in areas such as the Market and Liquidity Risk reviews where actual booking location is more important for an assessment. Segmental information is therefore on a Management View unless otherwise stated.

Segments and regions

The Group's segmental reporting is in accordance with IFRS 8 Operating Segments and is reported consistently with the internal performance framework and as presented to the Group's Management Team.

As part of the ongoing execution of its refreshed strategy, the Group has expanded and reorganised its reporting structure with the creation of a third client segment, Ventures, effective on 1st January 2022. Ventures is a consolidation of SC Ventures and its related entities as well as the Group's majority owned digital bank- Trust in Singapore.

- SC Ventures is the platform and catalyst for the Group to promote innovation, invest in disruptive financial technology and explore alternative business models.
- Trust Bank was launched in Singapore in partnership with FairPrice Group, the nation's leading grocery retailer, in September 2022.

The changes above require comparative periods to be restated.

The following should also be noted:

- Transactions and funding between the segments are carried out on an arm's-length basis
- Corporate Centre costs represent stewardship and central management services roles and activities that are not directly attributable to business or country operations
- Treasury markets , joint ventures and associate investments are managed in the regions and are included within the applicable region. However, they are not managed directly by a client segment and are therefore included in the Central & other items segment
- In addition to treasury activities, Corporate Centre costs and other Group related functions, Central & other items for regions includes globally run businesses or activities that are managed by the client segments but not directly by geographic management. These include Principal Finance and Portfolio Management
- The Group allocated central costs (excluding Corporate Centre costs) relating to client segments and geographic regions using appropriate business drivers (such as in proportion to the direct cost base of each segment before allocation of indirect costs) and these are reported within operating expenses

Restructuring items excluded from underlying results

The Group's statutory performance is adjusted for profits or losses of a capital nature, amounts consequent to investment transactions driven by strategic intent, other infrequent and/or exceptional transactions that are significant or material in the context of the Group's normal business earnings for the period and items which management and investors would ordinarily identify separately when assessing underlying performance period-by period.

Restructuring charges of $115 million for 2022 reflects the impact of actions to transform the organisation to improve productivity, primarily redundancy related charges.

2. Segmental information continued

Reconciliations between underlying and statutory results are set out in the tables below:

Profit before taxation (PBT)

	2022					
	Underlying $million	Regulatory Fine $million	Restructuring $million	Net gains on businesses disposed/ held for sale $million	Goodwill and Other impairment $million	Statutory $million
Operating income	10,193	–	21	20	–	10,234
Operating expenses	(6,539)	–	(123)	–	–	(6,662)
Operating profit/(loss) before impairment losses and taxation	3,654	–	(102)	20	–	3,572
Credit impairment	22	–	–	–	–	22
Other impairment	(84)	–	(13)	–	(10)	(107)
Profit from associates and joint ventures	(13)	–	–	–	–	(13)
Profit/(loss) before taxation	3,579	–	(115)	20	(10)	3,474

	2021					
	Underlying $million	Regulatory Fine $million	Restructuring $million	Net gains on businesses disposed/ held for sale $million	Goodwill and Other impairment $million	Statutory $million
Operating income	8,914	–	(74)	20	–	8,860
Operating expenses	(6,204)	(62)	(214)	–	–	(6,480)
Operating profit/(loss) before impairment losses and taxation	2,710	(62)	(288)	20	–	2,380
Credit impairment	28	–	2	–	–	30
Other impairment	9	–	(39)	–	–	(30)
Profit from associates and joint ventures	1	–	–	–	–	1
Profit/(loss) before taxation	2,748	(62)	(325)	20	–	2,381

Underlying performance by client segment

	2022				
	Corporate, Commercial & Institutional Banking $million	Consumer Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Operating income	7,024	2,875	3	291	10,193
External	6,428	2,321	3	1,441	10,193
Inter-segment	596	554	–	(1,150)	–
Operating expenses	(3,813)	(1,917)	(242)	(567)	(6,539)
Operating profit before impairment losses and taxation	3,211	958	(239)	(276)	3,654
Credit impairment	186	(19)	(2)	(143)	22
Other impairment	(8)	(6)	(20)	(50)	(84)
(Loss)/profit from associates and joint ventures	–	–	(16)	3	(13)
Underlying profit/(loss) before taxation	3,389	933	(277)	(466)	3,579
Restructuring	(43)	(33)	(1)	(38)	(115)
Goodwill impairment and other items	–	–	–	10	10
Statutory profit/(loss) before taxation	3,346	900	(278)	(494)	3,474
Total assets	299,628	47,435	900	202,771	550,734
Total liabilities	348,587	66,777	517	100,710	516,591

2. Segmental information continued

	2021 (Restated)[1]				
	Corporate, Commercial & Institutional Banking $million	Consumer Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Operating income	5,703	2,680	(21)	552	8,914
External	5,560	2,323	(21)	1,052	8,914
Inter-segment	143	357	–	(500)	–
Operating expenses	(3,591)	(1,943)	(167)	(503)	(6,204)
Operating profit before impairment losses and taxation	2,112	737	(188)	49	2,710
Credit impairment	216	(169)	–	(19)	28
Other impairment	(39)	–	–	48	9
Profit from associates and joint ventures	–	–	–	1	1
Underlying profit before taxation	2,289	568	(188)	79	2,748
Restructuring	(108)	(47)	–	(170)	(325)
Goodwill impairment and other items	–	–	20	(62)	(42)
Statutory profit/(loss) before taxation	2,181	521	(168)	(153)	2,381
Total assets	299,608	47,506	404	197,273	544,791
Total liabilities	340,801	65,755	51	102,747	509,354

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment in 2022. Prior periods have been restated

Operating income by client segment

	2022				
	Corporate, Commercial & Institutional Banking $million	**Consumer Private & Business Banking $million**	**Ventures $million**	**Central & other items $million**	**Total $million**
Underlying operating income	**7,024**	**2,875**	**3**	**291**	**10,193**
Restructuring	**19**	**–**	**–**	**2**	**21**
Other items	**–**	**–**	**–**	**20**	**20**
Statutory operating income	**7,043**	**2,875**	**3**	**313**	**10,234**

	2021 (Restated)[1]				
	Corporate, Commercial & Institutional Banking $million	Consumer Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Underlying operating income	5,703	2,680	(21)	552	8,914
Restructuring	(33)	–	–	(41)	(74)
Other items	–	–	20	–	20
Statutory operating income	5,670	2,680	(1)	511	8,860

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment in 2022. Prior periods have been restated

2. Segmental information continued

Underlying performance by region

	2022				
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Central & other items $million	Total $million
Operating income	4,631	2,582	2,587	393	10,193
Operating expenses	(2,655)	(1,638)	(1,473)	(773)	(6,539)
Operating profit/(loss) before impairment losses and taxation	1,976	944	1,114	(380)	3,654
Credit impairment	61	(118)	87	(8)	22
Other impairment	(4)	2	3	(85)	(84)
Loss from associates and joint ventures	–	–	–	(13)	(13)
Underlying profit/(loss) before taxation	2,033	828	1,204	(486)	3,579
Restructuring	(9)	(29)	(12)	(65)	(115)
Goodwill impairment and other items	–	–	–	10	10
Statutory profit/(loss) before taxation	2,024	799	1,192	(541)	3,474
Total assets	152,356	37,515	324,039	36,824	550,734
Total liabilities	134,639	37,912	256,031	88,009	516,591

	2021				
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Central & other items $million	Total $million
Operating income	4,274	2,435	2,006	199	8,914
Operating expenses	(2,635)	(1,610)	(1,444)	(515)	(6,204)
Operating profit/(loss) before impairment losses and taxation	1,639	825	562	(316)	2,710
Credit impairment	(112)	34	120	(14)	28
Other impairment	–	(1)	33	(23)	9
Profit from associates and joint ventures	–	–	–	1	1
Underlying profit before taxation	1,527	858	715	(352)	2,748
Restructuring	(84)	(26)	(89)	(126)	(325)
Goodwill impairment and other items	–	–	–	(42)	(42)
Statutory profit/(loss) before taxation	1,443	832	626	(520)	2,381
Total assets	163,441	57,404	287,372	36,574	544,791
Total liabilities	146,644	41,257	238,220	83,233	509,354

Operating income by region

	2022				
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Central & other items $million	Total $million
Underlying operating income	4,631	2,582	2,587	393	10,193
Restructuring	21	2	(1)	(1)	21
Other items	–	–	–	20	20
Statutory operating income	4,652	2,584	2,586	412	10,234

	2021				
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Central & other items $million	Total $million
Underlying operating income	4,274	2,435	2,006	199	8,914
Restructuring	(11)	3	(31)	(35)	(74)
Other items	–	–	–	20	20
Statutory operating income	4,263	2,438	1,975	184	8,860

2. Segmental information continued

Additional segmental information (statutory)

	2022				
	Corporate, Commercial& Institutional Banking $million	Consumer Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Net interest income	2,428	1,773	3	247	4,451
Net fees and commission income	1,310	944	2	(102)	2,154
Net trading and other income	3,305	158	(2)	168	3,629
Operating income	7,043	2,875	3	313	10,234

	2021 (Restated)[1]				
	Corporate, Commercial& Institutional Banking $million	Consumer Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Net interest income	2,267	1,464	–	321	4,052
Net fees and commission income	1,325	1,076	–	(6)	2,396
Net trading and other income	2,078	139	(1)	196	2,412
Operating income	5,670	2,679	(1)	511	8,860

1 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment in 2022. Prior periods have been restated

Operating income by Region

	2022				
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Central & other items $million	Total $million
Net interest income	2,416	1,292	273	470	4,451
Net fees and commission income	1,063	517	567	7	2,154
Net trading and other income	1,173	775	1,746	(65)	3,629
Operating income	4,652	2,584	2,586	412	10,234

	2021				
	Asia $million	Africa & Middle East $million	Europe & Americas $million	Central & other items $million	Total $million
Net interest income	2,130	1,188	502	232	4,052
Net fees and commission income	1,234	605	563	(6)	2,396
Net trading and other income	899	645	910	(42)	2,412
Operating income	4,263	2,438	1,975	184	8,860

Operating income by Key Countries

	2022					
	Singapore $million	India $million	Indonesia $million	UAE $million	UK $million	US $million
Net interest income	1,093	765	106	330	(79)	340
Net fees and commission income	715	188	34	204	110	369
Net trading and other income	336	369	76	315	1,577	102
Operating income	2,144	1,322	216	849	1,608	811

	2021					
	Singapore $million	India $million	Indonesia $million	UAE $million	UK $million	US $million
Net interest income	804	820	99	254	285	214
Net fees and commission income	850	187	43	253	52	370
Net trading and other income	249	298	72	220	781	114
Operating income	1,903	1,305	214	727	1,118	698

3. Net interest income

Accounting Policy

Interest income for financial assets held at either fair value through other comprehensive income or amortised cost, and interest expense on all financial liabilities held at amortised cost is recognised in profit or loss using the effective interest method.

The effective interest method is a method of calculating the amortised cost of a financial asset or a financial liability and of allocating the interest income or interest expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Group estimates cash flows considering all contractual terms of the financial instrument (for example prepayment options) but does not consider future credit losses. The calculation includes all fees paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts. For floating-rate financial instruments, periodic re-estimation of cash flows that reflect the movements in the market rates of interest alters the effective interest rate. Where the estimates of cash flows have been revised, the carrying amount of the financial asset or liability is adjusted to reflect the actual and revised cash flows, discounted at the instruments original effective interest rate. The adjustment is recognised as interest income or expense in the period in which the revision is made as long as the change in estimates is not due to credit issues.

Interest income for financial assets that are either held at fair value through other comprehensive income or amortised cost that have become credit-impaired subsequent to initial recognition (stage 3) and have had amounts written off, is recognised using the credit adjusted effective interest rate. This rate is calculated in the same manner as the effective interest rate except that expected credit losses are included in the expected cash flows. Interest income is therefore recognised on the amortised cost of the financial asset including expected credit losses. Should the credit risk on a stage 3 financial asset improve such that the financial asset is no longer considered credit-impaired, interest income recognition reverts to a computation based on the rehabilitated gross carrying value of the financial asset.

	2022 $million	2021[2] $million
Balances at central banks	745	67
Loans and advances to banks	635	321
Loans and advances to customers	5,756	4,061
Debt securities	2,037	1,240
Other eligible bills	518	285
Accrued on impaired assets (discount unwind)[1]	74	211
Interest income	9,765	6,185
Of which: financial instruments held at fair value through other comprehensive income	1,508	1,018
Deposits by banks	358	68
Customer accounts	3,999	1,509
Debt securities in issue	367	98
Subordinated liabilities and other borrowed funds	562	424
Interest expense on IFRS 16 lease liabilities	28	34
Interest expense	5,314	2,133
Net interest income	4,451	4,052

1 Includes a $71 million (2021: $163 million) adjustment in relation to interest earned on impaired assets as required by IFRS9 Financial Instruments Recognition and Measurement

2 The 2021 comparative figures have been restated to reclassify $418 million of interest paid on subordinated liabilities, previously included in 'Customer accounts', to 'Subordinated liabilities and other borrowed funds'

4. Net fees and commission

Accounting policy

Fees and commissions charged for services provided by the Group are recognised as or when the service is completed or significant act performed.

Loan syndication fees are recognised as revenue when the syndication has been completed and the Group retained no part of the loan package for itself, or retained a part at the same effective interest rate as for the other participants. The Group can act as trustee or in other fiduciary capacities that result in the holding or placing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions. The assets and income arising thereon are excluded from these financial statements, as they are not assets and income of the Group.

The Group applies the following practical expedients:

- information on amounts of transaction price allocated to unsatisfied (or partially unsatisfied) performance obligations at the end of the reporting period is not disclosed as almost all fee-earning contracts have an expected duration of less than one year
- promised consideration is not adjusted for the effects of a significant financing component as the period between the Group providing a service and the customer paying for it is expected to be less than one year
- incremental costs of obtaining a fee-earning contract are recognised upfront in 'Fees and commission expense' rather than amortised, if the expected term of the contract is less than one year

The determination of the services performed for the customer, the transaction price, and when the services are completed depends on the nature of the product with the customer. The main considerations on income recognition by product are as follows:

Transaction Banking

The Group recognises fee income associated with transactional trade and cash management at the point in time the service is provided. The Group recognises income associated with trade contingent risk exposures (such as letters of credit and guarantees) over the period in which the service is provided.

Payment of fees is usually received at the same time the service is provided. In some cases, letters of credit and guarantees issued by the Group have annual upfront premiums, which are amortised on a straight-line basis to fee income over the year.

Financial Markets

The Group recognises fee income at the point in time the service is provided. Fee income is recognised for a significant nonlending service when the transaction has been completed and the terms of the contract with the customer entitle the Group to the fee. Fees are usually received shortly after the service is provided.

Syndication fees are recognised when the syndication is complete. Fees are generally received before completion of the syndication, or within 12 months of the transaction date.

Securities services include custody services, fund accounting and administration, and broker clearing. Fees are recognised over the period the custody or fund management services are provided, or as and when broker services are requested.

Wealth Management

Upfront consideration on bancassurance agreements is amortised straight-line over the contractual term. Commissions for bancassurance activities are recorded as they are earned through sales of third-party insurance products to Customers. These commissions are received within a short time frame of the commission being earned. Target-linked fees are accrued based on percentage of the target achieved, provided it is assessed as highly probable that the target will be met. Cash payment is received at a contractually specified date after achievement of a target has been confirmed.

Upfront and trailing commissions for managed investment placements are recorded as they are confirmed. Income from these activities is relatively even throughout the period, and cash is usually received within a short time frame after the commission is earned.

Retail Products

The Group recognises most income at the point in time the Group is entitled to the fee, since most services are provided at the time of the customer's request.

Credit card annual fees are recognised at the time the fee is received since in most of our retail markets there are contractual circumstances under which fees are waived, so income recognition is constrained until the uncertainties associated with the annual fee are resolved. The Group defers the fair value of reward points on its credit card reward programmes, and recognises income and costs associated with fulfilling the reward at the time of redemption.

4. Net fees and commission continued

	2022 $million	2021 $million
Fees and commissions income	2,863	2,972
Of which:		
Financial instruments that are not fair valued through profit or loss	1,013	962
Trust and other fiduciary activities	243	276
Fees and commissions expense	(709)	(576)
Of which:		
Financial instruments that are not fair valued through profit or loss	(225)	(182)
Trust and other fiduciary activities	(14)	(9)
Net fees and commission	2,154	2,396

	2022				
	Corporate, Commercial & Institutional Banking $million	Consumer Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Transaction Banking	1,021	21	–	–	1,042
Trade	501	16	–	–	517
Cash Management	520	5	–	–	525
Financial Markets	717	–	–	–	717
Lending and Portfolio Management	104	4	–	–	108
Principal Finance	–	–	–	–	–
Wealth Management[4]	–	711	–	–	711
Retail Products[5]	–	337	3	–	340
Treasury	–	–	–	1	1
Others	7	(40)	13	(36)	(56)
Net fees and commission income	1,849	1,033	16	(35)	2,863
Net fees and commission expense	(539)	(89)	(14)	(67)	(709)
Net fees and commission	1,310	944	2	(102)	2,154

4. Net fees and commission continued

	2021[2,3]				
	Corporate, Commercial & Institutional Banking $million	Consumer Private & Business Banking $million	Ventures $million	Central & other items $million	Total $million
Transaction Banking	940	27	–	–	967
Trade	501	18	–	–	519
Cash Management	439	9	–	–	448
Financial Markets	662	–	–	–	662
Lending and Portfolio Management	123	–	–	–	123
Principal Finance	(5)	–	–	–	(5)
Wealth Management[4]	–	946	–	–	946
Retail Products[5]	–	332	–	–	332
Treasury	–	–	–	2	2
Others	–	(19)	34	(70)	(55)
Net fees and commission income[1]	1,720	1,286	34	(68)	2,972
Net fees and commission expense[1]	(395)	(209)	(34)	62	(576)
Net fees and commission[1]	1,325	1,077	–	(6)	2,396

1 Fees & commission by segments was presented on a net basis in 2021. The presentation has been changed to gross basis for Fees & commission income and expense. Prior period has been restated

2 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment in 2022. Prior periods have been restated

3 Following a reorganisation of certain clients, there has been a reclassification of balances across products

4. Upfront bancassurance consideration amounts are amortised on a straight-line basis over the contractual period to which the consideration relates. Deferred income on the balance sheet in respect of these activities is $ 549million (31 December 2021: $634 million). The income will be earned evenly over the next 6.5 years (31 December 2021: 7.5 years). For the twelve months ended 31 December 2022, $66 million of fee income was released from deferred income (31 December 2021: $66 million).

The Group has recognised revenue of $134 million from one of its bancassurance contracts based on confirmation from the counterparty that the annual performance bonus will be paid to the Group for the year ended 31 December 2022.

5. $42 million of amortisation of capitalised acquisition costs on credit cards have been recorded as fee and commission expense in 2022 as against interest income until last year. The corresponding impact for 2021 was $42 million, but the comparatives have not been restated based on materiality.

5. Net trading income

Accounting policy

Gains and losses arising from changes in the fair value of financial instruments held at fair value through profit or loss are recorded in net trading income in the period in which they arise. This includes contractual interest receivable or payable.

Income is recognised from the sale and purchase of trading positions, margins on market making and customer business and fair value changes.

When the initial fair value of a financial instrument held at fair value through profit or loss relies on unobservable inputs, the difference between the initial valuation and the transaction price is amortised to net trading income as the inputs become observable or over the life of the instrument, whichever is shorter. Any unamortised 'day one' gain is released to net trading income if the transaction is terminated.

	2022 $million	2021 $million
Net trading income	**3,743**	2,280
Significant items within net trading income include:		
Gains on instruments held for trading[1]	**3,489**	2,291
Gains on financial assets mandatorily at fair value through profit or loss	**951**	136
(Losses) on financial assets designated at fair value through profit or loss	**–**	(5)
Losses on financial liabilities designated at fair value through profit or loss	**(726)**	(53)

1 Includes $202million loss (31 December 2021 $187 million gain) from the transaction of foreign currency monetary assets and liabilities

6. Other operating income

Accounting policy

Operating lease income is recognised on a straight-line basis over the period of the lease unless another systematic basis is more appropriate.

Dividends on equity instruments are recognised when the Group's right to receive payment is established.

On disposal of fair value through other comprehensive income debt instruments, the cumulative gain or loss recognised in other comprehensive income is recycled to the profit or loss in other operating income.

When the Group loses control of the subsidiary or disposal group, the difference between the consideration received and the carrying amount of the subsidiary or disposal group is recognised as a gain or loss on sale of the business.

	2022 $million	2021 $million
Other operating income includes:		
Rental income from operating lease assets	5	2
Net (loss)/gain on disposal of fair value through other comprehensive income debt instruments	(157)	96
Net gain on amortized cost financial assets	3	34
Net (loss)/gain on sale of businesses	(1)	12
Dividend income	11	11
Other	25	(23)
Other operating income	(114)	132

7. Operating expenses

Accounting policy

Short-term employee benefits: salaries and social security expenses are recognised over the period in which the employees provide the service. Variable compensation is included within share-based payments costs and wages and salaries. Further details are disclosed in the Directors' remuneration report (pages 308 to 309).

Pension costs: contributions to defined contribution pension schemes are recognised in profit or loss when payable. For defined benefit plans, net interest expense, service costs and expenses are recognised in the income statement. Further details are provided in Note 29.

Share-based compensation: the Group operates equity-settled and cash-settled share-based payment compensation plans. The fair value of the employee services (measured by the fair value of the option granted) received in exchange for the grant of the options is recognised as an expense. Further details are provided in Note 30.

	2022 $million	2021 $million
Staff costs:		
Wages and salaries	4,562	4,360
Social security costs	150	144
Other pension costs (Note 29)	275	274
Share-based payment costs	156	148
Other staff costs	605	665
	5,748	5,591

Other staff costs include redundancy expenses of $26 million (31 December 2021: $88 million). Further costs in this category include training, travel costs and other staff related costs.

The following table summarises the number of employees within the Group and Company:

Group

	2022			2021		
	Business	Support services	Total	Business	Support services	Total
At 31 December	20,031	47,166	67,197	19,515	45,758	65,273
Average for the year	20,069	46,334	66,403	19,986	45,481	65,467

7. Operating expenses continued
Company

	2022			2021		
	Business	Support services	Total	Business	Support services	Total
At 31 December	8,493	12,627	21,120	8,032	12,534	20,566
Average for the year	8,359	12,404	20,763	8,211	12,618	20,829

Details of directors' pay, benefits, pensions and benefits and interests in shares are disclosed in Note 38 Remuneration of Directors' (page 309).

Transactions with directors, officers and other related parties are disclosed in Note 35.

	2022 $million	2021 $million
Premises and equipment expenses	228	224
General administrative expenses:		
UK bank levy	102	100
Provision for regulatory matters	14	62
Other general administrative expenses	(41)	(91)
	75	71
Depreciation and amortisation:		
Property, plant and equipment:		
Premises	140	160
Equipment	86	90
	226	250
Intangibles:		
Software	379	339
Acquired on business combinations	6	5
	611	594
Total operating expenses	6,662	6,480

Operating expenses include research expenditure of $689 million (31 December 2021: $705 million) recognised as an expense in the year

The UK bank levy is applied to chargeable equity and liabilities on the balance sheet of UK operations. Key exclusions from chargeable equity and liabilities include Tier 1 capital, insured or guaranteed retail deposits, repos secured on certain sovereign debt and liabilities subject to netting. The rates are 0.10 per cent for short-term liabilities and 0.05 per cent for long-term liabilities.

8. Credit impairment

Accounting policy

Significant accounting estimates and judgements

The Group's expected credit loss (ECL) calculations are outputs of complex models with a number of underlying assumptions. The significant judgements in determining expected credit loss include:

- The Group's criteria for assessing if there has been a significant increase in credit risk;
- Development of expected credit loss models, including the choice of inputs relating to macroeconomic variables;
- Evaluation of management overlays and post-model adjustments;
- Determination of probability weightings for Stage 3 individually assessed provisions

The calculation of credit impairment provisions also involves expert credit judgement to be applied by the credit risk management team based upon counterparty information they receive from various sources including relationship managers and on external market information. Details on the approach for determining expected credit loss can be found in the credit risk section, under IFRS 9 Methodology (page 65).

Estimates of forecasts of key macroeconomic variables underlying the expected credit loss calculation can be found within the Risk review, Key assumptions and judgements in determining expected credit loss (page 106).

8. Credit impairment continued

Expected credit losses

Expected credit losses are determined for all financial debt instruments that are classified at amortised cost or fair value through other comprehensive income, undrawn commitments and financial guarantees.

An expected credit loss represents the present value of expected cash shortfalls over the residual term of a financial asset, undrawn commitment or financial guarantee.

A cash shortfall is the difference between the cash flows that are due in accordance with the contractual terms of the instrument and the cash flows that the Group expects to receive over the contractual life of the instrument.

Measurement

Expected credit losses are computed as unbiased, probability-weighted amounts which are determined by evaluating a range of reasonably possible outcomes, the time value of money, and considering all reasonable and supportable information including that which is forward-looking.

For material portfolios, the estimate of expected cash shortfalls is determined by multiplying the probability of default (PD) with the loss given default (LGD) with the expected exposure at the time of default (EAD). There may be multiple default events over the lifetime of an instrument. Further details on the components of PD, LGD and EAD are disclosed in the Credit risk section. For less material Retail Banking loan portfolios, the Group has adopted less sophisticated approaches based on historical roll rates or loss rates.

Forward-looking economic assumptions are incorporated into the PD, LGD and EAD where relevant and where they influence credit risk, such as GDP growth rates, interest rates, house price indices and commodity prices among others. These assumptions are incorporated using the Group's most likely forecast for a range of macroeconomic assumptions. These forecasts are determined using all reasonable and supportable information, which includes both internally developed forecasts and those available externally, and are consistent with those used for budgeting, forecasting and capital planning.

To account for the potential non-linearity in credit losses, multiple forward-looking scenarios are incorporated into the range of reasonably possible outcomes for all material portfolios. For example, where there is a greater risk of downside credit losses than upside gains, multiple forward-looking economic scenarios are incorporated into the range of reasonably possible outcomes, both in respect of determining the PD (and where relevant, the LGD and EAD) and in determining the overall expected credit loss amounts. These scenarios are determined using a Monte Carlo approach centred around the Group's most likely forecast of macroeconomic assumptions.

The period over which cash shortfalls are determined is generally limited to the maximum contractual period for which the Group is exposed to credit risk. However, for certain revolving credit facilities, which include credit cards or overdrafts, the Group's exposure to credit risk is not limited to the contractual period. For these instruments, the Group estimates an appropriate life based on the period that the Group is exposed to credit risk, which includes the effect of credit risk management actions such as the withdrawal of undrawn facilities.

For credit-impaired financial instruments, the estimate of cash shortfalls may require the use of expert credit judgement. The estimate of expected cash shortfalls on a collateralised financial instrument reflects the amount and timing of cash flows that are expected from foreclosure on the collateral less the costs of obtaining and selling the collateral, regardless of whether foreclosure is deemed probable.

Cash flows from unfunded credit enhancements held are included within the measurement of expected credit losses if they are part of, or integral to, the contractual terms of the instrument (this includes financial guarantees, unfunded risk participations and other non-derivative credit insurance). Although non-integral credit enhancements do not impact the measurement of expected credit losses, a reimbursement asset is recognised to the extent of the expected credit losses recorded.

Cash shortfalls are discounted using the effective interest rate (or credit-adjusted effective interest rate for purchased or originated credit-impaired instruments (POCI)) on the financial instrument as calculated at initial recognition or if the instrument has a variable interest rate, the current effective interest rate determined under the contract.

Instruments	Location of expected credit loss provisions
Financial assets held at amortised cost	Loss provisions: netted against gross carrying value[1]
Financial assets held FVOCI – Debt instruments	Other comprehensive income (FVOCI expected credit loss reserve)[2]
Loan commitments	Provisions for liabilities and charges[3]
Financial guarantees	Provisions for liabilities and charges[3]

1 Purchased or originated credit-impaired assets do not attract an expected credit loss provision on initial recognition. An expected credit loss provision will be recognised only if there is an increase in expected credit losses from that considered at initial recognition

2 Debt and treasury securities classified as fair value through other comprehensive income (FVOCI) are held at fair value on the face of the balance sheet. The expected credit loss attributed to these instruments is held as a separate reserve within other comprehensive income (OCI) and is recycled to the profit and loss account along with any fair value measurement gains or losses held within FVOCI when the applicable instruments are derecognised

3 Expected credit loss on loan commitments and financial guarantees is recognised as a liability provision. Where a financial instrument includes both a loan (i.e. financial asset component) and an undrawn commitment (i.e. loan commitment component), and it is not possible to separately identify the expected credit loss on these components, expected credit loss amounts on the loan commitment are recognised together with expected credit loss amounts on the financial asset. To the extent the combined expected credit loss exceeds the gross carrying amount of the financial asset, the expected credit loss is recognised as a liability provision

8. Credit impairment continued

Recognition

12 months expected credit losses (Stage 1)

Expected credit losses are recognised at the time of initial recognition of a financial instrument and represent the lifetime cash shortfalls arising from possible default events up to 12 months into the future from the balance sheet date. Expected credit losses continue to be determined on this basis until there is either a significant increase in the credit risk of an instrument or the instrument becomes credit-impaired. If an instrument is no longer considered to exhibit a significant increase in credit risk, expected credit losses will revert to being determined on a 12-month basis.

Significant increase in credit risk (Stage 2)

If a financial asset experiences a significant increase in credit risk (SICR) since initial recognition, an expected credit loss provision is recognised for default events that may occur over the lifetime of the asset.

Significant increase in credit risk is assessed by comparing the risk of default of an exposure at the reporting date to the risk of default at origination (after taking into account the passage of time). Significant does not mean statistically significant nor is it assessed in the context of changes in expected credit loss. Whether a change in the risk of default is significant or not is assessed using a number of quantitative and qualitative factors, the weight of which depends on the type of product and counterparty. Financial assets that are 30 or more days past due and not credit-impaired will always be considered to have experienced a significant increase in credit risk. For less material portfolios where a loss rate or roll rate approach is applied to compute expected credit loss, significant increase in credit risk is primarily based on 30 days past due.

Quantitative factors include an assessment of whether there has been significant increase in the forward-looking probability of default (PD) since origination. A forward-looking PD is one that is adjusted for future economic conditions to the extent these are correlated to changes in credit risk. We compare the residual lifetime PD at the balance sheet date to the residual lifetime PD that was expected at the time of origination for the same point in the term structure and determine whether both the absolute and relative change between the two exceeds predetermined thresholds. To the extent that the differences between the measures of default outlined exceed the defined thresholds, the instrument is considered to have experienced a significant increase in credit risk.

Qualitative factors assessed include those linked to current credit risk management processes, such as lending placed on non-purely precautionary early alert (and subject to closer monitoring).

A non-purely precautionary early alert account is one which exhibits risk or potential weaknesses of a material nature requiring closer monitoring, supervision, or attention by management. Weaknesses in such a borrower's account, if left uncorrected, could result in deterioration of repayment prospects and the likelihood of being downgraded. Indicators could include a rapid erosion of position within the industry, concerns over management's ability to manage operations, weak/deteriorating operating results, liquidity strain and overdue balances among other factors.

Credit-impaired (or defaulted) exposures (Stage 3)

Financial assets that are credit-impaired (or in default) represent those that are at least 90 days past due in respect of principal and/or interest. Financial assets are also considered to be credit-impaired where the obligors are unlikely to pay on the occurrence of one or more observable events that have a detrimental impact on the estimated future cash flows of the financial asset. It may not be possible to identify a single discrete event but instead the combined effect of several events may cause financial assets to become credit-impaired.

- Evidence that a financial asset is credit-impaired includes observable data about the following events:
- Significant financial difficulty of the issuer or borrower;
- Breach of contract such as default or a past due event;
- For economic or contractual reasons relating to the borrower's financial difficulty, the lenders of the borrower have granted the borrower concession/s that lenders would not otherwise consider. This would include forbearance actions (page 88);
- Pending or actual bankruptcy or other financial reorganisation to avoid or delay discharge of the borrower's obligation/s;
- The disappearance of an active market for the applicable financial asset due to financial difficulties of the borrower;
- Purchase or origination of a financial asset at a deep discount that reflects incurred credit losses

Lending commitments to a credit-impaired obligor that have not yet been drawn down are included to the extent that the commitment cannot be withdrawn. Loss provisions against credit-impaired financial assets are determined based on an assessment of the recoverable cash flows under a range of scenarios, including the realisation of any collateral held where appropriate. The loss provisions held represent the difference between the present value of the expected cash flows, discounted at the instrument's original effective interest rate, and the gross carrying value (including contractual interest due but not paid) of the instrument prior to any credit impairment. The Group's definition of default is aligned with the regulatory definition of default as set out in the UK's onshored Capital Requirements Regulation (Article 178) and related guidelines.

8. Credit impairment continued

Expert credit judgement

For Corporate, Commercial & Institutional Banking, Consumer, Private and Business Banking, borrowers are graded by credit risk management on a credit grading (CG) scale from CG1 to CG14. Once a borrower starts to exhibit credit deterioration, it will move along the credit grading scale in the performing book and when it is classified as CG12 the credit assessment and oversight of the loan will normally be performed by Stressed Assets Group (SAG). Borrowers graded CG12 exhibit well-defined weaknesses in areas such as management and/or performance but there is no current expectation of a loss of principal or interest. Where the impairment assessment indicates that there will be a loss of principal on a loan, the borrower is graded a CG14 while borrowers of other credit-impaired loans are graded CG13. Instruments graded CG13 or CG14 are regarded as stage 3.

For individually significant financial assets within stage 3, SAG will consider all judgements that have an impact on the expected future cash flows of the asset. These include: the business prospects, industry and geo political climate of the customer, quality of realisable value of collateral, the Group's legal position relative to other claimants and any renegotiation/forbearance/modification options. The future cash flow calculation involves significant judgements and estimates. As new information becomes available and further negotiations/forbearance measures are taken the estimates of the future cash flows will be revised, and will have an impact on the future cash flow analysis.

For financial assets which are not individually significant, such as the Retail Banking portfolio or small business loans, which comprise a large number of homogenous loans that share similar characteristics, statistical estimates and techniques are used, as well as credit scoring analysis.

Consumer and Business Banking clients are considered credit-impaired where they are more 90 days past due, or if the borrower files for bankruptcy or other forbearance programme, the borrower is deceased or the business is closed in the case of a small business, or if the borrower surrenders the collateral, or there is an identified fraud on the account. Additionally, if the account is unsecured and the borrower has other credit accounts with the Group that are considered credit-impaired, the account may be also be credit-impaired.

Techniques used to compute impairment amounts use models which analyse historical repayment and default rates over a time horizon. Where various models are used, judgement is required to analyse the available information provided and select the appropriate model or combination of models to use.

Expert credit judgement is also applied to determine whether any post-model adjustments are required for credit risk elements which are not captured by the models.

Modified financial instruments

Where the original contractual terms of a financial asset have been modified for credit reasons and the instrument has not been derecognised (an instrument is derecognised when a modification results in a change in cash flows that the Group would consider substantial), the resulting modification loss is recognised within credit impairment in the income statement with a corresponding decrease in the gross carrying value of the asset. If the modification involved a concession that the bank would not otherwise consider, the instrument is considered to be credit-impaired and is considered forborne.

Expected credit loss for modified financial assets that have not been derecognised and are not considered to be credit-impaired will be recognised on a 12-month basis, or a lifetime basis, if there is a significant increase in credit risk. These assets are assessed (by comparison to the origination date) to determine whether there has been a significant increase in credit risk subsequent to the modification. Although loans may be modified for non-credit reasons, a significant increase in credit risk may occur. In addition to the recognition of modification gains and losses, the revised carrying value of modified financial assets will impact the calculation of expected credit losses, with any increase or decrease in expected credit loss recognised within impairment.

Forborne loans

Forborne loans are those loans that have been modified in response to a customer's financial difficulties. Forbearance strategies assist clients who are temporarily in financial distress and are unable to meet their original contractual repayment terms. Forbearance can be initiated by the client, the Group or a third-party including government sponsored programmes or a conglomerate of credit institutions. Forbearance may include debt restructuring such as new repayment schedules, payment deferrals, tenor extensions, interest only payments, lower interest rates, forgiveness of principal, interest or fees, or relaxation of loan covenants.

Forborne loans that have been modified (and not derecognised) on terms that are not consistent with those readily available in the market and/or where we have granted a concession compared to the original terms of the loans are considered credit-impaired if there is a detrimental impact on cash flows. The modification loss (see Classification and measurement – Modifications) is recognised in the profit or loss within credit impairment and the gross carrying value of the loan reduced by the same amount. The modified loan is disclosed as 'Loans subject to forbearance – credit-impaired'.

Loans that have been subject to a forbearance modification, but which are not considered credit-impaired (not classified as CG13 or CG14), are disclosed as 'Forborne – not credit-impaired'. This may include amendments to covenants within the contractual terms.

8. Credit impairment continued

Write-offs of credit-impaired instruments and reversal of impairment

To the extent a financial debt instrument is considered irrecoverable, the applicable portion of the gross carrying value is written off against the related loan provision. Such loans are written off after all the necessary procedures have been completed, it is decided that there is no realistic probability of recovery and the amount of the loss has been determined. Subsequent recoveries of amounts previously written off decrease the amount of the provision for credit impairment in the income statement.

Loss provisions on purchased or originated credit-impaired instruments (POCI)

The Group measures expected credit loss on a lifetime basis for POCI instruments throughout the life of the instrument. However, expected credit loss is not recognised in a separate loss provision on initial recognition for POCI instruments as the lifetime expected credit loss is inherent within the gross carrying amount of the instruments. The Group recognises the change in lifetime expected credit losses arising subsequent to initial recognition in the income statement and the cumulative change as a loss provision. Where lifetime expected credit losses on POCI instruments are less than those at initial recognition, then the favourable differences are recognised as impairment gains in the income statement (and as impairment loss where the expected credit losses are greater).

Improvement in credit risk/curing

A period may elapse from the point at which instruments enter lifetime expected credit losses (stage 2 or stage 3) and are reclassified back to 12-month expected credit losses (stage 1). For financial assets that are credit-impaired (stage 3), a transfer to stage 2 or stage 1 is only permitted where the instrument is no longer considered to be credit-impaired. An instrument will no longer be considered credit-impaired when there is no shortfall of cash flows compared to the original contractual terms.

For financial assets within stage 2, these can only be transferred to stage 1 when they are no longer considered to have experienced a significant increase in credit risk.

Where significant increase in credit risk was determined using quantitative measures, the instruments will automatically transfer back to stage 1 when the original PD based transfer criteria are no longer met. Where instruments were transferred to stage 2 due to an assessment of qualitative factors, the issues that led to the reclassification must be cured before the instruments can be reclassified to stage 1. This includes instances where management actions led to instruments being classified as stage 2, requiring that action to be resolved before loans are reclassified to stage 1.

A forborne loan can only be removed from being disclosed as forborne if the loan is performing (stage 1 or 2) and a further two-year probation period is met.

In order for a forborne loan to become performing, the following criteria have to be satisfied:

- At least a year has passed with no default based upon the forborne contract terms
- The customer is likely to repay its obligations in full without realising security
- The customer has no accumulated impairment against amount outstanding (except for ECL)

Subsequent to the criteria above, a further two-year probation period has to be fulfilled, whereby regular payments are made by the customer and none of the exposures to the customer are more than 30 days past due.

	2022 $million	2021 $million
Net credit impairment on loans and advances to banks and customers	(118)	(30)
Net credit impairment against profit or loss during the period relating to debt securities[1]	126	23
Net credit impairment relating to financial guarantees and loan commitments	(29)	(23)
Net credit impairment relating to other financial assets	(1)	–
Credit impairment[1]	**(22)**	(30)

1 Includes impairment of $13 million (2021: Nil) on originated credit-impaired debt securities

9. Goodwill and other impairment

Accounting policy

Refer to the below referenced notes for the relevant accounting policy.

	2022 $million	2021 $million
Impairment of goodwill (Note 16)	10	–
Impairment of property, plant and equipment (Note 17)	5	39
Impairment of other intangible assets (Note 16)	57	3
Other	35[1]	(12)
Property, plant and equipment and other impairment	97	30
Goodwill, property, plant and equipment and other impairment	107	30

1 For 2022, Other primarily relates to impairment on interests in associates and joint ventures. Refer Note 31

10. Taxation

Accounting policy

Income tax payable on profits is based on the applicable tax law in each jurisdiction and is recognised as an expense in the period in which profits arise.

Deferred tax is provided on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred tax is determined using tax rates (and laws) that have been enacted or substantively enacted as at the balance sheet date, and that are expected to apply when the related deferred tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised where it is probable that future taxable profit will be available against which the temporary differences can be utilised. Where permitted, deferred tax assets and liabilities are offset on an entity basis and not by component of deferred taxation.

Current and deferred tax relating to items which are charged or credited directly to equity, is credited or charged directly to equity and is subsequently recognised in the income statement together with the current or deferred gain or loss.

Other accounting estimates and judgements

- Determining the Group's tax charge for the year involves estimation and judgement, which includes an interpretation of local tax laws and an assessment of whether the tax authorities will accept the position taken. These judgements take account of external advice where appropriate, and the Group's view on settling with the relevant tax authorities
- The Group provides for current tax liabilities at the best estimate of the amount that is expected to be paid to the tax authorities where an outflow is probable. In making its estimates, the Group assumes that the tax authorities will examine all the amounts reported to them and have full knowledge of all relevant information
- The recoverability of the Group's deferred tax assets is based on management's judgement of the availability of future taxable profits against which the deferred tax assets will be utilised. In preparing management forecasts the effect of applicable laws and regulations relevant to the utilisation of future taxable profits have been considered.

The following table provides analysis of taxation charge in the year:

	2022 $million	2021 $million
The charge for taxation based upon the profit for the year comprises:		
Current tax:		
United Kingdom corporation tax at 19 per cent (2021: 19 per cent):		
Current tax charge on income for the year	111	(1)
Adjustments in respect of prior years (including double tax relief)	–	–
Foreign tax:		
Current tax charge on income for the year	1,036	737
Adjustments in respect of prior years	11	(40)
	1,158	696
Deferred tax:		
Origination/reversal of temporary differences	(11)	112
Adjustments in respect of prior years	(25)	(65)
	(36)	47
Tax on profits on ordinary activities	1,122	743
Effective tax rate	32.3%	31.2%

10. Taxation continued

The tax charge for the year of $1,122 million (31 December 2021: $743 million) on a profit before tax of $3,474 million (31 December 2021: $2,381 million) reflects the impact of countries with tax rates higher or lower than the UK, the most significant of which is India, non-creditable withholding tax and non-deductible expense.

Tax rate: The tax charge for the year is higher than the charge at the rate of corporation tax in the UK, 19 per cent. The differences are explained below:

	2022		2021	
	$million	%	$million	%
Profit on ordinary activities before tax	3,474		2,381	
Tax at 19 per cent (2021: 19 per cent)	660	19.0	452	19.0
Lower tax rates on overseas earnings	(116)	(3.3)	(81)	(3.4)
Higher tax rates on overseas earnings	390	11.2	333	14.0
Tax at domestic rates applicable where profits earned	934	26.9	704	29.6
Non-creditable withholding taxes	70	2.0	103	4.3
Tax exempt income	(3)	(0.1)	(24)	(1.0)
Non-deductible expenses	53	1.5	106	4.4
Regulatory fine	–	–	12	0.5
Bank levy	19	0.5	19	0.8
Non-taxable (gains)/losses on investments	1	–	(1)	–
Payments on financial instruments in reserves	(43)	(1.2)	(43)	(1.8)
Goodwill impairment	2	0.1	–	–
Deferred tax not recognised	30	0.9	2	0.1
Deferred tax assets written-off	–	–	1	–
Deferred tax rate changes	(11)	(0.3)	–	–
Adjustments to tax charge in respect of prior years	(14)	(0.4)	(105)	(4.4)
Other items	84	2.4	(31)	(1.3)
Tax on profit on ordinary activities	1,122	32.3	743	31.2

Factors affecting the tax charge in future years: the Group's tax charge, and effective tax rate in future years could be affected by several factors including acquisitions, disposals and restructuring of our businesses, the mix of profits across jurisdictions with different statutory tax rates, changes in tax legislation and tax rates and resolution of uncertain tax positions. The evaluation of uncertain tax positions involves an interpretation of local tax laws which could be subject to challenge by a tax authority, and an assessment of whether the tax authorities will accept the position taken. The Group does not currently consider that assumptions or judgements made in assessing tax liabilities have a significant risk of resulting in a material adjustment within the next financial year.

	2022			2021		
Tax recognised in other comprehensive income	Current tax $million	Deferred tax $million	Total $million	Current tax $million	Deferred tax $million	Total $million
Items that will not be reclassified to income statement	–	17	17	–	(76)	(76)
Own credit adjustment	–	2	2	–	(3)	(3)
Equity instruments at fair value through other comprehensive income	–	27	27	–	(58)	(58)
Retirement benefit obligations	–	(12)	(12)	–	(15)	(15)
Items that may be reclassed subsequently to income statement	–	135	135	–	68	68
Debt instruments at fair value through other comprehensive income	–	44	44	–	63	63
Cash flow hedges	–	91	91	–	5	5
Total tax credit/(charge) recognised in equity	–	152	152	–	(8)	(8)

10. Taxation continued

Current tax: The following are the movements in current tax during the year:

	Group		Company	
Current tax comprises:	**2022 $million**	2021 $million	**2022 $million**	2021 $million
Current tax assets	**648**	808	**487**	605
Current tax liabilities	**(336)**	(345)	**(168)**	(250)
Net current tax opening balance	**312**	463	**319**	355
Movements in income statement	**(1,158)**	(696)	**(633)**	(302)
Movements in other comprehensive income	**–**	–	**–**	–
Taxes paid	**782**	557	**359**	274
Other movements	**(46)**	(12)	**(27)**	(8)
Net current tax balance as at 31 December	**(110)**	312	**18**	319
Current tax assets	**446**	648	**347**	487
Current tax liabilities	**(556)**	(336)	**(329)**	(168)
Total	**(110)**	312	**18**	319

Deferred tax: The following are the major deferred tax liabilities and assets recognised by the Group and movements thereon during the year:

Group

	At 1 January 2022 $million	**Exchange & other adjustments $million**	**(Charge)/ credit to profit $million**	**(Charge)/ credit to equity $million**	**At 31 December 2022 $million**
Deferred tax comprises:					
Accelerated tax depreciation	**(275)**	**(8)**	**(23)**	**–**	**(306)**
Impairment provisions on loans and advances	**243**	**(35)**	**14**	**–**	**222**
Tax losses carried forward	**149**	**16**	**(76)**	**–**	**89**
Fair value through other comprehensive income assets	**(116)**	**–**	**24**	**71**	**(21)**
Cash flow hedges	**(2)**	**(1)**	**–**	**91**	**88**
Own credit adjustment	**(3)**	**1**	**–**	**2**	**–**
Retirement benefit obligations	**18**	**(3)**	**(1)**	**(12)**	**2**
Share-based payments	**25**	**–**	**1**	**–**	**26**
Other temporary differences	**(27)**	**(6)**	**97**	**–**	**64**
Net deferred tax assets	**12**	**(36)**	**36**	**152**	**164**

	At 1 January 2021 $million	Exchange & other adjustments $million	(Charge)/ credit to profit $million	(Charge)/ credit to equity $million	At 31 December 2021 $million
Deferred tax comprises:					
Accelerated tax depreciation	(252)	5	(28)	–	(275)
Impairment provisions on loans and advances	305	7	(69)	–	243
Tax losses carried forward	143	(3)	9	–	149
Fair value through other comprehensive income assets	(122)	3	(2)	5	(116)
Cash flow hedges	(7)	–	–	5	(2)
Own credit adjustment	1	(1)	–	(3)	(3)
Retirement benefit obligations	29	9	(5)	(15)	18
Share-based payments	14	–	11	–	25
Other temporary differences	(42)	(22)	37	–	(27)
Net deferred tax assets	69	(2)	(47)	(8)	12

10. Taxation continued

Deferred tax comprises assets and liabilities as follows:

	2022			2021		
	Total $million	**Asset $million**	**Liability $million**	Total $million	Asset $million	Liability $million
Deferred tax comprises:						
Accelerated tax depreciation	**(306)**	**12**	**(318)**	(275)	18	(293)
Impairment provisions on loans and advances	**222**	**244**	**(22)**	243	300	(57)
Tax losses carried forward	**89**	**70**	**19**	149	148	1
Fair value through other comprehensive income assets	**(21)**	**42**	**(63)**	(116)	(14)	(102)
Cash flow hedges	**88**	**86**	**2**	(2)	(3)	1
Own credit adjustment	**–**	**–**	**–**	(3)	–	(3)
Retirement benefit obligations	**2**	**15**	**(13)**	18	13	5
Share-based payments	**26**	**–**	**26**	25	(1)	26
Other temporary differences	**64**	**272**	**(208)**	(27)	220	(247)
	164	**741**	**(577)**	12	681	(669)

Deferred tax: The following are the major deferred tax liabilities and assets recognised by the Company and movements thereon during the year:

Company

	At 1 January 2022 $million	**Exchange & other adjustments $million**	**(Charge)/ credit to profit $million**	**(Charge)/ credit to equity $million**	**At 31 December 2022 $million**
Deferred tax comprises:					
Accelerated tax depreciation	**(254)**	**(6)**	**(10)**	**–**	**(270)**
Impairment provisions on loans and advances	**176**	**(21)**	**(20)**	**–**	**135**
Tax losses carried forward	**114**	**17**	**(64)**	**–**	**67**
Fair value through other comprehensive income assets	**(86)**	**(5)**	**3**	**84**	**(4)**
Cash flow hedges	**(3)**	**–**	**–**	**89**	**86**
Own credit adjustment	**(3)**	**–**	**–**	**3**	**–**
Retirement benefit obligations	**14**	**(3)**	**(1)**	**(9)**	**1**
Share-based payments	**9**	**1**	**–**	**–**	**10**
Other temporary differences	**(42)**	**10**	**100**	**–**	**68**
Net deferred tax liabilities	**(75)**	**(7)**	**8**	**167**	**93**

	At 1 January 2021 $million	Exchange & other adjustments $million	(Charge)/ credit to profit $million	(Charge)/ credit to equity $million	At 31 December 2021 $million
Deferred tax comprises:					
Accelerated tax depreciation	(251)	5	(8)	–	(254)
Impairment provisions on loans and advances	226	11	(61)	–	176
Tax losses carried forward	106	–	8	–	114
Fair value through other comprehensive income assets	(89)	1	–	2	(86)
Cash flow hedges	(3)	–	–	–	(3)
Own credit adjustment	1	–	–	(4)	(3)
Retirement benefit obligations	21	10	(4)	(13)	14
Share-based payments	4	–	5	–	9
Other temporary differences	(34)	(20)	12	–	(42)
Net deferred tax liabilities	(19)	7	(48)	(15)	(75)

10. Taxation continued

Deferred tax comprises assets and liabilities as follows:

	2022			2021		
	Total $million	Asset $million	Liability $million	Total $million	Asset $million	Liability $million
Deferred tax comprises:						
Accelerated tax depreciation	(270)	6	(276)	(254)	9	(263)
Impairment provisions on loans and advances	135	180	(45)	176	234	(58)
Tax losses carried forward	67	51	16	114	113	1
Fair value through other comprehensive income assets	(4)	47	(51)	(86)	(5)	(81)
Cash flow hedges	86	86	–	(3)	(3)	–
Own credit adjustment	–	–	–	(3)	–	(3)
Retirement benefit obligations	1	14	(13)	14	9	5
Share-based payments	10	–	10	9	(1)	10
Other temporary differences	68	195	(127)	(42)	152	(194)
	93	579	(486)	(75)	508	(583)

Group

As at 31 December 2022, the Group has net deferred tax asset of $164 million (31 December 2021: $12 million). The recoverability of the Group's deferred tax assets is based on management's judgement of the availability of future taxable profits against which the deferred tax assets will be utilised.

Of the Group's total deferred tax assets, $89 million relates to tax losses carried forward. These tax losses have arisen in individual legal entities and will be offset as future taxable profits arise in those entities.

- $51 million of the deferred tax assets relating to losses has arisen in the US. Management forecasts show that the losses are expected to be fully utilised over a period of two years.

The remaining deferred tax assets of $38 million relating to losses have arisen in other jurisdictions and are expected to be recovered in less than 10 years.

Company

As at 31 December 2022, the Company has net deferred tax asset of $93 million (31 December 2021: $(75) million). The recoverability of the Company's deferred tax assets is based on management's judgement of the availability of future taxable profits against which the deferred tax assets will be utilised.

Of the Company's total deferred tax assets, $67 million asset relates to tax losses carried forward. These tax losses have arisen in individual legal entities and will be offset as future taxable profits arise in those entities.

- $51 million of the deferred tax assets relating to losses has arisen in the US. Management forecasts show that the losses are expected to be fully utilised over a period of two years.

The remaining deferred tax assets of $16 million relating to losses have arisen in other jurisdictions and are expected to be recovered in less than 10 years.

Unrecognised deferred tax
Group

	Net 2022 $million	Gross 2022 $million	Net 2021 $million	Gross 2021 $million
No account has been taken of the following potential deferred tax assets/(liabilities):				
Withholding tax on unremitted earnings from overseas subsidiaries and associates	(227)	(1,841)	(170)	(1,433)
Tax losses	936	3,727	991	3,643
Held over gains on incorporation of overseas branches	(164)	(587)	(218)	(660)
Other temporary differences	451	1,702	196	741

10. Taxation continued

Company

	Net 2022 $million	Gross 2022 $million	Net 2021 $million	Gross 2021 $million
No account has been taken of the following potential deferred tax assets/(liabilities):				
Withholding tax on unremitted earnings from overseas subsidiaries and associates	**(128)**	**(978)**	(82)	(649)
Tax losses	**862**	**3,352**	945	3,432
Held over gains on incorporation of overseas branches	**(164)**	**(587)**	(218)	(660)
Other temporary differences	**450**	**1,697**	196	742

11. Dividends

Accounting policy

Dividends on ordinary shares and preference shares classified as equity are recognised in equity in the year in which they are declared.

Dividends on ordinary equity shares are recorded in the year in which they are declared and, in respect of the final dividend, have been approved by the shareholders.

The Court considers a number of factors which include the rate of recovery in the Group's financial performance, the macroeconomic environment, and opportunities to further invest in our business and grow profitably in our markets.

Ordinary equity shares

	2022		2021	
	Cents per share	**$million**	Cents per share	$million
Interim dividend declared and paid during the year[1]	**–**	**–**	2	300
Interim dividend declared and paid during the year[2]	**3**	**575**	6	1,211

1 Interim dividend declared and paid during H1 2021

2 Interim dividend declared and paid during H2 2022/2021

Dividends on ordinary equity shares are recorded in the period in which they are declared and, in respect of the final dividend, have been approved by the shareholders.

Preference shares and Additional Tier 1 securities

Dividends on these preference shares and securities classified as equity are recorded in the period in which they are declared.

	2022 $million	2021 $million
Non-cumulative redeemable preference shares:		
7.014 per cent preference shares of $5 each	**53**	52
6.409 per cent preference shares of $5 each	**20**	13
	73	65
Additional Tier 1 securities: Fixed rate resetting perpetual subordinated contingent convertible securities	**238**	227
	311	292

12. Financial instruments

Classification and measurement

Accounting policy

The Group classifies its financial assets into the following measurement categories: amortised cost; fair value through other comprehensive income(FVOCI); and fair value through profit or loss. Financial liabilities are classified as either amortised cost, or held at fair value through profit or loss. Management determines the classification of its financial assets and liabilities at initial recognition of the instrument or, where applicable, at the time of reclassification.

Financial assets held at amortised cost and fair value through other comprehensive income

Debt instruments held at amortised cost or held at FVOCI have contractual terms that give rise to cash flows that are solely payments of principal and interest (SPPI) characteristics. Principal is the fair value of the financial asset at initial recognition but this may change over the life of the instrument as amounts are repaid. Interest consists of consideration for the time value of money, for the credit Risk associated with the principal amount outstanding during a particular period and for other basic lending risks and costs, as well as a profit margin.

In assessing whether the contractual cash flows have SPPI characteristics, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making the assessment, the Group considers:

- Contingent events that would change the amount and timing of cash flows
- Leverage features
- Prepayment and extension terms
- Terms that limit the Group's claim to cash flows from specified assets (e.g. non-recourse asset arrangements);
- Features that modify consideration of the time value of money – e.g. periodical reset of interest rates

Whether financial assets are held at amortised cost, FVTPL or at FVOCI depends on the objectives of the business models under which the assets are held. A business model refers to how the Group manages financial assets to generate cash flows.

The Group makes an assessment of the objective of a business model in which an asset is held at the individual product business line, and where applicable within business lines, depending on the way the business is managed and information is provided to management. Factors considered include:

- How the performance of the product business line is evaluated and reported to the Group's management
- How managers of the business model are compensated, including whether management is compensated based on the fair value of assets or the contractual cash flows collected
- The risks that affect the performance of the business model and how those risks are managed
- The frequency, volume and timing of sales in prior periods, the reasons for such sales and expectations about future sales activity

12. Financial instruments continued

The Group's business model assessment is as follows:

Business model	Business objective	Characteristics	Businesses	Products
Hold to collect	Intent is to originate financial assets and hold them to maturity, collecting the contractual cash flows over the term of the instrument	• Providing financing and originating assets to earn interest income as primary income stream • Performing credit risk management activities • Costs include funding costs, transaction costs and impairment losses	• Corporate Lending • Financial Markets • Transaction Banking • Retail Lending • Treasury Markets (Loans and Borrowings)	• Loans and advances • Debt securities
Hold to collect and sell	Business objective met through both hold to collect and by selling financial assets	• Portfolios held for liquidity needs; or where a certain interest yield profile is maintained; or that are normally rebalanced to achieve matching of duration of assets and liabilities • Income streams come from interest income, fair value changes, and impairment losses	• Treasury Markets	• Derivatives • Debt securities
Fair value through profit or loss	All other business objectives, including trading and managing financial assets on a fair value basis	• Assets held for trading • Assets that are originated, purchased, and sold for profit taking or underwriting activity • Performance of the portfolio is evaluated on a fair value basis • Income streams are from fair value changes or trading gains or losses	• Financial Markets • Syndication • All other business lines	• Derivatives • Trading portfolios • Financial Markets reverse repos • Financial Markets (FM Bond and Loan Syndication)

Financial assets which have SPPI characteristics and that are held within a business model whose objective is to hold financial assets to collect contractual cash flows ("Hold to collect") are recorded at amortised cost. Conversely, financial assets which have SPPI characteristics but are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets ("Hold to collect and sell") are classified as held at FVOCI.

Both hold to collect business and a hold to collect and sell business model involve holding financial assets to collect the contractual cash flows. However, the business models are distinct by reference to the frequency and significance that asset sales play in meeting the objective under which a particular group of financial assets is managed. Hold to collect business models are characterised by asset sales that are incidental to meeting the objectives under which a group of assets is managed. Sales of assets under a hold to collect business model can be made to manage increases in the credit Risk of financial assets but sales for other reasons should be infrequent or insignificant.

Cash flows from the sale of financial assets under a hold to collect and sell business model by contrast are integral to achieving the objectives under which a particular group of financial assets are managed. This may be the case where frequent sales of financial assets are required to manage the Group's daily liquidity requirements or to meet regulatory requirements to demonstrate liquidity of financial instruments. Sales of assets under hold to collect and sell business models are therefore both more frequent and more significant in value than those under the hold to collect model.

Equity instruments designated as held at FVOCI

Non-trading equity instruments acquired for strategic purposes rather than capital gain may be irrevocably designated at initial recognition as held at FVOCI on an instrument-by-instrument basis. Dividends received are recognised in profit or loss. Gains and losses arising from changes in the fair value of these instruments, including foreign exchange gains and losses, are recognised directly in equity and are never reclassified to profit or loss even on derecognition.

Financial assets and liabilities held at fair value through profit or loss

Financial assets which are not held at amortised cost or that are not held at FVOCI are held at fair value through profit or loss. Financial assets and liabilities held at fair value through profit or loss are either mandatorily classified fair value through profit or loss or irrevocably designated at fair value through profit or loss at initial recognition.

12. Financial instruments continued

Mandatorily classified at fair value through profit or loss

Financial assets and liabilities which are mandatorily held at fair value through profit or loss are split between two subcategories as follows:

Trading, including:

- Financial assets and liabilities held for trading, which are those acquired principally for the purpose of selling in the short-term
- Derivatives

Non-trading mandatorily at fair value through profit or loss, including

- Instruments in a business which has a fair value business model (see the Group's business model assessment) which are not trading or derivatives
- Hybrid financial assets that contain one or more embedded derivatives
- Financial assets that would otherwise be measured at amortised cost or FVOCI but which do not have SPPI characteristics
- Equity instruments that have not been designated as held at FVOCI
- Financial liabilities that constitute contingent consideration in a business combination

Designated at fair value through profit or loss

Financial assets and liabilities may be designated at fair value through profit or loss when the designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities on a different basis ('accounting mismatch').

Financial liabilities may also be designated at fair value through profit or loss where they are managed on a fair value basis or have a embedded derivative where the Group is not able to bifurcate and separately value the embedded derivative component.

Financial liabilities held at amortised cost

Financial liabilities that are not financial guarantees or loan commitments and that are not classified as financial liabilities held at fair value through profit or loss are classified as financial liabilities held at amortised cost.

Preference shares which carry a mandatory coupon that represents a market rate of interest at the issue date, or which are redeemable on a specific date or at the option of the shareholder are classified as financial liabilities and are presented in other borrowed funds. The dividends on these preference shares are recognised in the income statement as interest expense on an amortised cost basis using the effective interest method.

Financial guarantee contracts and loan commitments

The Group issues financial guarantee contracts and loan commitments in return for fees. Financial guarantee contracts and any loan commitments issued at below-market interest rates are initially recognised at their fair value as a financial liability, and subsequently measured at the higher of the initial value less the cumulative amount of income recognised in accordance with the principles of IFRS 15 Revenue from Contracts with Customers and their expected credit loss provision. Loan commitments may be designated at fair value through profit or loss where that is the business model under which such contracts are held.

Fair value of financial assets and liabilities

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal market for the asset or liability, or in the absence of a principal market, the most advantageous market to which the Group has access at the date. The fair value of a liability includes the risk that the bank will not be able to honour its obligations.

The fair value of financial instruments is generally measured on the basis of the individual financial instrument. However, when a group of financial assets and financial liabilities is managed on the basis of its net exposure to either market Risk or credit Risk, the fair value of the group of financial instruments is measured on a net basis.

The fair values of quoted financial assets and liabilities in active markets are based on current prices. A market is regarded as active if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. If the market for a financial instrument, and for unlisted securities, is not active, the Group establishes fair value by using valuation techniques.

12. Financial instruments continued

Initial recognition

Purchases and sales of financial assets and liabilities held at fair value through profit or loss, and debt securities classified as financial assets held at fair value through other comprehensive income are initially recognised on the trade-date (the date on which the Group commits to purchase or sell the asset). Loans and advances and other financial assets held at amortised cost are recognised on the settlement date (the date on which cash is advanced to the borrowers).

All financial instruments are initially recognised at fair value, which is normally the transaction price, plus directly attributable transaction costs for financial assets which are not subsequently measured at fair value through profit or loss.

In certain circumstances, the initial fair value may be based on a valuation technique which may lead to the recognition of profits or losses at the time of initial recognition. However, these profits or losses can only be recognised when the valuation technique used is based solely on observable market data. In those cases where the initially recognised fair value is based on a valuation model that uses unobservable inputs, the difference between the transaction price and the valuation model is not recognised immediately in the income statement but is amortised or released to the income statement as the inputs become observable, or the transaction matures or is terminated.

Subsequent measurement

Financial assets and financial liabilities held at amortised cost

Financial assets and financial liabilities held at amortised cost are subsequently carried at amortised cost using the effective interest method (see Interest income and expense). Foreign exchange gains and losses are recognised in the income statement.

Where a financial instrument carried at amortised cost is the hedged item in a qualifying fair value hedge relationship, its carrying value is adjusted by the fair value gain or loss attributable to the hedged risk.

Financial assets held at FVOCI

Debt instruments held at FVOCI are subsequently carried at fair value, with all unrealised gains and losses arising from changes in fair value (including any related foreign exchange gains or losses) recognised in other comprehensive income and accumulated in a separate component of equity. Foreign exchange gains and losses on the amortised cost are recognised in income. Changes in expected credit losses are recognised in profit or loss and are accumulated in equity. On derecognition, the cumulative fair value gains or losses, net of the cumulative expected credit loss reserve, are transferred to the profit or loss.

Equity investments designated at FVOCI are subsequently carried at fair value with all unrealised gains and losses arising from changes in fair value (including any related foreign exchange gains or losses) recognised in other comprehensive income and accumulated in a separate component of equity. On derecognition, the cumulative reserve is transferred to retained earnings and is not recycled to profit or loss.

Financial assets and liabilities held at fair value through profit or loss

Financial assets and liabilities mandatorily held at fair value through profit or loss and financial assets designated at fair value through profit or loss are subsequently carried at fair value, with gains and losses arising from changes in fair value, including contractual interest income or expense, recorded in the net trading income line in the profit or loss unless the instrument is part of a cash flow hedging relationship.

Financial liabilities designated at fair value through profit or loss

Financial liabilities designated at fair value through profit or loss are held at fair value, with changes in fair value recognised in the net trading income line in the profit or loss, other than that attributable to changes in credit risk. Fair value changes attributable to credit risk are recognised in other comprehensive income and recorded in a separate category of reserves unless this is expected to create or enlarge an accounting mismatch, in which case the entire change in fair value of the financial liability designated at fair value through profit or loss is recognised in profit or loss.

Derecognition of financial instruments

Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or where the Group has transferred substantially all risks and rewards of ownership. If substantially all the risks and rewards have been neither retained nor transferred and the Group has retained control, the assets continue to be recognised to the extent of the Group's continuing involvement.

Where financial assets have been modified, the modified terms are assessed on a qualitative and quantitative basis to determine whether a fundamental change in the nature of the instrument has occurred, such as whether the derecognition of the pre-existing instrument and the recognition of a new instrument is appropriate.

On derecognition of a financial asset, the difference between the carrying amount of the asset (or the carrying amount allocated to the portion of the asset derecognised) and the sum of the consideration received (including any new asset obtained, less any new liability assumed) and any cumulative gain or loss that had been recognised in other comprehensive income is recognised in profit or loss except for equity instruments elected FVOCI (see above) and cumulative fair value adjustments attributable to the credit risk of a liability that are held in other comprehensive income.

12. Financial instruments continued

Financial liabilities are derecognised when they are extinguished. A financial liability is extinguished when the obligation is discharged, cancelled or expires and this is evaluated both qualitatively and quantitatively. However, where a financial liability has been modified, it is derecognised if the difference between the modified cash flows and the original cash flows is more than 10 percent, or if less than 10 per cent, the Group will perform a qualitative assessment to determine whether the terms of the two instruments are substantially different.

If the Group purchases its own debt, it is derecognised and the difference between the carrying amount of the liability and the consideration paid is included in 'Other income' except for the cumulative fair value adjustments attributable to the credit risk of a liability that are held in other comprehensive income which are never recycled to the profit or loss.

Modified financial instruments

Financial assets and financial liabilities whose original contractual terms have been modified, including those loans subject to forbearance strategies, are considered to be modified instruments. Modifications may include changes to the tenor, cash flows and or interest rates, among other factors.

Where derecognition of financial assets is appropriate (see Derecognition), the newly recognised residual loans are assessed to determine whether the assets should be classified as purchased or originated credit-impaired assets (POCI).

Where derecognition is not appropriate, the gross carrying amount of the applicable instruments is recalculated as the present value of the renegotiated or modified contractual cash flows discounted at the original effective interest rate (or credit adjusted effective interest rate for POCI financial assets). The difference between the recalculated values and the pre-modified gross carrying values of the instruments are recorded as a modification gain or loss in the profit or loss.

Gains and losses arising from modifications for credit reasons are recorded as part of 'Credit Impairment' (see Credit Impairment Policy). Modification gains and losses arising for non-credit reasons are recognised either as part of "Credit Impairment or within income depending on whether there has been a change in the credit risk on the financial asset subsequent to the modification. Modification gains and losses arising on financial liabilities are recognised within income. The movements in the applicable expected credit loss loan positions are disclosed in further detail in Risk Review.

Under the Phase 2 Interest Rate Benchmark Reform amendments to IFRS 9, changes to the basis for determining contractual cash flows as a direct result of interest rate benchmark reform are treated as changes to a floating interest rate to that instrument, provided that the transition from the IBOR benchmark rate to the alternative RFR takes place on an economically equivalent basis. Where the instrument is measured at amortised cost or FVOCI, this results in a change in the instrument's effective interest rate, with no change in the amortised cost value of the instrument. If the change to the instrument does not meet these criteria, the Group applies judgement to assess whether the changes are substantial and if they are, the financial instrument is derecognised and a new financial instrument is recognised. If the changes are not substantial, the Group adjusts the gross carrying amount of the financial instrument by the present value of the changes not covered by the practical expedient, discounted using the revised effective interest rate.

Reclassifications

Financial liabilities are not reclassified subsequent to initial recognition. Reclassifications of financial assets are made when, and only when, the business model for those assets changes. Such changes are expected to be infrequent and arise as a result of significant external or internal changes such as the termination of a line of business or the purchase of a subsidiary whose business model is to realise the value of pre-existing held for trading financial assets through a hold to collect model.

Financial assets are reclassified at their fair value on the date of reclassification and previously recognised gains and losses are not restated. Moreover, reclassifications of financial assets between financial assets held at amortised cost and financial assets held at fair value through other comprehensive income do not affect effective interest rate or expected credit loss computations.

Reclassified from amortised cost

Where financial assets held at amortised cost are reclassified to financial assets held at fair value through profit and loss, the difference between the fair value of the assets at the date of reclassification and the previously recognised amortised cost is recognised in profit or loss.

For financial assets held at amortised cost that are reclassified to fair value through other comprehensive income, the difference between the fair value of the assets at the date of reclassification and the previously recognised gross carrying value is recognised in other comprehensive income. Additionally, the related cumulative expected credit loss amounts relating to the reclassified financial assets are reclassified from loan loss provisions to a separate reserve in other comprehensive income at the date of reclassification.

Reclassified from fair value through other comprehensive income

Where financial assets held at fair value through other comprehensive income are reclassified to financial assets held at fair value through profit or loss, the cumulative gain or loss previously recognised in other comprehensive income is transferred to the profit or loss.

12. Financial instruments continued

For financial assets held at fair value through other comprehensive income that are reclassified to financial assets held at amortised cost, the cumulative gain or loss previously recognised in other comprehensive income is adjusted against the fair value of the financial asset such that the financial asset is recorded at a value as if it had always been held at amortised cost. In addition, the related cumulative expected credit losses held within other comprehensive income are reversed against the gross carrying value of the reclassified assets at the date of reclassification.

Reclassified from fair value through profit or loss

Where financial assets held at fair value through profit and loss are reclassified to financial assets held at fair value through other comprehensive income or financial assets held at amortised cost, the fair value at the date of reclassification is used to determine the effective interest rate on the financial asset going forward. In addition, the date of reclassification is used as the date of initial recognition for the calculation of expected credit losses. Where financial assets held at fair value through profit or loss are reclassified to financial assets held at amortised cost, the fair value at the date of reclassification becomes the gross carrying value of the financial asset.

The Group's classification of its financial assets and liabilities is summarised in the following tables.

Group

		Assets at fair value							
Assets	**Notes**	Trading $million	Derivatives held for hedging $million	Non-trading mandatorily at fair value through profit or loss $million	Designated at fair value through profit or loss $million	Fair value through other comprehensive income $million	Total financial assets at fair value $million	Assets held at amortised cost $million	Total $million
Cash and balances at central banks		–	–	–	–	–	–	50,531	50,531
Financial assets held at fair value through profit or loss									
Loans and advances to banks[1]		859	–	–	–	–	859	–	859
Loans and advances to customers[1]		3,531	–	534	–	–	4,065	–	4,065
Reverse repurchase agreements and other similar secured lending	15	–	–	62,333	–	–	62,333	–	62,333
Debt securities, alternative tier one and other eligible bills		12,619	–	792	–	–	13,411	–	13,411
Equity shares		1,743	–	143	–	–	1,886	–	1,886
		18,752	–	63,802	–	–	82,554	–	82,554
Derivative financial instruments	13	62,840	2,210	–	–	–	65,050	–	65,050
Loans and advances to banks[1]	14	–	–	–	–	–	–	27,383	27,383
of which – reverse repurchase agreements and other similar secured lending	15	–	–	–	–	–	–	878	878
Loans and advances to customers[1]	14	–	–	–	–	–	–	158,126	158,126
of which – reverse repurchase agreements and other similar secured lending	15	–	–	–	–	–	–	15,586	15,586
Investment securities									
Debt securities, alternative tier one and other eligible bills		–	–	–	–	70,624	70,624	41,801	112,425
Equity shares		–	–	–	–	603	603	–	603
		–	–	–	–	71,227	71,227	41,801	113,028
Other assets	19	–	–	–	–	–	–	27,210	27,210
Assets held for sale	20	–	–	–	2	–	2	1,388	1,390
Total at 31 December 2022		81,592	2,210	63,802	2	71,227	218,833	306,439	525,272

1 Further analysed in Risk review and Capital review (pages 65 to 153)

12. Financial instruments continued

Assets	Notes	Assets at fair value: Trading $million	Assets at fair value: Derivatives held for hedging $million	Assets at fair value: Non-trading mandatorily at fair value through profit or loss $million	Assets at fair value: Designated at fair value through profit or loss $million	Assets at fair value: Fair value through other comprehensive income $million	Assets at fair value: Total financial assets at fair value $million	Assets held at amortised cost $million	Total $million
Cash and balances at central banks		–	–	–	–	–	–	61,963	61,963
Financial assets held at fair value through profit or loss									
Loans and advances to banks[1]		1,315	–	2,307	–	–	3,622	–	3,622
Loans and advances to customers[1]		2,812	–	1,120	–	–	3,932	–	3,932
Reverse repurchase agreements and other similar secured lending	15	–	–	78,986	–	–	78,986	–	78,986
Debt securities, alternative tier one and other eligible bills		14,301	–	1,103	–	–	15,404	–	15,404
Equity shares		4,465	–	120	–	–	4,585	–	4,585
		22,893	–	83,636	–	–	106,529	–	106,529
Derivative financial instruments	13	52,609	636	–	–	–	53,245	–	53,245
Loans and advances to banks[1]	14	–	–	–	–	–	–	29,999	29,999
of which – reverse repurchase agreements and other similar secured lending	15	–	–	–	–	–	–	956	956
Loans and advances to customers[1]	14	–	–	–	–	–	–	144,799	144,799
of which – reverse repurchase agreements and other similar secured lending	15	–	–	–	–	–	–	3,764	3,764
Investment securities									
Debt securities, alternative tier one and other eligible bills		–	–	–	–	42,491	72,491	29,214	101,705
Equity shares		–	–	–	–	575	575	–	575
		–	–	–	–	73,066	73,066	29,214	102,280
Other assets	19	–	–	–	–	–	–	22,281	22,281
Assets held for sale	20	–	–	–	43	–	43	52	95
Total at 31 December 2021		75,502	636	83,636	43	73,066	232,883	288,308	521,191

1 Further analysed in Risk review and Capital review (pages 65 to 153)

12. Financial instruments continued

Company

Assets	Notes	Trading $million	Derivatives held for hedging $million	Non-trading mandatorily at fair value through profit or loss $million	Designated at fair value through profit or loss $million	Fair value through other comprehensive income $million	Total financial assets at fair value $million	Assets held at amortised cost $million	Total $million
		Assets at fair value							
Cash and balances at central banks		–	–	–	–	–	–	38,867	38,867
Financial assets held at fair value through profit or loss									
Loans and advances to banks[1]		837	–	–	–	–	837	–	837
Loans and advances to customers[1]		3,113	–	83	–	–	3,196	–	3,196
Reverse repurchase agreements and other similar secured lending	15	–	–	59,057	–	–	59,057	–	59,057
Debt securities, alternative tier one and other eligible bills		9,282	–	1,679	–	–	10,961	–	10,961
Equity shares		1,738	–	3	–	–	1,741	–	1,741
		14,970	–	60,822	–	–	75,792	–	75,792
Derivative financial instruments	13	63,355	2,126	–	–	–	65,481	–	65,481
Loans and advances to banks[1]	14	–	–	–	–	–	–	18,548	18,548
of which – reverse repurchase agreements and other similar secured lending	15	–	–	–	–	–	–	184	184
Loans and advances to customers[1]	14	–	–	–	–	–	–	80,611	80,611
of which – reverse repurchase agreements and other similar secured lending	15	–	–	–	–	–	–	15,071	15,071
Investment securities									
Debt securities, alternative tier one and other eligible bills		–	–	–	–	57,007	57,007	38,042	95,049
Equity shares		–	–	–	–	323	323	–	323
		–	–	–	–	57,330	57,330	38,042	95,372
Other assets	19	–	–	–	–	–	–	23,625	23,625
Assets held for sale	20	–	–	–	2	–	2	544	546
Total at 31 December 2022		78,325	2,126	60,822	2	57,330	198,605	200,237	398,842

1 Further analysed in Risk review and Capital review (pages 65 to 153)

12. Financial instruments continued

Assets	Notes	Trading $million	Derivatives held for hedging $million	Non-trading mandatorily at fair value through profit or loss $million	Designated at fair value through profit or loss $million	Fair value through other comprehensive income $million	Total financial assets at fair value $million	Assets held at amortised cost $million	Total $million
		Assets at fair value							
Cash and balances at central banks		–	–	–	–	–	–	48,165	48,165
Financial assets held at fair value through profit or loss									
Loans and advances to banks[1]		1,293	–	2,277	–	–	3,570	–	3,570
Loans and advances to customers[1]		2,759	–	448	–	–	3,207	–	3,207
Reverse repurchase agreements and other similar secured lending	15	–	–	77,655	–	–	77,655	–	77,655
Debt securities, alternative tier one and other eligible bills		9,367	–	1,485	–	–	10,852	–	10,852
Equity shares		4,419	–	2	–	–	4,421	–	4,421
		17,838	–	81,867	–	–	99,705	–	99,705
Derivative financial instruments	13	52,847	631	–	–	–	53,478	–	53,478
Loans and advances to banks[1]	14	–	–	–	–	–	–	16,117	16,117
of which – reverse repurchase agreements and other similar secured lending	15	–	–	–	–	–	–	438	438
Loans and advances to customers[1]	14	–	–	–	–	–	–	71,161	71,161
of which – reverse repurchase agreements and other similar secured lending	15	–	–	–	–	–	–	3,047	3,047
Investment securities									
Debt securities, alternative tier one and other eligible bills		–	–	–	–	60,033	60,033	25,995	86,028
Equity shares		–	–	–	–	361	361	–	361
		–	–	–	–	60,394	60,394	25,995	86,389
Other assets	19	–	–	–	–	–	–	19,860	19,860
Assets held for sale	20	–	–	–	42	–	42	49	91
Total at 31 December 2021		70,685	631	81,867	42	60,394	213,619	181,347	394,966

1 Further analysed in Risk review and Capital review (pages 65 to 153)

12. Financial instruments continued
Group

Liabilities	Notes	Liabilities at fair value: Trading $million	Liabilities at fair value: Derivatives held for hedging $million	Liabilities at fair value: Designated at fair value through profit or loss $million	Liabilities at fair value: Total financial liabilities at fair value $million	Amortised cost $million	Total $million
Financial liabilities held at fair value through profit or loss							
Deposits by banks		–	–	586	586	–	586
Customer accounts		29	–	6,526	6,555	–	6,555
Repurchase agreements and other similar secured borrowing	15	–	–	50,402	50,402	–	50,402
Debt securities in issue	21	–	–	7,563	7,563	–	7,563
Short positions		2,302	–	–	2,302	–	2,303
Other liabilities		–	–	–	–	–	–
		2,331	–	65,077	67,408	–	67,408
Derivative financial instruments	13	66,283	2,575	–	68,858	–	68,858
Deposits by banks		–	–	–	–	24,150	24,150
Customer accounts		–	–	–	–	243,075	243,075
Repurchase agreements and other similar secured borrowing	15	–	–	–	–	1,991	1,991
Debt securities in issue	21	–	–	–	–	36,982	36,982
Other liabilities	22	–	–	–	–	25,567	25,567
Subordinated liabilities and other borrowed funds	26	–	–	–	–	13,269	13,269
Liabilities included in disposal groups held for sale	20	–	–	5	5	1,230	1,235
Total at 31 December 2022		68,614	2,575	65,082	136,271	346,264	482,535

Liabilities	Notes	Liabilities at fair value: Trading $million	Liabilities at fair value: Derivatives held for hedging $million	Liabilities at fair value: Designated at fair value through profit or loss $million	Liabilities at fair value: Total financial liabilities at fair value $million	Amortised cost $million	Total $million
Financial liabilities held at fair value through profit or loss							
Deposits by banks		–	–	59	59	–	59
Customer accounts		198	–	6,770	6,968	–	6,968
Repurchase agreements and other similar secured borrowing	15	–	–	61,307	61,307	–	61,307
Debt securities in issue	21	–	–	4,360	4,360	–	4,360
Short positions		2,852	–	–	2,852	–	2,852
Other liabilities		6	–	–	6	–	6
		3,056	–	72,496	75,552	–	75,552
Derivative financial instruments	13	53,344	242	–	53,586	–	53,586
Deposits by banks		–	–	–	–	25,205	25,205
Customer accounts		–	–	–	–	242,331	242,331
Repurchase agreements and other similar secured borrowing	15	–	–	–	–	325	325
Debt securities in issue	21	–	–	–	–	36,060	36,060
Other liabilities	22	–	–	–	–	25,650	25,650
Subordinated liabilities and other borrowed funds	26	–	–	–	–	14,615	14,615
Liabilities included in disposal groups held for sale	20	–	–	–	–	–	–
Total at 31 December 2021		56,400	242	72,496	129,138	344,186	473,324

12. Financial instruments continued
Company

Liabilities	Notes	Liabilities at fair value: Trading $million	Liabilities at fair value: Derivatives held for hedging $million	Liabilities at fair value: Designated at fair value through profit or loss $million	Liabilities at fair value: Total financial liabilities at fair value $million	Amortised cost $million	Total $million
Financial liabilities held at fair value through profit or loss							
Deposits by banks		–	–	573	573	–	573
Customer accounts		–	–	6,325	6,325	–	6,325
Repurchase agreements and other similar secured borrowing	15	–	–	50,179	50,179	–	50,179
Debt securities in issue	21	–	–	7,271	7,271	–	7,271
Short positions		1,841	–	–	1,841	–	1,841
Other liabilities		–	–	–	–	–	–
		1,841	–	64,348	66,189	–	66,189
Derivative financial instruments	13	66,729	2,474	–	69,203	–	69,203
Deposits by banks		–	–	–	–	17,900	17,900
Customer accounts		–	–	–	–	137,422	137,422
Repurchase agreements and other similar secured borrowing	15	–	–	–	–	1,723	1,723
Debt securities in issue	21	–	–	–	–	34,992	34,992
Other liabilities	22	–	–	–	–	20,661	20,661
Subordinated liabilities and other borrowed funds	26	–	–	–	–	12,729	12,729
Liabilities included in disposal groups held for sale	20	–	–	–	–	335	335
Total at 31 December 2022		68,570	2,474	64,348	135,392	225,762	361,154

Liabilities	Notes	Liabilities at fair value: Trading $million	Liabilities at fair value: Derivatives held for hedging $million	Liabilities at fair value: Designated at fair value through profit or loss $million	Liabilities at fair value: Total financial liabilities at fair value $million	Amortised cost $million	Total $million
Financial liabilities held at fair value through profit or loss							
Deposits by banks		–	–	59	59	–	59
Customer accounts		–	–	6,598	6,598	–	6,598
Repurchase agreements and other similar secured borrowing	15	–	–	60,897	60,897	–	60,897
Debt securities in issue	21	–	–	4,086	4,086	–	4,086
Short positions		2,256	–	–	2,256	–	2,256
Other liabilities		6	–	–	6	–	6
		2,262	–	71,640	73,902	–	73,902
Derivative financial instruments	13	53,621	214	–	53,835	–	53,835
Deposits by banks		–	–	–	–	18,870	18,870
Customer accounts		–	–	–	–	135,478	135,478
Repurchase agreements and other similar secured borrowing	15	–	–	–	–	283	283
Debt securities in issue	21	–	–	–	–	33,826	33,826
Other liabilities	22	–	–	–	–	20,125	20,125
Subordinated liabilities and other borrowed funds	26	–	–	–	–	14,076	14,076
Liabilities included in disposal groups held for sale	20	–	–	–	–	–	–
Total at 31 December 2021		55,883	214	71,640	127,737	222,658	350,395

12. Financial instruments continued

Interest rate benchmark reform

In 2017, the Financial Conduct Authority (FCA) announced that it had reached an agreement with LIBOR panel banks to contribute to LIBOR until the end of 2021, after which there would be a transition from LIBORs to alternative risk-free rates (RFRs). Since then, there have been further updates, particularly with respect to the cessation date for certain USD LIBOR tenors being deferred from 31 December 2021 to 30 June 2023.

How the Group is managing the transition to alternative benchmark rates

In 2018, the Group established its IBOR Transition Programme to manage the transition away from LIBOR. Senior management oversight for the Programme is provided by the Chief Executive Officers of CCIB and CPBB. The Programme's strategic bank-wide approach aims to support clients throughout the transition, while ensuring key risks and issues are identified and effectively managed. The Programme is governed by a principal Programme Steering Committee that oversees 13 workstreams aligned to the Group's businesses and functions. Within the Programme, separate committees govern each workstream, and all of them have a dedicated Accountable Executive.

Additional governance is supported by regular updates provided to senior risk committees, including the Group Risk Committee, Board Risk Committee and the Corporate, Commercial and Institutional Banking Risk Committee.

From an industry and regulatory perspective, the Group actively participates in and contributes to working groups, industry associations and business forums that focus on different aspects of the transition. The Group monitors the developments at these forums and includes significant decisions into its broader transition plans.

Progress during 2022

Supported by a number of system enhancements, the Group has successfully enabled the transition to RFR products, with end-to-end capabilities across a full suite of derivative and cash products. Activity in products referencing RFRs continued to grow throughout 2022. New use of USD LIBOR has ceased, except for limited exceptions as permitted by the regulators.

The Group remediated all non-USD LIBOR exposures by early 2022 and has no reliance on synthetic GBP or JPY LIBOR in 2022. During 2022, focus shifted on the remediation of legacy USD LIBOR transactions and automation of associated data and processes. Clients with legacy USD LIBOR loans have been engaged to remediate their contracts primarily via active conversion to alternative rates, or other suitable transition mechanisms such as the inclusion of robust fallbacks. The Group adhered to the International Swaps and Derivatives Association (ISDA) 2020 IBOR Fallbacks Protocol for all its trading entities and continued to engage clients that had not adhered to negotiate remediation of USD LIBOR contracts by the end of June 2023. The Group will also participate in the conversion events at the London Clearing House (LCH) during the first part of 2023.

Frontline and client engagement, including internal and client communications, training, and client webinars were a key feature of the Programme throughout 2022 to support transition from USD LIBOR to Secured Overnight Financing Rate (SOFR) as well as the transition for other IBOR benchmarks that are ceasing.

Risks which the Group is exposed to due to IBOR transition

The Group has largely mitigated all material adverse outcomes associated with the cessation of IBOR benchmarks, and these have not required a change to the Group's risk management strategy. However, the Group will continue to focus on the remediation required for other benchmarks, and will continue to monitor and manage the inherent risks of the transition, with particular attention being paid to the following:

- Legal Risk: IBOR transition introduces significant legal risks and the Group has taken action to mitigate them where possible. These include risks around contracts that reference USD LIBOR. Steps have been taken to either insert robust fallbacks or actively convert transactions from the relevant IBOR to the new RFR-based options. The Group actively monitors remediation progress and tracks exposures that are proving difficult to remediate. Based on the information available as at the date of this Report, there is a reasonable probability that some such exposures may not be remediated by the first interest fixing date following June 30 2023. The Group will apply certain legislative solutions to these exposures if required, including the application of synthetic USD LIBOR, should it be made available
- Conduct Risk: The Group considers Conduct Risk to be a significant area of non-financial risk management throughout the transition. Our risk appetite statement on Conduct Risk strives to maintain appropriate outcomes by continuously demonstrating that we are 'Doing the Right Thing' in the way we do business. Accordingly, we recognise that the identification and mitigation of conduct risks arising in respect of the transition are fundamental to the successful transition to new RFR-based rates. The Group has therefore taken actions in this regard as an integral part of its IBOR Transition Programme, including an extensive outreach programme
- Operational Risk: The Group has recognised the importance of the ongoing identification and management of Operational Risk as a result of IBOR transition, including those related to systems affected by the transition. The Programme has adopted the Group's existing Operational Risk Framework in its approach to identifying, quantifying, and mitigating the impact of operational risks resulting from the transition

12. Financial instruments continued

- Market Risk: As trades are transitioned from IBOR to RFRs, the business-as-usual metrics, limit structure and controls will continue to apply. Limits for value at risk and market risk sensitivities are in accordance with the Group Risk Appetite Statement. New limits have been set following engagement with the business to consider client demand and market liquidity in RFR-linked products, as well as the regulatory expectations
- Financial and pricing risk: The Group continues to monitor any financial impact of IBOR transition across business and functional workstreams in the Programme, and is implementing model and pricing changes to mitigate these risks and ensure alignment with conventions and pricing mechanisms of the alternative reference rates and indices
- Accounting Risk: The Group has identified the financial instruments that may be affected by accounting issues such as accounting for contractual changes due to IBOR reform, fair value measurement and hedge accounting. We continue to monitor and contribute to industry developments on tax and accounting changes.

As at 31 December 2022 the Group had the following notional principal exposures to interest rate benchmarks that are expected to be subject to interest rate benchmark reform. The Group has excluded financial instruments linked to USD LIBOR maturing before 30 June 2023 as it is assumed these will not require remediatiom due USD LIBOR no longer being published on a representative basis beyond this date.

Group

IBOR exposures by benchmark as of 31 December 2022	USD LIBOR $million	GBP LIBOR $million	SGD SOR $million	THB FIX $million	Other IBOR $million	Total IBOR $million
Assets						
Loans and advances to banks	610	–	–	–	–	610
Loans and advances to customers	16,537	–	–	–	–	16,537
Debt securities, AT1 and other eligible bills	1,591	–	16	–	–	1,607
	18,738	–	16	–	–	18,754
Liabilities				–		
Deposits by banks	4,194	–	6	–	–	4,200
Customer accounts	3,062	–	–	34	–	3,096
Repurchase agreements and other secured borrowing	671	–	–	–	–	671
Debt securities in issue	259	–	–	–	–	259
Subordinated liabilities and other borrowed funds	–	–	–	–	–	–
	8,186	–	6	34	–	8,226
Derivatives – Foreign exchange contracts						
Currency swaps and options	159,088	–	3,941	958	–	163,987
Derivatives – Interest rate contracts	–	–	–	–	–	–
Swaps	739,704	–	10,823	11,614	–	762,141
Forward rate agreements and options	22,148	1	–	9	–	22,158
Exchange traded futures and options	31,758	–	–	–	–	31,758
Equity and stock index options	49	–	–	–	–	49
Credit derivative contracts	5,085	–	78	72	–	4,235
Total IBOR derivative exposure	957,832	1	14,842	12,653	–	985,328
Total IBOR exposure	984,756	1	14,864	12,687	–	1,012,308
Loan commitments off balance sheet	2,375	–	14	–	–	2,389

12. Financial instruments continued

IBOR exposures by benchmark as at 31 December 2021	USD LIBOR $million	GBP LIBOR $million	SGD SOR $million	THB FIX $million	Other IBOR $million	Total IBOR $million
Assets						
Loans and advances to banks	787	–	–	–	–	787
Loans and advances to customers	18,932	123	1,479	15	58	20,607
Debt securities, AT1 and other eligible bills	2,007	237	18	–	–	2,262
	21,726	360	1,497	15	58	23,656
Liabilities						
Deposits by banks	6,636	–	8	–	–	6,644
Customer accounts	3,057	–	1	36	–	3,094
Repurchase agreements and other secured borrowing	671	–	–	–	–	671
Debt securities in issue	295	–	–	–	–	295
Subordinated liabilities and other borrowed funds	160	–	–	–	–	160
	10,819	–	9	36	–	10,864
Derivatives – Foreign exchange contracts						
Currency swaps and options	155,567	–	6,008	1,725	–	163,300
Derivatives – Interest rate contracts	–	–	–	–	–	–
Swaps	738,979	–	14,053	52,808	–	805,840
Forward rate agreements and options	29,221	1	74	124	–	29,420
Exchange traded futures and options	24,236	–	–	–	–	24,236
Equity and stock index options	74	–	–	–	–	74
Credit derivative contracts	4,056	–	215	277	–	4,458
Total IBOR derivative exposure	925,133	1	20,350	54,934	–	1,027,418
Total IBOR exposure	984,678	361	21,856	54,985	58	1,061,938
Loan commitments off balance sheet	3,291	271	179	–	964	4,705

12. Financial instruments continued

Company

IBOR exposures by benchmark as of 31 December 2022	USD LIBOR $million	GBP LIBOR $million	SGD SOR $million	THB FIX $million	Other IBOR $million	Total IBOR $million
Assets						
Loans and advances to banks	610	–	–	–	–	610
Loans and advances to customers	15,958	–	–	–	–	15,958
Debt securities, AT1 and other eligible bills	1,577	–	16	–	–	1,593
	18,145	–	16	–	–	18,161
Liabilities						
Deposits by banks	3,930	–	6	–	–	3,936
Customer accounts	2,285	–	–	34	–	2,319
Repurchase agreements and other secured borrowing	471	–	–	–	–	471
Debt securities in issue	254	–	–	–	–	254
Subordinated liabilities	–	–	–	–	–	–
	6,940	–	6	34	–	6,980
Derivatives – Foreign exchange contracts						
Currency swaps and options	152,394	–	3,132	919	–	156,445
Derivatives – Interest rate contracts	–	–	–	–	–	–
Swaps	704,546	–	9,535	10,910	–	724,991
Forward rate agreements and options	18,814	–	–	9	–	18,823
Exchange traded futures and options	31,216	–	–	–	–	31,216
Equity and stock index options	49	–	–	–	–	49
Credit derivative contracts	4,782	–	78	72	–	4,932
Total IBOR derivative exposure	911,801	–	12,745	11,910	–	936,456
Total IBOR exposure	936,886	–	12,767	11,944	–	961,597
Loan commitments off balance sheet	2,167		–	–	–	2,167

12. Financial instruments continued

IBOR exposures by benchmark as at 31 December 2021	USD LIBOR $million	GBP LIBOR $million	SGD SOR $million	THB FIX $million	Other IBOR $million	Total IBOR $million
Assets						
Loans and advances to banks	680	–	–	–	–	680
Loans and advances to customers	14,444	123	–	–	58	14,625
Debt securities, AT1 and other eligible bills	1,726	237	–	–	–	1,963
	16,850	360	–	–	58	17,268
Liabilities						
Deposits by banks	5,087	–	–	–	–	5,087
Customer accounts	2,809	–	–	–	–	2,809
Repurchase agreements and other secured borrowing	471	–	–	–	–	471
Debt securities in issue	275	–	–	–	–	275
Subordinated liabilities and other borrowed funds	160	–	–	–	–	160
	8,802	–	–	–	–	8,802
Derivatives – Foreign exchange contracts						
Currency swaps and options	145,302	–	2,334	–	–	147,636
Derivatives – Interest rate contracts	–	–	–	–	–	–
Swaps	718,980	–	9,971	48,543	–	777,494
Forward rate agreements and options	28,429	1	74	–	–	28,504
Exchange traded futures and options	24,236	–	–	–	–	24,236
Equity and stock index options	74	–	–	–	–	74
Credit derivative contracts	3,867	–	–	–	–	3,867
Total IBOR derivative exposure	920,888	1	12,379	48,543	–	981,811
Total IBOR exposure	946,540	361	12,379	48,543	58	1,007,881
Loan commitments off balance sheet	2,900	263	7	–	879	4,049

Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the asset and settle the liability simultaneously.

In practice, for credit mitigation, the Group is able to offset assets and liabilities which do not meet the IAS 32 netting criteria set out below. Such arrangements include master netting arrangements for derivatives and global master repurchase agreements for repurchase and reverse repurchase transactions. These agreements generally allow that all outstanding transactions with a particular counterparty can be offset but only in the event of default or other predetermined events.

In addition, the Group also receives and pledges readily realisable collateral for derivative transactions to cover net exposure in the event of a default. Under repurchase and reverse repurchase agreements the Group pledges (legally sells) and obtains (legally purchases) respectively, highly liquid assets which can be sold in the event of a default.

The following tables set out the impact of netting on the balance sheet. This comprises derivative transactions settled through an enforceable netting agreement where we have the intent and ability to settle net and which are offset on the balance sheet.

12. Financial instruments continued
Group

	2022					
				Related amount not offset in the balance sheet		
	Gross amounts of recognised financial instruments $million	Impact of offset in the balance sheet $million	Net amounts of financial instruments presented in the balance sheet $million	Financial instruments $million	Financial collateral $million	Net amount $million
Assets						
Derivative financial instruments	119,241	(54,191)	65,050	(52,827)	(8,304)	3,919
Reverse repurchase agreements and other similar secured lending	94,352	(15,555)	78,797	–	(78,797)	–
At 31 December 2022	213,593	(69,746)	143,847	(52,827)	(87,101)	3,919
Liabilities						
Derivative financial instruments	123,049	(54,191)	68,858	(52,827)	(11,372)	4,659
Repurchase agreements and other similar secured borrowing	67,948	(15,555)	52,393	–	(52,393)	–
At 31 December 2022	190,997	(69,746)	121,251	(52,827)	(63,765)	4,659

	2021					
				Related amount not offset in the balance sheet		
	Gross amounts of recognised financial instruments $million	Impact of offset in the balance sheet $million	Net amounts of financial instruments presented in the balance sheet $million	Financial instruments $million	Financial collateral $million	Net amount $million
Assets						
Derivative financial instruments	79,128	(25,883)	53,245	(42,577)	(7,757)	2,911
Reverse repurchase agreements and other similar secured lending	91,132	(7,426)	83,706	–	(83,706)	–
At 31 December 2021	170,260	(33,309)	136,951	(42,577)	(91,463)	2,911
Liabilities						
Derivative financial instruments	79,469	(25,883)	53,586	(42,577)	(8,244)	2,765
Repurchase agreements and other similar secured borrowing	69,058	(7,426)	61,632	–	(61.632)	–
At 31 December 2021	148,527	(33,309)	115,218	(42,577)	(69,876)	2,765

12. Financial instruments continued

Company

	2022					
				Related amount not offset in the balance sheet		
	Gross amounts of recognised financial instruments $million	Impact of offset in the balance sheet $million	Net amounts of financial instruments presented in the balance sheet $million	Financial instruments $million	Financial collateral $million	Net amount $million
Assets						
Derivative financial instruments	**119,672**	**(54,191)**	**65,481**	**(53,810)**	**(7,710)**	**3,961**
Reverse repurchase agreements and other similar secured lending	**89,867**	**(15,555)**	**74,312**	**–**	**(74,312)**	**–**
At 31 December 2022	**209,539**	**(69,746)**	**139,793**	**(53,810)**	**(82,022)**	**3,961**
Liabilities						
Derivative financial instruments	**123,394**	**(54,191)**	**69,203**	**(53,810)**	**(10,231)**	**5,162**
Repurchase agreements and other similar secured borrowing	**67,457**	**(15,555)**	**51,902**	**–**	**(51,902)**	**–**
At 31 December 2022	**190,851**	**(69,746)**	**121,105**	**(53,810)**	**(62,133)**	**5,162**

	2021					
				Related amount not offset in the balance sheet		
	Gross amounts of recognised financial instruments $million	Impact of offset in the balance sheet $million	Net amounts of financial instruments presented in the balance sheet $million	Financial instruments $million	Financial collateral $million	Net amount $million
Assets						
Derivative financial instruments	79,361	(25,883)	53,478	(43,788)	(7,033)	2,657
Reverse repurchase agreements and other similar secured lending	88,566	(7,426)	81,140	–	(81,140)	–
At 31 December 2021	167,927	(33,309)	134,618	(43,788)	(88,173)	2,657
Liabilities						
Derivative financial instruments	79,718	(25,883)	53,835	(43,788)	(7,780)	2,267
Repurchase agreements and other similar secured borrowing	68,606	(7,426)	61,180	–	(61,180)	–
At 31 December 2021	148,324	(33,309)	115,015	(43,788)	(68,960)	2,267

Related amounts not offset in the balance sheet comprises:

- Financial instruments not offset in the balance sheet but covered by an enforceable netting arrangement. This comprises master netting arrangements held against derivative financial instruments and excludes the effect of over-collateralisation
- Financial instruments where a legal opinion evidencing enforceability the right of offset may not have sought, or may have been unable to obtain
- Financial collateral comprises cash collateral pledged and received for derivative financial instruments and collateral bought and sold for reverse repurchase and repurchase agreements respectively and excludes the effect of over-collateralisation

12. Financial instruments continued

Financial liabilities designated at fair value through profit or loss

	2022 $million	2021 $million
Carrying balance aggregate fair value	**65,077**	72,496
Amount contractually obliged to repay at maturity	**66,138**	72,710
Difference between aggregate fair value and contractually obliged to repay at maturity	**(1,061)**	(214)
Cumulative change in fair value accredited to credit risk difference	**(31)**	14

The net fair value loss on financial liabilities designated at fair value through profit or loss was $726 million for the year (31 December 2021: net loss of $53 million). Further details of the Group's own credit adjustment (OCA) valuation technique is described later in this note.

Valuation of financial instruments

The fair values of quoted financial assets and liabilities in active markets are based on current prices. A market is regarded as active if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis. Wherever possible, fair values have been calculated using unadjusted quoted market prices in active markets for identical instruments held by the Group. Where quoted market prices are not available, or are unreliable because of poor liquidity, fair values have been determined using valuation techniques which, to the extent possible, use market observable inputs, but in some cases use non market observable inputs. Valuation techniques used include discounted cash flow analysis and pricing models and, where appropriate, comparison with instruments that have characteristics similar to those of the instruments held by the Group.

The Valuation Methodology function is responsible for independent price verification, oversight of fair value and appropriate value adjustments and escalation of valuation issues. Independent price verification is the process of determining that the valuations incorporated into the financial statements are validated independent of the business area responsible for the product. The Valuation Methodology function has oversight of the fair value adjustments to ensure the financial instruments are priced to exit. These are key controls in ensuring the material accuracy of the valuations incorporated in the financial statements. The market data used for price verification may include data sourced from recent trade data involving external counterparties or third parties such as Bloomberg, Reuters, brokers and consensus pricing providers. Valuation Methodology perform an ongoing review of the market data sources that are used as part of the PV and fair value processes which are formally documented on a semi-annual basis detailing of the suitability of the market data used for price testing. Price verification uses independently sourced data that is deemed most representative of the market the instruments trade in. To determine the quality of the market data inputs, factors such as independence, relevance, reliability, availability of multiple data sources and methodology employed by the pricing provider are taken into consideration.

The Valuation and Benchmarks Committee (VBC) is the valuation governance forum consisting of representatives from Group Market Risk, Product Control, Valuation Methodology and the business, which meets monthly to discuss and approve the independent valuations of the inventory. For Principal Finance, the Investment Committee meeting is held on a quarterly basis to review investments and valuations.

Significant accounting estimates and judgements

The Group evaluates the significance of financial instruments and material accuracy of the valuations incorporated in the financial statements as they involve a high degree of judgement and estimation uncertainty in determining the carrying values of financial assets and liabilities at the balance sheet date.

- Fair value of financial instruments is determined using valuation techniques and estimates (see below) which, to the extent possible, use market observable inputs, but in some cases use non-market observable inputs. Changes in the observability of significant valuation inputs can materially affect the fair values of financial instruments
- When establishing the exit price of a financial instrument using a valuation technique, the Group estimates valuation adjustments in determining the fair value (page 219)
- In determining the valuation of financial instruments, the Group makes judgements on the amounts reserved to cater for model and valuation risks, which cover both Level 2 and Level 3 assets, and the significant valuation judgements in respect of Level 3 instruments (page 220)
- Where the estimated measurement of fair value is more judgemental in respect of Level 3 assets, these are valued based on models that use a significant degree of non-market-based unobservable inputs

12. Financial instruments continued

Valuation techniques

Refer to the fair value hierarchy explanation – Level 1, 2 and 3 (page 220)

- Financial instruments held at fair value
  - **Debt securities – asset-backed securities:** Asset-backed securities are valued based on external prices obtained from consensus pricing providers, broker quotes, recent trades, arrangers' quotes, etc. Where an observable price is available for a given security, it is classified as Level 2. In instances where third-party prices are not available or reliable, the security is classified as Level 3. The fair value of Level 3 securities is estimated using market standard cash flow models with input parameter assumptions which include prepayment speeds, default rates, discount margins derived from comparable securities with similar vintage, collateral type, and credit ratings
  - **Debt securities in issue:** These debt securities relate to structured notes issued by the Group. Where independent market data is available through pricing vendors and broker sources these positions are classified as Level 2. Where such liquid external prices are not available, valuations of these debt securities are implied using input parameters such as bond spreads and credit spreads, and are classified as Level 3. These input parameters are determined with reference to the same issuer (if available) or proxies from comparable issuers or assets
  - **Derivatives:** Derivative products are classified as Level 2 if the valuation of the product is based upon input parameters which are observable from independent and reliable market data sources. Derivative products are classified as Level 3 if there are significant valuation input parameters which are unobservable in the market, such as products where the performance is linked to more than one underlying variable. Examples are foreign exchange basket options, equity options based on the performance of two or more underlying indices and interest rate products with quanto payouts. In most cases these unobservable correlation parameters cannot be implied from the market, and methods such as historical analysis and comparison with historical levels or other benchmark data must be employed
  - **Equity shares – private equity:** The majority of private equity unlisted investments are valued based on earning multiples – Price-to-Earnings (P/E) or enterprise value to earnings before income tax, depreciation and amortisation (EV/EBITDA) ratios - of comparable listed companies. The two primary inputs for the valuation of these investments are the actual or forecast earnings of the investee companies and earning multiples for the comparable listed companies. To ensure comparability between these unquoted investments and the comparable listed companies, appropriate adjustments are also applied (for example, liquidity and size) in the valuation. In circumstances where an investment does not have direct comparables or where the multiples for the comparable companies cannot be sourced from reliable external sources, alternative valuation techniques (for example, discounted cash flow model or net asset value ("NAV") or option pricing model), which use predominantly unobservable inputs or Level 3 inputs, may be applied. Even though earning multiples for the comparable listed companies can be sourced from third-party sources (for example, Bloomberg), and those inputs can be deemed Level 2 inputs, all unlisted investments (excluding those where observable inputs are available, for example, over-the-counter (OTC) prices) are classified as Level 3 on the basis that the valuation methods involve judgements ranging from determining comparable companies to discount rates where the discounted cash flow method is applied
  - **Loans and advances:** These primarily include loans in the FM Bond and Loan Syndication business which were not syndicated as of the balance sheet date and other financing transactions within Financial Markets and loans and advances including reverse repurchase agreements that do not have SPPI cash flows or are managed on a fair value basis. These loans are generally bilateral in nature and, where available, their valuation is based on observable clean sales transactions prices or market observable spreads. If observable credit spreads are not available, proxy spreads based on comparable loans with similar credit grade, sector and region, are used. Where observable credit spreads and market standard proxy methods are available, these loans are classified as Level 2. Where there are no recent transactions or comparable loans, these loans are classified as Level 3
  - **Other debt securities:** These debt securities include convertible bonds, corporate bonds, credit and structured notes. Where quoted prices are available through pricing vendors, brokers or observable trading activities from liquid markets, these are classified as Level 2 and valued using such quotes. Where there are significant valuation inputs which are unobservable in the market, due to illiquid trading or the complexity of the product, these are classified as Level 3. The valuations of these debt securities are implied using input parameters such as bond spreads and credit spreads. These input parameters are determined with reference to the same issuer (if available) or proxied from comparable issuers or assets

12. Financial instruments continued

- Financial instruments held at amortised cost

The following sets out the Group's basis for establishing fair values of amortised cost financial instruments and their classification between Levels 1, 2 and 3. As certain categories of financial instruments are not actively traded, there is a significant level of management judgement involved in calculating the fair values:

- **Cash and balances at central banks:** The fair value of cash and balances at central banks is their carrying amounts
- **Debt securities in issue, subordinated liabilities and other borrowed funds:** The aggregate fair values are calculated based on quoted market prices. For those notes where quoted market prices are not available, a discounted cash flow model is used based on a current market related yield curve appropriate for the remaining term to maturity
- **Deposits and borrowings:** The estimated fair value of deposits with no stated maturity is the amount repayable on demand. The estimated fair value of fixed interest-bearing deposits and other borrowings without quoted market prices is based on discounted cash flows using the prevailing market rates for debts with a similar Credit Risk and remaining maturity
- **Investment securities:** For investment securities that do not have directly observable market values, the Group utilises a number of valuation techniques to determine fair value. Where available, securities are valued using input proxies from the same or closely related underlying (for example, bond spreads from the same or closely related issuer) or input proxies from a different underlying (for example, a similar bond but using spreads for a particular sector and rating). Certain instruments cannot be proxies as set out above, and in such cases the positions are valued using non-market observable inputs. This includes those instruments held at amortised cost and predominantly relates to asset-backed securities. The fair value for such instruments is usually proxies from internal assessments of the underlying cash flows
- **Loans and advances to banks and customers:** For loans and advances to banks, the fair value of floating rate placements and overnight deposits is their carrying amounts. The estimated fair value of fixed interest-bearing deposits is based on discounted cash flows using the prevailing money market rates for debts with a similar Credit Risk and remaining maturity. The Group's loans and advances to customers' portfolio is well diversified by geography and industry. Approximately a quarter of the portfolio re-prices within one month, and approximately half re-prices within 12 months. Loans and advances are presented net of provisions for impairment. The fair value of loans and advances to customers with a residual maturity of less than one year generally approximates the carrying value. The estimated fair value of loans and advances with a residual maturity of more than one year represents the discounted amount of future cash flows expected to be received, including assumptions relating to prepayment rates and Credit Risk. Expected cash flows are discounted at current market rates to determine fair value. The Group has a wide range of individual instruments within its loans and advances portfolio and as a result providing quantification of the key assumptions used to value such instruments is impractical
- **Other assets:** Other assets comprise primarily of cash collateral and trades pending settlement. The carrying amount of these financial instruments is considered to be a reasonable approximation of fair value as they are either short-term in nature or re-price to current market rates frequently

12. Financial instruments continued

Fair value adjustments

When establishing the exit price of a financial instrument using a valuation technique, the Group considers adjustments to the modelled price which market participants would make when pricing that instrument. The main valuation adjustments (described further below) in determining fair value for financial assets and financial liabilities are as follows:

	01.01.22 $million	Movement during the year $million	31.12.22 $million	01.01.21 $million	Movement during the year $million	31.12.21 $million
Bid-offer valuation adjustment	87	2	89	93	(6)	87
Credit Valuation adjustment	6	129	135	169	(163)	6
Debit Valuation adjustment	–	(91)	(91)	(45)	45	–
Model valuation adjustment	3	–	3	5	(2)	3
Funding Valuation adjustment	–	44	44	15	(15)	–
Other fair value adjustments	13	6	19	27	(14)	13
Total	**109**	**90**	**199**	**264**	**(155)**	**109**
Income deferrals						
Day 1 and other deferrals	84	76	160	97	(13)	84
Total	**84**	**76**	**160**	**97**	**(13)**	**84**

Note: Bracket represents an asset and credit to the income statement

- **Bid-offer valuation adjustment:** Generally, market parameters are marked on a mid-market basis in the revaluation systems, and a bid-offer valuation adjustment is required to quantify the expected cost of neutralising the business' positions through dealing away in the market, thereby bringing long positions to bid and short positions to offer. The methodology to calculate the bid-offer adjustment for a derivative portfolio involves netting between long and short positions and the grouping of risk by strike and tenor based on the hedging strategy where long positions are marked to bid and short positions marked to offer in the systems
- **Credit valuation adjustment (CVA):** The Group accounts for CVA against the fair value of derivative products. CVA is an adjustment to the fair value of the transactions to reflect the possibility that our counterparties may default and we may not receive the full market value of the outstanding transactions. It represents an estimate of the adjustment a market participant would include when deriving a purchase price to acquire our exposures. CVA is calculated for each subsidiary, and within each entity for each counterparty to which the entity has exposure and takes account of any collateral we may hold. The Group calculates the CVA by using estimates of future positive exposure, market-implied probability of default (PD) and recovery rates. Where market-implied data is not readily available, we use market-based proxies to estimate the PD. Wrong-way risk occurs when the exposure to a counterparty is adversely correlated with the credit quality of that counterparty, and the Group has implemented a model to capture this impact for key wrong-way exposures. The Group also captures the uncertainties associated with wrong-way risk in the Group's Prudential Valuation Adjustments framework
- **Debit valuation adjustment (DVA):** The Group calculates DVA adjustments on its derivative liabilities to reflect changes in its own credit standing. The Group's DVA adjustments will increase if its credit standing worsens and conversely, decrease if its credit standing improves. For derivative liabilities, a DVA adjustment is determined by applying the Group's probability of default to the Group's negative expected exposure against the counterparty. The Group's probability of default and loss expected in the event of default is derived based on bond and CDS spreads associated with the Group's issuances and market standard recovery levels. The expected exposure is modelled based on the simulation of the underlying risk factors over the expected life of the deal. This simulation methodology incorporates the collateral posted by the Group and the effects of master netting agreements
- **Model valuation adjustment:** Valuation models may have pricing deficiencies or limitations that require a valuation adjustment. These pricing deficiencies or limitations arise due to the choice, implementation and calibration of the pricing model
- **Funding valuation adjustment (FVA):** The Group makes FVA adjustments against derivative products. FVA reflects an estimate of the adjustment to its fair value that a market participant would make to incorporate funding costs or benefits that could arise in relation to the exposure. FVA is calculated by determining the net expected exposure at a counterparty level and then applying a funding rate to those exposures that reflect the market cost of funding. The FVA for uncollateralised (including partially collateralised) derivatives incorporates the estimated present value of the market funding cost or benefit associated with funding these transactions

12. Financial instruments continued

- **Other fair value adjustments:** The Group calculates the fair value on the interest rate callable products by calibrating to a set of market prices with differing maturity, expiry and strike of the trades
- **Day one and other deferrals:** In certain circumstances the initial fair value is based on a valuation technique which differs to the transaction price at the time of initial recognition. However, these gains can only be recognised when the valuation technique used is based primarily on observable market data. In those cases where the initially recognised fair value is based on a valuation model that uses inputs which are not observable in the market, the difference between the transaction price and the valuation model is not recognised immediately in the income statement. The difference is amortised to the income statement until the inputs become observable, or the transaction matures or is terminated. Other deferrals primarily represent adjustments taken to reflect the specific terms and conditions of certain derivative contracts which affect the termination value at the measurement date

In addition, the Group calculates own credit adjustment (OCA) on its issued debt designated at fair value, including structured notes, in order to reflect changes in its own credit standing. Issued debt is discounted utilising the spread at which similar instruments would be issued or bought back at the measurement date as this reflects the value from the perspective of a market participant who holds the identical item as an asset. OCA measures the difference between the fair value of issued debt as of reporting date and theoretical fair values of issued debt adjusted up or down for changes in own credit spreads from inception date to the measurement date. Under IFRS 9 the change in the OCA component is reported under other comprehensive income. The Group's OCA reserve will increase if its credit standing worsens and conversely, decrease if its credit standing improves. The Group's OCA reserve will reverse over time as its liabilities mature.

In the fourth quarter of 2022, the Group implemented refinements to its methodology for the valuation of structured notes, to align with evolving market practice. Previously, the structured note spread was split into a market level of funding component (recorded in the Consolidated income statement) and an idiosyncratic own credit component (recorded in the Consolidated statement of other comprehensive income). The refinement is to record all prospective movements in the spreads over the benchmark rate of the host debt instrument through Other Comprehensive income, as changes to the funding component are considered to be integral to the issuer's own credit risk. The funding valuation adjustment in relation to the embedded derivative component of the structured notes will continue to be recorded in the Consolidated income statement.

The impact of this change in estimate, which took effect prospectively from 1 October 2022, was a loss of $21 million recorded in the Consolidated statement of other comprehensive income, which would have been recorded in the Consolidated income statement under the previous methodology. The revised approach is expected to result in a more consistent own credit valuation with peer banks. The net life-to-date gain previously recorded in the Consolidated income statement of $183million from inception of the structured notes to the effective date of this change in estimate in relation to the market level of funding for the host debt instrument are expected to reverse in the Consolidated statement of other comprehensive income as the existing portfolio matures, unless the structured notes are redeemed or otherwise derecognised earlier. This net life-to-date gain of $183 million includes a gain of $165 million recorded in the Consolidated income statement for 2022 (2021: $18 million gain).

Fair value hierarchy – financial instruments held at fair value

Assets and liabilities carried at fair value or for which fair values are disclosed have been classified into three levels according to the observability of the significant inputs used to determine the fair values. Changes in the observability of significant valuation inputs during the reporting period may result in a transfer of assets and liabilities within the fair value hierarchy. The Group recognises transfers between levels of the fair value hierarchy when there is a significant change in either its principal market or the level of observability of the inputs to the valuation techniques as at the end of the reporting period.

- **Level 1:** Fair value measurements are those derived from unadjusted quoted prices in active markets for identical assets or liabilities
- **Level 2:** Fair value measurements are those with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets and financial instruments valued using models where all significant inputs are observable
- **Level 3:** Fair value measurements are those where inputs which could have a significant effect on the instrument's valuation are not based on observable market data

12. Financial instruments continued
The following tables show the classification of financial instruments held at fair value into the valuation hierarchy:

Group

Assets	Level 1 $million	Level 2 $million	Level 3 $million	Total $million
Financial instruments held at fair value through profit or loss				
Loans and advances to banks	–	838	21	859
Loans and advances to customers	–	2,757	1,308	4,065
Reverse repurchase agreements and other similar secured lending	–	60,345	1,988	62,333
Debt securities and other eligible bills	6,363	6,241	807	13,411
Of which:				
Issued by central banks & governments	6,101	3,082	–	9,183
Issued by corporates other than financial institutions[1]	86	1,009	416	1,511
Issued by financial institutions[1]	176	2,150	391	2,717
Equity shares	1,770	24	92	1,886
Derivative financial instruments	889	64,117	44	65,050
Of which:				
Foreign exchange	136	56,425	17	56,578
Interest rate	32	6,612	24	6,668
Credit	–	405	1	406
Equity and stock index options	–	84	2	86
Commodity	721	591	–	1,312
Investment securities				
Debt securities and other eligible bills	31,993	38,631	–	70,624
Of which:				
Issued by central banks & governments	22,467	15,056	–	37,523
Issued by corporates other than financial institutions[1]	899	1,215	–	2,114
Issued by financial institutions[1]	8,627	22,360	–	30,987
Equity shares	112	7	484	603
Total financial instruments at 31 December 2022[2]	41,127	172,960	4,744	218,831
Liabilities				
Financial instruments held at fair value through profit or loss				
Deposits by banks	–	453	133	586
Customer accounts	–	6,385	170	6,555
Repurchase agreements and other similar secured borrowing	–	50,402	–	50,402
Debt securities in issue	–	7,136	427	7,563
Short positions	251	2,011	40	2,302
Derivative financial instruments	637	68,103	118	68,858
Of which:				
Foreign exchange	96	57,641	14	57,751
Interest rate	29	8,988	12	9,029
Credit	–	396	37	433
Equity and stock index options	–	103	55	158
Commodity	512	975	–	1,487
Other liabilities	–	–	–	–
Total financial instruments at 31 December 2022[2]	888	134,490	888	136,266

1 Includes covered bonds of $6,082 million, securities issued by Multilateral Development Banks/International Organisations of $8,563 million and State-owned agencies and development banks of $5,778 million

2 The above table does not include held for sale assets of $3 million and liabilities of $5 million. These are reported in Note 20 together with their fair value hierarchy

The fair value of derivatives and debt securities in issue classified as Level 2 in the fair value hierarchy that are subject to complex modelling techniques is $741 million.

There were no significant changes to valuation or levelling approaches in 2022.

There were no significant transfers of financial assets and liabilities measured at fair value between Level 1 and Level 2 during the year

12. Financial instruments continued

Assets	Level 1 $million	Level 2 $million	Level 3 $million	Total $million
Financial instruments held at fair value through profit or loss				
Loans and advances to banks	–	3,613	9	3,622
Loans and advances to customers	–	3,522	410	3,932
Reverse repurchase agreements and other similar secured lending	–	77,431	1,555	78,986
Debt securities and other eligible bills	4,845	10,247	312	15,404
Of which:				
Issued by central banks & governments	4,641	5,343	–	9,984
Issued by corporates other than financial institutions[1]	1	2,343	74	2,418
Issued by financial institutions[1]	203	2,561	238	3,002
Equity shares	4,449	38	98	4,585
Derivative financial instruments	1,061	52,117	67	53,245
Of which:				
Foreign exchange	156	43,136	12	43,304
Interest rate	9	5,821	50	5,880
Credit	–	2,242	2	2,244
Equity and stock index options	–	90	3	93
Commodity	896	828	–	1,724
Investment securities				
Debt securities and other eligible bills	29,433	43,108	40	72,491
Of which:				
Issued by central banks & governments	21,431	16,588	40	38,059
Issued by corporates other than financial institutions[1]	–	1,344	–	1,344
Issued by financial institutions[1]	8,002	25,086	–	33,088
Equity shares	166	17	392	575
Total financial instruments at 31 December 2021[2]	39,954	190,003	2,883	232,840
Liabilities				
Financial instruments held at fair value through profit or loss				
Deposits by banks	–	37	22	59
Customer accounts	–	6,603	365	6,968
Repurchase agreements and other similar secured borrowing	–	61,307	–	61,307
Debt securities in issue	–	3,579	781	4,360
Short positions	597	2,255	–	2,852
Derivative financial instruments	940	52,550	96	53,586
Of which:				
Foreign exchange	160	43,127	5	43,292
Interest rate	7	5,927	16	5,950
Credit	–	2,363	41	2,404
Equity and stock index options	–	119	34	153
Commodity	773	1,014	–	1,787
Other liabilities	–	6	–	6
Total financial instruments at 31 December 2021[2]	1,537	126,337	1,264	129,138

1 Includes covered bonds of $5,513 million, securities issued by Multilateral Development Banks/International Organisations of $8,716 million and State-owned agencies and development banks of $7,430 million

2 The above table does not include held for sale assets of $43 million and liabilities of $nil. These are reported in Note 20 together with their fair value hierarchy

The fair value of derivatives and debt securities in issue classified as Level 2 in the fair value hierarchy that are subject to complex modelling techniques is $637 million.

12. Financial instruments continued

Company

Assets	Level 1 $million	Level 2 $million	Level 3 $million	Total $million
Financial instruments held at fair value through profit or loss				
Loans and advances to banks	–	837	–	837
Loans and advances to customers	–	2,297	899	3,196
Reverse repurchase agreements and other similar secured lending	–	57,069	1,988	59,057
Debt securities and other eligible bills	5,703	4,789	469	10,961
Of which:				
Issued by central banks & governments	5,475	1,838	–	7,313
Issued by corporates other than financial institutions[1]	86	417	100	603
Issued by financial institutions[1]	142	2,534	369	3,045
Equity shares	1,738	3	–	1,741
Derivative financial instruments	883	64,559	39	65,481
Of which:				
Foreign exchange	131	51,427	16	51,574
Interest rate	32	11,980	21	12,033
Credit	–	351	1	352
Equity and stock index options	–	68	1	69
Commodity	720	733	–	1,453
Investment securities				
Debt securities and other eligible bills	24,485	32,522	–	57,007
Of which:				
Issued by central banks & governments	16,239	10,441	–	26,680
Issued by corporates other than financial institutions[1]	–	1,064	–	1,064
Issued by financial institutions[1]	8,246	21,017	–	29,263
Equity shares	101	2	220	323
Total financial instruments at 31 December 2022[2]	32,910	162,078	3,615	198,603
Liabilities				
Financial instruments held at fair value through profit or loss				
Deposits by banks	–	454	119	573
Customer accounts	–	6,258	67	6,325
Repurchase agreements and other similar secured borrowing	–	50,179	–	50,179
Debt securities in issue	–	7,009	262	7,271
Short positions	141	1,660	40	1,841
Derivative financial instruments	636	68,457	110	69,203
Of which:				
Foreign exchange	95	53,146	25	53,266
Interest rate	29	13,696	9	13,734
Credit	–	412	25	437
Equity and stock index options	–	75	51	126
Commodity	512	1,128	–	1,640
Other liabilities	–	–	–	–
Total financial instruments at 31 December 2022[2]	777	134,017	598	135,392

1 Includes covered bonds of $6,468 million, securities issued by Multilateral Development Banks/International Organisations of $9,199 million and State-owned agencies and development banks of $5,503 million.

2 The above table does not include held for sale assets of $2 million and liabilities of $nil. These are reported in Note 20 together with their fair value hierarchy

The fair value of derivatives and debt securities in issue classified as Level 2 in the fair value hierarchy that are subject to complex modelling techniques is $727 million.

There were no significant changes to valuation or levelling approaches in 2022.

There were no significant transfers of financial assets and liabilities measured at fair value between Level 1 and Level 2 during the year.

12. Financial instruments continued

Assets	Level 1 $million	Level 2 $million	Level 3 $million	Total $million
Financial instruments held at fair value through profit or loss				
Loans and advances to banks	–	3,561	9	3,570
Loans and advances to customers	–	3,125	82	3,207
Reverse repurchase agreements and other similar secured lending	–	76,100	1,555	77,655
Debt securities and other eligible bills	3,683	6,966	203	10,852
Of which:				
Issued by central banks & governments	3,495	2,763	–	6,258
Issued by corporates other than financial institutions[1]	–	1,539	5	1,544
Issued by financial institutions[1]	188	2,664	198	3,050
Equity shares	4,419	2	–	4,421
Derivative financial instruments	1,047	52,362	69	53,478
Of which:				
Foreign exchange	142	41,415	14	41,571
Interest rate	9	7,707	50	7,766
Credit	–	2,244	2	2,246
Equity and stock index options	–	47	3	50
Commodity	896	949	–	1,845
Investment securities				
Debt securities and other eligible bills	25,521	34,226	286	60,033
Of which:				
Issued by central banks & governments	17,956	9,287	25	27,268
Issued by corporates other than financial institutions[1]	–	1,226	–	1,226
Issued by financial institutions[1]	7,565	23,713	261	31,539
Equity shares	151	2	208	361
Total financial instruments at 31 December 2021[2]	34,821	176,344	2,412	231,577
Liabilities				
Financial instruments held at fair value through profit or loss				
Deposits by banks	–	37	22	59
Customer accounts	–	6,306	292	6,598
Repurchase agreements and other similar secured borrowing	–	60,897	–	60,897
Debt securities in issue	–	3,472	614	4,086
Short positions	462	1,794	–	2,256
Derivative financial instruments	933	52,797	105	53,835
Of which:				
Foreign exchange	153	41,642	16	41,811
Interest rate	7	7,694	15	7,716
Credit	–	2,328	41	2,369
Equity and stock index options	–	38	33	71
Commodity	773	1,095	–	1,868
Other liabilities	–	6	–	6
Total financial instruments at 31 December 2021[2]	1,395	125,309	1,033	127,737

1 Includes covered bonds of $5,100 million, securities issued by Multilateral Development Banks/International Organisations of $8,245 million and State-owned agencies and development banks of $7,356 million.

2 The above table does not include held for sale assets of $42 million and liabilities of $nil. These are reported in Note 20 together with their fair value hierarchy

The fair value of derivatives and debt securities in issue classified as Level 2 in the fair value hierarchy that are subject to complex modelling techniques is $631 million.

12. Financial instruments continued

Fair value hierarchy – financial instruments measured at amortised cost

The following table shows the carrying amounts and incorporates the Group's estimate of fair values of those financial assets and liabilities not presented on the Group's balance sheet at fair value. These fair values may be different from the actual amount that will be received or paid on the settlement or maturity of the financial instrument. For certain instruments, the fair value may be determined using assumptions for which no observable prices are available.

Group

		Fair value			
	Carrying value $million	**Level 1 $million**	**Level 2 $million**	**Level 3 $million**	**Total $million**
Assets					
Cash and balances at central banks[1]	**50,531**	**–**	**50,531**	**–**	**50,531**
Loans and advances to banks	**27,383**	**–**	**27,383**	**–**	**27,383**
of which – reverse repurchase agreements and other similar secured lending	**878**	**–**	**833**	**–**	**833**
Loans and advances to customers	**158,126**	**–**	**58,045**	**100,025**	**158,070**
of which – reverse repurchase agreements and other similar secured lending	**15,586**	**–**	**15,727**	**–**	**15,727**
Investment securities[2]	**41,801**	**–**	**39,704**	**25**	**39,729**
Other assets[1]	**27,210**	**–**	**27,210**	**–**	**27,210**
Assets held for sale	**1,388**	**344**	**946**	**98**	**1,388**
At 31 December 2022	**306,439**	**344**	**203,819**	**100,148**	**304,311**
Liabilities					
Deposits by banks	**24,150**	**–**	**24,175**	**–**	**24,175**
Customer accounts	**243,075**	**–**	**243,160**	**–**	**243,160**
Repurchase agreements and other similar secured borrowing	**1,991**	**–**	**1,991**	**–**	**1,991**
Debt securities in issue	**36,982**	**–**	**36,982**	**–**	**36,982**
Subordinated liabilities and other borrowed funds	**13,269**	**–**	**13,215**	**–**	**13,215**
Other liabilities[1]	**25,567**	**–**	**25,566**	**1**	**25,567**
Liabilities held for sale	**1,230**	**398**	**832**	**–**	**1,230**
At 31 December 2022	**346,264**	**398**	**345,921**	**1**	**346,320**

		Fair value			
	Carrying value $million	Level 1 $million	restated Level 2 $million	Level 3 $million	restated Total $million
Assets					
Cash and balances at central banks[1]	61,963	–	61,963	–	61,963
Loans and advances to banks	29,999	–	29,999	–	29,999
of which – reverse repurchase agreements and other similar secured lending	956	–	956	–	956
Loans and advances to customers	144,799	–	42,050	102,756	144,806
of which – reverse repurchase agreements and other similar secured lending	3,764	–	3,764	–	3,764
Investment securities[2]	29,281	–	29,749	–	29,749
Other assets[1]	22,281	–	22,280	1	22,281
Assets held for sale	52	–	–	52	52
At 31 December 2021	288,186	–	186,041	102,809	288,850
Liabilities					
Deposits by banks	25,205	–	25,205	–	25,205
Customer accounts	242,331	–	242,297	–	242,297
Repurchase agreements and other similar secured borrowing	325	–	325	–	325
Debt securities in issue	36,060	–	36,061	–	36,061
Subordinated liabilities and other borrowed funds	14,615	–	14,579	–	14,579
Other liabilities[1]	25,650		25,649	1	25,650
Liabilities held for sale	–	–	–	–	–
At 31 December 2021	344,186	–	344,116	25,205	344,117

1 The carrying amount of these financial instruments is considered to be a reasonable approximation of fair value as they are short-term in nature or reprice to current market rates frequently

2 Includes Government bonds and Treasury bills of $13,781 million at 31 December 2022 and $15,152 million at 31 December 2021

12. Financial instruments continued
Company

	Carrying value $million	Fair value Level 1 $million	Level 2 $million	Level 3 $million	Total $million
Assets					
Cash and balances at central banks[1]	**38,867**	**–**	**38,867**	**–**	**38,867**
Loans and advances to banks	**18,548**	**–**	**18,548**	**–**	**18,548**
of which – reverse repurchase agreements and other similar secured lending	**184**	**–**	**184**	**–**	**184**
Loans and advances to customers	**80,611**	**–**	**33,590**	**47,064**	**80,654**
of which – reverse repurchase agreements and other similar secured lending	**15,071**	**–**	**15,071**	**–**	**15,071**
Investment securities[2]	**38,042**	**–**	**35,944**	**25**	**35,969**
Other assets[1]	**23,625**	**–**	**23,625**	**–**	**23,625**
Assets held for sale	**544**	**–**	**–**	**544**	**544**
At 31 December 2022	**200,237**	**–**	**150,574**	**47,633**	**198,207**
Liabilities					
Deposits by banks	**17,900**	**–**	**17,925**	**–**	**17,925**
Customer accounts	**137,422**	**–**	**137,394**	**–**	**137,394**
Repurchase agreements and other similar secured borrowing	**1,723**	**–**	**1,723**	**–**	**1,723**
Debt securities in issue	**34,992**	**–**	**34,997**	**–**	**34,997**
Subordinated liabilities and other borrowed funds	**12,729**	**–**	**12,675**	**–**	**12,675**
Other liabilities[1]	**20,661**	**–**	**20,661**	**–**	**20,661**
Liabilities held for sale	**335**	**–**	**–**	**335**	**335**
At 31 December 2022	**225,762**	**–**	**225,375**	**335**	**225,710**

	Carrying value $million	Fair value Level 1 $million	restated Level 2 $million	Level 3 $million	restated Total $million
Assets					
Cash and balances at central banks[1]	48,165	–	48,165	–	48,165
Loans and advances to banks	16,117	–	16,117	–	16,117
of which – reverse repurchase agreements and other similar secured lending	438	–	438	–	438
Loans and advances to customers	71,161	–	19,600	51,368	70,968
of which – reverse repurchase agreements and other similar secured lending	3,047	–	3,047	–	3,047
Investment securities[2]	25,995	–	26,529	–	26,529
Other assets[1]	19,860	–	19,860	–	19,860
Assets held for sale	49	–	–	49	49
At 31 December 2021	181,347	–	130,271	51,417	181,688
Liabilities					
Deposits by banks	18,870	–	18,870	–	18,870
Customer accounts	135,478	–	135,444	–	135,444
Repurchase agreements and other similar secured borrowing	283	–	283	–	283
Debt securities in issue	33,826	–	33,827	–	33,827
Subordinated liabilities and other borrowed funds	14,076	–	14,039	–	14,039
Other liabilities[1,3]	20,125	–	20,125	–	20,125
Liabilities held for sale	–	–	–	–	–
At 31 December 2021	222,658	–	222,588	–	222,588

1 The carrying amount of these financial instruments is considered to be a reasonable approximation of fair value as they are short-term in nature or reprice to current market rates frequently

2 Includes Government bonds and Treasury bills of $12,321 million as at 31 December 2022 and $13,827 million as at 31 December 2021

3 Includes correction of fair value hedge accounting adjustment $81 million

12. Financial instruments continued

Loans and advances to customers by client segment[1]

Group

	2022					
	Carrying value			Fair value		
	Stage 3 $million	Stage 1 and stage 2 $million	Total $million	Stage 3 $million	Stage 1 and stage 2 $million	Total $million
Corporate, Commercial & Institutional Banking	1,955	85,524	87,479	1,998	85,382	87,380
Consumer, Private & Business Banking	440	45,573	46,013	448	45,608	46,056
Ventures	–	64	64	–	63	63
Central & other items	230	24,340	24,570	230	24,341	24,571
At 31 December 2022	2,625	155,501	158,126	2,676	155,394	158,070

	2021 (Restated)[2]					
	Carrying value			Fair value		
	Stage 3 $million	Stage 1 and stage 2 $million	Total $million	Stage 3 $million	Stage 1 and stage 2 $million	Total $million
Corporate, Commercial & Institutional Banking[2]	2,187	77,580	79,767	2,278	77,330	79,608
Consumer, Private & Business Banking[2]	528	45,520	46,048	528	45,687	46,215
Ventures	–	–	–	–	–	–
Central & other items	–	18,984	18,984	–	18,983	18,983
At 31 December 2021	2,715	142,084	144,799	2,806	142,000	144,806

1 Loans and advances includes reverse repurchase agreements and other similar secured lending: carrying value $15,586 million and fair value $15,586 million (31 December 2021: $3,764 million and $3,764 million respectively)

2 Following the increased strategic importance and reporting of Ventures to management, this has been established as a separate operating segment from January 2022. Prior period has been restated

Company

	2022					
	Carrying value			Fair value		
	Stage 3 $million	Stage 1 and stage 2 $million	Total $million	Stage 3 $million	Stage 1 and stage 2 $million	Total $million
Corporate, Commercial & Institutional Banking	1,609	63,311	65,920	1,652	64,311	65,963
Consumer, Private & Business Banking	225	11,436	11,661	231	11,430	11,661
Central & other items	230	2,800	3,030	230	2,800	3,030
At 31 December 2022	2,064	78,547	80,611	2,113	78,541	80,654

	2021					
	Carrying value			Fair value		
	Stage 3 $million	Stage 1 and stage 2 $million	Total $million	Stage 3 $million	Stage 1 and stage 2 $million	Total $million
Corporate, Commercial & Institutional Banking	1,716	54,645	56,361	1,748	54,419	56,167
Consumer, Private & Business Banking	276	11,925	12,201	276	11,928	12,204
Central & other items	–	2,599	2,599	–	2,597	2,597
At 31 December 2021	1,992	69,169	71,161	2,024	68,944	70,968

1 Loans and advances includes reverse repurchase agreements and other similar secured lending: carrying value $15,071 million and fair value $15,071 million (31 December 2021: $3,047 million and fair value $3,047 million)

12. Financial instruments continued

Fair value of financial instruments

Level 3 Summary and significant unobservable inputs

The following table presents the Group's primary Level 3 financial instruments which are held at fair value. The table also presents the valuation techniques used to measure the fair value of those financial instruments, the significant unobservable inputs, the range of values for those inputs and the weighted average of those inputs:

Group

	Value as at 31 December 2022					
Instrument	Assets $million	Liabilities $million	Principal valuation technique	Significant unobservable inputs	Range[1]	Weighted average[2]
Loans and advances to banks	21	–	Discounted cash flows	Price/yield	N/A	N/A
				Credit spreads	2.9%	2.9%
Loans and advances to customers	1,308	–	Discounted cash flows	Price/yield	0.3% - 18.2%	5.4%
				Recovery rates	5.0% - 100%	91.3%
Reverse repurchase agreements and other similar secured lending	1,988	–	Discounted cash flows	Repo curve	2.3% - 8.0%	6.2%
				Price/yield	1.9%-7.2%	4.7%
Debt securities, alternative tier one and other eligible securities	807	–	Discounted cash flows	Price/yield	5.5% - 48.5%	8.3%
				Recovery rates	0.0% - 1.0%	0.2%
Government bonds and treasury bills	–	–	Discounted cash flows	Price/yield	N/A	N/A
Asset-backed securities	–	–	Discounted cash flows	Price/yield	N/A	N/A
Equity shares (includes private equity investments)	576	–	Comparable pricing/yield	EV/EBITDA multiples	N/A	N/A
				EV/Revenue multiples	8.2x - 23.2x	12.9X
				P/E multiples	13.4x - 29.7x	14.5X
				P/B multiples	0.3x - 3.3x	1.2X
				P/S multiples	2.1x - 2.2x	2.2X
				Liquidity discount	20.0%	20.0%
			Discounted cash flows	Discount rates	7.5% -16.4%	8.0%
			Option pricing model	Equity value based on EV/ Revenue multiples	4.8x - 76.1x	32.9x
				Equity value based on EV/EBITDA multiples	2.6x	2.6x
				Equity value based on volatility	60.0%	60.0%
Derivative financial instruments of which:						
Foreign exchange	17	14	Option pricing model	Foreign exchange option implied volatility	(21.0)% - 21%	(2.7)%
			Discounted cash flows	Foreign exchange curves	(4.6)% - 81.8%	19.8%
Interest rate	24	12	Discounted cash flows	Interest rate curves	(2.1)% - 50.2%	10.6%
			Option pricing model	Bond option implied volatility	N/A	N/A
Credit	1	37	Discounted cash flows	Credit spreads	0.1% - 2.3%	1.2%
				Price/yield	7.2% - 9.7%	7.4%
Equity and stock index	2	55	Internal pricing model	Equity correlation	30% - 96%	67.0%
				Equity-FX correlation	(70.0)% - 85.0%	37.0%
Deposits by banks	–	133	Discounted cash flows	Credit spreads	0.9% - 3.4%	2.0%
				Price/yield	6.0%	6.0%
Customer accounts	–	170	Discounted cash flows	Credit spreads	5.5% - 19.1%	11.4%
				Price/yield	22.8% - 22.9%	22.9%
Debt securities in issue	–	427	Discounted cash flows	Credit spreads	2.0% - 7.0%	5.3%
				Price/yield	6.8% - 12.4%	9.1%
			Internal pricing model	Equity correlation	30.0% - 96.0%	67.0%
				Equity-FX correlation	(70.0)% - 85.0%	37.0%
Short positions	–	40	Discounted cash flows	Price/yield	6.8%	6.8%
Total	4,744	888				

1 The ranges of values shown in the above table represent the highest and lowest levels used in the valuation of the Group's Level 3 financial instruments as at 31 December 2022. The ranges of values used are reflective of the underlying characteristics of these Level 3 financial instruments based on the market conditions at the balance sheet date. However, these ranges of values may not represent the uncertainty in fair value measurements of the Group's Level 3 financial instruments

2 Weighted average for non-derivative financial instruments has been calculated by weighting inputs by the relative fair value. Weighted average for derivatives has been provided by weighting inputs by the risk relevant to that variable. N/A has been entered for the cases where weighted average is not a meaningful indicator

12. Financial instruments continued

Instrument	Value as at 31 December 2021 Assets $million	Liabilities $million	Principal valuation technique	Significant unobservable inputs	Range[1]	Weighted average[2]
Loans and advances to banks	9	–	Discounted cash flows	Price/yield	1.0%-15.6%	10.8%
Loans and advances to customers	410	–	Discounted cash flows	Price/yield	0.5% - 6.9%	4.2%
				Recovery rates	18.9% - 100%	92.1%
Debt securities, alternative tier one and other eligible securities	312	–	Discounted cash flows	Price/yield	3.8% - 18.7%	11.6%
Government bonds and treasury bills	40	–	Discounted cash flows	Price/yield	2.9% - 5.5%	3.7%
Asset-backed securities	–	–	Discounted cash flows	Price/yield	1.4% - 3.2%	2.7%
Equity shares (includes private equity investments)	490	–	Comparable pricing/yield	EV/EBITDA multiples	3.5x - 7.3x	4.6x
				P/E multiples	17.4x	17.4x
				P/B multiples	0.6x - 1.0x	0.9x
				P/S multiples	N/A	N/A
				Liquidity discount	10.0% - 20.0%	15.9%
			Discounted cash flows	Discount rates	8.4% - 16.2%	9.5%
Derivative financial instruments of which:						
Foreign exchange	12	5	Option pricing model	Foreign exchange option implied volatility	4.4% - 18.9%	16.7%
			Discounted cash flows	Foreign exchange curves	7.8% - 8.0%	7.9%
Interest rate	50	16	Discounted cash flows	Interest rate curves	5.3% - 19.6%	8.6%
			Option pricing model	Bond option implied volatility	17.0% - 28.0%	24.0%
Credit	2	41	Discounted cash flows	Credit spreads	1.0% - 7.9%	1.1%
Equity and stock index	3	34	Internal pricing model	Equity correlation	1.0% - 90.0%	58.0%
				Equity-FX correlation	(80.0)% - 70.0%	(29.0)%
Deposits by banks	–	22	Discounted cash flows	Credit spreads	1.0% - 1.8%	1.4%
Customer accounts	–	365	Discounted cash flows	Credit spreads	1.0% - 5.8%	2.7%
Debt securities in issue	–	781	Discounted cash flows	Credit spreads	0.1% - 1.4%	0.9%
			Internal pricing model	Equity correlation	1.0% - 90.0%	58.0%
				Equity-FX correlation	(80.0)% - 70.0%	(29.0)%
Short positions	–	–	N/A	N/A	N/A	N/A
Total	2,883	1,264				

1 The ranges of values shown in the above table represent the highest and lowest levels used in the valuation of the Group's Level 3 financial instruments as at 31 December 2021. The ranges of values used are reflective of the underlying characteristics of these Level 3 financial instruments based on the market conditions at the balance sheet date. However, these ranges of values may not represent the uncertainty in fair value measurements of the Group's Level 3 financial instruments

2 Weighted average for non-derivative financial instruments has been calculated by weighting inputs by the relative fair value. Weighted average for derivatives has been provided by weighting inputs by the risk relevant to that variable. N/A has been entered for the cases where weighted average is not a meaningful indicator

12. Financial instruments continued
Company

Instrument	Value at 31 December 2022 Assets $million	Liabilities $million	Principal valuation technique	Significant unobservable inputs	Range[1]	Weighted average[2]
Loans and advances to banks	–	–	Discounted cash flows	Price/yield	N/A	N/A
				Credit spreads	N/A	N/A
Loans and advances to customers	899	–	Discounted cash flows	Price/yield	2.8% - 11.5%	4.9%
				Recovery rates	26.5% - 100%	93.0%
Reverse repurchase agreements and other similar secured lending	1,988	–	Discounted cash flows	Repo curve	2.3% - 8.0%	6.2%
				Price/yield	1.9%-7.2%	4.7%
Debt securities, alternative tier one and other eligible securities	469	–	Discounted cash flows	Price/yield	6.8% - 48.5%	8.5%
				Recovery rates	0.0% - 1.0%	0.2%
Government bonds and treasury bills	–	–	Discounted cash flows	Price/yield	N/A	N/A
Asset-backed securities	–	–	Discounted cash flows	Price/yield	N/A	N/A
Equity shares (includes private equity investments)	220	–	Comparable pricing/yield	EV/EBITDA multiples	N/A	N/A
				EV/Revenue multiples	N/A	N/A
				P/E multiples	N/A	N/A
				P/B multiples	0.7x - 2.3x	1.2x
				P/S multiples	N/A	N/A
				Liquidity discount	20.0%	20.0%
			Discounted cash flows	Discount rates	7.5% - 16.4%	7.9%
			Option pricing model	Equity value based on EV/ Revenue multiples	12.2x	12.2x
				Equity value based on EV/EBITDA multiples	N/A	N/A
				Equity value based on volatility	N/A	N/A
Derivative financial instruments of which:						
Foreign exchange	16	25	Option pricing model	Foreign exchange option implied volatility	(21.0)% - 21.0%	(3.6)%
			Discounted cash flows	Foreign exchange curves	(4.6)% - 81.8%	15.8%
Interest rate	21	9	Discounted cash flows	Interest rate curves	(2.1)% - 50.2%	7.8%
			Option pricing model	Bond option implied volatility	N/A	N/A
Credit	1	25	Discounted cash flows	Credit spreads	0.1% - 2.3%	1.2%
				Price/yield	7.2% - 9.7%	8.5%
Equity and stock index	1	51	Internal pricing model	Equity correlation	30.0% - 96.0%	67.0%
				Equity-FX correlation	(70.0)% - 85.0%	37.0%
Deposits by banks	–	119	Discounted cash flows	Credit spreads	0.9% - 3.4%	2.0%
				Price/yield	6.0%	6.0%
Customer accounts	–	67	Discounted cash flows	Credit spreads	N/A	N/A
				Price/yield	22.8% - 22.9%	22.9%
Debt securities in issue	–	262	Discounted cash flows	Credit spreads	2.0%	2.0%
			Internal pricing model	Equity correlation	30.0% - 96.0%	67.0%
				Equity-FX correlation	(70.0)% - 85.0%	37.0%
Short positions	–	40	Discounted cash flows	Price/yield	6.8%	6.8%
Total	3,615	598				

1 The ranges of values shown in the above table represent the highest and lowest levels used in the valuation of the Group's Level 3 financial instruments as at 31 December 2022. The ranges of values used are reflective of the underlying characteristics of these Level 3 financial instruments based on the market conditions at the balance sheet date. However, these ranges of values may not represent the uncertainty in fair value measurements of the Group's Level 3 financial instruments

2 Weighted average for non-derivative financial instruments has been calculated by weighting inputs by the relative fair value. Weighted average for derivatives has been provided by weighting inputs by the risk relevant to that variable. N/A has been entered for the cases where weighted average is not a meaningful indicator

Instrument	Value at 31 December 2021 Assets $million	Liabilities $million	Principal valuation technique	Significant unobservable inputs	Range[1]	Weighted average[2]
Loans and advances to banks	9	–	Discounted cash flows	Price/yield	1.0%-15.6%	10.8%
Loans and advances to customers	82	–	Discounted cash flows	Price/yield	0.5% - 6.9%	4.2%
				Recovery rates	18.9% - 100%	92.1%
Reverse repurchase agreements and other similar secured lending	1,555	–	Discounted cash flows	Repo rate		
Debt securities, alternative tier one and other eligible securities	464	–	Discounted cash flows	Price/yield	3.8% - 18.7%	11.6%
Government bonds and treasury bills	25	–	Discounted cash flows	Price/yield	2.9% - 5.5%	3.7%
Equity shares (includes private equity investments)	208	–	Comparable pricing/yield	EV/EBITDA multiples	3.5x - 7.3x	4.6x
				P/E multiples	17.4x	17.4x
				P/B multiples	0.6x - 1.0x	0.9x
				P/S multiples	N/A	N/A
				Liquidity discount	10.0% - 20.0%	15.9%
			Discounted cash flows	Discount rates	8.4% - 16.2%	9.5%
Derivative financial instruments of which:						
Foreign exchange	14	16	Option pricing model	Foreign exchange option implied volatility	4.4% - 18.9%	16.7%
			Discounted cash flows	Foreign exchange curves	7.8% - 8.0%	7.9%
Interest rate	50	15	Discounted cash flows	Interest rate curves	5.3% - 19.6%	8.6%
			Option pricing model	Bond option implied volatility	17.0% - 28.0%	24.0%
Credit	2	41	Discounted cash flows	Credit spreads	1.0% - 7.9%	1.1%
Equity and stock index	3	33	Internal pricing model	Equity correlation	1.0% - 90.0%	58.0%
				Equity-FX correlation	(80.0)% - 70.0%	(29.0)%
Deposits by banks	–	22	Discounted cash flows	Credit spreads	1.0% - 1.8%	1.4%
Customer accounts	–	292	Discounted cash flows	Credit spreads	1.0% - 5.8%	2.7%
Debt securities in issue	–	614	Discounted cash flows	Credit spreads	0.1% - 1.4%	0.9%
			Internal pricing model	Equity correlation	1.0% - 90.0%	58.0%
				Equity-FX correlation	(80.0)% - 70.0%	(29.0)%
Short positions	–	–	N/A	N/A	N/A	N/A
Total	2,412	1,033				

1 The ranges of values shown in the above table represent the highest and lowest levels used in the valuation of the Group's Level 3 financial instruments as at 31 December 2021. The ranges of values used are reflective of the underlying characteristics of these Level 3 financial instruments based on the market conditions at the balance sheet date. However, these ranges of values may not represent the uncertainty in fair value measurements of the Group's Level 3 financial instruments

2 Weighted average for non-derivative financial instruments has been calculated by weighting inputs by the relative fair value. Weighted average for derivatives has been provided by weighting inputs by the risk relevant to that variable. N/A has been entered for the cases where weighted average is not a meaningful indicator

12. Financial instruments continued

The following section describes the significant unobservable inputs identified in the valuation technique table:

- Comparable price/yield is a valuation methodology in which the price of a comparable instrument is used to estimate the fair value where there are no direct observable prices. Yield is the interest rate that is used to discount the future cash flows in a discounted cash flow model. Valuation using comparable instruments can be done by calculating an implied yield (or spread over a liquid benchmark) from the price of a comparable instrument, then adjusting that yield (or spread) to derive a value for the instrument. The adjustment should account for relevant differences in the financial instruments such as maturity and/or credit quality. Alternatively, a price-to-price basis can be assumed between the comparable instrument and the instrument being valued in order to establish the value of the instrument (for example, deriving a fair value for a junior unsecured bond from the price of a senior secured bond). An increase in price, in isolation, would result in a favourable movement in the fair value of the asset. An increase in yield, in isolation, would result in an unfavourable movement in the fair value of the asset
- Correlation is the measure of how movement in one variable influences the movement in another variable. An equity correlation is the correlation between two equity instruments while an interest rate correlation refers to the correlation between two swap rates
- Credit spread represents the additional yield that a market participant would demand for taking exposure to the Credit Risk of an instrument
- Discount rate refers to the rate of return used to convert expected cash flows into present value
- Equity-FX correlation is the correlation between equity instrument and foreign exchange instrument
- EV/EBITDA multiple is the ratio of Enterprise Value (EV) to Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA). EV is the aggregate market capitalisation and debt minus the cash and cash equivalents. An increase in EV/EBITDA multiples, will result in a favourable movement in the fair value of the unlisted firm
- EV/Revenue multiple is the ratio of Enterprise Value (EV) to Revenue. An increase in EV/Revenue multiple will result in a favourable movement in the fair value of the unlisted firm
- Foreign exchange curves is the term structure for forward rates and swap rates between currency pairs over a specified period
- Net asset value (NAV) is the value of an entity's assets after deducting any liabilities.
- Interest rate curves is the term structure of interest rates and measure of future interest rates at a particular point in time
- Liquidity discounts in the valuation of unlisted investments primarily applied to the valuation of unlisted firms' investments to reflect the fact that these stocks are not actively traded. An increase in liquidity discount will result an unfavourable movement in the fair value of the unlisted firm
- Price-Earnings (P/E) multiples is the ratio of the market value of equity to the net income after tax. An increase in P/E multiple will result in a favourable movement in the fair value of the unlisted firm
- Price-Book (P/B) multiple is the ratio of the market value of equity to the book value of equity. An increase in P/B multiple will result in a favourable movement in the fair value of the unlisted firm
- Price-Sales (P/S) multiple is the ratio of the market value of equity to sales. An increase in P/S multiple will result in a favourable movement in the fair value of the unlisted firm
- Recovery rates are the expectation of the rate of return resulting from the liquidation of a particular loan. As the probability of default increases for a given instrument, the valuation of that instrument will increasingly reflect its expected recovery level assuming default. An increase in the recovery rate, in isolation, would result in a favourable movement in the fair value of the loan
- Repo curve is the term structure of repo rates on repos and reverse repos at a particular point in time.
- Volatility represents an estimate of how much a particular instrument, parameter or index will change in value over time. Generally, the higher the volatility, the more expensive the option will be

12. Financial instruments continued

Level 3 movement tables – financial assets

The table below analyses movements in Level 3 financial assets carried at fair value.

Group

	Held at fair value through profit or loss						Investment securities		
Assets	Loans and advances to banks $million	Loans and advances to customers $million	Reverse repurchase agreements and other similar secured lending $million	Debt securities, alternative tier one and other eligible bills $million	Equity shares $million	Derivative financial instruments $million	Debt securities, alternative tier one and other eligible bills $million	Equity shares $million	Total $million
At 01 January 2022	9	410	1,555	312	98	67	40	392	2,883
Total (losses)/gains recognised in income statement	(16)	(79)	2	18	(6)	23	–	–	(58)
Net trading income	(16)	(79)	2	18	(6)	23	–	–	(58)
Other operating income	–	–	–	–	–	–	–	–	–
Total gains recognised in other comprehensive income (OCI)	–	–	–	–	–	–	(1)	5	4
Fair value through OCI reserve	–	–	–	–	–	–	–	7	7
Exchange difference	–	–	–	–	–	–	(1)	(2)	(3)
Purchases	37	1,149	6,416	743	10	121	–	84	8,560
Sales	(30)	(237)	(5,485)	(342)	(2)	(74)	–	(6)	(6,176)
Settlements	–	(58)	(500)	(1)	–	(76)	(39)	–	(674)
Transfers out[1]	–	(106)	–	–	(8)	(29)	–	–	(143)
Transfers in[2]	21	229	–	77	–	12	–	9	348
At 31 December 2022	21	1,308	1,988	807	92	44	–	484	4,744
Total unrealised (losses) recognised in the income statement, within net trading income, relating to change in fair value of assets held at 31 December 2022	–	–	–	–	(6)	(8)	–	–	(14)

1 Transfers out includes equity shares, derivative financial instruments and loans and advances where the valuation parameters became observable during the year and were transferred to Level 1 and Level 2.

2 Transfers in primarily relate to debt securities, alternative tier one and other eligible bills, derivative financial instruments and loans and advances where the valuation parameters become unobservable during the year

12. Financial instruments continued

The table below analyses movements in Level 3 financial assets carried at fair value.

	Held at fair value through profit or loss						Investment securities		
Assets	Loans and advances to banks $million	Loans and advances to customers $million	Reverse repurchase agreements and other similar secured lending $million	Debt securities, alternative tier one and other eligible bills $million	Equity shares $million	Derivative financial instruments $million	Debt securities, alternative tier one and other eligible bills $million	Equity shares $million	Total $million
At 1 January 2021	200	464	1,064	195	124	9	40	255	2,351
Total gains/(losses) recognised in income statement	1	(80)	2	(32)	(4)	9	–	–	(104)
Net trading income	1	(80)	2	(31)	(4)	9	–	–	(103)
Other operating income	–	–	–	(1)	–	–	–	–	(1)
Total gains recognised in other comprehensive income (OCI)	–	–	–	–	–	–	3	60	63
Fair value through OCI reserve	–	–	–	–	–	–	4	61	65
Exchange difference	–	–	–	–	–	–	(1)	(1)	(2)
Purchases	9	339	4,962	387	10	92	–	94	5,893
Sales	–	(301)	(4,392)	(202)	(16)	(31)	–	(9)	(4,951)
Settlements	(201)	(161)	(81)	(60)	–	(5)	(13)	–	(521)
Transfers out[1]	–	(41)	–	–	(16)	(11)	–	(8)	(76)
Transfers in[2]	–	190	–	24	–	4	10	–	228
At 31 December 2021	9	410	1,555	312	98	67	40	392	2,883
Total unrealised gains/(losses) recognised in the income statement, within net trading income, relating to change in fair value of assets held at 31 December 2021	–	–	–	–	12	(2)	–	–	10

1 Transfers out includes equity shares, derivative financial instruments and loans and advances where the valuation parameters became observable during the year and were transferred to Level 1 and Level 2.

2 Transfers in primarily relate to debt securities, alternative tier one and other eligible bills, derivative financial instruments and loans and advances where the valuation parameters become unobservable during the year

12. Financial instruments continued

Level 3 movement tables – financial assets

The table below analyses movements in Level 3 financial assets carried at fair value.

Company

Assets	Held at fair value through profit or loss: Loans and advances to banks $million	Held at fair value through profit or loss: Loans and advances to customers $million	Held at fair value through profit or loss: Reverse repurchase agreements and other similar secured lending $million	Held at fair value through profit or loss: Debt securities, alternative tier one and other eligible bills $million	Derivative financial instruments $million	Investment securities: Debt securities, alternative tier one and other eligible bills $million	Investment securities: Equity shares $million	Total $million
At 01 January 2022	9	82	1,555	203	69	286	208	2,412
Total (losses)/gains recognised in income statement	(16)	(45)	2	75	23	–	–	39
Net trading income	(16)	(45)	2	75	23	–	–	39
Other operating income	–	–	–	–	–	–	–	–
Total gains recognised in other comprehensive income (OCI)	–	–	–	–	–	–	19	19
Fair value through OCI reserve	–	–	–	–	–	–	20	20
Exchange difference	–	–	–	–	–	–	(1)	(1)
Purchases	37	823	6,416	297	99	295	1	7,968
Sales	(30)	(85)	(5,485)	(107)	(61)	–	(8)	(5,776)
Settlements	–	(6)	(500)	–	(73)	(15)	–	(594)
Transfers out[1]	–	(99)	–	–	(28)	(566)	–	(693)
Transfers in[2]	–	229	–	1	10	–	–	240
At 31 December 2022	–	899	1,988	469	39	–	220	3,615
Total unrealised (losses) recognised in the income statement, within net trading income, relating to change in fair value of assets held at 31 December 2022	–	–	–	–	(7)	–	–	(7)

1 Transfers out includes debt securities, alternative tier one and other eligible bills, derivative financial instruments and loans and advances where the valuation parameters became observable during the year and were transferred to Level 1 and Level 2.

2 Transfers in primarily relate to debt securities, alternative tier one and other eligible bills, derivative financial instruments and loans and advances where the valuation parameters become unobservable during the year

12. Financial instruments continued

Assets	Held at fair value through profit or loss: Loans and advances to banks $million	Loans and advances to customers $million	Reverse repurchase agreements and other similar secured lending $million	Debt securities, alternative tier one and other eligible bills $million	Derivative financial instruments $million	Investment securities: Debt securities, alternative tier one and other eligible bills $million	Equity shares $million	Total $million
At 1 January 2021	200	275	1,064	135	11	28	172	1,885
Total gains/(losses) recognised in income statement	1	(36)	2	(18)	9	–	–	(42)
Net trading income	1	(36)	2	(17)	9	–	–	(41)
Other operating income	–	–	–	(1)	–	–	–	(1)
Total gains recognised in other comprehensive income (OCI)	–	–	–	–	–	–	26	26
Fair value through OCI reserve	–	–	–	–	–	–	26	26
Exchange difference	–	–	–	–	–	–	–	–
Purchases	9	48	4,962	256	91	–	12	5,378
Sales	–	(235)	(4,392)	(170)	(30)	–	(2)	(4,829)
Settlements	(201)	(140)	(81)	–	(5)	(13)	–	(440)
Transfers out[1]	–	(20)	–	–	(11)	–	–	(31)
Transfers in[2]	–	190	–	–	4	271	–	465
At 31 December 2021	9	82	1,555	203	69	286	208	2,412
Total unrealised losses recognised in the income statement, within net trading income, relating to change in fair value of assets held at 31 December 2021	–	–	–	–	(3)	–	–	(3)

1 Transfers out includes derivative financial instruments and loans and advances where the valuation parameters became observable during the year and were transferred to Level 1 and Level 2.

2 Transfers in primarily relate to debt securities, alternative tier one and other eligible bills, derivative financial instruments and loans and advances where the valuation parameters become unobservable during the year

12. Financial instruments continued

Level 3 movement tables – financial liabilities

Group

	2022					
	Deposits by banks $million	**Customer accounts $million**	**Debt securities in issue $million**	**Derivative financial instruments $million**	**Short positions $million**	**Total $million**
At 01 January 2022	**22**	**365**	**781**	**96**	**–**	**1,264**
Total (gains)/losses recognised in income statement – net trading income	**(11)**	**(50)**	**(148)**	**155**	**(3)**	**(57)**
Issues	**144**	**906**	**737**	**174**	**140**	**2,101**
Settlements	**(22)**	**(1,099)**	**(981)**	**(291)**	**(97)**	**(2,490)**
Transfers out[1]	**–**	**–**	**(38)**	**(23)**	**–**	**(61)**
Transfers in[2]	**–**	**48**	**76**	**7**	**–**	**131**
At 31 December 2022	**133**	**170**	**427**	**118**	**40**	**888**
Total unrealised (gains) recognised in the income statement, within net trading income, relating to change in fair value of liabilities held at 31 December 2022	**(1)**	**(17)**	**(7)**	**(3)**	**–**	**(28)**

	2021					
	Deposits by banks $million	Customer accounts $million	Debt securities in issue $million	Derivative financial instruments $million	Short positions $million	Total $million
At 1 January 2021	–	(3)	124	117	–	238
Total (gains) recognised in income statement – net trading income	–	(2)	(12)	(8)	–	(22)
Issues	22	492	1,508	151	–	2,173
Settlements	–	(122)	(882)	(177)	–	(1,181)
Transfers out[1]	–	–	(49)	(6)	–	(55)
Transfers in[2]	–	–	92	19	–	111
At 31 December 2021	22	365	781	96	–	1,264
Total unrealised (gains)/losses recognised in the income statement, within net trading income, relating to change in fair value of liabilities held at 31 December 2021	–	–	–	–	–	–

1 Transfers out during the year primarily relates to debt securities in issue and derivative financial instruments where the valuation parameters became observable during the year and were transferred to Level 2 financial liabilities

2 Transfers in during the year primarily relates to customer accounts, debt securities in issue and derivative financial instruments where the valuation parameters became unobservable during the year

12. Financial instruments continued
Company

	2022					
	Deposits by banks $million	Customer accounts $million	Debt securities in issue $million	Derivative financial instruments $million	Short positions $million	Total $million
At 01 January 2022	22	292	614	105	–	1,033
Total (gains)/losses recognised in income statement – net trading income	(11)	(33)	(137)	153	–	(28)
Issues	130	612	263	146	40	1,191
Settlements	(22)	(804)	(517)	(280)	–	(1,623)
Transfers out[1]	–	–	(38)	(20)	–	(58)
Transfers in[2]	–	–	77	6	–	83
At 31 December 2022	119	67	262	110	40	598
Total unrealised (gains) recognised in the income statement, within net trading income, relating to change in fair value of liabilities held at 31 December 2022	–	–	–	(4)	–	(4)

	2021					
	Deposits by banks $million	Customer accounts $million	Debt securities in issue $million	Derivative financial instruments $million	Short positions $million	Total $million
At 1 January 2021	–	(3)	124	90	–	211
Total (gains) recognised in income statement – net trading income	–	(1)	(8)	(7)	–	(16)
Issues	22	309	1,135	147	–	1,613
Settlements	–	(13)	(680)	(138)	–	(831)
Transfers out[1]	–	–	(49)	(5)	–	(54)
Transfers in[2]	–	–	92	18	–	110
At 31 December 2021	22	292	614	105	–	1,033
Total unrealised (gains)/losses recognised in the income statement, within net trading income, relating to change in fair value of liabilities held at 31 December 2021	–	–	–	–	–	–

1 Transfers out during the year primarily relates to debt securities in issue and derivative financial instruments where the valuation parameters became observable during the year and were transferred to Level 2 financial liabilities

2 Transfers in during the year primarily relates to debt securities in issue and derivative financial instruments where the valuation parameters become unobservable during the year

Sensitivities in respect of the fair values of Level 3 assets and liabilities

Sensitivity analysis is performed on products with significant unobservable inputs. The Group applies a 10 per cent increase or decrease on the values of these unobservable inputs, to generate a range of reasonably possible alternative valuations. The percentage shift is determined by statistical analysis performed on a set of reference prices based on the composition of the Group's Level 3 inventory as the measurement date. Favourable and unfavourable changes (which show the balance adjusted for input change) are determined on the basis of changes in the value of the instrument as a result of varying the levels of the unobservable parameters. The Level 3 sensitivity analysis assumes a one-way market move and does not consider offsets for hedges.

12. Financial instruments continued
Group

	Held at fair value through profit or loss			Fair value through other comprehensive income		
	Net exposure $million	Favourable changes $million	Unfavourable changes $million	Net exposure $million	Favourable changes $million	Unfavourable changes $million
Financial instruments held at fair value						
Loans and advances	1,329	1,348	1,268	–	–	–
Reverse Repurchase agreements and other similar secured lending	1,988	2,003	1,969	–	–	–
Asset-backed securities	–	–	–	–	–	–
Debt securities, alternative tier one and other eligible bills	807	818	783	–	–	–
Equity shares	92	101	83	484	528	441
Other Assets	–	–	–	–	–	–
Derivative financial instruments	(74)	(41)	(107)	–	–	–
Customer accounts	(170)	(164)	(176)	–	–	–
Deposits by banks	(133)	(128)	(138)	–	–	–
Short positions	(40)	(39)	(41)	–	–	–
Debt securities in issue	(427)	(395)	(458)	–	–	–
At 31 December 2022	3,372	3,503	3,183	484	528	441
Financial instruments held at fair value						
Loans and advances	419	435	399	–	–	–
Reverse Repurchase agreements and other similar secured lending	1,555	1,568	1,538	–	–	–
Asset-backed securities	–	–	–	–	–	–
Debt securities, alternative tier one and other eligible bills	312	325	299	40	41	38
Equity shares	98	107	88	392	430	351
Other Assets	–	–	–	–	–	–
Derivative financial instruments	(29)	(13)	(45)	–	–	–
Customer accounts	(365)	(358)	(372)	–	–	–
Deposits by banks	(22)	(17)	(26)	–	–	–
Short positions	–	–	–	–	–	–
Debt securities in issue	(781)	(723)	(838)	–	–	–
At 31 December 2021	1,187	1,324	1,043	432	471	389

The reasonably possible alternatives could have increased or decreased the fair values of financial instruments held at fair value through profit or loss and those classified as fair value through other comprehensive income by the amounts disclosed below.

Financial instruments	Fair value changes	2022 $million	2021 $million
Held at fair value through profit or loss	Possible increase	131	137
	Possible decrease	(189)	(144)
Fair value through other comprehensive income	Possible increase	44	39
	Possible decrease	(43)	(43)

12. Financial instruments continued

Company

	Held at fair value through profit or loss			Fair value through other comprehensive income		
	Net exposure $million	Favourable changes $million	Unfavourable changes $million	Net exposure $million	Favourable changes $million	Unfavourable changes $million
Financial instruments held at fair value						
Loans and advances	899	913	872	–	–	–
Reverse Repurchase agreements and other similar secured lending	1,988	2,003	1,969	–	–	–
Asset-backed securities	–	–	–	–	–	–
Debt securities, alternative tier one and other eligible bills	469	471	454	–	–	–
Equity shares	–	–	–	220	239	201
Derivative financial instruments	(71)	(34)	(107)	–	–	–
Customer accounts	(67)	(66)	(68)	–	–	–
Deposits by banks	(119)	(116)	(122)	–	–	–
Short positions	(40)	(39)	(41)	–	–	–
Debt securities in issue	(262)	(236)	(288)	–	–	–
At 31 December 2022	2,797	2,896	2,669	220	239	201
Financial instruments held at fair value						
Loans and advances	91	94	86	–	–	–
Reverse Repurchase agreements and other similar secured lending	1,555	1,568	1,539	–	–	–
Asset-backed securities	–	–	–	–	–	–
Debt securities, alternative tier one and other eligible bills	203	211	196	286	312	260
Equity shares	–	–	–	208	227	189
Derivative financial instruments	(36)	(15)	(57)	–	–	–
Customer accounts	(292)	(290)	(294)	–	–	–
Deposits by banks	(22)	(17)	(26)	–	–	–
Short positions	–	–	–	–	–	–
Debt securities in issue	(614)	(556)	(672)	–	–	–
At 31 December 2021	885	995	772	494	539	449

The reasonably possible alternatives could have increased or decreased the fair values of financial instruments held at fair value through profit or loss and those classified as fair value through other comprehensive income by the amounts disclosed below.

Financial instruments	Fair value changes	2022 $million	2021 $million
Held at fair value through profit or loss	Possible increase	99	110
	Possible decrease	(128)	(113)
Fair value through other comprehensive income	Possible increase	19	45
	Possible decrease	(19)	(45)

13. Derivative financial instruments

Accounting policy

Derivatives are financial instruments that derive their value in response to changes in interest rates, financial instrument prices, commodity prices, foreign exchange rates, credit risk and indices. Derivatives are categorised as trading unless they are designated as hedging instruments.

Derivatives are initially recognised and subsequently measured at fair value, with revaluation gains recognised in profit or loss (except where cash flow or net investment hedging has been achieved, in which case the effective portion of changes in fair value is recognised within other comprehensive income).

Fair values may be obtained from quoted market prices in active markets, recent market transactions, and valuation techniques, including discounted cash flow models and option pricing models, as appropriate. Where the initially recognised fair value of a derivative contract is based on a valuation model that uses inputs which are not observable in the market, it follows the same initial recognition accounting policy as for other financial assets and liabilities. All derivatives are carried as assets when fair value is positive and as liabilities when fair value is negative.

Hedge accounting

Under certain conditions, the Group may designate a recognised asset or liability, a firm commitment, highly probable forecast transaction or net investment of a foreign operation into a formal hedge accounting relationship with a derivative that has been entered to manage interest rate and/or foreign exchange risks present in the hedged item. The Group applies the 'Phase 1' hedge accounting requirements of IAS 39 Financial Instruments: Recognition and Measurement, and the 'Phase 2' amendments to IFRS in respect of interest rate benchmark reform. There are three categories of hedge relationships:

- Fair value hedge: to manage the fair value of interest rate and/or foreign currency risks of recognised assets or liabilities or firm commitments
- Cash flow hedge: to manage interest rate or foreign exchange risk of highly probable future cash flows attributable to a recognised asset or liability, or a forecasted transaction
- Net investment hedge: to manage the structural foreign exchange risk of an investment in a foreign operation

The Group formally documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking hedge transactions. This is described in more detail in the categories of hedges below.

The Group assesses, both at hedge inception and on a quarterly basis, whether the derivatives designated in hedge relationships are highly effective in offsetting changes in fair values or cash flows of hedged items. Hedges are considered to be highly effective if all the following criteria are met:

- At inception of the hedge and throughout its life, the hedge is prospectively expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk
- Actual results of the hedge are within a range of 80–125%. This is tested using regression analysis
- The regression co-efficient (R squared), which measures the correlation between the variables in the regression, is at least 80%
- In the case of the hedge of a forecast transaction, the transaction must have a high probability of occurring and must present an exposure to variations in cash flows that are expected to affect reported profit or loss. The Group assumes that any interest rate benchmarks on which hedged item cash flows are based are not altered by IBOR reform

The Group discontinues hedge accounting in any of the following circumstances:

- The hedging instrument is not, or has ceased to be, highly effective as a hedge
- The hedging instrument has expired, is sold, terminated or exercised
- The hedged item matures, is sold or repaid
- The forecast transaction is no longer deemed highly probable
- The Group elects to discontinue hedge accounting voluntarily

For interest rate benchmarks deemed in scope of IBOR reform, if the actual result of a hedge is outside the 80-125% range, but the hedge passes the prospective assessment, then the Group will not de-designate the hedge relationship.

13. Derivative financial instruments continued

Under the Phase 2 Interest Rate Benchmark Reform amendments to IFRS 9 and IAS 39, the Group may change hedge designations and corresponding documentation without the hedge being discontinued where there is a change in interest rate benchmark of the hedged item, hedging instrument or designated hedged risk. Permitted changes include the right to:

- Redefine the description of the hedged item and/or hedging instrument
- Redefine the hedged risk to reference an alternative risk-free rate
- Change the method for assessing hedge effectiveness due to modifications required by IBOR reform
- Elect, on a hedge-by-hedge basis, to reset the cumulative fair value changes in the assessment of retrospective hedge effectiveness to zero

A hedge designation may be modified more than once, each time a relationship is affected as a direct result of IBOR reform.

Fair value hedge

Changes in the fair value of derivatives that are designated and qualify as fair value hedging instruments are recorded i n net trading income, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest method is used is amortised to the income statement over the remaining term to maturity of the hedged item. If the hedged item is sold or repaid, the unamortised fair value adjustment is recognised immediately in the income statement. For financial assets classified as fair value through other comprehensive income, the hedge accounting adjustment attributable to the hedged risk is included in net trading income to match the hedging derivative.

Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedging instruments are initially recognised in other comprehensive income, accumulating in the cash flow hedge reserve within equity. These amounts are subsequently recycled to the income statement in the periods when the hedged item affects profit or loss. Both the derivative fair value movement and any recycled amount are recorded in the 'Cashflow hedges' line item in other comprehensive income.

The Group assesses hedge effectiveness using the hypothetical derivative method, which creates a derivative instrument to serve as a proxy for the hedged transaction. The terms of the hypothetical derivative match the critical terms of the hedged item and it has a fair value of zero at inception. The hypothetical derivative and the actual derivative are regressed to establish the statistical significance of the hedge relationship. Any ineffective portion of the gain or loss on the hedging instrument is recognised in the net trading income immediately.

If a cash flow hedge is discontinued, the amount accumulated in the cash flow hedge reserve is released to the income statement as and when the hedged item affects the income statement.

For interest rate benchmarks deemed in scope of IBOR reform, the Group will retain the cumulative gain or loss in the cash flow hedge reserve for designated cash flow hedges even though there is uncertainty arising from these reforms with respect to the timing and amount of the cash flows of the hedged items. Should the Group consider the hedged future cash flows are no longer expected to occur due to reasons other than IBOR reform, the cumulative gain or loss will be immediately reclassified to profit or loss.

Net investment hedge

Hedges of net investments are accounted for in a similar manner to cash flow hedges, with gains and losses arising on the effective portion of the hedges recorded in the line 'Exchange differences on translation of foreign operations' in other comprehensive income, accumulating in the translation reserve within equity. These amounts remain in equity until the net investment is disposed of. The ineffective portion of the hedges is recognised in the net trading income immediately.

The tables below analyse the notional principal amounts and the positive and negative fair values of derivative financial instruments. Notional principal amounts are the amounts of principal underlying the contract at the reporting date.

13. Derivative financial instruments continued

Derivatives

Group

Derivatives	2022 Notional principal amounts $million	2022 Assets $million	2022 Liabilities $million	2021 Notional principal amounts $million	2021 Assets $million	2021 Liabilities $million
Foreign exchange derivative contracts:						
Forward foreign exchange contracts	2,901,200	45,187	45,162	3,353,471	32,966	32,597
Currency swaps and options	999,374	11,391	12,589	1,333,095	10,338	10,695
	3,900,574	56,578	57,751	4,686,566	43,304	43,292
Interest rate derivative contracts:						
Swaps	3,213,891	58,440	60,124	3,294,078	30,294	29,849
Forward rate agreements and options	95,480	2,140	2,838	125,200	1,313	1,852
Exchange traded futures and options	324,225	279	258	294,712	156	132
	3,633,596	60,859	63,220	3,713,990	31,763	31,833
Credit derivative contracts	246,802	406	433	182,161	2,244	2,404
Equity and stock index options	4,912	86	158	7,124	93	153
Commodity derivative contracts	83,738	1,312	1,487	109,543	1,724	1,787
Gross total derivatives	7,869,622	119,241	123,049	8,699,384	79,128	79,469
Offset	–	(54,191)	(54,191)	–	(25,883)	(25,883)
Total derivatives	7,869,622	65,050	68,858	8,699,384	53,245	53,586

Company

Derivatives	2022 Notional principal amounts $million	2022 Assets $million	2022 Liabilities $million	2021 Notional principal amounts $million	2021 Assets $million	2021 Liabilities $million
Foreign exchange derivative contracts:						
Forward foreign exchange contracts	3,322,275	39,464	40,402	3,887,220	30,604	30,387
Currency swaps and options	1,027,838	12,110	12,864	1,362,078	10,967	11,424
	4,350,113	51,574	53,266	5,249,298	41,571	41,811
Interest rate derivative contracts:						
Swaps	3,548,036	63,668	64,723	3,597,413	31,993	31,543
Forward rate agreements and options	98,617	2,277	2,944	127,709	1,500	1,924
Exchange traded futures and options	324,225	279	258	294,712	156	132
	3,970,878	66,224	67,925	4,019,834	33,649	33,599
Credit derivative contracts	246,922	352	437	185,189	2,246	2,369
Equity and stock index options	3,223	69	126	5,342	50	71
Commodity derivative contracts	89,095	1,453	1,640	113,855	1,845	1,868
Gross total derivatives	8,660,231	119,672	123,394	9,573,518	79,361	79,718
Offset	–	(54,191)	(54,191)	–	(25,883)	(25,883)
Total derivatives	8,660,231	65,481	69,203	9,573,518	53,478	53,835

13. Derivative financial instruments continued
The Group limits exposure to credit losses in the event of default by entering into master netting agreements with certain market counterparties. As required by IAS 32, exposures are only presented net in these accounts where they are subject to legal right of offset and intended to be settled net in the ordinary course of business.

The Group applies balance sheet offsetting only in the instance where we are able to demonstrate legal enforceability of the right to offset (e.g. via legal opinion) and the ability and intention to settle on a net basis (e.g. via operational practice).

The Group may enter into economic hedges that do not qualify for IAS 39 hedge accounting treatment, including derivative such as interest rate swaps, interest rate futures and cross currency swaps to manage interest rate and currency risks of the Group. These derivatives are measured at fair value, with fair value changes recognised in net trading income: refer to Market risk (page 114).

The Derivatives and Hedging sections of the Risk review and Capital review (page 116) explain the Group's risk management of derivative contracts and application of hedging.

Derivatives held for hedging
The Group enters into derivative contracts for the purpose of hedging interest rate, currency and structural foreign exchange risks inherent in assets, liabilities and forecast transactions. The table below summarises the notional principal amounts and carrying values of derivatives designated in hedge accounting relationships at the reporting date.

Group

	2022			2021		
	Notional principal amounts $million	**Assets $million**	**Liabilities $million**	Notional principal amounts $million	Assets $million	Liabilities $million
Derivatives designated as fair value hedges:						
Interest rate swaps	**56,127**	**2,052**	**1,509**	53,621	623	181
Currency swaps	**114**	**14**	**4**	202	6	12
	56,241	**2,066**	**1,513**	53,823	629	193
Derivatives designated as cash flow hedges:						
Interest rate swaps	**22,820**	**25**	**576**	2,651	5	10
Forward foreign exchange contracts	**11,889**	**97**	**385**	72	2	–
Currency swaps	**1,336**	**5**	**50**	226	–	12
	36,045	**127**	**1,011**	2,949	7	22
Derivatives designated as net investment hedges:						
Forward foreign exchange contracts	**3,130**	**17**	**51**	2,611	–	27
Total derivatives held for hedging	**95,416**	**2,210**	**2,575**	59,383	636	242

13. Derivative financial instruments continued

Company

	2022			2021		
	Notional principal amounts $million	Assets $million	Liabilities $million	Notional principal amounts $million	Assets $million	Liabilities $million
Derivatives designated as fair value hedges:						
Interest rate swaps	54,273	1,978	1,507	52,444	618	174
Currency swaps	114	14	4	202	6	12
	54,387	1,992	1,511	52,646	624	186
Derivatives designated as cash flow hedges:						
Interest rate swaps	20,880	24	576	2,651	5	10
Forward foreign exchange contracts	11,829	93	385	72	2	–
Currency swaps	47	–	2	69	–	2
	32,756	117	963	2,792	7	12
Derivatives designated as net investment hedges:						
Forward foreign exchange contracts	1,939	17	–	1,871	–	16
Total derivatives held for hedging	89,082	2,126	2,474	57,309	631	214

Fair value hedges

The Group issues various long-term fixed rate debt issuances that are measured at amortised cost, including some denominated in foreign currency, such as unsecured senior and subordinated debt (see Notes 21 and 26). The Group also holds various fixed rate debt securities such as government and corporate bonds, including some denominated in foreign currency (see Note 12). These assets and liabilities held are exposed to changes in fair value due to movements in market interest and foreign currency rates.

The Group uses interest rate swaps to exchange fixed rates for floating rates on funding to match floating rates received on assets, or exchange fixed rates on assets to match floating rates paid on funding. The Group further uses cross currency swaps to match the currency of the issued debt or held asset with that of the entity's functional currency.

Hedge ineffectiveness from fair value hedges is driven by cross currency basis risk. The amortisation of fair value hedge adjustments for hedged items no longer designated is recognised in net trading income. In future periods hedge relationships linked to an interest rate benchmark deemed in scope of benchmark reform may experience ineffectiveness due to market participants' expectations for when the change from the existing IBOR benchmark to an alternative risk-free rate will occur, since the transition may occur at different times for the hedged item and hedging instrument.

At 31 December 2022 the Group held the following interest rate and cross currency swaps as hedging instruments in fair value hedges of interest and currency risk.

Hedging instruments and ineffectiveness

Group

	2022				
		Carrying amount			
Interest rate[1]	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectiveness[2] $million	Ineffectiveness recognised in profit or (loss) $million
Interest rate swaps – issued notes	24,373	100	1,489	(1,439)	2
Interest rate swaps – loans and advances	299	22	–	21	(1)
Interest rate swaps – debt securities and other eligible bills	31,455	1,930	20	2,711	11
Interest and currency risk[1]					
Cross currency swaps – subordinated notes issued	72	–	4	(6)	2
Cross currency swaps – debt securities and other eligible bills	42	14	–	9	3
Total at 31 December 2022	56,241	2,066	1,513	1,296	17

1 Interest rate swaps are designated in hedges of the fair value of interest rate risk attributable to the hedged item. Cross currency swaps are used to hedge both interest rate and currency risks. All the hedging instruments are derivatives, with changes in fair value including hedge ineffectiveness recorded within net trading income

2 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

13. Derivative financial instruments continued

	2021				
		Carrying amount			
Interest rate[1]	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectiveness[2] $million	Ineffectiveness recognised in profit or (loss) $million
Interest rate swaps – issued notes	18,694	322	106	(384)	(4)
Interest rate swaps – loans and advances	855	4	3	7	–
Interest rate swaps – debt securities and other eligible bills	34,072	297	72	547	(1)
Interest and currency risk[1]					
Cross currency swaps – subordinated notes issued	48	–	11	(2)	1
Cross currency swaps – debt securities and other eligible bills	154	6	1	1	–
Total at 31 December 2021	53,823	629	193	169	(4)

1 Interest rate swaps are designated in hedges of the fair value of interest rate risk attributable to the hedged item. Cross currency swaps are used to hedge both interest rate and currency risks. All the hedging instruments are derivatives, with changes in fair value including hedge ineffectiveness recorded within net trading income

2 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

Hedged items in fair value hedges

	2022					
	Carrying amount		**Accumulated amount of fair value hedge adjustments included in the carrying amount**			
	Asset $million	**Liability $million**	**Asset $million**	**Liability $million**	**Change in the value used for calculating hedge ineffectiveness**[1] **$million**	**Cumulative balance of fair value adjustments from de-designated hedge relationships**[2] **$million**
Issued notes	**–**	**25,892**	**–**	**1,339**	**1,450**	**28**
Debt securities and other eligible bills	**28,861**	**–**	**(1,819)**	**–**	**(2,708)**	**383**
Loans and advances to customers	**277**	**–**	**(22)**	**–**	**(21)**	**1**
Total at 31 December 2022	**29,138**	**25,892**	**(1,841)**	**1,339**	**(1,279)**	**412**

	2021					
	Carrying amount		Accumulated amount of fair value hedge adjustments included in the carrying amount			
	Asset $million	Liability $million	Asset $million	Liability $million	Change in the value used for calculating hedge ineffectiveness[1] $million	Cumulative balance of fair value adjustments from de-designated hedge relationships[2] $million
Issued notes	–	18,850	–	134	384	53
Debt securities and other eligible bills	34,062	–	(286)	–	(549)	(7)
Loans and advances to customers	853	–	(2)	–	(8)	(1)
Total at 31 December 2021	34,915	18,850	(288)	134	(173)	45

1 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

2 This represents a credit/(debit) to the balance sheet value

Income statement impact of fair value hedges

	2022 $million Income/ (expense)	2021 $million Income/ (expense)
Change in fair value of hedging instruments	**1,296**	169
Change in fair value of hedged risks attributable to hedged items	**(1,279)**	(173)
Net ineffectiveness (loss)/gain to net trading income	**17**	(4)
Amortisation gain/(loss) to net interest income	**117**	55

13. Derivative financial instruments continued

Hedging instruments and ineffectiveness

Company

	2022				
		Carrying amount			
Interest rate[1]	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectiveness[2] $million	Ineffectiveness recognised in profit or (loss) $million
Interest rate swaps – issued notes	24,373	101	1,489	(1,440)	3
Interest rate swaps – loans and advances	270	19	–	19	(1)
Interest rate swaps – debt securities and other eligible bills	29,630	1,858	18	2,582	10
Interest and currency risk[1]					
Cross currency swaps – subordinated notes issued	72	–	4	(6)	2
Cross currency swaps – debt securities and other eligible bills	42	14	–	9	3
Total at 31 December 2022	**54,387**	**1,992**	**1,511**	**1,164**	**17**

	2021				
		Carrying amount			
Interest rate[1]	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectiveness[2] $million	Ineffectiveness recognised in profit or (loss) $million
Interest rate swaps – issued notes	18,694	322	105	(384)	(4)
Interest rate swaps – loans and advances	826	3	3	6	–
Interest rate swaps – debt securities and other eligible bills	32,924	293	66	534	(1)
Interest and currency risk[1]					
Cross currency swaps – subordinated notes issued	48	–	11	(2)	1
Cross currency swaps – debt securities and other eligible bills	154	6	1	1	–
Total at 31 December 2021	52,646	624	186	155	(4)

1 Interest rate swaps are designated in hedges of the fair value of interest rate risk attributable to the hedged item. Cross currency swaps are used to hedge both interest rate and currency risks. All the hedging instruments are derivatives, with changes in fair value including hedge ineffectiveness recorded within net trading income

2 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

Hedged Items in fair value hedges

	2022					
	Carrying amount		Accumulated amount of fair value hedge adjustments included in the carrying amount			
	Asset $million	Liability $million	Asset $million	Liability $million	Change in the value used for calculating hedge[1] ineffectiveness $million	Cumulative balance of fair value adjustments from de-designated hedge relationships[2] $million
Issued notes	–	25,892	–	1,339	1,450	28
Debt securities and other eligible bills	27,141	–	(1,751)	–	(2,578)	373
Loans and advances to customers	251	–	(19)	–	(19)	1
Total at 31 December 2022	**27,392**	**25,892**	**(1,770)**	**1,339**	**(1,147)**	**402**

1 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

2 This represents a credit/(debit) to the balance sheet value

13. Derivative financial instruments continued

	2021					
	Carrying amount		Accumulated amount of fair value hedge adjustments included in the carrying amount			
	Asset $million	Liability $million	Asset $million	Liability $million	Change in the value used for calculating hedge ineffectiveness[1] $million	Cumulative balance of fair value adjustments from de-designated hedge relationships[2] $million
Issued notes	–	18,850	–	134	384	53
Debt securities and other eligible bills	32,907	–	(287)	–	(535)	–
Loans and advances to customers	825	–	(1)	–	(8)	(1)
Total at 31 December 2021	33,732	18,850	(288)	134	(159)	52

1 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

2 This represents a credit/(debit) to the balance sheet value

Income statement impact of fair value hedges

	2022 $million Income/ (expense)	2021 $million Income/ (expense)
Change in fair value of hedging instruments	**1,164**	155
Change in fair value of hedged risks attributable to hedged items	**(1,147)**	(159)
Net ineffectiveness (loss)/gain to net trading income	**17**	(4)
Amortisation gain/(loss) to net interest income	**120**	49

Cash flow hedges

The Group has exposure to market movements in future interest cash flows on portfolios of customer accounts, debt securities and loans and advances to customers. The amounts and timing of future cash flows, representing both principal and interest flows, are projected on the basis of contractual terms and other relevant factors, including estimates of prepayments and defaults.

The hedging strategy of the Group involves using interest rate swaps to manage the variability in future cash flows on assets and liabilities that have floating rates of interest by exchanging the floating rates for fixed rates. It also uses foreign exchange contracts and currency swaps to manage the variability in future exchange rates on its assets and liabilities and costs in foreign currencies. This is done on both a micro basis whereby a single interest rate or cross currency swap is designated in a separate relationship with a single hedged item (such as a floating rate loan to a customer), and on a portfolio basis whereby each hedging instrument is designated against a group of hedged items that share the same risk (such as a group of customer accounts).

The hedged risk is determined as the variability of future cash flows arising from changes in the designated benchmark interest rate.

Hedging instruments and ineffectiveness

Group

	2022					
		Carrying amount				
	Notional $million	**Asset $million**	**Liability $million**	**Change in fair value used to calculate hedge ineffectiveness[1] $million**	**Gain/(loss) recognised in OCI $million**	**Ineffectiveness gain/(loss) recognised in net trading income $million**
Interest rate risk						
Interest rate swaps	**22,820**	**25**	**576**	**(552)**	**(551)**	**(1)**
Currency risk						
Forward foreign exchange contract	**11,889**	**97**	**385**	**(141)**	**(141)**	**–**
Cross currency swaps	**1,336**	**5**	**50**	**(9)**	**(10)**	**1**
Total as at 31 December 2022	**36,045**	**127**	**1,011**	**(702)**	**(702)**	**–**

1 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

13. Derivative financial instruments continued

	2021					
		Carrying amount				
	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectivenessl $million	Gain/(loss) recognised in OCI $million	Ineffectiveness gain/(loss) recognised in net trading income $million
Interest rate risk						
Interest rate swaps	2,651	5	10	14	14	–
Currency risk						
Forward foreign exchange contract	72	2	–	2	2	–
Cross currency swaps	226	–	12	(3)	(3)	–
Total as at 31 December 2021	2,949	7	22	13	13	–

1 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

Hedged items in cash flow hedges

	2022		
	Change in fair value used for calculating hedge ineffectiveness[1] $million	**Cash flow hedge reserve $million**	**Cumulative balance in the cash flow hedge reserve from de-designated hedge relationships $million**
Customer accounts	**390**	**(450)**	**31**
Debt securities and other eligible bills	**110**	**(67)**	**(22)**
Loans and advances to customers	**204**	**(83)**	**(12)**
Forecast cashflow currency hedge	**–**	**–**	**–**
Intragroup borrowing currency hedge	**(2)**	**–**	**–**
Total at 31 December 2022	**702**	**(600)**	**(3)**

	2021		
	Change in fair value used for calculating hedge ineffectiveness[1] $million	Cash flow hedge reserve[2] $million	Cumulative balance in the cash flow hedge reserve from de-designated hedge relationships $million
Customer accounts	(16)	(11)	–
Debt securities and other eligible bills	2	(4)	–
Loans and advances to customers	1	(1)	–
Forecast cashflow currency hedge	–	–	–
Intragroup borrowing currency hedge	–	–	–
Total at 31 December 2021	(13)	(16)	–

1 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

2 Restated to reflect the correct movement in the cashflow reserve. Refer to the following table for additional details

13. Derivative financial instruments continued

Impact of cash flow hedges on profit and loss and other comprehensive income

	2022 Cumulative gain/(loss) $million	2021 Cumulative gain/(loss) $million
Cash flow hedge reserve balance as at 1 January	(11)	5
(Losses)/gains recognised in other comprehensive income on effective portion of changes in fair value of hedging instruments[1]	(702)	13
Losses/(gains) reclassified to income statement when hedged item affected net profit[1]	110	(34)
Taxation credit relating to cash flow hedges	90	5
Cash flow hedge reserve balance as at 31 December	**(513)**	(11)

1 The 2021 comparatives have been restated to correct a presentation error in two line items in the prior period whereby for a group of cross currency swaps designated in cash flow hedging relationships, the fair value changes presented in other comprehensive income were shown net of the effect of changes in foreign exchange rates. Following the restatement, the gain recognised in other comprehensive income for the effective portion of changes in the fair value of hedging instruments has been increased by $48million from $(35) million to $13 million and the gain reclassified to the income statement when the hedged item affected net profit, has been reduced by $(48) million from $14 million to $(34) million. On the statement of comprehensive income these two line items have been combined into one line item in the current and the prior period to present the net change in other comprehensive income for cash flow hedges, with the gross movements shown in Note 13. No change is required to the income statement

Hedging instruments and ineffectiveness

Company

	2022					
		Carrying amount				
	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectiveness[1] $million	Gain/(loss) recognised in OCI $million	Ineffectiveness gain/(loss) recognised in net trading income $million
Interest rate risk						
Interest rate swaps	20,880	24	576	(534)	(533)	(1)
Currency risk						
Forward foreign exchange contract	11,829	93	385	(147)	(147)	–
Cross currency swaps	47	–	2	(2)	(2)	–
Total as at 31 December 2022	**32,756**	**117**	**963**	**(683)**	**(682)**	**(1)**

	2021					
		Carrying amount				
	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectiveness[1] $million	Gain/(loss) recognised in OCI $million	Ineffectiveness gain/(loss) recognised in net trading income $million
Interest rate risk						
Interest rate swaps	2,651	5	10	14	14	–
Currency risk						
Forward foreign exchange contract	72	2	–	2	2	–
Cross currency swaps	69	–	2	–	–	–
Total as at 31 December 2021	2,792	7	12	16	16	–

1 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

13. Derivative financial instruments continued

Hedged items in cash flow hedges

	2022		
	Change in fair value used for calculating hedge ineffectiveness[1] $million	Cash flow hedge reserve $million	Cumulative balance in the cash flow hedge reserve from de-designated hedge relationships $million
Customer accounts	390	(443)	31
Debt securities and other eligible bills	105	(61)	(22)
Loans and advances to customers	189	(69)	(11)
Forecast cashflow currency hedge	–	–	–
Intragroup borrowing currency hedge	(2)	–	–
Total at 31 December 2022	**682**	**(573)**	**(2)**

	2021		
	Change in fair value used for calculating hedge ineffectiveness[1] $million	Cash flow hedge reserve[2] $million	Cumulative balance in the cash flow hedge reserve from de-designated hedge relationships $million
Customer accounts	(15)	(6)	–
Debt securities and other eligible bills	(2)	2	–
Loans and advances to customers	1	(1)	–
Forecast cashflow currency hedge	–	–	–
Intragroup borrowing currency hedge	–	–	–
Total at 31 December 2021	(16)	(5)	–

1 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

2 Restated to reflect the correct movement in the cashflow reserve. Refer to the following table for additional details

Impact of cash flow hedges on profit and loss and other comprehensive income

	2022 Cumulative gain/(loss) $million	2021 Cumulative gain/(loss) $million
Cash flow hedge reserve balance as at 1 January	(39)	(32)
(Losses)/gains recognised in other comprehensive income on effective portion of changes in fair value of hedging instruments[1]	(682)	16
Losses/(gains) reclassified to income statement when hedged item affected net profit[1]	110	(24)
Taxation credit relating to cash flow hedges	89	1
Cash flow hedge reserve balance as at 31 December	**(522)**	(39)

1 The 2021 comparatives have been restated to correct a presentation error in two line items in the prior period whereby for a group of cross currency swaps designated in cash flow hedging relationships, the fair value changes presented in other comprehensive income were shown net of the effect of changes in foreign exchange rates. Following the restatement, the gain recognised in other comprehensive income for the effective portion of changes in the fair value of hedging instruments has been increased by $24million from $(8) million to $16 million and the gain reclassified to the income statement when the hedged item affected net profit, has been reduced by $(24) million from $nil to $(24) million. On the statement of comprehensive income these two line items have been combined into one line item in the current and the prior period to present the net change in other comprehensive income for cash flow hedges, with the gross movements shown in Note 13. No change is required to the income statement

Net investment hedges

Foreign currency exposures arise from investments in subsidiaries that have a different functional currency from that of the presentation currency of the Group. This risk arises from the fluctuation in spot exchange rates between the functional currency of the subsidiaries and the Group's presentation currency, which causes the value of the investment to vary.

The Group's policy is to hedge these exposures only when not doing so would be expected to have a significant impact on the regulatory ratios of the Group and its banking subsidiaries. The Group uses foreign exchange forwards to manage the effect of exchange rates on its net investments in foreign subsidiaries.

13. Derivative financial instruments continued

Hedging instruments and ineffectiveness

Group

	2022						
		Carrying amount					
	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectiveness[2] $million	Changes in the value of the hedging instrument recognised in OCI $million	Ineffectiveness recognised in profit or loss $million	Amount reclassified from reserves to income $million
Derivative forward currency contracts[1]	3,130	17	51	54	54	–	–

	2021						
		Carrying amount					
	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectiveness[2] $million	Changes in the value of the hedging instrument recognised in OCI $million	Ineffectiveness recognised in profit or loss $million	Amount reclassified from reserves to income $million
Derivative forward currency contracts[1]	2,611	–	27	(31)	(31)	–	–

1 These derivative forward currency contracts have a maturity of less than one year. The hedges are rolled on a periodic basis

2 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

Hedged items in net investment hedges

	2022		
	Change in the value used for calculating hedge ineffectiveness[1] $million	Translation reserve $million	Balances remaining in the translation reserve from hedging relationships for which hedge accounting is no longer applied $million
Net investments	(54)	(34)	–

	2021		
	Change in the value used for calculating hedge ineffectiveness[1] $million	Translation reserve $million	Balances remaining in the translation reserve from hedging relationships for which hedge accounting is no longer applied $million
Net investments	31	(27)	–

1 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

Impact of net investment hedges on other comprehensive income

	2022 Income/ (expense) $million	2021 Income/ (expense) $million
Gains/(losses) recognised in other comprehensive income	54	(19)

13. Derivative financial instruments continued

Hedging instruments and ineffectiveness

Company

	2022						
		Carrying amount					
	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectiveness[2] $million	Changes in the value of the hedging instrument recognised in OCI $million	Ineffectiveness recognised in profit or loss $million	Amount reclassified from reserves to income $million
Derivative forward currency contracts[1]	1,939	17	–	51	51	–	–

	2021						
		Carrying amount					
	Notional $million	Asset $million	Liability $million	Change in fair value used to calculate hedge ineffectiveness[2] $million	Changes in the value of the hedging instrument recognised in OCI $million	Ineffectiveness recognised in profit or loss $million	Amount reclassified from reserves to income $million
Derivative forward currency contracts[1]	1,871	–	16	(19)	(19)	–	–

1 These derivative forward currency contracts have a maturity of less than one year. The hedges are rolled on a periodic basis

2 This represents a (loss)/ change in fair value used for calculating hedge ineffectiveness

Hedged items in net investment hedges

	2022		
	Change in the value used for calculating hedge ineffectiveness $million	Translation reserve $million	Balances remaining in the translation reserve from hedging relationships for which hedge accounting is no longer applied $million
Net investments	(51)	17	–

	2021		
	Change in the value used for calculating hedge ineffectiveness $million	Translation reserve $million	Balances remaining in the translation reserve from hedging relationships for which hedge accounting is no longer applied $million
Net investments	19	(16)	–

Impact of net investment hedges on other comprehensive income

	2022 Income/ (expense) $million	2021 Income/ (expense) $million
Gains/(losses) recognised in other comprehensive income	51	(19)

13. Derivative financial instruments continued

Maturity of hedging instruments

Group

Fair value hedges		2022 Less than one month	More than one month and less than one year	One to five years	More than five years
Interest rate swap					
Notional	$million	451	7,406	36,788	11,482
Average fixed interest rate	USD	0.51%	2.22%	2.22%	1.98%
	EUR	–	2.73%	0.72%	0.56%
Cross currency swap					
Notional	$million	–	–	114	–
Average fixed interest rate (to USD)	GBP	–	–	1.33%	–
	CNH	–	–	3.17%	–
Average exchange rate	GBP/USD	–	–	0.66	–
	HKD/USD	–	–	6.37	–
Cash flow hedges					
Interest rate swap					
Notional	$million	195	8,831	13,582	212
Average fixed interest rate	USD	3.80%	2.16%	1.60%	2.14%
Cross currency swap					
Notional	$million	–	594	742	–
Average fixed interest rate	INO	–	8.67%	11.50%	–
	KRO	–	4.14%	4.06%	–
Average exchange rate	JPY/USD	–	78.32	79.90	–
	KRO/USD	–	1,368.57	1,288.97	–
Forward foreign exchange contracts					
Notional	$million	1,246	10,643	–	–
Average exchange rate	JPY/USD	135.18	133.26	–	–
	CLO/USD	–	–	–	–
Net investment hedges					
Foreign exchange derivatives					
Notional	$million	3,130	–	–	–
Average exchange rate	INR[1]/USD	80.55	–	–	–
	SGD/USD	1.40	–	–	–
	AED/USD	3.67	–	–	–

1 Offshore currency

13. Derivative financial instruments continued

		2021			
Fair value hedges		Less than one month	More than one month and less than one year	One to five years	More than five years
Interest rate swap					
Notional	$million	2,415	5,465	33,921	11,820
Average fixed interest rate	USD	2.00%	0.61%	0.86%	1.41%
	EUR	–	0.12%	(0.09)%	(0.11)%
Cross currency swap					
Notional	$million	48	–	154	–
Average fixed interest rate (to USD)	GBP	4.35%	–	1.33%	–
	HKD	–	–	0.22%	–
Average exchange rate	GBP/USD	0.57	–	0.66	–
	HKD/USD	–	–	7.77	–
Cash flow hedges					
Interest rate swap					
Notional	$million	–	1,666	781	204
Average fixed interest rate	USD	–	0.08%	2.26%	1.26%
Cross currency swap					
Notional	$million	–	69	157	–
Average fixed interest rate	INO	–	3.85%	9.00%	–
Average exchange rate	INO/USD	–	68.85	72.66	–
Forward foreign exchange contracts					
Notional	$million	–	–	72	–
Average exchange rate	CLO/USD	–	–	868.10	–
Net investment hedges					
Foreign exchange derivatives					
Notional	$million	673	1,938	–	–
Average exchange rate	INR[1]/USD	76.17	–	–	–
	SGD/USD	–	1.37	–	–
	AED/USD	–	3.67	–	–

1 Offshore currency

13. Derivative financial instruments continued

Maturity of hedging instruments

Company

Fair value hedges		2022 Less than one month	More than one month and less than one year	One to five years	More than five years
Interest rate swap					
Notional	$million	451	7,251	35,089	11,482
Average fixed interest rate	USD	0.51%	2.23%	2.21%	1.98%
	EUR	–	2.73%	0.72%	0.56%
Cross currency swap					
Notional	$million	–	–	114	–
Average fixed interest rate (to USD)	GBP	–	–	1.33%	–
	CNH	–	–	3.17%	–
Average exchange rate	GBP/USD	–	–	0.66	–
	HKD/USD	–	–	6.37	–
Cash flow hedges					
Interest rate swap					
Notional	$million	195	6,891	13,582	212
Average fixed interest rate	USD	3.80%	2.44%	1.60%	2.14%
Cross currency swap					
Notional	$million	–	47	–	–
Average fixed interest rate	KRO	–	5.58%	–	–
Average exchange rate	KRO/USD	–	1,356.70	–	–
Forward foreign exchange contracts					
Notional	$million	1,186	10,643	–	–
Average exchange rate	JPY/USD	135.18	133.26	–	–
Net investment hedges					
Foreign exchange derivatives					
Notional	$million	1,939	–	–	–
Average exchange rate	INR[1]/USD	80.55	–	–	–
	AED/USD	3.67	–	–	–

1 Offshore currency

13. Derivative financial instruments continued

		2021			
Fair value hedges		Less than one month	More than one month and less than one year	One to five years	More than five years
Interest rate swap					
Notional	$million	2,415	5,340	32,869	11,820
Average fixed interest rate	USD	2.00%	0.63%	0.85%	1.41%
	EUR	–	0.12%	(0.09)%	(0.11)%
Cross currency swap					
Notional	$million	48	–	154	–
Average fixed interest rate (to USD)	GBP	4.35%	–	1.33%	–
	HKD	–	–	0.22%	–
Average exchange rate	GBP/USD	0.57	–	0.66	–
	HKD/USD	–	–	7.77	–
Cash flow hedges					
Interest rate swap					
Notional	$million	–	1,666	781	204
Average fixed interest rate	USD	–	0.08%	2.26%	1.26%
Cross currency swap					
Notional	$million	–	69	–	–
Average fixed interest rate	INO	–	3.85%	–	–
Average exchange rate	INO/USD	–	68.85	–	–
Forward foreign exchange contracts					
Notional	$million	–	–	72	–
Average exchange rate	CLO/USD	–	–	868.10	–
Net investment hedges					
Foreign exchange derivatives					
Notional	$million	673	1,198	–	–
Average exchange rate	INR[1]/USD	76.17	–	–	–
	AED/USD	–	3.67	–	–

1 Offshore currency

13. Derivative financial instruments continued

Interest rate benchmark reform

The Group applies the Phase 1 'Interest Rate Benchmark Reform Amendments to IFRS 9, IAS 39 and IFRS 7' which allow the Group to assume that the interest rate benchmark on which cash flows for the hedged item and/or hedging instrument are based is not altered as a result of IBOR reform for the following activities:

- Prospective hedge assessment
- Determining whether a cash flow or forecast transaction for a cash flow hedge is highly probable. However, the Group otherwise assesses whether the cash flows are considered highly probable
- Determining when cumulative balances in the cash flow hedge reserve from de-designated hedges should be recycled to the income statement

The Group will not de-designate a hedge relationship of a benchmark in scope of IBOR reform if the retrospective hedge result is outside the required 80-125% range, but the hedge passes the prospective assessment. Any hedge ineffectiveness continues to be recorded in net trading income.

For hedges of non-contractually specified benchmark portions of an interest rate (such as fair value hedges of interest rate risk on fixed rate debt instruments) the Group only assesses whether the designated benchmark is separately identifiable at hedge inception. The choice of designated benchmark is not revisited for existing hedge relationships

In applying these amendments, the Group has made the following key assumptions for the period end, to be reviewed on an ongoing basis:

- The interest rate benchmarks applicable to the Group that are in scope of the IFRS amendments are all LIBOR's, EONIA, Singapore Swap Offer Rate (SGD SOR) and Thai Baht Interest Rate fixing (THB FIX)
- EURIBOR is not in scope of the IFRS amendments because its revised methodology incorporates market transaction data, hence the benchmark is expected to continue to exist in future reporting periods
- The Group assumes that the uncertainty arising from USD LIBOR will be present until 30 June 2023, at which time the amendments to IFRS no longer apply

As at 31 December 2022, the following notional principal amounts of derivative instruments designated in fair value or cash flow hedge accounting relationships were linked to IBOR reference rates:

Group

	Fair value hedges $million	Cash flow hedges $million	Total $million	Weighted average exposure $million
Interest rate swaps				
USD LIBOR	25,828	18,754	44,582	2.2
GBP LIBOR	–	–	–	–
JPY LIBOR	–	–	–	–
	25,828	18,754	44,582	2.2
Cross currency swaps				
USD LIBOR vs Fixed rate foreign currency	42	916	958	1.3
Total notional of hedging instruments in scope of IFRS amendments as at 31 December 2022	25,870	19,670	45,540	2.2

13. Derivative financial instruments continued

	Fair value hedges $million	Cash flow hedges $million	Total $million	Weighted average exposure $million
Interest rate swaps				
USD LIBOR	32,543	753	33,296	3.5
GBP LIBOR	47	–	47	0.1
JPY LIBOR	463	–	463	0.1
	33,053	753	33,806	3.4
Cross currency swaps				
USD LIBOR vs Fixed rate foreign currency	202	–	202	1.1
Total notional of hedging instruments in scope of IFRS amendments as at 31 December 2021	33,255	753	34,008	3.4

Company

	Fair value hedges $million	**Cash flow hedges $million**	**Total $million**	**Weighted average exposure $million**
Interest rate swaps				
USD LIBOR	**24,665**	**16,814**	**41,479**	**2.2**
GBP LIBOR	**–**	**–**	**–**	**–**
JPY LIBOR	**–**	**–**	**–**	**–**
	24,665	**16,814**	**41,479**	**2.2**
Cross currency swaps				
USD LIBOR vs Fixed rate foreign currency	**42**	**47**	**90**	**1.3**
Total notional of hedging instruments in scope of IFRS amendments as at 31 December 2022	**24,707**	**16,861**	**41,569**	**2.2**

	Fair value hedges $million	Cash flow hedges $million	Total $million	Weighted average exposure $million
Interest rate swaps				
USD LIBOR	31,520	753	32,273	3.5
GBP LIBOR	47	–	47	0.1
JPY LIBOR	463	–	463	0.1
	32,030	753	32,783	3.4
Cross currency swaps				
USD LIBOR vs Fixed rate foreign currency	202	–	202	1.9
Total notional of hedging instruments in scope of IFRS amendments as at 31 December 2021	32,232	753	32,985	3.4

The Group's primary exposure is to USD LIBOR due to the extent of fixed rate debt security assets and issued notes denominated in USD that are designated in fair value hedge relationships. Where fixed rate instruments are in other currencies, cross currency swaps are used to achieve an equivalent floating USD exposure.

14. Loans and advances to banks and customers

Accounting policy

Refer to Note 12 Financial instruments for the relevant accounting policy

	Group		Company	
	2022 $million	2021 $million	**2022 $million**	2021 $million
Loans and advances to banks	**27,394**	30,014	**18,552**	16,129
Expected credit loss	**(11)**	(15)	**(4)**	(12)
	27,383	29,999	**18,548**	16,117
Loans and advances to customers	**162,158**	149,672	**83,457**	74,574
Expected credit loss	**(4,032)**	(4,873)	**(2,846)**	(3,413)
	158,126	144,799	**80,611**	71,161
Total loans and advances to banks and customers	**185,509**	174,798	**99,159**	87,278

Analysis of loans and advances to customers by client segments and related impairment provisions as set out within the Risk review and Capital review (page 65 to 153).

15. Reverse repurchase and repurchase agreements including other similar lending and borrowing

Accounting policy

The Group purchases securities (a reverse repurchase agreement – 'reverse repo') typically with financial institutions subject to a commitment to resell or return the securities at a predetermined price. These securities are not included in the balance sheet as the Group does not acquire the risks and rewards of ownership, however they are recorded off-balance sheet as collateral received. Consideration paid (or cash collateral provided) is accounted for as a loan asset at amortised cost, unless it is managed on a fair value basis or designated at fair value through profit or loss. In the majority of cases through the contractual terms of a reverse repo arrangement, the Group as the transferee of the security collateral has the right to sell or repledge the asset concerned.

The Group also sells securities (a repurchase agreement – 'repo') subject to a commitment to repurchase or redeem the securities at a predetermined price. The securities are retained on the balance sheet as the Group retains substantially all the risks and rewards of ownership and these securities are disclosed as pledged collateral. Consideration received (or cash collateral received) is accounted for as a financial liability at amortised cost, unless it is either mandatorily classified as fair value through profit or loss or irrevocably designated at fair value through profit or loss at initial recognition.

Financial assets are pledged as collateral as part of sales and repurchases, securities borrowing and securitisation transactions under terms that are usual and customary for such activities. The Group is obliged to return equivalent securities.

Repo and reverse repo transactions typically entitle the Group and its counterparties to have recourse to assets similar to those provided as collateral in the event of a default. Securities sold subject to repos, either by way of a Global Master Repurchase Agreement (GMRA), or through a securities sale and Total Return Swap (TRS) continue to be recognised on the balance sheet as the Group retains substantially the associated risks and rewards of the securities (the TRS is not recognised). The counterparty liability is included in deposits by banks or customer accounts, as appropriate. Assets sold under repurchase agreements are considered encumbered as the Group cannot pledge these to obtain funding.

15. Reverse repurchase and repurchase agreements including other similar lending and borrowing continued

Reverse repurchase agreements and other similar secured lending

Group

	2022 $million	2021 $million
Banks	**24,154**	19,664
Customers	**54,643**	64,042
	78,797	83,706
Of which:		
Fair value through profit or loss	**62,333**	78,986
Banks	**23,276**	18,708
Customers	**39,057**	60,278
Held at amortised cost	**16,464**	4,720
Banks	**878**	956
Customers	**15,586**	3,764

Under reverse repurchase and securities borrowing arrangements, the Group obtains securities on terms which permit it to repledge or resell the securities to others. Amounts on such terms are:

	2022 $million	2021 $million
Securities and collateral received (at fair value)	**113,744**	113,892
Securities and collateral which can be repledged or sold (at fair value)	**113,624**	113,736
Amounts repledged/transferred to others for financing activities, to satisfy liabilities under sale and repurchase agreements (at fair value)	**44,628**	57,879

Company

	2022 $million	2020 2021
Banks	**21,383**	18,818
Customers	**52,929**	62,322
	74,312	81,140
Of which:		
Fair value through profit or loss	**59,057**	77,655
Banks	**21,199**	18,380
Customers	**37,858**	59,275
Held at amortised cost	**15,255**	3,485
Banks	**184**	438
Customers	**15,071**	3,047

Under reverse repurchase and securities borrowing arrangements, the Company obtains securities on terms which permit it to repledge or resell the securities to others. Amounts on such terms are:

	2022 $million	2021 $million
Securities and collateral received (at fair value)	**108,433**	110,558
Securities and collateral which can be repledged or sold (at fair value)	**108,314**	110,462
Amounts repledged/transferred to others for financing activities, to satisfy liabilities under sale and repurchase agreements (at fair value)	**44,419**	57,826

15. Reverse repurchase and repurchase agreements including other similar lending and borrowing continued

Repurchase agreements and other similar secured borrowing

Group

	2022 $million	2021 $million
Banks	6,536	5,092
Customers	45,857	56,540
	52,393	61,632
Of which:		
Fair value through profit or loss	50,402	61,307
Banks	5,422	4,768
Customers	44,980	56,539
Held at amortised cost	1,991	325
Banks	1,114	324
Customers	877	1

The tables below set out the financial assets provided as collateral for repurchase and other secured borrowing transactions:

	2022				
Collateral pledged against repurchase agreements	**Fair value through profit or loss $million**	**Fair value through other comprehensive income $million**	**Amortised cost $million**	**Off-balance sheet $million**	**Total $million**
On-balance sheet					
Debt securities and other eligible bills	1,629	3,624	4,799	–	10,052
Off-balance sheet					
Repledged collateral received	–	–	–	44,628	44,628
At 31 December 2022	1,629	3,624	4,799	44,628	54,680

	2021				
Collateral pledged against repurchase agreements	Fair value through profit or loss $million	Fair value through other comprehensive income $million	Amortised cost $million	Off-balance sheet $million	Total $million
On-balance sheet					
Debt securities and other eligible bills	2,318	483	1,778	–	4,579
Off-balance sheet					
Repledged collateral received	–	–	–	57,879	57,879
At 31 December 2021	2,318	483	1,778	57,879	62,458

15. Reverse repurchase and repurchase agreements including other similar lending and borrowing continued

Company

	2022 $million	2021 $million
Banks	6,215	4,737
Customers	45,687	56,443
	51,902	61,180
Of which:		
Fair value through profit or loss	50,179	60,897
Banks	5,307	4,455
Customers	44,872	56,442
Held at amortised cost	1,723	283
Banks	908	282
Customers	815	1

The tables below set out the financial assets provided as collateral for repurchase and other secured borrowing transactions:

	2022				
Collateral pledged against repurchase agreements	**Fair value through profit or loss $million**	**Fair value through other comprehensive income $million**	**Amortised cost $million**	**Off-balance sheet $million**	**Total $million**
On-balance sheet					
Debt securities and other eligible bills	1,407	3,624	4,799	–	9,830
Off-balance sheet					
Repledged collateral received	–	–	–	44,419	44,419
At 31 December 2022	1,407	3,624	4,799	44,419	54,249

	2021				
Collateral pledged against repurchase agreements	Fair value through profit or loss $million	Fair value through other comprehensive income $million	Amortised cost $million	Off-balance sheet $million	Total $million
On-balance sheet					
Debt securities and other eligible bills	2,085	318	1,776	–	4,179
Off-balance sheet					
Repledged collateral received	–	–	–	57,826	57,826
At 31 December 2021	2,085	318	1,776	57,826	62,005

16. Goodwill and intangible assets

Accounting policy

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the Group's share of the identifiable net assets and contingent liabilities of the acquired subsidiary, associate or joint venture at the date of acquisition. Goodwill on acquisitions of subsidiaries is included in intangible assets. Goodwill on acquisitions of associates is included in Investments in associates. Goodwill included in intangible assets is assessed at each balance sheet date for impairment and carried at cost less any accumulated impairment losses. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold. Detailed calculations are performed based on discounting expected cash flows of the relevant cash generating units (CGUs) and discounting these at an appropriate discount rate, the determination of which requires the exercise of judgement. Goodwill is allocated to CGUs for the purpose of impairment testing. CGUs represent the lowest level within the Group which generate separate cash inflows and at which the goodwill is monitored for internal management purposes. These are equal to or smaller than the Group's reportable segments (as set out in Note 2) as the Group views its reportable segments on a global basis. The major CGUs to which goodwill has been allocated are set out in the CGU table (page 266 to 267).

Significant accounting estimates and judgements

The carrying amount of goodwill is based on the application of judgements including the basis of goodwill impairment calculation assumptions. Judgement is also applied in determination of cash generating units.

Estimates include forecasts used for determining cash flows for CGUs and, the appropriate long term growth rates to use and discount rates which factor in country risk-free rates and applicable risk premiums. These estimates are periodically assessed for appropriateness. The Group undertakes an annual assessment to evaluate whether the carrying value of goodwill is impaired. The estimation of future cash flows and the level to which they are discounted is inherently uncertain and requires significant judgement and is subject to potential change over time.

Acquired intangibles

At the date of acquisition of a subsidiary or associate, intangible assets which are deemed separable and that arise from contractual or other legal rights are capitalised and included within the net identifiable assets acquired. These intangible assets are initially measured at fair value, which reflects market expectations of the probability that the future economic benefits embodied in the asset will flow to the entity, and are amortised on the basis of their expected useful lives (4 to 16 years). At each balance sheet date, these assets are assessed for indicators of impairment. In the event that an asset's carrying amount is determined to be greater than its recoverable amount, the asset is written down immediately.

Computer software

Acquired computer software licences are capitalised if the principles of development are met on the basis of the costs incurred to acquire and bring to use the specific software.

Internally generated software represents substantially all of the total software capitalised. Direct costs of the development of separately identifiable internally generated software are capitalised where it is probable that future economic benefits attributable to the asset will flow from its use (internally generated software). These costs include salaries and wages, materials, service providers and contractors, and directly attributable overheads. Costs incurred in the ongoing maintenance of software are expensed immediately when incurred. Internally generated software is amortised over each asset's useful life to a maximum of a 10 year time period. On an annual basis software assets' residual values and useful lives are reviewed, including assessing for indicators of impairment. Indicators of impairment include loss of business relevance, obsolescence of asset, exit of the business to which the software relates, technological changes, change in use of the asset, reduction in useful life, plans to reduce usage or scope.

For capitalised software, judgement is required to determine which costs relate to research (and therefore expensed) and which costs relate to development (capitalised). Further judgement is required to determine the technical feasibility of completing the software such that it will be available for use. Estimates are used to determine how the software will generate probable future economic benefits, these estimates include; cost savings, income increases, balance sheet improvements, improved functionality or improved asset safeguarding.

Software as a Service (SaaS) is a contractual arrangement that conveys the right to receive access to the supplier's software application over the contract term. As such, the Group does not have control and as a result recognises an operating expense for these costs over the contract term. Certain costs related to implementation of the SaaS may meet the definition of an intangible asset in their own right if it is separately identifiable and control is established. These costs are capitalised if it is expected to provide the Group with future economic benefits flowing from the underlying resource and the Group can restrict others from accessing those benefits.

16. Goodwill and intangible assets continued

Group

	2022				2021			
	Goodwill $million	Acquired intangibles $million	Computer software $million	Total $million	Goodwill $million	Acquired intangibles $million	Computer software $million	Total $million
Cost								
At 1 January	1,379	148	3,569	5,096	1,408	132	3,017	4,557
Exchange translation differences	(44)	(5)	1	(48)	(29)	(4)	(58)	(91)
Additions	–	–	761	761	–	20	738	758
Impairment	(10)	–	(18)	(28)	–	–	–	–
Amounts written off	–	–	(346)	(346)	–	–	(128)	(128)
Classified as held for sale	(2)	–	(5)	(7)	–	–	–	–
At 31 December	1,323	143	3,962	5,428	1,379	148	3,569	5,096
Provision for amortisation								
At 1 January	–	118	1,178	1,296	–	117	944	1,061
Exchange translation differences	–	(5)	(6)	(11)	–	(4)	(20)	(24)
Amortisation	–	6	379	385	–	5	339	344
Impairment charge	–	–	39	39	–	–	3	3
Classified as held for sale	–	–	(4)	(4)				
Amounts written off	–	–	(329)	(329)	–	–	(88)	(88)
At 31 December	–	119	1,257	1,376	–	118	1,178	1,296
Net book value	1,323	24	2,705	4,052	1,379	30	2,391	3,800

At 31 December 2022, accumulated goodwill impairment losses incurred from 1 January 2005 amounted to $3,237 million (2021: $3,227 million), of which $10 million was recognised in 2022 (2021: $nil).

Company

	2022				2021			
	Goodwill $million	Acquired intangibles $million	Computer software $million	Total $million	Goodwill $million	Acquired intangibles $million	Computer software $million	Total $million
Cost								
At 1 January	79	30	2,997	3,106	79	32	2,647	2,758
Exchange translation differences	–	(1)	1	–	–	(2)	(48)	(50)
Additions	–	–	501	501	–	–	503	503
Impairment	(6)	–	(17)	(23)	–	–	–	–
Amounts written off	–	–	(297)	(297)	–	–	(105)	(105)
Classified as held for sale	(1)	–	(2)	(3)	–	–	–	–
At 31 December	72	29	3,183	3,284	79	30	2,997	3,106
Provision for amortisation								
At 1 January	–	18	967	985	–	18	782	800
Exchange translation differences	–	(2)	(3)	(5)	–	(2)	(15)	(17)
Amortisation	–	2	271	273	–	2	271	273
Impairment charge	–	–	37	37	–	–	2	2
Amounts written off	–	–	(285)	(285)	–	–	(73)	(73)
At 31 December	–	–	987	1,005	–	–	967	985
Net book value	72	11	2,196	2,279	79	12	2,030	2,121

16. Goodwill and intangible assets continued

Goodwill

Outcome of impairment assessment

An annual assessment is made as to whether the current carrying value of goodwill is impaired. For the purposes of impairment testing, goodwill is allocated at the date of acquisition to a CGU. Goodwill is considered to be impaired if the carrying amount of the relevant CGU exceeds its recoverable amount. Indicators of impairment include changes in the economic performance and outlook of the region including geopolitical changes, changes in market value of regional investments, large credit defaults and strategic decisions to exit certain regions. The recoverable amounts for all the CGUs were measured based on value in use (VIU). The calculation of VIU for each CGU is calculated using five-year cashflow projections and an estimated terminal value based on a perpetuity value after year five. The cashflow projections are based on forecasts approved by management up to 2027. The perpetuity terminal value amount is calculated using year five cashflows using long-term GDP growth rates. All cashflows are discounted using discount rates which reflect market rates appropriate to the CGU. Post-tax discount rates are used to calculate the VIU using the post-tax cashflows. The post-tax discount rate is subsequently grossed up to pre-tax discount rate. The calculated VIU using post-tax and pre-tax discount rate is same.

The goodwill allocated to each CGU and key assumptions used in determining the recoverable amounts are set out below and are solely estimates for the purposes of assessing impairment of acquired goodwill.

Group

	2022			2021		
Cash generating unit[1]	Goodwill $million	Pre tax Discount Rates per cent	Long-term forecast GDP growth rates per cent	Goodwill $million	Pre tax Discount Rates per cent	Long-term forecast GDP growth rates per cent
Country CGUs						
Africa & Middle East	69			76		
Pakistan	35	30.9	5.9	42	20.2	5.1
Bahrain	34	16.6	0.7	34	14.2	2.8
ASIA	281			290		
Singapore	281	12.3	2.3	280	12.0	3.0
Bangladesh	–	24.3	5.4	10	19.6	7.2
Global CGUs	973			1,013		
Global Private Banking	83	14.4	2.0	84	12.6	3.6
Global Corporate, Commercial & Institutional Banking	890	14.5	2.5	929	12.0	3.0
	1,323			1,379		

Bangladesh has had all the goodwill allocated to them written off, totalling $10 million. This was primarily due to lower economic growth forecasts and higher discount rates. As a result, the carrying amount of Bangladesh CGU, which included goodwill, was greater than the recoverable amount (VIU of $83 million).

In the current year there are no CGUs that are sensitive to any individual movement on key estimates (cashflow, discount rate and GDP growth rate).

16. Goodwill and intangible assets continued

Company

Acquired intangibles primarily comprise those recognised as part of the acquisitions of American Express Bank, Tradewinds, Australia and New Zealand Project Finance and Grindlays.

Significant items of goodwill arising on acquisitions have been allocated to the following cash generating units for the purposes of impairment testing:

Cash generating unit	2022 $million	2021 $million
Country CGUs		
Bahrain	**17**	17
Bangladesh	**–**	6
Global CGUs		
Global Corporate, Commercial & Institutional Banking	**55**	56
	72	79

Bangladesh has had all the goodwill allocated to them written off, totalling $6 million.

Acquired intangibles

Acquired Intangibles primarily comprises of the intellectual property acquired from Standard Chartered Bank Hong Kong Limited.

The acquired intangibles are amortised over periods from four years to a maximum of 16 years. The constituents are as follows:

	Group		Company	
	2022 $million	2021 $million	**2022 $million**	2021 $million
Acquired intangibles comprise:				
Brand names	**1**	–	**–**	–
Customer relationships	**1**	3	**2**	3
Licences	**22**	27	**9**	9
Net book value	**24**	30	**11**	12

17. Property, plant and equipment

Accounting policy

All property, plant and equipment is stated at cost less accumulated depreciation and impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the assets. Subsequent costs are included in the asset's carrying amount or are recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably.

At each balance sheet date the assets' residual values and useful lives are reviewed, and adjusted if appropriate, including assessing for indicators of impairment. In the event that an asset's carrying amount is determined to be greater than its recoverable amount, the asset is written down to the recoverable amount. Gains and losses on disposals are included in the income statement.

Repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

Land and buildings comprise mainly branches and offices. Freehold land is not depreciated although it is subject to impairment testing.

Depreciation on other assets is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives, as follows:

- Buildings up to 50 years
- Leasehold improvements life of lease up to 50 years
- Equipment and motor vehicles three to 15 years

17. Property, plant and equipment continued

Where the Group is a lessee of a right-of-use asset, the leased assets are capitalised and included in Property, plant and equipment with a corresponding liability to the lessor recognised in Other liabilities, in accordance with the Group's leased assets accounting policy in Note 18.

All other repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

Group

	2022				
	Premises $million	Equipment $million	Leased premises assets $million	Leased equipment assets $million	Total $million
Cost or valuation					
At 1 January	663	566	879	8	2,116
Exchange translation differences	(31)	(47)	(78)	(1)	(157)
Additions[1]	55	84	247	–	386
Disposals and fully depreciated assets written off[2]	(82)	(66)	(263)	–	(411)
Transfers to assets held for sale	(56)	(18)	(5)	–	(79)
As at 31 December	549	519	780	7	1,855
Depreciation					
Accumulated at 1 January	298	366	376	5	1,045
Exchange translation differences	(16)	(26)	(22)	(2)	(66)
Charge for the year	32	85	108	1	226
Impairment charge	1	–	4	–	5
Attributable to assets sold, transferred or written off[2]	(80)	(65)	(162)	–	(307)
Transfers to assets held for sale	(28)	(12)	(2)	–	(42)
Accumulated at 31 December	207	348	302	4	861
Net book amount at 31 December	342	171	478	3	994

1 Refer to the cash flow statement under cash flows from investing activities section for the purchase of property, plant and equipment during the year of $139 million on page 171

2 Disposals for property, plant and equipment during the year of $30 million in the cash flow statement would include the gains and losses incurred as part of other operating income (Note 6) on disposal of assets during the year and the net book value disposed Group

	2021				
	Premises $million	Equipment $million	Leased premises assets $million	Leased equipment assets $million	Total $million
Cost or valuation					
At 1 January	666	570	862	6	2,104
Exchange translation differences	(28)	(7)	(32)	2	(65)
Additions[1]	43	91	83	1	218
Disposals and fully depreciated assets written off[2]	(14)	(88)	(34)	(1)	(137)
Transfers to assets held for sale	(4)	–	–	–	(4)
As at 31 December	663	566	879	8	2,116
Depreciation					
Accumulated at 1 January	282	368	249	4	903
Exchange translation differences	(8)	(4)	(14)	–	(26)
Charge for the year	33	89	127	1	250
Impairment charge	–	–	39	–	39
Attributable to assets sold, transferred or written off[2]	(9)	(87)	(25)	–	(121)
Accumulated at 31 December	298	366	376	5	1,045
Net book amount at 31 December	365	200	503	3	1,071

1 Refer to the cash flow statement under cash flows from investing activities section for the purchase of property, plant and equipment during the year of $134 million on page 171

2 Disposals for property, plant and equipment during the year of $25 million in the cash flow statement would include the gains and losses incurred as part of other operating income (Note 6) on disposal of assets during the year and the net book value disposed Group

17. Property, plant and equipment continued

Company

	2022				
	Premises $million	Equipment $million	Leased premises assets $million	Leased equipment assets $million	Total $million
Cost or valuation					
At 1 January	314	309	596	1	1,220
Exchange translation differences	(19)	(12)	(17)	–	(48)
Additions[1]	12	47	24	–	83
Disposals, transfers and fully depreciated assets written off[2]	(75)	(31)	(226)	–	(332)
Transfers to assets held for sale	(27)	(2)	–	–	(29)
As at 31 December	205	311	377	1	894
Depreciation					
Accumulated at 1 January	150	182	260	1	593
Exchange translation differences	(7)	(9)	(8)	–	(24)
Charge for the year	13	49	61	–	123
Impairment charge/(release)	1	–	(2)	–	(1)
Attributable to assets sold, transferred or written off[2]	(74)	(30)	(114)	–	(218)
Transfers to assets held for sale	(8)	(1)	–	–	(9)
Accumulated at 31 December	75	191	197	1	464
Net book amount at 31 December	130	120	180	–	430

1 Refer to the cash flow statement under cash flows from investing activities section for the purchase of property, plant and equipment during the year of $59 million on page 171

2 Disposals for property, plant and equipment during the year of $14 million in the cash flow statement would include the gains and losses incurred as part of other operating income (Note 6) on disposal of assets during the year and the net book value disposed

	2021				
	Premises $million	Equipment $million	Leased premises assets $million	Leased equipment assets $million	Total $million
Cost or valuation					
At 1 January	313	262	576	1	1,152
Exchange translation differences	(10)	5	(2)	–	(7)
Additions[1]	17	50	39	–	106
Disposals and fully depreciated assets written off[2]	(6)	(8)	(17)	–	(31)
As at 31 December	314	309	596	1	1,220
Depreciation					
Accumulated at 1 January	137	140	166	1	444
Exchange translation differences	–	(2)	(5)	–	(7)
Charge for the year	15	51	77	–	143
Impairment charge	–	–	38	–	38
Attributable to assets sold, transferred or written off[2]	(2)	(7)	(16)	–	(25)
Accumulated at 31 December	150	182	260	1	593
Net book amount at 31 December	164	127	336	–	627

1 Refer to the cash flow statement under cash flows from investing activities section for the purchase of property, plant and equipment during the year of $67 million on page 171

2 Disposals for property, plant and equipment during the year of $6 million in the cash flow statement would include the gains and losses incurred as part of other operating income (Note 6) on disposal of assets during the year and the net book value disposed

18. Leased assets

Accounting policy

The Group assesses whether a contract is a lease in scope of this policy by determining whether the contract gives it the right to use a specified underlying physical asset for a lease term greater than 12 months, unless the underlying asset is of low value.

Where the Group is a lessee and the lease is deemed in scope, it recognises a liability equal to the present value of lease payments over the lease term, discounted using the incremental borrowing rate applicable in the economic environment of the lease. The liability is recognised in 'Other liabilities'. A corresponding right-of-use asset equal to the liability, adjusted for any lease payments made at or before the commencement date, is recognised in 'Property, plant and equipment'. The lease term includes any extension options contained in the contract that the Group is reasonably certain it will exercise.

The Group subsequently depreciates the right-of-use asset using the straight-line method over the lease term and measures the lease liability using the effective interest method. Depreciation on the asset is recognised in 'Depreciation and amortisation', and interest on the lease liability is recognised in 'Interest expense'.

If a leased premise, or a physically distinct portion of a premise such as an individual floor, is deemed by management to be surplus to the Group's needs and action has been taken to abandon the space before the lease expires, this is considered an indicator of impairment. An impairment loss is recognised if the right-of-use asset, or portion thereof, has a carrying value in excess of its value-in-use when taking into account factors such as the ability and likelihood of obtaining a subtenant.

The judgements in determining lease balances are the determination of whether the Group is reasonably certain that it will exercise extension options present in lease contracts. On initial recognition, the Group considers a range of characteristics such as premises function, regional trends and the term remaining on the lease to determine whether it is reasonably certain that a contractual right to extend a lease will be exercised. Where a change in assumption is confirmed by the local property management team, a remeasurement is performed in the Group-managed vendor system.

The estimates were the determination of incremental borrowing rates in the respective economic environments. The Group uses third party broker quotes to estimate its USD cost of senior unsecured borrowing, then uses cross currency swap pricing information to determine the equivalent cost of borrowing in other currencies. If it is not possible to estimate an incremental borrowing rate through this process, other proxies such as local government bond yields are used.

The Group primarily enters lease contracts that grant it the right to use premises such as office buildings and retail branches.

Existing lease liabilities may change in future periods due to changes in assumptions or decisions to exercise lease renewal or termination options, changes in payments due to renegotiations of market rental rates as permitted by those contracts and changes to payments due to rent being contractually linked to an inflation index. In general the re-measurement of a lease liability under these circumstances leads to an equal change to the right-of-use asset balance, with no immediate effect on the income statement.

The total cash outflow during the year for premises and equipment leases was $156 million for Group and $94 million for Company.

The total expense during the year in respect of leases with a term less than or equal to 12 months is nil during the period for Group.

The right-of-use asset balances and depreciation charges are disclosed in Note 17. The lease liability balances are disclosed in Note 22 and the interest expense on lease liabilities is disclosed in Note 3.

Maturity analysis

The maturity profile for lease liabilities associated with leased premises and equipment assets is as follows:

Group

	2022				
	One year or less $million	Between one year and two years $million	Between two years and five years $million	More than five years $million	Total $million
Other liabilities – lease liabilities	130	119	260	238	747

	2021				
	One year or less $million	Between one year and two years $million	Between two years and five years $million	More than five years $million	Total $million
Other liabilities – lease liabilities	137	119	282	84	622

18. Leased assets continued

Company

	2022				
	One year or less $million	Between one year and two years $million	Between two years and five years $million	More than five years $million	Total $million
Other liabilities – lease liabilities	**63**	**57**	**133**	**111**	**364**

	2021				
	One year or less $million	Between one year and two years $million	Between two years and five years $million	More than five years $million	Total $million
Other liabilities – lease liabilities	92	88	225	40	445

19. Other assets

Accounting policy

Refer to Note 12 Financial instruments for the relevant accounting policy.

Commodities represent physical holdings where the Group has title and exposure to the Market Risk associated with the holding.

Commodities are fair valued with the fair value derived from observable spot or short-term futures prices from relevant exchanges.

Group

Other assets include:

	2022 $million	2021 $million
Financial assets held at amortised cost (Note 12):		
Cash collateral	**11,372**	8,244
Acceptances and endorsements	**3,777**	3,047
Unsettled trades and other financial assets	**12,061**	10,990
	27,210	22,281
Non-financial assets:		
Commodities[1]	**10,174**	9,265
Other assets	**257**	424
	37,641	31,970

1 Commodities and emissions certificates are carried at fair value less costs to sell, $5.5 billion (2021: $5.7 billion) are classified as Level 1 and $4.6 billion are classified as Level 2 (2021: $3.6 billion)

Company

Other assets include:

	2022 $million	2021 $million
Financial assets held at amortised cost (Note 12):		
Cash collateral	**10,231**	7,780
Acceptances and endorsements	**2,737**	2,329
Unsettled trades and other financial assets	**10,657**	9,751
	23,625	19,860
Non-financial assets:		
Commodities[1]	**7,921**	5,475
Other assets	**169**	353
	31,715	25,688

1 Commodities and emissions certificates are carried at fair value less costs to sell, $3.2 billion (2021: $1.8 billion) are classified as Level 1 and $4.7 billion are classified as Level 2 (2021: $3.6 billion)

20. Assets held for sale and associated liabilities

Accounting policy

Financial instruments can be reclassified as held for sale if they are non-current assets or if they are part of a disposal group; however, in these circumstances financial instruments continue to be measured per the requirements of IFRS 9 Financial Instruments. Refer to Note 12 Financial instruments for the relevant accounting policy.

Non-current assets are classified as held for sale and measured at the lower of their carrying amount and fair value less cost to sell when:

a) Their carrying amounts will be recovered principally through sale;

b) They are available for immediate sale in their present condition; and

c) Their sale is highly probable.

Immediately before the initial classification as held for sale, the carrying amounts of the assets are measured in accordance with the applicable accounting policies related to the asset or liability before reclassification as held for sale.

The assets below have been presented as held for sale following the approval of Group management and the transactions are expected to complete in 2023.

Following a decision by the Board of directors to exit certain markets in Africa & Middle east, the assets and liabilities of those markets have been moved to 'Held for sale'.

Group

Assets held for sale

The financial assets reported below are classified under Level 1 $345 million (31 December 2021: NIL), Level 2 $946 million (31 December 2021: NIL) and Level 3 $100 million (31 December 2021: $95 million).

	2022 $million	2021 $million
Financial assets held at fair value through profit or loss	3	43
Loans and advances to customers	–	20
Equity shares	2	23
Derivative financial instruments – Assets	1	–
Financial assets held at amortised cost	1,388	52
Cash and balances at central banks	423	–
Loans and advances to banks	81	–
Loans and advances to customers	508	52
Debt securities held at amortised cost	376	–
Goodwill and intangible assets	4	–
Property, plant and equipment	36	3
Others	36	3
Others	55	–
	1,486	98

Liabilities held for sale

The financial liabilities reported below are classified under Level 1 $402million (31 December 2021: Nil) and Level 2 $833 million (31 December 2021: Nil).

	2022 $million	2021 $million
Financial liabilities held at fair value through profit or loss	5	–
Derivative financial instruments	5	–
Financial liabilities held at amortised cost	1,230	–
Deposits by banks	17	–
Customer accounts	1,213	–
Other liabilities	64	–
Provisions for liabilities and charges	8	–
	1,307	–

20. Assets held for sale and associated liabilities continued

Company

Assets held for sale

The financial assets reported below are classified under Level 1 $198 million (31 December 2021: NIL), Level 2 $248 million (31 December 2021: NIL) and Level 3 $100 million (31 December 2021: $91 million).

	2022 $million	2021 $million
Financial assets held at fair value through profit or loss	2	42
Loans and advances to customers	–	20
Equity shares	2	22
Financial assets held at amortised cost	544	49
Cash and balances at central banks	96	–
Loans and advances to banks	74	–
Loans and advances to customers	230	49
Debt securities held at amortised cost	144	–
Goodwill and intangible assets	3	–
Property, plant and equipment	20	–
Others	20	–
Others	24	–
	592	91

Liabilities held for sale

The financial liabilities reported below are classified under Level 1 $325million (31 December 2021: Nil) and Level 2 $10 million (31 December 2021: Nil).

	2022 $million	2021 $million
Financial liabilities held at amortised cost	335	–
Deposits by banks	7	–
Customer accounts	328	–
Other liabilities	10	–
	345	–

21. Debt securities in issue

Accounting policy

Refer to Note 12 Financial instruments for the relevant accounting policy.

Group

	2022			2021		
	Certificates of deposit of $100,000 or more $million	Other debt securities in issue $million	Total $million	Certificates of deposit of $100,000 or more $million	Other debt securities in issue $million	Total $million
Debt securities in issue	20,026	16,956	36,982	22,498	13,562	36,060
Debt securities in issue included within:						
Financial liabilities held at fair value through profit or loss (Note 12)	–	7,563	7,563	–	4,360	4,360
Total debt securities in issue	20,026	24,519	44,545	22,498	17,922	40,420

21. Debt securities in issue continued

Company

	2022			2021		
	Certificates of deposit of $100,000 or more $million	Other debt securities in issue $million	Total $million	Certificates of deposit of $100,000 or more$million	Other debt securities in issue $million	Total $million
Debt securities in issue	19,926	15,066	34,992	21,799	12,027	33,826
Debt securities in issue included within:						
Financial liabilities held at fair value through profit or loss (Note 12)	–	7,271	7,271	–	4,086	4,086
Total debt securities in issue	19,926	22,337	42,263	21,799	16,113	37,912

In 2022, the Company issued a total of $2.5 billion senior notes for general business purposes of the Group as shown below:

Securities	$million
CNY 1100 million callable fixed rate senior notes due 2026 (callable 2025)	158
SGD 225 million callable fixed rate senior notes due 2033 (callable 2032)	190
HKD 800 million callable fixed rate senior notes due 2025 (callable 2024)	103
$1,000 million callable fixed rate senior notes due 2028 (callable 2027)	1,000
$1,000 million callable fixed rate senior notes due 2025 (callable 2024)	1,000
Total Senior Notes issued	2,451

In 2021, the Company issued a total of $3.1 billion senior notes for general business purposes of the Group as shown below :

Securities	$million
$1500 million callable fixed rate senior notes due 2025 (callable 2024)	1,500
$1000 million callable fixed rate senior notes due 2025 (callable 2024)	1,000
EUR 500 million callable fixed rate senior notes due 2029 (callable 2028)	569
Total Senior Notes issued	3,069

Where a debt instrument is callable, the issuer has the right to call.

22. Other liabilities

Accounting policy

Refer to Note 12 Financial instruments for the relevant accounting policy for financial liabilities, Note 18 Leased assets for the accounting policy for leases and Note 30 Share-based payments for the accounting policy for cash-settled share-based payments.

Group

	2022 $million	2021 $million
Financial liabilities held at amortised cost (Note 12)		
Acceptances and endorsements	3,842	3,048
Cash collateral	8,304	7,757
Property leases[1]	550	611
Equipment leases[1]	2	6
Unsettled trades and other financial liabilities	12,869	14,228
	25,567	25,650
Non-financial liabilities		
Cash-settled share-based payments	2	–
Other liabilities	356	363
	25,925	26,013

22. Other liabilities continued

Company

	2022 $million	2021 $million
Financial liabilities held at amortised cost (Note 12)		
Acceptances and endorsements	2,737	2,329
Cash collateral	7,710	7,033
Property leases[1]	227	417
Unsettled trades and other financial liabilities	9,987	10,346
	20,661	20,125
Non-financial liabilities		
Other liabilities	329	335
	20,990	20,460

1 Other financial liabilities include the present value of lease liabilities, as required by IFRS 16 from 1 January 2019; refer to Note 18

23. Provisions for liabilities and charges

Accounting policy

The Group recognises a provision for a present legal or constructive obligation resulting from a past event when it is more likely than not that it will be required to transfer economic benefits to settle the obligation and the amount of the obligation can be estimated reliably. Where a liability arises based on participation in a market at a specified date, the obligation is recognised in the financial statements on that date and is not accrued over the period.

Other accounting estimates and judgements

The recognition and measurement of provisions for liabilities and charges requires significant judgement and the use of estimates about uncertain future conditions or events.

Estimates include the best estimate of the probability of outflow of economic resources, cost of settling a provision and timing of settlement. Judgements are required for inherently uncertain areas such as legal decisions (including external advice obtained), and outcome of regulator reviews.

Group

	2022			2021		
	Provision for credit commitments $million	Other provisions $million	Total $million	Provision for credit commitments $million	Other provisions $million	Total $million
At 1 January	316	80	396	331	69	400
Exchange translation differences	(36)	(4)	(40)	8	(1)	7
Transfer	–	–	–	–	2	2
(Release)/charge against profit	(29)	27	(2)	(23)	30	7
Provisions utilised	–	(19)	(19)	–	(20)	(20)
At 31 December	251	84	335	316	80	396

Company

	2022			2021		
	Provision for credit commitments $million	Other provisions $million	Total $million	Provision for credit commitments $million	Other provisions $million	Total $million
At 1 January	245	53	298	294	42	336
Exchange translation differences	(22)	(3)	(25)	(9)	–	(9)
Transfer	–	6	6	–	1	1
(Release)/charge against profit	(40)	13	(27)	(40)	18	(22)
Provisions utilised	–	(3)	(3)	–	(8)	(8)
At 31 December	183	66	249	245	53	298

23. Provisions for liabilities and charges continued
Provision for credit commitment comprises those undrawn contractually committed facilities where there is doubt as to the borrowers' ability to meet their repayment obligations.

Other provisions include $14 million (2021:$17 million) recognised for certain contracts with suppliers for which the unavoidable costs of meeting the obligations exceed the economic benefits expected to be received. It is expected that the costs will be incurred over the next 5 years.

Other provisions consist mainly of provisions for legal claims and regulatory and enforcement investigations and proceedings.

24. Contingent liabilities and commitments

Accounting policy

Financial guarantee contracts and loan commitments

The Group issues financial guarantee contracts and loan commitments in return for fees. Financial guarantee contracts and any loan commitments issued at below-market interest rates are initially recognised at their fair value as a financial liability, and subsequently measured at the higher of the initial value less the cumulative amount of income recognised in accordance with the principles of IFRS 15 Revenue from Contracts with Customers and their expected credit loss provision. Loan commitments may be designated at fair value through profit or loss where that is the business model under which such contracts are held. Notional values of financial guarantee contracts and loan commitments are disclosed in the table below.

Financial guarantees, trade credits and irrevocable letters of credit are the notional values of contracts issued by the Group's Transaction Banking business for which an obligation to make a payment has not arisen at the reporting date. Transaction Banking will issue contracts to clients and counterparties of clients, whereby in the event the holder of the contract is not paid, the Group will reimburse the holder of the contract for the actual financial loss suffered. These contracts have various legal forms such as letters of credit, guarantee contracts and performance bonds. The contracts are issued to facilitate trade through export and import business, provide guarantees to financial institutions where the Group has a local presence, as well as guaranteeing project financing involving large construction projects undertaken by sovereigns and corporates. The contracts may contain performance clauses which require the counterparty performing services or providing goods to meet certain conditions before a right to payment is achieved, however the Group does not guarantee this performance. The Group will only guarantee the credit of the counterparty paying for the services or goods.

Commitments are where the Group has confirmed its intention to provide funds to a customer or on behalf of a customer under prespecified terms and conditions in the form of loans, overdrafts, future guarantees whether cancellable or not and the Group has not made payments at the balance sheet date; those instruments are included in these financial statements as commitments. Commitments and contingent liabilities are generally considered on demand as the Group may have to honour them, or the client may draw down at any time.

Capital commitments are contractual commitments the Group has entered into to purchase non-financial assets.

The table below shows the contract or underlying principal amounts of unmatured off-balance sheet transactions at the balance sheet date. The contract or underlying principal amounts indicate the volume of business outstanding and do not represent amounts at risk.

	Group		Company	
	2022 $million	2021 $million	**2022 $million**	2021 $million
Financial guarantees and trade credits				
Financial guarantees, trade and irrevocable letters of credit	**47,799**	49,235	**37,890**	37,465
	47,799	49,235	**37,890**	37,465
Commitments				
Undrawn formal standby facilities, credit lines and other commitments to lend				
One year and over	**54,610**	53,128	**44,162**	45,801
Less than one year	**18,429**	17,608	**13,807**	14,353
Unconditionally cancellable	**34,846**	29,950	**6,036**	6,524
	107,885	100,686	**64,005**	66,678
Capital commitments				
Contracted capital expenditure approved by the directors but not provided for in these accounts	**11**	8	**–**	–

24. Contingent liabilities and commitments continued
The table below shows the contract or underlying principal amounts and risk-weighted amounts of unmatured Group off-balance sheet transactions at the balance sheet date. The contract or underlying principal amounts indicate the volume of business outstanding and do not represent amounts at risk.

	Group		Company	
	2022 $million	2021 $million	**2022 $million**	2021 $million
Financial guarantees and trade credits (inter-group)				
Financial guarantees, trade and irrevocable letters of credit	**3,076**	2,120	**12,465**	7,542
	3,076	2,120	**12,465**	7,542
Commitments (inter-group)				
Undrawn commitments	**1,007**	5	**1,936**	261
	1,007	5	**1,936**	261

Please refer to Note 19 for further details. As set out in Note 25, the Group has contingent liabilities in respect of certain legal and regulatory matters for which it is not practicable to estimate the financial impact as there are many factors that may affect the range of possible outcomes.

25. Legal and regulatory matters

Accounting policy

Where appropriate, the Group recognises a provision for liabilities when it is probable that an outflow of economic resources embodying economic benefits will be required, and for which a reliable estimate can be made of the obligation. The uncertainties inherent in legal and regulatory matters affect the amount and timing of any potential outflows with respect to which provisions have been established. These uncertainties also mean that it is not possible to give an aggregate estimate of contingent liabilities arising from such legal and regulatory matters.

The Group receives legal claims against it in a number of jurisdictions and is subject to regulatory and enforcement investigations and proceedings from time to time. Apart from the matters described below, the Group currently considers none of the ongoing claims, investigations or proceedings to be individually material. However, in light of the uncertainties involved in such matters there can be no assurance that the outcome of a particular matter or matters currently not considered to be material may not ultimately be material to the Group's results in a particular reporting period depending on, among other things, the amount of the loss resulting from the matter(s) and the results otherwise reported for such period.

Since 2014, the Group has been named as a defendant in a series of lawsuits that have been filed in the United States District Courts for the Southern and Eastern Districts of New York against a number of banks (including Standard Chartered Bank or its affiliates) on behalf of plaintiffs who are, or are relatives of, victims of various terrorist attacks in Iraq and Afghanistan. The most recent lawsuit was filed in April 2022 and concerns terrorist attacks that occurred in Afghanistan between 2013 and 2016. None of these lawsuits have specified the amount of damages claimed. The plaintiffs in each of these lawsuits have alleged that the defendant banks aided and abetted the unlawful conduct of parties with connections to terrorist organisations in breach of the U.S. Anti-Terrorism Act. The courts have ruled in favour of the banks' motions to dismiss in six of these lawsuits, including a ruling issued in December 2022 in which the United States District Court for the Eastern District of New York dismissed a lawsuit filed in August 2021. In January 2023 a panel of the United States Court of Appeals for the Second Circuit upheld a September 2019 ruling by the United States District Court for the Eastern District of New York in which a lawsuit filed in November 2014 was dismissed. While a ruling is awaited in respect of the Group's motion to dismiss the lawsuit filed in April 2022, the other lawsuits are currently stayed pending a ruling by the United States Supreme Court in another U.S. Anti-Terrorism Act case in which SCB is not involved. An appeal from the December 2022 dismissal ruling is also pending.

In January 2020, a shareholder derivative complaint was filed by the City of Philadelphia in New York State Court against 45 current and former directors and senior officers of the Group. It is alleged that the individuals breached their duties to the Group and caused a waste of corporate assets by permitting the conduct that gave rise to the costs and losses to the Group related to legacy conduct and control issues. In March 2021, an amended complaint was served in which SCB and seven individuals were removed from the case. Standard Chartered PLC and Standard Chartered Holdings Limited remained as named "nominal defendants" in the complaint. In May 2021, Standard Chartered PLC filed a motion to dismiss the complaint. In February 2022, the New York State Court ruled in favour of Standard Chartered PLC's motion to dismiss the complaint. The plaintiffs are pursuing an appeal against the February 2022 ruling. A hearing date for the plaintiffs' appeal is awaited.

25. Legal and regulatory matters continued

Bernard Madoff's 2008 confession to running a Ponzi scheme through Bernard L. Madoff Investment Securities LLC (BMIS) gave rise to a number of lawsuits against the Group. BMIS and the Fairfield funds (which invested in BMIS) are in bankruptcy and liquidation, respectively. Between 2010 and 2012, five lawsuits were brought against the Group by the BMIS bankruptcy trustee and the Fairfield funds' liquidators, in each case seeking to recover funds paid to the Group's clients pursuant to redemption requests made prior to BMIS' bankruptcy filing. The total amount sought in these cases exceeds USD 300 million, excluding any pre-judgement interest that may be awarded. The four lawsuits commenced by the Fairfield funds' liquidators have been dismissed and the appeals of those dismissals by the funds' liquidators are ongoing.

The Group has concluded that the threshold for recording provisions pursuant to IAS 37 Provisions, Contingent Liabilities and Contingent Assets is not met with respect to the above matters; however, the outcomes of these lawsuits are inherently uncertain and difficult to predict.

26. Subordinated liabilities and other borrowed funds

Accounting policy

Subordinated liabilities and other borrowed funds are classified as financial instruments. Refer to Note 12 Financial instruments for the accounting policy.

All subordinated liabilities are unsecured, unguaranteed and subordinated to the claims of other creditors including without limitation, customer deposits and deposits by banks. The Group has the right to settle these debt instruments in certain circumstances as set out in the contractual agreements. Where a debt instrument is callable, the issuer has the right to call.

	2022 $million	2021 $million
Subordinated loan capital – issued by subsidiary undertakings		
$540 million floating rate subordinated notes due 2030 (callable 2025)[1]	540	540
	540	540
Subordinated loan capital – issued by the Company		
£200 million 7.75 per cent subordinated notes due (callable 2022)	–	48
$960 million floating rate subordinated notes due 2022	–	960
$700 million 8.0 per cent subordinated notes due 2031	345	418
$2 billion floating rate subordinated notes due 2023	2,000	2,000
$500 million floating rate subordinated notes due 2043	392	500
$2 billion floating rate subordinated notes due 2044 (callable 2039)	1,821	2,000
$250 million floating rate subordinated notes due 2048 (callable 2043)	250	250
$1 billion floating rate subordinated notes due 2029 (callable 2024)	991	1,000
$1.25 billion floating rate subordinated notes due 2032 (callable 2027)	1,250	1,250
$1 billion 3.516 per cent subordinated notes due 2030 (callable 2025)	881	956
£504 million floating subordinated debt 2043 (callable 2038)	630	682
$2 billion 5.3 per cent subordinated debt 2035 (callable 2030)	1,767	2,000
£527 million floating rate subordinated debt 2039 (callable 2034)	634	713
€1 billion 2.5 per cent subordinated debt 2030 (callable 2025)	977	1,137
$750 million 3.604 per cent Fixed rate reset dated subordinated notes due 2033	630	–
	12,568	13,914
Primary capital floating rate notes		
$400 million floating rate undated subordinated notes	16	16
$300 million floating rate undated subordinated notes (Series 2)	69	69
$400 million floating rate undated subordinated notes (Series 3)	50	50
$200 million floating rate undated subordinated notes (Series 4)	26	26
	161	161
Total for Group	13,269	14,615

1 Issued by Standard Chartered Bank (Singapore) Limited

26. Subordinated liabilities and other borrowed funds continued

	2022			
	USD $million	GBP $million	EUR $million	Total $million
Fixed rate subordinated debt	3,623	–	977	4,600
Floating rate subordinated debt	7,405	1,264	–	8,669
Total	11,028	1,264	977	13,269

	2021			
	USD $million	GBP $million	EUR $million	Total $million
Fixed rate subordinated debt	3,374	48	1,137	4,559
Floating rate subordinated debt	8,661	1,395	–	10,056
Total	12,035	1,443	1,137	14,615

Redemptions and repurchases during the year

Standard Chartered Bank exercised its right to redeem $960m-3.625% Floating rate Sub Debt Notes Matured on 23 Nov 2022 & £200m-7.75% Fixed rate Subordinated Notes (callable 2022) during the year.

Issuances during the year

Standard Chartered Bank has issued $750m-3.604% Fixed rate dated subordinated notes due 2033 during the year.

27. Share capital, other equity instruments and reserves

Accounting policy

Financial instruments issued are classified as equity when there is no contractual obligation to transfer cash, other financial assets or issue available number of own equity instruments. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

Securities which carry a discretionary coupon and have no fixed maturity or redemption date are classified as other equity instruments. Interest payments on these securities are recognised, net of tax, as distributions from equity in the period in which they are paid.

Where the Company or other members of the consolidated Group purchase the Company's equity share capital, the consideration paid is deducted from the total shareholders' equity of the Group and/or of the Company as treasury shares until they are cancelled. Where such shares are subsequently sold or reissued, any consideration received is included in shareholders' equity of the Group and/or the Company.

Group and Company

	Number of ordinary shares millions	Ordinary share capital[1] millions	Ordinary share premium millions	Preference share premium[2] millions	Total share capital and share premium millions	Other equity instruments millions
At 1 January 2021	19,324	19,324	296	1,500	21,120	3,000
Shares issued	1,273	1,273	–	–	1,273	–
Additional Tier 1 equity issuance	–	–	–	–	–	2,750
Additional Tier 1 redemption	–	–	–	–	–	(1,001)
At 31 December 2021	20,597	20,597	296	1,500	22,393	4,749
Shares issued	–	–	–	–	–	–
Additional Tier 1 equity issuance	–	–	–	–	–	1,000
Additional Tier 1 redemption	–	–	–	–	–	(999)
At 31 December 2022	20,597	20,597	296	1,500	22,393	4,750

1 Issued and fully paid ordinary shares of $1 each

2 Includes preference share capital of $75,000

27. Share capital, other equity instruments and reserves continued

Ordinary share capital

The authorised share capital of the Company at 31 December 2022 was $26,789 million and TWD 1,225 million (31 December 2021: $26,789 million and TWD 1,225 million) made up of 26,782 million ordinary shares of $1 each, 2.4 million non-cumulative irredeemable preference shares of $0.01 each, 1 million non-cumulative preference shares of $5 each, 15,000 non-cumulative redeemable preference shares of $5 each, 462,500 non-cumulative redeemable 8.125% preference shares of $5 each and 50 million non-cumulative redeemable preference shares of TWD24.50 each.

The issued share capital of the Company at 31 December 2022 was $20,597 million (2021: $20,597 million) made up of: 20,597 million ordinary shares of $1 each.

The was no new issue of shares during the year. The Company has one class of ordinary shares, which carries no rights to fixed income. Subject to any special rights or restrictions as to voting attached to any shares in accordance with the Company's Royal Charter Bye-Laws and Rules, on a show of hands every member present at a general meeting by a representative or proxy shall have one vote. On a poll, every member holding shares or stock of less than the nominal amount of US$25 shall not have any vote, but every other member who is present in person or by proxy shall have votes in accordance with the following scale:

Nominal amount of Shares or Stock held	Number of Votes
US$25 or more but less than US$50	1 vote
US$50 or more but less than US$100	2 votes
US$100 or more but less than US$250	3 votes
US$250 or more but less than US$375	4 votes
US$375 or more but less than US$500	5 votes
US$500 or more but less than US$750	6 votes
US$750 or more but less than US$1,000	7 votes
US$1,000 or more but less than US$1,250	8 votes
US$1,250 or more but less than US$1,500	9 votes
US$1,500 or more	10 votes

Preference share capital

7,500 non-cumulative redeemable preference shares issued on 8 December 2006 with a nominal value of $5 each and a premium of $99,995, making a paid-up amount per preference share of $100,000. The preference shares are redeemable at the option of the company in whole or in part on 31 Jan 2027 and on any quarterly dividend payment date falling on or around ten-year intervals thereafter. The amount payable on redemption will be the paid up amount of $100,000 per preference share to be redeemed, plus an amount equal to the accrued but unpaid dividend thereon up to but excluding the redemption date; and;7,500 non-cumulative redeemable preference shares issued on 25 May 2007 with a nominal value of $5 each and a premium of $99,995, making a paid up amount per preference share of $100,000. The preference shares are redeemable at the option of the company on 30 July 2037 and on any quarterly dividend payment date falling on or around ten-year intervals thereafter. The amount payable on redemption will be the paid-up amount of $100,000 per preference share to be redeemed, plus an amount equal to the accrued but unpaid dividend thereon up to but excluding the redemption date

Other equity instruments

The table provides details of outstanding Fixed Rate Resetting Perpetual Subordinated Contingent Convertible AT1 securities issued by Standard Chartered Bank. All issuances are made for general business purposes and to increase the regulatory capital base of the Group.

Issuance date	Nominal value	Interest rate[1]	Coupon payment dates[2]	First reset dates[3]
18 January 2017	USD 1,000 million	7.75%	2 April, 2 October each year	2 April 2023
14 January 2021	USD 1,250 million	4.75%	14 January, 14 July each year	14 July 2031
19 August 2021	USD 1,500 million	4.30%	19 February, 19 August each year	19 August 2028
15 August 2022	USD 1,000 million	7.75%	15 February, 15 August each year	15 February 2028

1 Interest rates for the period from (and including) the issue date to (but excluding) the first reset date

2 Interest payable semi-annually in arrears

3 Securities are resettable each date falling five years, or an integral multiple of five years, after the first reset date

27. Share capital, other equity instruments and reserves continued

The principal terms of the AT1 securities are described below:

- The securities are perpetual and redeemable, at the option of the Company in whole but not in part, on the first call date or on any fifth anniversary after the first call date
- The securities are also redeemable for certain regulatory or tax reasons on any date at 100 per cent of their principal amount together with any accrued but unpaid interest up to (but excluding) the date fixed for redemption. Any redemption is subject to the Company giving notice to the relevant regulator and the regulator granting permission to redeem interest payments on these securities will be accounted for as a dividend
- Interest on the securities is due and payable only at the sole and absolute discretion of the Company, subject to certain additional restrictions set out in the terms and conditions. Accordingly, the Company may at any time elect to cancel any interest payment (or part thereof) which would otherwise be payable on any interest payment date
- The securities will be written down in full should the fully loaded Common Equity Tier 1 ratio of the issuer fall below 7.0 per cent (a Loss Absorption Event).

The securities rank behind the claims against the Company of: (a) unsubordinated creditors; (b) claims which are expressed to be subordinated to the claims of unsubordinated creditors of the Company but not further or otherwise; or (c) claims which are, or are expressed to be, junior to the claims of other creditors of the Company, whether subordinated or unsubordinated, other than claims which rank, or are expressed to rank, pari passu with, or junior to, the claims of holders of the AT1 securities in a winding-up occurring prior to the Loss Absorption Event.

Reserves

The constituents of the reserves are summarised as follows:

- The capital reserve represents the exchange difference on redenomination of share capital and share premium from sterling to US dollars in 2001. The capital redemption reserve represents the nominal value of preference shares redeemed.
- Own credit adjustment reserve represents the cumulative gains and losses on financial liabilities designated at fair value through profit or loss relating to own credit. Gains and losses on financial liabilities designated at fair value through profit or loss relating to own credit in the year have been taken through other comprehensive income into this reserve. On derecognition of applicable instruments, the balance of any OCA will not be recycled to the income statement, but will be transferred within equity to retained earnings
- Fair value through other comprehensive income (FVOCI) debt reserve represents the unrealised fair value gains and losses in respect of financial assets classified as FVOCI, net of expected credit losses and taxation. Gains and losses are deferred in this reserve and are reclassified to the income statement when the underlying asset is sold, matures or becomes impaired.
- FVOCI equity reserve represents unrealised fair value gains and losses in respect of financial assets classified as FVOCI, net of taxation. Gains and losses are recorded in this reserve and never recycled to the income statement
- Cash flow hedge reserve represents the effective portion of the gains and losses on derivatives that meet the criteria for these types of hedges. Gains and losses are deferred in this reserve and are reclassified to the income statement when the underlying hedged item affects profit and loss or when a forecast transaction is no longer expected to occur.
- Translation reserve represents the cumulative foreign exchange gains and losses on translation of the net investment of the Group in foreign operations. Since 1 January 2004, gains and losses are deferred to this reserve and are reclassified to the income statement when the underlying foreign operation is disposed. Gains and losses arising from derivatives used as hedges of net investments are netted against the foreign exchange gains and losses on translation of the net investment of the foreign operations.
- Retained earnings represents profits and other comprehensive income earned by the Group and Company in the current and prior periods, together with the after tax increase relating to equity-settled share options, less dividend distributions and own shares held (treasury shares).

A substantial part of the Group's reserves is held in overseas subsidiary undertakings and branches, principally to support local operations or to comply with local regulations. The maintenance of local regulatory capital ratios could potentially restrict the amount of reserves which can be remitted. In addition, if these overseas reserves were to be remitted, further unprovided taxation liabilities might arise.

As at 31 December 2022, the distributable reserves of Standard Chartered Bank (the Company) were $5.2 billion (2021: $4.2 billion). These comprised of retained earnings. Distribution of reserves is subject to maintaining minimum capital requirements.

28. Non-controlling interests

Accounting policy

Non-controlling interests are measured at the non-controlling interest's proportionate share of the acquiree's identifiable net assets.

	$million
At 1 January 2021	1,254
Comprehensive income for the year	4
Loss attributable to non-controlling interests	(25)
Profits attributable to non-controlling interests	29
Distributions	(83)
Other increases[1]	73
At 31 December 2021	**1,248**
Comprehensive loss for the year	**(56)**
Loss attributable to non-controlling interests	**(38)**
Profits attributable to non-controlling interests	**(18)**
Distributions	**(87)**
Other increases[2]	**59**
At 31 December 2022	**1,164**

1 Movements related to non-controlling interest from Trust Bank Singapore Limited ($70 million), Zodia Markets Holdings Limited ($3 million)

2 Movements related to non-controlling interest from Trust Bank Singapore Limited ($47 million), Power2SME Pte Limited ($9 million), & Zodia Markets Holdings Limited ($3 million)

29. Retirement benefit obligations

Accounting policy

The Bank Group operates pension and other post-retirement benefit plans around the world, which can be categorised into defined contribution plans and defined benefit plans. For defined contribution plans, the Bank Group pays contributions to publicly or privately administered pension plans on a statutory or contractual basis, and such amounts are charged to operating expenses. The Bank Group has no further payment obligations once the contributions have been paid.

For funded defined benefit plans, the liability recognised in the balance sheet is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. For unfunded defined benefit plans the liability recognised at the balance sheet date is the present value of the defined benefit obligation.

The defined benefit obligation is calculated annually by independent actuaries using the projected unit method.

Actuarial gains and losses that arise are recognised in shareholders' equity and presented in the statement of other comprehensive income in the period they arise. The Bank Group determines the net interest expense on the net defined benefit liability for the year by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the net defined benefit liability, taking into account any changes in the net defined benefit liability during the year as a result of contributions and benefit payments. Net interest expense, the cost of the accrual of new benefits, benefit enhancements (or reductions) and administration expenses met directly from plan assets are recognised in the income statement in the period in which they were incurred.

Other accounting estimates and judgements

There are many factors that affect the measurement of the retirement benefit obligations. This measurement requires the use of estimates, such as discount rates, inflation, pension increases, salary increases, and life expectancies which are inherently uncertain.

Discount rates are determined by reference to market yields at the end of the reporting period on high-quality corporate bonds (or, in countries where there is no deep market in such bonds, government bonds) of a currency and term consistent with the currency and term of the post-employment benefit obligations. This is the approach adopted across our geographies. Where there are inflation-linked bonds available (e.g. United Kingdom and the eurozone), the Bank Group derives inflation based on the market on those bonds, with the market yield adjusted in respect of the United Kingdom to take account of the fact that liabilities are linked to Consumer Price Index inflation, whereas the reference bonds are linked to Retail Price Index inflation. Where no inflation-linked bonds exist, we determine inflation assumptions based on long-term forecasts and short-term inflation data. Salary growth assumptions reflect the Bank Group's long-term expectations, taking into account future business plans and macroeconomic data (primarily expected future long-term inflation). Demographic assumptions, including mortality and turnover rates, are typically set based on the assumptions used in the most recent actuarial funding valuation, and will generally use industry standard tables, adjusted where appropriate to reflect recent historic experience and/or future expectations. The sensitivity of the liabilities to changes in these assumptions is shown in the Note below.

29. Retirement benefit obligations continued

Group

Retirement benefit obligations comprise:

	2022 $million	2021 $million
Defined benefit plans obligation	147	187
Defined contribution plans obligation	19	17
Net obligation	**166**	204

Retirement benefit charge comprises:

	2022 $million	2021 $million
Defined benefit plans	28	31
Defined contribution plans	247	243
Charge against profit (Note 7)	**275**	274

The Bank Group operates over 50 defined benefit plans across its geographies, many of which are closed to new entrants who now join defined contribution arrangements. The aim of all these plans is, as part of the Group's commitment to financial wellbeing for employees, to give employees the opportunity to save appropriately for retirement in a way that is consistent with local regulations, taxation requirements and market conditions. The defined benefit plans expose the Group to currency risk, interest rate risk, investment risk and actuarial risks such as longevity risk.

The material holdings of government and corporate bonds shown on page 287 partially hedge movements in the liabilities resulting from interest rate and inflation changes. Setting aside movements from other drivers such as currency fluctuation, the increases in discount rates in most geographies over 2022 have led to lower liabilities. These have been partly offset by decreases in the value of bonds held and poor stock market performance, with the overall impact being a fall in the pension deficit reported over 2022. These movements are shown as actuarial gains and losses in the table below. Contributions into a number of plans in excess of the amounts required to fund benefits accruing have also helped to reduce the net deficit over the year.

The disclosures required under IAS 19 have been calculated by independent qualified actuaries based on the most recent full actuarial valuations updated, where necessary, to 31 December 2022.

UK Fund

The Standard Chartered Pension Fund (the 'UK Fund') is the Bank Group's largest pension plan, representing 67 per cent (31 December 2021: 70 per cent) of total pension liabilities. The UK Fund is set up under a trust that is legally separate from the Bank (its formal sponsor) and, as required by UK legislation, at least one-third of the trustee directors are nominated by members; the remainder are appointed by the Bank. The trustee directors have a fiduciary duty to members and are responsible for governing the UK Fund in accordance with its Trust Deed and Rules.

The UK Fund was closed to new entrants from 1 July 1998 and closed to the accrual of new benefits from 1 April 2018. All employees are now offered membership of a defined contribution plan.

The financial position of the UK Fund is regularly assessed by an independent qualified actuary. The funding valuation as at 31 December 2021 was completed in December 2022 by the then Scheme Actuary, T Kripps of Towers Watson Limited, using assumptions different from those on page 286, and agreed with the UK Fund trustee. It showed that the UK Fund was 92% funded at that date, revealing a past service deficit of $153million (£127 million).

To repair the deficit, three annual cash payments of $40 million (£32.9 million) were agreed, with the first of these paid in December 2022, and two further instalments to be paid in December 2023 and December 2024. However, the agreement allows that, if the funding position improves to being at or near a surplus in future years, the payments due in 2022 and 2023 will be reduced or eliminated. As a result of the Fund being in surplus at the agreed measurement point of mid-year, no payment was made in December 2022. As part of the 2020 valuation, in order to provide security for future contributions an additional $60 million nominal gilts (£50 million) were purchased and transferred into the existing escrow account of $132 million gilts (£110 million), topping it up to $192 million. Themillion. The Bank Group has not recognised any additional liability under IFRIC 14 as the Bank has control of any pension surplus under the Trust Deed and Rules.

29. Retirement benefit obligations continued

Overseas plans

The principal overseas defined benefit arrangements operated by the Bank Group are in Germany, India, Jersey, United Arab Emirates (UAE) and the United States of America (US). Plans in Germany, India and UAE remain open for accrual of future benefits.

Key assumptions

The principal financial assumptions used at 31 December 2022 were:

	Funded plans			
	UK Fund		Overseas Plans[1]	
	2022 %	2021 %	2022 %	2021 %
Discount rate	**4.8**	2.0	**3.7-7.6**	1.0-6.7
Price Inflation	**2.6**	2.6	**2.3-4.0**	2.0-4.0
Salary increases	**n/a**	n/a	**3.8-7.8**	3.5-7.0
Pension increases	**2.4**	2.5	**0.0-3.1**	0.0-3.1

1 The range of assumptions shown is for the main funded defined benefit overseas plans in Germany, India, Jersey, and the US. These comprise around 80 per cent of the total liabilities of funded overseas defined benefit plans

	Unfunded plans			
	US post-retirement medical		Other[1]	
	2022 %	2021 %	2022 %	2021 %
Discount rate	**5.1**	3.1	**3.7-7.6**	2.0-6.7
Price inflation	**2.5**	2.5	**2.0-4.0**	2.0-4.0
Salary increases	**n/a**	n/a	**3.7-7.8**	3.7-7.0
Pension increases	**n/a**	n/a	**0.0-2.4**	0.0-2.6
Post-retirement medical rate	**7% in 2022 reducing by 0.5% per annum to 5% in 2026**	7% in 2021 reducing by 0.5% per annum to 5% in 2025	**n/a**	n/a

1 The range of assumptions shown is for the main unfunded plans in Bahrain, India, Thailand, UAE and the UK. They comprise around 95 per cent of the total liabilities of unfunded plans

The principal non-financial assumptions are those made for UK life expectancy. The assumptions for life expectancy for the UK Fund are that a male member currently aged 60 will live for 27 years (2021: 27 years) and a female member for 30 years (2021: 30 years) and a male member currently aged 40 will live for 29 years (2021: 29 years) and a female member for 32 years (2021: 31 years) after their 60th birthdays. Both financial and non-financial assumptions can be expected to change in the future, which would affect the value placed on the liabilities.
For example, changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below:

- If the discount rate increased by 25 basis points, the liability would reduce by approximately $30 million for the UK Fund (2021: $65 million) and $15 million for the other plans (2021: $25 million)
- If the rate of inflation increased by 25 basis points, the liability allowing for the consequent impact on pension and salary increases, would increase by approximately $20 million for the UK Fund (2021 $45 million) and $10 million for the other plans (2021: $10 million)
- If the rate salaries increase compared with inflation increased by 25 basis points, the liability would increase by nil for the UK Fund (2021: $nil million) and approximately $5 million for the other plans (2021: $5 million)
- If longevity expectations increased by one year, the liability would increase by approximately $35 million for the UK Fund (2021: $80 million) and $10 million for the other plans (2021: $15 million)

Although this analysis does not take account of the full distribution of cash flows expected under the UK Fund, it does provide an approximation of the sensitivity to the main assumptions. While changes in other assumptions would also have an impact, the effect would not be as significant.

29. Retirement benefit obligations continued

Profile of plan obligations

	Funded plans		Unfunded plans	
	UK Fund	Overseas	Post-retirement medical	Other
Duration of the defined benefit obligation (in years)	11	11	8	9
(Duration of the defined benefit obligation – 2021)	15	13	9	11
Benefits expected to be paid from plans				
Benefits expected to be paid during 2023	75	31	1	16
Benefits expected to be paid during 2024	77	28	1	13
Benefits expected to be paid during 2025	79	28	1	14
Benefits expected to be paid during 2026	81	29	1	14
Benefits expected to be paid during 2027	83	34	1	14
Benefits expected to be paid during 2028 to 2023	449	219	4	66

Fund values:

The fair value of assets and present value of liabilities of the defined benefit plans were:

	2022						2021	
	UK Fund			Overseas plans			UK Fund	Overseas plans
At 31 December	Quoted assets $million	Unquoted assets $million	Total assets $million	Quoted assets $million	Unquoted assets $million	Total assets $million	Total assets $million	Total assets $million
Equities	2	–	2	97	–	97	145	149
Government bonds	206	–	206	104	–	104	695	150
Corporate bonds	309	82	391	81	–	81	610	119
Absolute Return Fund	–	–	–	–	–	–	91	–
Hedge funds	–	14	14	–	–	–	19	–
Infrastructure	–	177	177	–	–	–	87	–
Property	–	126	126	–	–	–	127	11
Derivatives	2	–	2	–	–	–	10	–
Cash and equivalents	257	–	257	21	–	21	108	83
Others	7	4	11	–	63	63	18	2
Total fair value of assets[1]	783	403	1,186	303	63	366	1,910	514

	2022				2021			
	Funded plans		Unfunded plans		Funded plans		Unfunded plans	
At 31 December	UK Fund $million	Overseas plans $million	Post-retirement medical $million	Other $million	UK Fund $million	Overseas plans $million	Post-retirement medical $million	Other $million
Total fair value of assets	1,186	366	N/A	N/A	1,910	514	N/A	N/A
Present value of liabilities	(1,138)	(394)	(10)	(157)	(1,822)	(561)	(16)	(246)
Net pension plan asset/ (obligation)	48	(28)	(10)	(157)	(88)	(47)	(13)	(215)

1 Self-investment is monitored closely and is less than $1 million of Standard Chartered equities and bonds for 2022 (2021: <$1 million). Self-investment is only allowed where it is not practical to exclude it – for example through investment in index-tracking funds where the Bank Group is a constituent of the relevant index

29. Retirement benefit obligations continued

The pension cost for defined benefit plans was:

2022	Funded plans: UK Fund $million	Funded plans: Overseas plans $million	Unfunded plans: Post-retirement medical $million	Unfunded plans: Other $million	Total $million
Current service cost[1]	–	17	–	6	23
Past service cost and curtailments[2]	–	1	–	–	1
Interest income on pension plan assets	(33)	(23)	–	–	(56)
Interest on pension plan liabilities	32	22	–	6	60
Total (release)/charge to profit before deduction of tax	(1)	17	–	12	28
Net losses on plan assets[3]	485	68	–	–	553
Gains on liabilities	(452)	(83)	(2)	(39)	(576)
Total losses/(gains) recognised directly in statement of comprehensive income before tax	33	(15)	(2)	(39)	(23)
Deferred taxation	7	5	–	–	12
Total losses/(gains) after tax	40	(10)	(2)	(39)	(11)

1 Includes administrative expenses paid out of plan assets of $1 million (2021: $1 million)

2 Includes various small costs and gains from plan amendments and settlements in India, Kenya, Mauritius, and Sri Lanka

3 The actual return on the UK Fund assets was a loss of $452 million and on overseas plan assets was a loss of $45 million

The pension cost for defined benefit plans was:

2021	Funded plans: UK Fund $million	Funded plans: Overseas plans $million	Unfunded plans: Post-retirement medical $million	Unfunded plans: Other $million	Total $million
Current service cost[1]	–	21	–	8	29
Past service cost and curtailments[2]	–	(1)	–	(4)	(5)
Interest income on pension plan assets	(26)	(19)	–	–	(45)
Interest on pension plan liabilities	27	21	–	4	52
Total charge to profit before deduction of tax	1	22	–	8	31
Net gains on plan assets[3]	(6)	(34)	–	–	(40)
Gains on liabilities	(87)	(18)	(2)	(10)	(117)
Total gains recognised directly in statement of comprehensive income before tax	(93)	(52)	(2)	(10)	(157)
Deferred taxation	–	15	–	–	15
Total gains after tax	(93)	(37)	(2)	(10)	(142)

1 Includes administrative expenses paid out of plan assets of $1 million (2020: $2 million)

2 Past service costs arose from plan amendments in India, Kenya, and Sri Lanka

3 The actual return on the UK Fund assets was a gain of $32 million and on overseas plan assets was a gain of $53 million

29. Retirement benefit obligations continued

Movement in the defined benefit pension plans and post-retirement medical deficit during the year comprise:

	Funded plans		Unfunded plans		
	UK Fund $million	Overseas plans $million	Post-retirement medical $million	Other $million	Total $million
Surplus/(deficit) at 1 January 2022	88	(47)	(13)	(215)	(187)
Contributions	–	32	1	13	46
Current service cost	–	(17)	–	(6)	(23)
Past service cost and curtailments	–	(1)	–	–	(1)
Net interest on the net defined benefit asset/liability	1	1	–	(6)	(4)
Actuarial (losses)/gains	(33)	15	2	39	23
Asset held for sale	–	(4)	–	2	(2)
Exchange rate adjustment	(8)	(7)	–	16	1
Surplus/deficit at 31 December 2022[1]	**48**	**(28)**	**(10)**	**(157)**	**(147)**

1 The deficit total of $147 million is made up of plans in deficit of $220 million (2021: $305 million) net of plans in surplus with assets totalling $73 million (2021: $118 million)

Movement in the defined benefit pension plans and post-retirement medical deficit during the year comprise:

	Funded plans		Unfunded plans		
	UK Fund $million	Overseas plans $million	Post-retirement medical $million	Other $million	Total $million
Deficit at 1 January 2021	(48)	(108)	(16)	(239)	(411)
Contributions	45	31	1	17	94
Current service cost	–	(21)	–	(8)	(29)
Past service cost and curtailments	–	1	–	4	5
Net interest on the net defined benefit asset/liability	(1)	(2)	–	(4)	(7)
Actuarial gains	93	52	2	10	157
Exchange rate adjustment	(1)	–	–	5	4
Surplus/(deficit) at 31 December 2021[1]	88	(47)	(13)	(215)	(187)

1 The deficit total of $187 million is made up of plans in deficit of $305 million (2020: $411 million) net of plans in surplus with assets totalling $118 million (2020: $14 million)

The Bank Group's expected contribution to its defined benefit pension plans in 2023 is $39 million.

	2022			2021		
	Assets $million	Obligations $million	Total $million	Assets $million	Obligations $million	Total $million
At 1 January	2,424	(2,611)	(187)	2,399	(2,810)	(411)
Contributions[1]	47	(1)	46	95	(1)	94
Current service cost[2]	–	(23)	(23)	–	(29)	(29)
Past service cost and curtailments	–	(1)	(1)	–	5	5
Settlement costs & transfers[3]	(5)	5	–	10	(10)	–
Interest cost on pension plan liabilities	–	(60)	(60)	–	(52)	(52)
Interest income on pension plan assets	56	–	56	45	–	45
Benefits paid out[2]	(130)	130	–	(142)	142	–
Actuarial (losses)/gains[4]	(553)	576	23	40	117	157
Assets held for sale	(18)	16	(2)	–	–	–
Exchange rate adjustment	(269)	270	1	(23)	27	4
At 31 December	**1,552**	**(1,699)**	**(147)**	2,424	(2,611)	(187)

1 Includes employee contribution of $1 million (2021: $1 million)

2 Includes administrative expenses paid out of plan assets of $1 million (2021: $1 million)

3 Impact of settlements relates to the buyout of a pension plan in Switzerland which was agreed in December.

4 Actuarial gain on obligation comprises of $644 million gain (2021: $118 million gain) from financial assumption changes, $4 million gain (2021: $5 million gain) from demographic assumption changes and $74 million loss (2021: $6 million loss) from experience.

29. Retirement benefit obligations continued

Company

Retirement benefit obligations comprise:

	2022 $million	2021 $million
Defined benefit plans obligation	120	152
Defined contribution plans obligation	4	4
Net obligation	**124**	156

Retirement benefit charge comprises:

	2022 $million	2021 $million
Defined benefit plans	17	20
Defined contribution plans	119	116
Charge against profit	**136**	136

UK Fund

See the Bank Group section on the UK Fund in this note (page 283). There are no differences between Bank Group and Company in respect of the Fund.

Overseas Plans

The principal overseas defined benefit arrangements operated by the Company are in Germany, Jersey, India, United Arab Emirates (UAE) and the United States of Americas (US).

All Plans

The disclosures required under IAS 19 have been calculated by qualified independent actuaries based on the most recent full actuarial valuations updated, where necessary, to 31 December 2022.

The financial assumptions used at 31 December 2022 as shown below. Sensitivities are recorded on page 285 of the Bank Group accounts and those for non-UK Fund plans are applicable in proportion to the lower liabilities of the Company.

	Funded plans			
	UK Fund		Overseas Plans[1]	
	2022 %	2021 %	2022 %	2021 %
Discount rate	4.8	2.0	3.7-7.6	1.0-6.7
Price inflation	1.6	2.6	2.3-4.0	2.0-4.0
Salary increases	n/a	n/a	3.8-7.8	3.5-7.0
Pension increases	2.4	2.5	0.0-3.1	0.0-3.1

1 The range of assumptions shown is for the main funded defined benefit overseas plans in Germany, India, Jersey and the US. These comprise around 80 per cent of the total liabilities of funded overseas plans

	Unfunded plans			
	US Post-retirement medical[1]		Other[1]	
	2022 %	2021 %	2022 %	2021 %
Discount rate	5.1	3.1	4.8-7.6	2.0-6.7
Price inflation	2.5	2.5	2.5-4.0	2.5-4.0
Salary increases	n/a	n/a	4.0-7.8	4.0-7.0
Pension increases	n/a	n/a	0.0-2.4	0.0-2.6
Post-retirement medical rate	7% in 2022 reducing by 0.5% per annum to 5% in 2026	7% in 2021 reducing by 0.5% per annum to 5% in 2025	n/a	n/a

1 The range of assumptions shown is for the main unfunded plans in India, UAE and the UK. These comprise around 90 per cent of the total liabilities of unfunded plans

29. Retirement benefit obligations continued

Fund values:

The fair value of assets and present value of liabilities of the defined benefit plans were

	2022						2021	
	UK Fund			Overseas plans			UK Fund	Overseas Plans
At 31 December	Quoted assets $million	Unquoted assets $million	Total assets $million	Quoted assets $million	Unquoted assets $million	Total assets $million	Total assets $million	Total assets $million
Equities	2	–	2	90	–	90	145	128
Government bonds	206	–	206	94	–	94	695	137
Corporate bonds	309	82	391	79	–	79	610	115
Absolute Return Fund	–	–	–	–	–	–	91	–
Hedge funds	–	14	14	–	–	–	19	–
Infrastructure	–	177	177	–	–	–	87	–
Property	–	126	126	–	–	–	127	–
Derivatives	2	–	2	–	–	–	10	–
Cash and equivalents	257	–	257	15	–	15	108	46
Others	7	4	11	–	27	27	18	–
Total fair value of assets[1]	**783**	**403**	**1,186**	**278**	**27**	**305**	1,910	426

	2022				2021			
	Funded plans		Unfunded plans		Funded plans		Unfunded plans	
At 31 December	UK Fund $million	Overseas plans $million	Post-retirement medical $million	Other $million	UK Fund $million	Overseas plans $million	Post-retirement medical $million	Other $million
Total fair value of assets	1,186	305	N/A	N/A	1,910	426	N/A	N/A
Present value of liabilities	(1,138)	(315)	(10)	(148)	(1,822)	(449)	(13)	(204)
Net pension plan asset/(obligation)	48	(10)	(10)	(148)	88	(23)	(13)	(204)

1 Self investment is monitored closely and is less than $1 million of Standard Chartered equities and bonds for 2022 (2021: <$1 million). Self-investment is only allowed where it is not practical to exclude it – for example through investment in index-tracking funds where the Bank is a constituent of the relevant index

The pension cost for defined benefit plans was:

	Funded plans		Unfunded plans		
2022	UK Fund $million	Overseas plans $million	Post-retirement medical $million	Other $million	Total $million
Current service cost[1]	–	9	–	4	13
Past service cost and curtailments	–	1	–	–	1
Interest income on pension plan assets	(33)	(15)	–	–	(48)
Interest on pension plan liabilities	32	15	–	4	51
Total (release)/charge to profit before deduction of tax	**(1)**	**10**	**–**	**8**	**17**
Net losses on plan assets[2]	485	89	–	–	574
Gains on liabilities	(452)	(91)	(2)	(39)	(584)
Total losses/(gains) recognised directly in statement of comprehensive income before tax	**33**	**(2)**	**(2)**	**(39)**	**(10)**
Deferred taxation	7	3	–	–	10
Total losses/(gains) after tax	**40**	**1**	**(2)**	**(39)**	**–**

1 Includes administrative expenses paid out of plan assets of $1 million (2021: $1 million)

2 The actual return on the UK Fund assets was a loss of $452 million and on overseas plan assets was a gain of $74 million

29. Retirement benefit obligations continued

2021	Funded plans UK Fund $million	Funded plans Overseas plans $million	Unfunded plans Post-retirement medical $million	Unfunded plans Other $million	Total $million
Current service cost[1]	–	11	–	5	16
Past service cost and curtailments	–	(1)	–	(2)	(3)
Interest income on pension plan assets	(26)	(13)	–	–	(39)
Interest on pension plan liabilities	27	15	–	4	46
Total charge to profit before deduction of tax	1	12	–	7	20
Net gains on plan assets[2]	(6)	(17)	–	–	(23)
Gains on liabilities	(87)	(34)	(2)	(9)	(132)
Total gains recognised directly in statement of comprehensive income before tax	(93)	(51)	(2)	(9)	(155)
Deferred taxation	–	13	–	–	13
Total gains after tax	(93)	(38)	(2)	(9)	(142)

1 Includes administrative expenses paid out of plan assets of $1 million (2021: $1 million)

2 The actual return on the UK Fund assets was a gain of $32 million and on overseas plan assets was a gain of $30 million

Movement in the defined benefit pension plans and post-retirement medical deficit during the year comprise:

	Funded plans UK Fund $million	**Funded plans Overseas plans $million**	**Unfunded plans Post-retirement medical $million**	**Unfunded plans Other $million**	**Total $million**
Surplus/(deficit) at 1 January 2022	**88**	**(23)**	**(13)**	**(204)**	**(152)**
Contributions	**–**	**22**	**1**	**13**	**36**
Current service cost	**–**	**(9)**	**–**	**(4)**	**(13)**
Past service cost and curtailments[2]	**–**	**(1)**	**–**	**–**	**(1)**
Net interest on the net defined benefit asset/liability	**1**	**–**	**–**	**(4)**	**(3)**
Actuarial (losses)/gains	**(33)**	**2**	**2**	**39**	**10**
Assets held for sale[3]	**–**	**–**	**–**	**1**	**1**
Exchange rate adjustment	**(8)**	**(1)**	**–**	**11**	**2**
Surplus/(deficit)at 31 December 2022[1]	**48**	**(10)**	**(10)**	**(148)**	**(120)**

1 The deficit total of $120 million is made up of plans in deficit of $192 million (2021: $266 million) net of plans in surplus with assets totalling $72 million (2021: $114 million)

2 Past service costs and gains arose due to plan amendments in India and Sri Lanka

3 Assets held for sale relates to an unfunded plan in Jordan

Movement in the defined benefit pension plans and post-retirement medical deficit during the year comprise:

	Funded plans UK Fund $million	Funded plans Overseas plans $million	Unfunded plans Post-retirement medical $million	Unfunded plans Other $million	Total $million
Deficit at 1 January 2021	(48)	(79)	(16)	(224)	(367)
Contributions	45	20	1	17	83
Current service cost	–	(11)	–	(5)	(16)
Past service cost and curtailments[2]	–	–	–	2	3
Net interest on the net defined benefit asset/liability	(1)	(2)	–	(4)	(7)
Actuarial gains	93	51	2	9	155
Exchange rate adjustment	–	–	–	–	–
Other	(1)	(3)	–	1	(3)
Surplus/(deficit) at 31 December 2021[1]	88	(23)	(13)	(204)	(152)

1 The deficit total of $152 million is made up of plans in deficit of $266 million (2020: $367 million) net of plans in surplus with assets totalling $114 million (2020: $11 million)

2 Past service costs and gains arose due to plan amendments in India, Kenya and Sri Lanka

29. Retirement benefit obligations continued

The Company's expected contribution to its defined benefit pension plans in 2023 is $27 million

	2022			2021		
	Assets $million	Obligations $million	Total $million	Assets $million	Obligations $million	Total $million
At 1 January	2,336	(2,488)	(152)	2,346	(2,713)	(367)
Contributions	36	–	36	83	–	83
Current service cost[1]	–	(13)	(13)	–	(16)	(16)
Past service cost and curtailments	–	(1)	(1)	–	3	3
Interest cost on pension plan liabilities	–	(51)	(51)	–	(46)	(46)
Interest income on pension plan assets	48	–	48	39	–	39
Benefits paid out	(122)	122	–	(134)	134	–
Actuarial (losses)/gains[2]	(574)	584	10	23	132	155
Asset held for sale	–	1	1	–	–	–
Exchange rate adjustment	(233)	235	2	(21)	18	(3)
At 31 December	**1,491**	**(1,611)**	**(120)**	2,336	(2,488)	(152)

1 Includes administrative expenses paid out of plan assets of $1 million (2021: $1 million)

2 Actuarial gain on obligation comprises of $633 million loss (2021: $115 million gain) from financial assumption changes, $4 million gain (2021: $5 million gain) from demographic assumption changes and $55 million loss (2021: $12 million gain) from experience

30. Share-based payments

Accounting policy

The Group operates equity-settled and cash-settled share-based compensation plans. The fair value of the employee services (measured by the fair value of the awards granted) received in exchange for the grant of the shares and awards is recognised as an expense. For deferred share awards granted as part of an annual performance award, the expense is recognised over the period from the start of the performance period to the vesting date. For example, the expense for three-year awards granted in 2023 in respect of 2022 performance, which vest in 2024-2026, is recognised as an expense over the period from 1 January 2022 to the vesting dates in 2024-2026. For all other awards, the expense is recognised over the period from the date of grant to the vesting date.

For equity-settled awards, the total amount to be expensed over the vesting period is determined by reference to the fair value of the shares and awards at the date of grant, which excludes the impact of any non-market vesting conditions (for example, profitability and growth targets). The fair value of equity instruments granted is based on market prices, if available, at the date of grant. In the absence of market prices, the fair value of the instruments is estimated using an appropriate valuation technique, such as a binomial option pricing model. Non-market vesting conditions are included in assumptions for the number of shares and awards that are expected to vest.

At each balance sheet date, the Group revises its estimates of the number of shares and awards that are expected to vest. It recognises the impact of the revision of original estimates, if any, in the income statement and a corresponding adjustment to equity over the remaining vesting period. Forfeitures prior to vesting attributable to factors other than the failure to satisfy service conditions and non-market vesting conditions are treated as a cancellation and the remaining unamortised charge is debited to the income statement at the time of cancellation. The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium when awards in the form of options are exercised.

Cash-settled awards are revalued at each balance sheet date and a liability recognised on the balance sheet for all unpaid amounts, with any changes in fair value charged or credited to staff costs in the income statement until the awards are exercised. Where forfeitures occur prior to vesting that are attributable to factors other than a failure to satisfy service conditions or market-based performance conditions, the cumulative charge incurred up to the date of forfeiture is credited to the income statement. Any revaluation related to cash-settled awards is recorded as an amount due from subsidiary undertakings.

30. Share-based payments continued

Other accounting estimates and judgements

Share-based payments involve judgement and estimation uncertainty in determining the expenses and carrying values of share awards at the balance sheet date.

- LTIP awards are determined using an estimation of the probability of meeting certain metrics over a three-year performance period using the Monte Carlo simulation model.
- Deferred shares and restricted shares are determined using an estimation of expected dividends.
- The 2013 Sharesave Plan valuation is determined using a binomial option-pricing model.

The Group operates a number of share-based arrangements for its executive directors and employees. Details of the share-based payment charge are set out below.

	2022 $million	2021 $million
Deferred share awards	**84**	87
Other share awards	**66**	63
Total share-based payments[1,2]	**150**	150

1 No forfeiture assumed

2 Includes $(6) million (2021: $2 million) of share-based payments reported in 'other staff costs'. This reflects Bank Group's requirement under IFRS 2 to account for cash-settled awards made to employees of Bank Group settled by Standard Chartered PLC with payments linked to PLC's share price as equity-settled awards

2011 Standard Chartered Share Plan (the '2011 Plan') and 2021 Standard Chartered Share Plan (the '2021 Plan')

The 2021 Plan was approved by shareholders in May 2021 and is the Group's main share plan, replacing the 2011 Plan for new awards, June 2021. It may be used to deliver various types of share awards to employees and former employees of the Group, including directors and former executive directors:

- Long Term Incentive Plan (LTIP) awards: granted with vesting subject to performance measures. Performance measures attached to awards granted previously include: relative total shareholder return (TSR); return on tangible equity (RoTE) (with a Common Equity Tier 1 (CET1) underpin); and strategic measures. Each measure is assessed independently over a three-year period. LTIP awards have an individual conduct gateway requirement that results in the award lapsing if not met
- Deferred awards are used to deliver the deferred portion of variable remuneration, in line with both market practice and regulatory requirements. These awards vest in instalments on anniversaries of the award date specified at the time of grant. Deferred awards are not subject to any plan limit. This enables the Group to meet regulatory requirements relating to deferral levels, and is in line with market practice
- Restricted share awards, made outside of the annual performance process as replacement buy-out awards to new joiners who forfeit awards on leaving their previous employers, vest in instalments on the anniversaries of the award date specified at the time of grant. This enables the Group to meet regulatory requirements relating to buy-outs, and is in line with market practice. In line with similar plans operated by our competitors, restricted share awards are not subject to an annual limit and do not have any performance measures

Under the 2021 Plan and 2011 Plan, no grant price is payable to receive an award. The remaining life of the 2021 Plan during which new awards can be made is nine years. The 2011 Plan has expired and no further awards will be granted under this plan.

30. Share-based payments continued

Valuation – LTIP awards

The vesting of awards granted in both 2022 and 2021 is subject to relative TSR performance measures, achievement of a strategic scorecard and satisfaction of RoTE (subject to a capital CET1 underpin). The vesting of awards also have additional conditions under strategic measures related to targets set for sustainability linked to business strategy. The fair value of the TSR component is calculated using the probability of meeting the measures over a three-year performance period, using a Monte Carlo simulation model. The number of shares expected to vest is evaluated at each reporting date, based on the expected performance against the RoTE and strategic measures in the scorecard, to determine the accounting charge.

No dividend equivalents accrue for the LTIP awards made in 2022 or 2021 and the fair value takes this into account, calculated by reference to market consensus dividend yield.

	2022	2021
Grant date	**14 March**	15 March
Share price at grant date (£)	**4.88**	4.90
Vesting period (years)	**3-7**	3-7
Expected divided yield (%)	**3.4**	3.4
Fair value (RoTE) (£)	**1.24, 1.20**	1.25, 1.20
Fair value (TSR) (£)	**0.70, 0.68**	0.72, 0.71
Fair value (Strategic) (£)	**1.65, 1.60**	1.66, 1.60

Deferred shares and restricted shares

The fair value for deferred awards which are not granted to material risk takers is based on 100 per cent of the face value of the shares at the date of grant as the share price will reflect expectations of all future dividends. For awards granted to material risk takers in 2021, the fair value of awards takes into account the lack of dividend equivalents, calculated by reference to market consensus dividend yield.

Deferred share awards

	2022					
Grant date	**09 November**		**20 June**		**14 March**	
Share price at grant date (£)		**5.62**		**6.04**		**4.88**
Vesting period (years)	**Expected dividend yield (%)**	**Fair value (£)**	**Expected dividend yield (%)**	**Fair value (£)**	**Expected dividend yield (%)**	**Fair value (£)**
1-3 years	**N/A**	**5.62**	**N/A**	**6.04**	**N/A**	**4.88**
1-5 years	**3.4**	**5.17**	**3.4, 3.4**	**5.56, 5.56**	**N/A, 3.4, 3.4, 3.4**	**4.88, 4.48, 4.41, 4.34**
3-7 years	**–**	**–**	**–**	**–**	**3.4, 3.4, 3.4**	**4.48, 4.13, 3.99**

	2021			
Grant date	21 June		15 March	
Share price at grant date (£)		4.69		4.90
Vesting period (years)	Expected dividend yield (%)	Fair value (£)	Expected dividend yield (%)	Fair value (£)
1-3 years	N/A, 3.4	4.69, 4.24	N/A, 3.4, 3.4	4.90, 4.58, 4.43
1-5 years	3.4	4.17	3.4, 3.4, 3.4	4.43, 4.36, 4.29
3-7 years	–	–	3.4, 3.4	4.15, 4.01

30. Share-based payments continued

Other restricted share awards

	2022							
Grant date	**28-Nov**		**09-Nov**		**20-Jun**		**14-Mar**	
Share price at grant date (£)		5.90		5.62		6.04		4.88
Vesting period (years)	**Expected dividend yield (%)**	**Fair value (£)**	**Expected dividend yield (%)**	**Fair value (£)**	**Expected dividend yield (%)**	**Fair value (£)**	**Expected dividend yield (%)**	**Fair value (£)**
4 Months			3.4	5.56				
1 year	3.4	5.71	3.4	5.44	3.4	5.84	3.4	4.72
1.4 years			3.4	5.38	3.4		3.4	
2 years	3.4	5.52	3.4	5.26	3.4	5.65	3.4	4.56
2.4 years			3.4	5.2	3.4		3.4	
3 years	3.4	5.34	3.4	5.08	3.4	5.46	3.4	4.41
4 years	3.4	5.16	3.4	4.92	3.4	5.28	3.4	4.27
5 years	3.4	4.99			3.4	5.11	3.4	4.13
6 years							3.4	3.99

	2021					
Grant date	30 September		21 June		15 March	
Share price at grant date (£)		4.37		4.69		4.90
Vesting period (years)	Expected dividend yield (%)	Fair value (£)	Expected dividend yield (%)	Fair value (£)	Expected dividend yield (%)	Fair value (£)
1 year	3.4	4.23	3.4	4.53	3.4	4.74
2 years	3.4	4.09	3.4	4.38	3.4	4.58
3 years	3.4	3.95	3.4	4.24	3.4	4.43
4 years	3.4	3.82	3.4	4.10	3.4	4.29
5 years	3.4	3.70	–	–	–	–

All Employee Sharesave Plans

2013 Sharesave Plan

Under the 2013 Sharesave Plan, employees may open a savings contract. Employees can save up to £250 per month over three years to purchase ordinary shares in the Company at a discount of up to 20 per cent on the share price at the date of invitation (the 'option exercise price'), after which they have a period of 6 months to exercise the option. There are no performance measures attached to options granted under the 2013 Sharesave Plan and no grant price is payable to receive an option. In some countries in which the Group operates, it is not possible to operate Sharesave plans, typically due to securities law and regulatory restrictions. In these countries, where possible, the Group offers an equivalent cash-based alternative to its employees.

The 2013 Sharesave Plan was approved by shareholders in May 2013, and expires in May 2023. A new Sharesave plan will be taken to shareholders for approval at the Annual General Meeting in May 2023.

30. Share-based payments continued

Valuation – Sharesave:

Options under the Sharesave plans are valued using a binomial option-pricing model. The same fair value is applied to all employees including executive directors. The fair value per option granted and the assumptions used in the calculation are as follows:

	2022	2021
Grant date	28 November	30 September
Share price at grant date (£)	5.80	4.37
Exercise price (£)	4.23	3.67
Vesting period (years)	3	3
Expected volatility (%)	39.3	35.1
Expected option life (years)	3.33	3.33
Risk-free rate (%)	3.21	0.42
Expected dividend yield (%)	3.4	3.4
Fair value (£)	2.08	1.11

The expected volatility is based on historical volatility over the last three years, or three years prior to grant. The expected life is the average expected period to exercise. The risk-free rate of return is the yield on zero-coupon UK Government bonds of a term consistent with the assumed option life. The expected dividend yield is calculated by reference to market consensus dividend yield.

Limits

An award shall not be granted under the 2021 Plan in any calendar year if, at the time of its proposed grant, it would cause the number of Standard Chartered PLC ordinary shares allocated in the period of 10 calendar years ending with that calendar year under the 2021 Plan and under any other discretionary share plan operated by Standard Chartered PLC to exceed such number as represents 5 per cent of the ordinary share capital of Standard Chartered PLC in issue at that time.

An award shall not be granted under the 2021 Plan or 2013 Sharesave Plan in any calendar year if, at the time of its proposed grant, it would cause the number of Standard Chartered PLC ordinary shares allocated in the period of 10 calendar years ending with that calendar year under the 2021 Plan or 2013 Sharesave Plan and under any other employee share plan operated by Standard Chartered PLC to exceed such number as represents 10 per cent of the ordinary share capital of Standard Chartered PLC in issue at that time.

An award shall not be granted under the 2021 Plan or 2013 Sharesave Plan in any calendar year if, at the time of its proposed grant, it would cause the number of Standard Chartered PLC ordinary shares which may be issued or transferred pursuant to awards then outstanding under the 2021 Plan or 2013 Sharesave Plan as relevant to exceed such number as represents 10 per cent of the ordinary share capital of Standard Chartered PLC in issue at that time.

The number of Standard Chartered PLC ordinary shares which may be issued pursuant to awards granted under the 2021 Plan in any 12-month period must not exceed such number as represents 1 per cent of the ordinary share capital of Standard Chartered PLC in issue at that time. The number of Standard Chartered PLC ordinary shares which may be issued pursuant to awards granted under the 2013 Sharesave Plan in any 12-month period must not exceed such number as represents 1 per cent of the ordinary share capital of Standard Chartered PLC in issue at that time.

Standard Chartered PLC has been granted a waiver from strict compliance with Rules 17.03(3), 17.03(9) and 17.03(18) of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong. Details are set out in the market announcement made on 5 May 2021.

30. Share-based payments continued

Reconciliation of share award movements for the year to 31 December 2022

	LTIP[1]	Deferred/ Restricted shares[1]	Sharesave	Weighted average Sharesave exercise price (£)
Outstanding at 1 January 2022	11,091,777	34,204,272	10,058,458	4.07
Granted[2,3]	2,903,903	21,159,348	3,882,756	–
Lapsed	(2,835,051)	(881,277)	(1,898,141)	4.46
Vested/Exercised	(420,718)	(14,761,219)	(2,083,514)	5.06
Outstanding at 31 December 2022	10,739,911	39,721,124	9,959,559	3.85
Total number of securities available for issue under the plan	10,739,911	39,721,124	9,959,559	3.85
Percentage of the issued shares this represents as at 31 December	0.37	1.37	0.34	
Exercisable as at 31 December 2022	–	1,180,633	864,082	4.96
Range of exercise prices (£)	–	–	3.14-5.13	
Intrinsic value of vested but not exercised options ($ million)	0.00	8.84	1.32	
Weighted average contractual remaining life (years)	7.86	8.20	1.02	
Weighted average share price for awards exercised during the period (£)	5.09	4.97	5.90	

1 Granted under the 2021 Plan and 2011 Plan. Employees do not contribute to the cost of these awards.

2 2,886,441 (LTIP) granted on 14 March 2022, 14,989 (LTIP) granted as a notional dividend on 1 March 2022, 2,473 (LTIP) granted as a notional dividend on 8 August 2022, 19,677,909 (Deferred/Restricted shares) granted on 14 March 2022, 62,076 (Deferred/Restricted shares) granted as a notional dividend on 1 March 2022, 550,432 (DRSA/RSA) granted on 20 June 2022, 35,175 (Deferred/Restricted shares) granted as a notional dividend on 8 August 2022, 710,435 (Deferred/Restricted shares) granted on 9 November 2022, 123,321 (Deferred/Restricted shares) granted on 28 November 2022 under the 2021 Plan. 3,882,756 (Sharesave) granted on 28 November 2022 under the 2013 Sharesave Plan.

3 For Sharesave granted in 2022 the exercise price is £4.23 per share, a 20% discount from the closing price on 1 November 2022. The closing price on 1 November 2022 was £5.282.

Reconciliation of share award movements for the year to 31 December 2021

	LTIP[1]	Deferred/ Restricted shares[1]	Sharesave	Weighted average Sharesave exercise price (£)
Outstanding at 1 January 2021	22,402,580	34,672,825	10,878,090	4.57
Granted[2,]	3,775,615	14,546,571	2,675,125	–
Lapsed	(14,765,454)	(786,117)	(3,491,017)	5.33
Exercised	(320,964)	(14,229,007)	(3,740)	3.62
Outstanding as at 31 December 2021	11,091,777	34,204,272	10,058,458	4.07
Exercisable as at 31 December 2021	3,952	1,534,479	2,293,424	5.11
Range of exercise prices (£)[3]	–	–	3.14 – 6.20	
Intrinsic value of vested but not exercised options ($ million)	0.02	9.31	0.05	
Weighted average contractual remaining life (years)	7.82	8.08	2.04	
Weighted average share price for awards exercised during the period (£)	4.95	4.88	4.69	

1 Employees does not contribute towards the cost of these awards and are covered under the 2011 and 2021 share plan rules

2 14,208,239 (DRSA/RSA) granted on 15 March 2021, 78,811 (DRSA/RSA) granted as notional dividend on 01 March 2021, 3,761,387 (LTIP) granted on 15 March 2021, 10,954 (LTIP) granted as notional dividend on 01 March 2021, 158,767 (DRSA/RSA) granted on 21 June 2021. 27,785 (DRSA/RSA) granted as notional dividend on 13 August 2021, 3,274 (LTIP) granted as notional dividend on 13 August 2021, 72,969 (RSA) granted on 30 September 2021, 2,675,125 (Sharesave) granted on 30 September 2021. LTIP and DRSA/RSA awards granted in March 2021 were granted under the 2011 Plan, and DRSA/RSA awards granted in June and September 2021 were granted under the 2021 Plan. Notional dividends were granted under the 2011 Plan. Sharesave options granted in 2021 were granted under the 2013 Sharesave Plan.

3 For Sharesave options granted in 2021 the exercise price is £3.67 per share, which was a 20% discount to the closing share price on 27 August 2021. The closing share price on 27 August 2021 was £4.578.

31. Investments in subsidiary undertakings, joint ventures and associates

Accounting policy

Subsidiaries

Subsidiaries are all entities, including structured entities, which the Group controls. The Group controls an entity when it is exposed to, and has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the investee. The assessment of power is based on the Group's practical ability to direct the relevant activities of the entity unilaterally for the Group's own benefit and is subject to reassessment if and when one or more of the elements of control change. Subsidiaries are fully consolidated from the date on which the Group effectively obtains control. They are deconsolidated from the date that control ceases, and where any interest in the subsidiary remains, this is remeasured to its fair value and the change in carrying amount is recognised in the income statement.

Associates and joint arrangements

Joint arrangements are where two or more parties either have rights to the assets, and obligations of the joint arrangement (joint operations), or have rights to the net assets of the joint arrangement (joint venture). The Group evaluates the contractual terms of joint arrangements to determine whether a joint arrangement is a joint operation or a joint venture. The Group did not have any contractual interest in joint operations.

An associate is an entity over which the Group has significant influence.

Investments in associates and joint ventures are accounted for by the equity method of accounting and are initially recognised at cost. The Group's investment in associates and joint ventures includes goodwill identified on acquisition (net of any accumulated impairment loss).

The Group's share of its associates' and joint ventures' post-acquisition profits or losses is recognised in the income statement, and its share of post-acquisition movements in other comprehensive income is recognised in reserves. The cumulative post-acquisition movements are adjusted against the carrying amount of the investment. When the Group's share of losses in an associate or a joint venture equals or exceeds its interest in the associate, including any other unsecured receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate or joint venture.

Unrealised gains and losses on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. At each balance sheet date, the Group assesses whether there is any objective evidence of impairment in the investment in associates and joint ventures. Such evidence includes a significant or prolonged decline in the fair value of the Group's investment in an associate or joint venture below its cost, among other factors.

Significant accounting estimates and judgements

The Group applies judgement in determining if it has control, joint control or significant influence over subsidiaries, joint ventures and associates respectively. These judgements are based upon identifying the relevant activities of counterparties, being those activities that significantly affect the entities returns, and further making a decision of if the Group has control over those entities, joint control, or has significant influence (being the power to participate in the financial and operating policy decisions but not control them).

These judgements are at times determined by equity holdings, and the voting rights associated with those holdings. However, further considerations including but not limited to board seats, advisory committee members and specialist knowledge of some decision-makers are also taken into account. Further judgement is required when determining if the Group has de-facto control over an entity even though it may hold less than 50% of the voting shares of that entity. Judgement is required to determine the relative size of the Group's shareholding when compared to the size and dispersion of other shareholders.

Impairment testing of investments in associates and joint ventures, is performed if there is a possible indicator of impairment. Judgement is used to determine if there is objective evidence of impairment. Objective evidence may be observable data such as losses incurred on the investment when applying the equity method, the granting of concessions as a result of financial difficulty, or breaches of contracts/regulatory fines of the associate or joint venture. Further judgement is required when considering broader indicators of impairment such as losses of active markets or ratings downgrades across key markets in which the associate or joint venture operate in.

Impairment testing is based on estimates including forecasting the expected cash flows from the investments, growth rates, terminal values and the discount rate used in calculation of the present values of those cash flows. The estimation of future cash flows and the level to which they are discounted is inherently uncertain and requires significant judgement.

31. Investments in subsidiary undertakings, joint ventures and associates continued

Business combinations

The acquisition method of accounting is used to account for the acquisition of subsidiaries by the Group. The cost of an acquisition is measured as the fair value of the assets given, equity instruments issued and liabilities incurred or assumed at the date of exchange, together with the fair value of any contingent consideration payable. The excess of the cost of acquisition over the fair value of the Group's share of the identifiable net assets and contingent liabilities acquired is recorded as goodwill (see Note 16 for details on goodwill recognised by the Group). If the cost of acquisition is less than the fair value of the net assets and contingent liabilities of the subsidiary acquired, the difference is recognised directly in the income statement.

Where the fair values of the identifiable net assets and contingent liabilities acquired have been determined provisionally, or where contingent or deferred consideration is payable, adjustments arising from their subsequent finalisation are not reflected in the income statement if (i) they arise within 12 months of the acquisition date (or relate to acquisitions completed before 1 January 2014) and (ii) the adjustments arise from better information about conditions existing at the acquisition date (measurement period adjustments). Such adjustments are applied as at the date of acquisition and, if applicable, prior year amounts are restated. All changes that are not measurement period adjustments are reported in income other than changes in contingent consideration not classified as financial instruments, which are accounted for in accordance with the appropriate accounting policy, and changes in contingent consideration classified as equity, which is not remeasured.

Changes in ownership interest in a subsidiary, which do not result in a loss of control, are treated as transactions between equity holders and are reported in equity. Where a business combination is achieved in stages, the previously held equity interest is remeasured at the acquisition date fair value with the resulting gain or loss recognised in the income statement.

In the Company's financial statements, investment in subsidiaries, associates and joint ventures are held at cost less impairment and dividends from pre-acquisition profits received prior to 1 January 2009, if any. Inter-company transactions, balances and unrealised gains and losses on transactions between Group companies are eliminated in the Group accounts.

Investments in subsidiary undertakings	2022 $million	2021 $million
As at 1 January	**9,694**	8,258
Additions[1]	**357**	3,077
Disposal	**–**	(1,639)[2]
Impairment release/(charge)	**249**[3]	(2)
As at 31 December	**10,300**	9,694

1 Includes issuances of $241 million to Standard Chartered Bank AG, $114 million to Standard Chartered UK holdings and $1 million to Standard Chartered Global Business Services Co., Ltd (31 December 2021 Includes issuances of $1,273 million by Standard Chartered Holdings (Singapore) Private Limited and $1,066 million by Standard Chartered Bank (Singapore) Limited

2 Disposal of Standard Chartered Bank (Thai) Public Company Limited ($782 million), Standard Chartered Bank (Vietnam) Limited ($327 million) from Standard Chartered Bank to Standard Chartered Bank (Singapore) Limited and $530 million repaid by Standard Chartered Holdings (Singapore) Private Limited to holding company. Impairment primarily consists of $72m on Standard Chartered (Thai) Public Company Limited as a result of a decrease in net asset value due to losses for the year, dividends paid and foreign exchange movements, offset by reversals of impairment of various subsidiaries, primarily Standard Chartered UK Holdings Limited and Standard Chartered Holdings Inc, as a result of fair value movements and profits recognised during the year

3 During 2022, the Bank reversed $273m of previously recognised impairment in its fully owned subsidiary Standard Chartered UK Holdings Limited following the increase in carrying value of the investment based on the third-party valuation report. ,$10 million on Standard Chartered Holdings Inc. and $6 million on Standard Chartered Investment Holding offset by impairment charge of $34million impairment in Standard Chartered Bank AG is due to the devaluation of functional currency EUR against the USD, $6 million related to Standard Chartered Botswana Limited

Impairment testing

At 31 December 2022, the net asset value of Standard Chartered Bank Pakistan Limited was below the carrying amount of the Group's investment in subsidiary. As a result, the Group assessed the carrying value of its investment in Standard Chartered Bank Pakistan Limited for impairment and as the value in use (VIU) was higher than the carrying value concluded none was required (2021: nil).

Basis of recoverable amount

The recoverable amount for the subsidiary was measured based on value in use (VIU). The VIU was calculated using five-year cashflow projections and an estimated terminal value based on a perpetuity value after year five. The cashflow projection is based on a forecast approved by management up to 2027. The perpetuity terminal value amount is calculated using year five cashflows using long-term GDP growth rates. All cashflows are discounted using discount rates which reflect market rates appropriate to the subsidiary. Post-tax discount rates are used to calculate the VIU using the post-tax cashflows. The post-tax discount rate is subsequently grossed up to pre-tax discount rate. The calculated VIU using post-tax and pre-tax discount rate is same.

The sensitivities disclosed below are for changes to the GDP, discount rate and cash flows for the 98.99 per cent investment.

			Base Case			Sensitivities - 2022										
															Combined	Combined
						GDP		Discount Rate		Cash Flows		Cash Flows		Cash Flows	GDP -1% DR +1%	GDP -1% DR +1%
						+1%	-1%	+1%	-1%	+10%	-10%	+20%	-20%	-30%	CF -10%	CF -20%
Subsidiary	Carrying value ($m)	ViU ($m)	Headroom ($m)	Pre Tax Discount Rate	GDP	Headroom ($m)	Headroom ($m)	Headroom ($m)	Headroom ($m)	Headroom ($m)	Headroom ($m)	Headroom ($m)	Headroom ($m)	Headroom ($m)	Headroom ($m)	Headroom ($m)
Standard Chartered Bank Pakistan Limited	642	665	23	30.60%	5.92%	57	(5)	(22)	76	85	(38)	146	(99)	(160)	(100)	(154)

31. Investments in subsidiary undertakings, joint ventures and associates continued

At 31 December 2022, the principal subsidiary undertakings, all indirectly held except for Standard Chartered Bank AG, Standard Chartered Bank (Pakistan) Limited and 13.6 per cent of Standard Chartered Bank (Singapore) Limited, and principally engaged in the business of banking and provision of other financial services, were as follows:

Country and place of incorporation or registration	Main areas of operation	Group interest in ordinary share capital %
Standard Chartered Bank (Singapore) Limited, Singapore	Singapore	100
Standard Chartered Bank AG, Germany	Germany	100
Standard Chartered Bank Malaysia Berhad, Malaysia	Malaysia	100
Standard Chartered Bank Nigeria Limited, Nigeria	Nigeria	100
Standard Chartered Bank (Vietnam) Limited, Vietnam	Vietnam	100
Standard Chartered Bank (Mauritius) Limited, Mauritius	Mauritius	100

Country and place of incorporation or registration	Main areas of operation	Group interest in ordinary share capital %
Standard Chartered Bank (Thai) Public Company Limited, Thailand	Thailand	99.87
Standard Chartered Bank (Pakistan) Limited, Pakistan	Pakistan	98.99
Standard Chartered Bank Zambia PLC, Zambia	Zambia	90.00
Standard Chartered Bank Botswana Limited, Botswana	Botswana	75.83
Standard Chartered Bank Kenya Limited, Kenya	Kenya	74.32
Standard Chartered Bank Ghana PLC, Ghana	Ghana	69.42

A complete list of subsidiary undertaking is included in Note 39.

The Group does not have any material non-controlling interest except as listed above, which contribute $16 million (2021: $44 million) of the profit attributable to non-controlling interest and $164 million (2021: $213 million) of the equity attributable to non-controlling interests.

While the Group's subsidiaries are subject to local statutory capital and liquidity requirements in relation to foreign exchange remittance, these restrictions arise in the normal course of business and do not significantly restrict the Group's ability to access or use assets and settle liabilities of the Group.

The Group does not have significant restrictions on its ability to access or use its assets and settle its liabilities other than those resulting from the regulatory framework within which the banking subsidiaries operate. These frameworks require banking operations to keep certain levels of regulatory capital, liquid assets, exposure limits and comply with other required ratios. These restrictions are summarised below:

Regulatory and liquidity requirements

The Group's subsidiaries are required to maintain minimum capital, leverage ratios, liquidity and exposure ratios which therefore restrict the ability of these subsidiaries to distribute cash or other assets to the parent company.

The subsidiaries are also required to maintain balances with central banks and other regulatory authorities in the countries in which they operate. At 31 December 2022, the total cash and balances with central banks was $50 billion (31 December 2021: $62 billion) of which $3.5 billion (2021: $3 billion) is restricted.

Statutory requirements

The Group's subsidiaries are subject to statutory requirements not to make distributions of capital and unrealised profits to the parent company, generally to maintain solvency. These requirements restrict the ability of subsidiaries to remit dividends to the Group. Certain subsidiaries are also subject to local exchange control regulations which provide for restrictions on exporting capital from the country other than through normal dividends.

31. Investments in subsidiary undertakings, joint ventures and associates continued

Contractual requirements

The encumbered assets in the balance sheet of the Group's subsidiaries are not available for transfer around the Group.

Share of profit from investment in associates and joint ventures comprises:

	2022 $million	2021 $million
Profit from investment in joint ventures	(7)	(2)
Profit from investment in associates	(6)	3
Total	(13)	1

Group

Interests in associates and joint ventures

	2022 $million	2021 $million
As at 1 January	156	79
Exchange translation differences	2	(1)
Additions	25	90
Share of profits	(13)	1
Disposals	(1)	(16)
Dividends received	(6)	–
Share of FVOCI and Other reserves	–	3
Impairment	(28)	–
Other Movements[1]	8	–
As at 31 December	143	156

1 Movement related to CurrencyFair

Company

Standard Chartered Bank has an Investment in Trade information network (associate – carrying value $1mn) which has been reclassified as an Equity investment during the year.

A complete list of the Group's interest in associates and joint ventures is included in Note 39. The principal associate is:

Associate	Nature of activities	Main areas of operation	Group interest in ordinary share capital %
CurrencyFair Limited Exchange Ireland	Banking	Ireland	43.42

On the 10th September 2021, the Group, through its subsidiary Standard Chartered UK Holdings Limited completed its investment in acquisition of CurrencyFair Limited, an Irish foreign exchange payments platform.

The Group invested in purchased CurrencyFair through the contribution of its existing investment in its joint venture, Assembly Payments Pte. Limited and a cash injection into CurrencyFair of $35 million, which provided the Group with equity of 43.42% in CurrencyFair. This equity ownership, along with control of the board of directors resulted in the Group controlling CurrencyFair.

This equity ownership, along with seats on the board of directors resulted in the Group having significant influence over CurrencyFair and as such will equity method account the investment.

The transaction will facilitate creation of a combined payments and foreign exchange products franchise, combining the customer base, staff, expertise and capabilities of both CurrencyFair and Assembly Payments.

The fair value of consideration for the investment as follows:

Consideration	$million
Fair value of the Group's investment in Assembly Payments[1]	36
Cash consideration	35
Total consideration/Investment in Associate	71

1 The fair value of Assembly Payments was determined to be $60m, of which the Group's equity ownership on transfer was 59.63%. The Group carried this investment under the equity method at a balance of $16m resulting in a profit on disposal of $20m

32. Structured entities

Accounting policy

A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. Contractual arrangements determine the rights and therefore relevant activities of the structured entity. Structured entities are generally created to achieve a narrow and well-defined objective with restrictions around their activities. Structured entities are consolidated when the substance of the relationship between the Group and the structured entity indicates the Group has power over the contractual relevant activities of the structured entity, is exposed to variable returns, and can use that power to affect the variable return exposure.

In determining whether to consolidate a structured entity to which assets have been transferred, the Group takes into account its ability to direct the relevant activities of the structured entity. These relevant activities are generally evidenced through a unilateral right to liquidate the structured entity, investment in a substantial proportion of the securities issued by the structured entity or where the Group holds specific subordinate securities that embody certain controlling rights. The Group may further consider relevant activities embedded within contractual arrangements such as call options which give the practical ability to direct the entity, special relationships between the structured entity and investors, and if a single investor has a large exposure to variable returns of the structured entity.

Judgement is required in determining control over structured entities. The purpose and design of the entity is considered, along with a determination of what the relevant activities are of the entity and who directs these. Further judgements are made around which investor is exposed to, and absorbs the variable returns of the structured entity. The Group will have to weigh up all of these facts to consider whether the Group, or another involved party is acting as a principal in its own right or as an agent on behalf of others. Judgement is further required in the ongoing assessment of control over structured entities, specifically if market conditions have an effect on the variable return exposure of different investors.

The Group has involvement with both consolidated and unconsolidated structured entities, which may be established by the Group as a sponsor or by a third-party.

Interests in consolidated structured entities: A structured entity is consolidated into the Group's financial statements where the Group controls the structured entity, as per the determination in the accounting policy above.

The following table presents the Group's interests in consolidated structured entities.

	2022 $million	2021 $million
Principal and other structured finance	212	173
Total	**212**	173

Interests in unconsolidated structured entities: Unconsolidated structured entities are all structured entities that are not controlled by the Group. The Group enters into transactions with unconsolidated structured entities in the normal course of business to facilitate customer transactions and for specific investment opportunities. This is predominantly within the CCIB business segment. An interest in a structured entity is contractual or non-contractual involvement which creates variability of the returns of the Group arising from the performance of the structured entity

The unconsolidated structure entity table presents the carrying amount of the assets recognised in the financial statements relating to interests held in unconsolidated structured entities, the maximum exposure to loss relating to those interests and the total assets of the structured entities. Maximum exposure to loss is primarily limited to the carrying amount of the Group's on-balance sheet exposure to the structured entity. For derivatives, the maximum exposure to loss represents the on-balance sheet valuation and not the notional amount. For commitments and guarantees, the maximum exposure to loss is the notional amount of potential future losses.

32. Structured entities continued

	2022[1]					2021 (Restated)[2]				
	Asset -backed securities $million	Corporate Lending & Structured Finance $million	Principal Finance funds $million	Other activities $million	Total $million	Asset -backed securities $million	Corporate Lending & Structured Finance $million	Principal Finance funds $million	Other activities $million	Total $million
Group's interest – assets										
Financial assets held at fair value through profit or loss	194	–	81	–	275	664	–	82	–	746
Loans and advances/ Investment securities at amortised cost	13,508	21,969	–	246	35,723	9,234	20,821	–	–	30,055
Investment securities (fair value through other comprehensive income)	1,496	–	–	–	1,496	1,368	–	–	–	1,368
Other assets	–	–	–	–	–	–	–	1	–	1
Total assets	15,198	21,969	81	246	37,494	11,266	20,821	83	–	32,170
Off-balance sheet	–	9,747	92	–	9,839	–	10,288	99	–	10,387
Group's maximum exposure to loss	15,198	31,716	173	246	47,333	11,266	31,109	182	–	42,557
Total assets of structured entities	98,835	19,620	150	1,828	120,433	138,014	25,791	872	2	164,679

1 As at 31 December 2022 Corporate Lending & Structured Finance includes $10,165 million (2021: $11,197 million) related to Loans and advances / investment securities at amortized cost within Structured Finance and $11,804 million (2021: $9,624 million) within Corporate Lending; Group's maximum exposure to loss within Structured Finance of $16,691 million (2021: $16,822 million) and $15,025 million (2021: $14,288 million) within Corporate Lending; and Total assets of structured entities within Structured Finance of $11,384 million (2021: $16,848 million) and $8,236 million (2021: $8,943 million) within Corporate Lending

2 The 2021 balances have been restated to reflect the addition of the Group's interest in certain entities reported on the Group's balance sheet but not previously disclosed as unconsolidated structured entities, associated off-balance sheet exposure, maximum exposure to loss, and the total assets of structured entities. The restatement results in increases to the following: Loans and advances / investment securities at amortized cost within Structured Finance of $11,197 million and Corporate Lending of $9,624 million; Group's maximum exposure to loss within Structured Finance of $16,822 million and Corporate Lending of $14,288 million; Off-balance sheet within Structured Finance of $5,624 million and Corporate Lending of $4,664 million; and Total assets of structured entities within Structured Finance of $16,848 million and Corporate Lending of $8,943 million

The main types of activities for which the Group utilises unconsolidated structured entities cover synthetic credit default swaps for managed investment funds (including specialised Principal Finance funds), portfolio management purposes, structured finance and asset-backed securities. These are detailed as follows:

- **Asset-backed securities (ABS):** The Group also has investments in asset-backed securities issued by third-party sponsored and managed structured entities. For the purpose of market making and at the discretion of ABS trading desk, the Group may hold an immaterial amount of debt securities from structured entities originated by credit portfolio management. This is disclosed in the ABS column above.
- **Portfolio management (Group sponsored entities):** For the purposes of portfolio management, the Group purchased credit protection via synthetic credit default swaps from note-issuing structured entities. This credit protection creates credit risk which the structured entity and subsequently the end investor absorbs. The referenced assets remain on the Group's balance sheet as they are not assigned to these structured entities. The Group continues to own or hold all of the risks and returns relating to these assets. The credit protection obtained from the regulatory-compliant securitisation only serves to protect the Group against losses upon the occurrence of eligible credit events and the underlying assets are not derecognised from the Group's balance sheet. The Group does not hold any equity interests in the structured entities but may hold an insignificant amount of the issued notes for market making purposes. This is disclosed in the ABS section above. The proceeds of the notes' issuance are typically held as cash collateral in the issuer's account operated by a trustee or invested in AAA-rated government-backed securities to collateralise the structured entities swap obligations to the Group, and to repay the principal to investors at maturity. The structured entities reimburse the Group on actual losses incurred, through the use of the cash collateral or realisation of the collateral security. Correspondingly, the structured entities write down the notes issued by an equal amount of the losses incurred, in reverse order of seniority. All funding is committed for the life of these vehicles and the Group has no indirect exposure in respect of the vehicles' liquidity position. The Group has reputational risk in respect of certain portfolio management vehicles and investment funds either because the Group is the arranger and lead manager or because the structured entities have Standard Chartered branding.
- **Corporate Lending & Structured finance:** Corporate Lending comprises secured lending in the normal course of business to third parties through structured entities.

  Structured finance comprises interests in transactions that the Group or, more usually, a customer has structured, using one or more structured entities, which provide beneficial arrangements for customers. The Group's exposure primarily represents the provision of funding to these structures as a financial intermediary, for which it receives a lender's return.
- **Principal Finance Fund:** The Group's exposure to Principal Finance Funds represents committed or invested capital in unleveraged investment funds, primarily investing in pan-Asian infrastructure, real estate and private equity.
- **Other activities:** Other activities include structured entities created to support margin financing transactions, the refinancing of existing credit and debt facilities, as well as setting up of bankruptcy remote structured entities.

33. Cash flow statement

Adjustment for non-cash items and other adjustments included within income statement

	Group		Company	
	2022 $million	2021[1] $million	2022 $million	2021 $million
Amortisation of discounts and premiums of investment securities	353	94	556	243
Interest expense on subordinated liabilities	562	424	508	401
Interest expense on senior debt securities in issue	7	60	81	(35)
Other non-cash items	(18)	(67)	(19)	1
Pension costs for defined benefit schemes	28	31	17	20
Share-based payment costs	156	148	100	99
Impairment losses on loans and advances and other credit risk provisions	(22)	(30)	(183)	(38)
Dividend income from subsidiaries	–	–	(1,046)	(1,626)
Other impairment	107	30	(181)	30
Gain on disposal of property, plant and equipment	(18)	(10)	(10)	–
Gain on disposal of FVOCI & AMCST financial assets	154	(130)	99	(69)
Depreciation and amortisation	611	594	396	416
Fair value changes taken to profit or loss	(235)	(67)	(113)	(34)
Foreign Currency revaluation	202	(188)	176	(67)
Profit from associates and joint ventures	13	1	–	–
Total	1,900	888	381	(659)

1 The 2021 comparative figures have been restated to reclassify $418 million of interest paid on subordinated liabilities, previously included in 'Change in operating liabilities', to 'Adjustments for non-cash items'

Change in operating assets

	Group		Company	
	2022 $million	2021[1] $million	2022 $million	2021[1] $million
(Increase)/decrease in derivative financial instruments	(8,171)	12,730	(6,448)	12,999
Decrease/(Increase) in debt securities, treasury bills and equity shares held at fair value through profit or loss	10,445	(3,581)	3,264	(1,245)
Decrease/(increase) in loans and advances to banks and customers	381	(24,206)	3,678	(15,951)
Net (increase)/decrease in prepayments and accrued income	(908)	19	(718)	44
Net (increase)/decrease in other assets	(3,905)	1,674	(5,227)	2,975
Total	(2,158)	(13,364)	(5,451)	(1,178)

1 Changes in operating assets have been restated

Change in operating liabilities

	Group		Company	
	2022 $million	2021[1] $million	2022 $million	2021[1] $million
Increase/(Decrease) in derivative financial instruments	11,674	(12,245)	9,854	(12,158)
Net (decrease)/increase in deposits from banks, customer accounts, debt securities in issue and short positions	(2,526)	54,022	(4,239)	36,056
Increase in accruals and deferred income	919	113	644	159
(Decrease)/increase in amount due to parents/subsidiaries/other related	(1,932)	(498)	(59)	(1,693)
Net (decrease)/increase in other liabilities	(1,181)	(4,207)	(1,679)	(3,461)
Total	6,954	37,185	4,521	18,903

1 Changes in operating liabilities have been restated

33. Cash flow statement continued

Disclosures

	Group		Company	
	2022 $million	2021 $million	**2022 $million**	2021 $million
Subordinated debt (including accrued interest):				
Opening balance	**14,621**	14,885	**14,081**	14,345
Proceeds from the issue	**750**	–	**750**	–
Interest paid	**(424)**	(479)	**(378)**	(456)
Repayment	**(1,008)**	(16)	**(1,008)**	(16)
Foreign exchange movements	**(227)**	(98)	**(227)**	(98)
Fair value changes	**(861)**	(150)	**(861)**	(150)
Accrued Interest and Others	**421**	479	**374**	456
Closing balance	**13,272**	14,621	**12,731**	14,081

	Group		Company	
	2022 $million	2021 $million	**2022 $million**	2021 $million
Senior debt (including accrued interest):				
Opening balance	**1,289**	1,706	**923**	686
Proceeds from the issue	**5,316**	2,833	**4,091**	660
Interest paid	**(1)**	(16)	**(1)**	(16)
Repayment	**(1,490)**	(3,250)	**(298)**	(422)
Foreign exchange movements	**(49)**	(8)	**(12)**	(2)
Fair value changes	**8**	(1)	**6**	–
Accrued Interest and Others	**81**	25	**68**	17
Closing balance	**5,154**	1,289	**4,777**	923

34. Cash and cash equivalents

Accounting policy

For the purposes of the cash flow statement, cash and cash equivalents comprise cash, on demand and overnight balances with central banks (unless restricted) and balances with less than three months' maturity from the date of acquisition, including treasury bills and other eligible bills, loans and advances to banks, and short-term government securities.

The following balances with less than three months' maturity from the date of acquisition have been identified by the Group as being cash and cash equivalents.

	Group		Company	
	2022 $million	2021 $million	**2022 $million**	2021 $million
Cash and balances at central banks	**50,531**	61,963	**38,867**	48,165
Less: restricted balances	**(3,515)**	(3,063)	**(1,320)**	(1,160)
Treasury bills and other eligible bills	**9,455**	3,635	**2,487**	1,627
Loans and advances to banks	**14,419**	18,672	**7,566**	10,642
Trading securities	**180**	220	**18**	132
Total	**71,070**	81,427	**47,618**	59,406

35. Related party transactions

Directors and officers

Details of directors' remuneration and interests in shares are disclosed in the Note 38 Remuneration of Directors.

IAS 24 Related party disclosures requires the following additional information for key management compensation. Key management comprises non-executive directors, executive directors of Standard Chartered PLC, the Court directors of Standard Chartered Bank and the persons discharging managerial responsibilities (PDMR) of Standard Chartered PLC Group.

	2022 $million	2021 $million
Salaries, allowances and benefits in kind	38	40
Share-based payments	26	28
Bonuses paid or receivable	4	4
Termination benefits	1	–
Total	69	72

Transactions with directors and others

At 31 December 2022, the total amounts to be disclosed under the Companies Act 2006 (the Act) and the Listing Rules of the Hong Kong Stock Exchange Limited (HK Listing Rules) about loans to directors were as follows:

	2022		2021	
	Number	$million	Number	$million
Directors	3	–	3	–

The loan transactions provided to the directors of Standard Chartered PLC were a connected transaction under Chapter 14A of the HK Listing Rules. It was fully exempt as financial assistance under Rule 14A.87(1), as it was provided in our ordinary and usual course of business and on normal commercial terms.

Other than as disclosed in these financial statements, there were no other transactions, arrangements or agreements outstanding for any director of the Company which have to be disclosed under the Act.

Group

	2022				2021			
	Due from/to subsidiary undertakings and other related parties $million	Derivative financial instruments $million	Subordinated liabilities and other borrowed funds $million	Debt Securities $million	Due from/to subsidiary undertakings and other related parties $million	Derivative financial instruments $million	Subordinated liabilities and other borrowed funds $million	Debt Securities $million
Assets								
Ultimate parent company	133	1,557	–	–	380	691	–	–
Fellow subsidiaries of SC PLC Group	6,254	9,573	–	601	5,855	4,521	–	737
	6,387	11,130	–	601	6,235	5,212	–	737
Liabilities								
Ultimate parent company	6,516	321	12,924	6,707	11,264	617	14,148	5,286
Fellow subsidiaries of SC PLC Group	21,586	9,007	–	669	19,734	4,696	–	667
	28,102	9,328	12,924	7,376	30,998	5,313	14,148	5,953

	2022			
	Fees and commission income $million	Fees and commission expense $million	Interest income $million	Interest expense $million
Ultimate parent company	–	–	1	875
Fellow subsidiaries of SC PLC Group	79	122	63	329
	79	122	64	1,204

35. Related party transactions continued

	2021			
	Fees and commission income $million	Fees and commission expense $million	Interest income $million	Interest expense $million
Ultimate parent company	–	–	7	776
Fellow subsidiaries of SC PLC Group	71	104	34	49
	71	104	41	825

The Group contributes to employee pension funds and provides banking services free of charge to the UK fund. For details of the funds (see Note 29).

The Group's employees participate in the Standard Chartered PLC group's share-based compensation plans (see Note 30). The cost of the compensation is recharged from Standard Chartered PLC to the Group's branches and subsidiaries.

Associates and joint ventures

The following transactions with related parties are on an arm's length basis:

	2022 $million	2021 (Restated)[1] $million
Assets		
Loans and advances	**20**	22
Derivative assets	**18**	2
Total assets	**38**	24
Liabilities		
Deposits	**49**	47
Derivative liabilities	**–**	1
Other liabilities	**19**	–
Total liabilities	**68**	48
Loan commitments and other guarantees[2]	**164**	80

1 Prior period has been restated

2 The maximum loan commitments and other guarantees during the year was $164 million

Company

	2022				2021			
	Due from/to subsidiary undertakings and other related parties $million	**Derivative financial instruments $million**	**Subordinated liabilities and other borrowed funds $million**	**Debt Securities $million**	Due from/to subsidiary undertakings and other related parties $million	Derivative financial instruments $million	Subordinated liabilities and other borrowed funds $million	Debt Securities $million
Assets								
Ultimate parent company	**133**	**1,557**	**–**	**–**	380	691	–	–
Subsidiaries and fellow subsidiaries of SC PLC Group	**13,081**	**13,207**	**–**	**2,438**	10,361	7,067	–	1,784
	13,214	**14,764**	**–**	**2,438**	10,741	7,758	–	1,784
Liabilities								
Ultimate parent company	**6,510**	**321**	**12,384**	**6,707**	11,262	617	13,609	5,286
Subsidiaries and fellow subsidiaries of SC PLC Group	**33,423**	**13,421**	**–**	**2**	29,483	7,266	–	–
	39,933	**13,742**	**12,384**	**6,709**	40,745	7,883	13,609	5,286

35. Related party transactions continued

	2022				
	Fees and commission income $million	Fees and commission expense $million	Interest income $million	Interest expense $million	Dividend income $million
Ultimate parent company	–	–	1	854	–
Subsidiaries and fellow subsidiaries of SC PLC Group	122	127	177	502	1,046
	122	127	178	1,356	1,046

	2021				
	Fees and commission income $million	Fees and commission expense $million	Interest income $million	Interest expense $million	Dividend income $million
Ultimate parent company	–	–	7	765	–
Subsidiaries and fellow subsidiaries of SC PLC Group	130	133	66	76	1,626
	130	133	73	841	1,626

As at 31 December 2022, Standard Chartered Bank had created a charge over $89 million (31 December 2021: $100 million) of cash assets in favour of the non-consolidated independent trustee of its employer financed retirement benefit scheme.

The Company contributes to employee pension funds and provides banking services free of charge to the UK fund. For details of the funds see note 29.

The Company's employees participate in the Standard Chartered PLC group's share-based compensation plans (see note 30).

The Company has an agreement with Standard Chartered PLC that in the event of the Company defaulting on its debt coupon interest payments, where the terms of such debt requires it, Standard Chartered PLC shall issue shares as settlement for non-payment of the coupon interest.

36. Post balance sheet events

None.

37. Auditor's remuneration

Auditor's remuneration is included within other general administration expenses. The amounts paid by the Group to their principal auditor, Ernst & Young LLP (EY LLP) and its associates (together EY LLP), are set out below. All services are approved by the Group Audit Committee and are subject to controls to ensure the external auditor's independence is unaffected by the provision of other services.

	2022 $million	2021 $million
Audit fees for the Standard Chartered PLC Group statutory audit	**22.2**	15.9
Of which fees for the statutory audit of Standard Chartered Bank Group	**16.3**	11.8
Fees payable to EY for other services provided to the Standard Chartered Bank Group:		
Audit of Standard Chartered Bank subsidiaries	**8.4**	7.0
Total Audit fees	**30.7**	22.9
Audit-related assurance services	**2.9**	2.8
Other assurance services	**3.8**	2.8
Other non-audit services	**0.1**	0.1
Total fees payable	**37.5**	28.6

The following is a description of the type of services included within the categories listed above:

- Audit fees for the Group statutory audit are in respect of fees payable to EY LLP for the statutory audit of the consolidated financial statements of the Group and the separate financial statements of Standard Chartered PLC
- Audit-related fees consist of fees such as those for services required by law or regulation to be provided by the auditor, reviews of interim financial information, reporting on regulatory returns, reporting to a regulator on client assets and extended work performed over financial information and controls authorised by those charged with governance
- Other assurance services include agreed-upon-procedures in relation to statutory and regulatory filings
- Corporate finance transaction services are fees payable to EY LLP for issuing comfort letters

Expenses incurred in respect of their role as auditors were reimbursed to EYLLP ($0.5m) (2021- $0.2m). Such expenses did not exceed 1% of total fees charged above.

38. Remuneration of Directors

This table sets out salary (including salary shares), pension and benefits received in 2022 and variable remuneration awards received in respect of 2022.

	2022[1] £000	2021[2] £000
Salaries and fees	**8,263**	8,588
Pension	**533**	553
Benefits	**576**	420
Annual incentive	**4,011**	3,688
Vesting of LTIP awards	**1,858**	1,434
Total	**15,241**	14,683

1 C Hodgson, J Hunt and R Lawther joined the Court on 21 September, 1 October and 8 December 2022 respectively. N Kheraj and M Smith stepped down from the Court on 30 April and 31 December 2022 respectively. D Conner and C Tong both stepped down from the Court on 8 December 2022. A McFadyen retired as an employee of SC PLC Group on 31 March 2022 but remained on the Court as a Non-Executive Director

2 The values of vesting 2019-21 LTIP awards have been restated based on the actual share price of £5.09 when the awards vested in March 2022

Additional information on the remuneration elements in the above single total figure table

Salaries and fees

The total salaries of the four directors as at 1 January 2022 were £5,610,200. For two of the directors, salary is paid part in cash and part in shares which are subject to a retention period and released pro rata over five years. The number of salary shares allocated is determined based on the monetary value and the prevailing market price of the Group's shares on the date of allocation. The emoluments, including share based payments and other benefits, of the highest paid director during 2022 were £5,483,442 (2021: £4,739,773). There were employer pension contributions for the highest paid director during 2022 of £244,800 (2021: £237,000).

The total annualised fees of the Chairman and directors as at 1 January 2022 (or the date of appointment, if later) were £3,279,167.

There is no apportionment of remuneration between Standard Chartered Bank and Standard Chartered PLC.

38. Remuneration of Directors continued

Share awards

One director exercised share awards over Standard Chartered PLC during the year.

Pension and benefits

An explanation of pension and benefits for those directors who are also executive directors of the SC PLC Group can be found in the SC PLC Group's 2022 Directors' remuneration report on pages 184 to 217. The directors who are also employees of the SC PLC Group received a flexible benefits allowance in alignment with the UK workforce to include a mixture of core pension and benefits provision, including private medical cover, life assurance and permanent health insurance. Some directors occasionally use a Group car service for traveling and, in some circumstances, were accompanied by their spouses to attend events.

For those directors who are also employees of the SC PLC Group, annual incentives in respect of 2022 are delivered upfront with at least 50 per cent paid in shares subject to a minimum twelve-month retention period.

Vesting of LTIP awards

The long-term incentive plan (LTIP) awards granted in March 2019 vested in March 2022, based on performance over the years 2019 to 2021. 23 per cent of these awards vested.

The LTIP awards granted in March 2020 are due to vest in March 2023, based on performance over the years 2020 to 2022. Following an estimated assessment of the performance measures (RoTE with CET1 underpin, relative TSR and strategic measures), 22 per cent of these awards will vest. The final assessment of the relative TSR performance will be conducted in March 2023, the end of the three-year performance period. Based on a share price of £5.78, the three-month average to 31 December 2022, the estimated value to be delivered to the directors is £1,857,877.

The highest paid director has not exercised any share options during the year.

An LTIP award of 756,932 shares was made in March 2022 to the highest paid director, at a share price of GBP4.876, which are subject to the satisfaction of stretching RoTE, TSR and strategic performance measures over three years (2022 to 2024).

Other disclosures

The remuneration policy and practices applying to the Material Risk Taker employees of the Bank are the same as those applied by the SC PLC Group which are set out in the SC PLC Group's 2022 Directors' remuneration report on pages 184 to 217.

Further information on the remuneration for those directors who are also executive directors of the SC PLC Group can be found in the SC PLC Group's 2022 Directors' remuneration report on pages 184 to 217..

39. Related undertakings of the Group

As at 31 December 2022, the Group's interests in related undertakings are disclosed below. Unless otherwise stated, the share capital disclosed comprises ordinary or common shares which are held by subsidiaries of the Group. Unless otherwise indicated, all related undertakings are held indirectly. Unless otherwise stated, the principal country of operation of each subsidiary is the same as its country of incorporation. Note 31 details undertakings that have a significant contribution to the Group's net profit or net assets.

Subsidiary undertakings

Name and registered address	Activity	Place of incorporation	Description of shares	Proportion of shares held (%)
The following companies have the address of 1 Basinghall Avenue, London, EC2V 5DD, United Kingdom				
SC (Secretaries) Limited[1]	Others	United Kingdom	£1.00 Ordinary shares	100
SC Transport Leasing 1 LTD[7,8]	Leasing Business	United Kingdom	£1.00 Ordinary shares	100
SC Transport Leasing 2 Limited[7,8]	Leasing Business	United Kingdom	£1.00 Ordinary shares	100
SC Ventures Innovation Investment L.P.	Investment Holding Company	United Kingdom	Limited Partnership interest	100
SCMB Overseas Limited[1]	Investment Holding Company	United Kingdom	£0.10 Ordinary shares	100
Standard Chartered Africa Limited	Investment Holding Company	United Kingdom	£1.00 Ordinary shares	100
Standard Chartered Bank	Banking & Financial Services	United Kingdom	US$0.01 Non-Cumulative Irredeemable Preference US$1.00 Ordinary US$5.00 Non-Cumulative Redeemable Preference	100
Standard Chartered Foundation[1,2]	Charity projects	United Kingdom	Guarantor	100
Standard Chartered Health Trustee (UK) Limited[1]	Trustee Services	United Kingdom	£1.00 Ordinary shares	100
Standard Chartered Leasing (UK) 3 Limited[1]	Leasing Business	United Kingdom	$1.00 Ordinary shares	100
Standard Chartered Leasing (UK) Limited[1,7,8]	Leasing Business	United Kingdom	$1.00 Ordinary shares	100
Standard Chartered Nominees (Private Clients UK) Limited[1]	Nominee Services	United Kingdom	$1.00 Ordinary shares	100
Standard Chartered Securities (Africa) Holdings Limited	Investment Holding Company	United Kingdom	$1.00 Ordinary shares	100
Standard Chartered Trustees (UK) Limited[1]	Trustee Services	United Kingdom	£1.00 Ordinary shares	100
Standard Chartered UK Holdings Limited[1]	Investment Holding Company	United Kingdom	$1.00 Ordinary shares	100
The SC Transport Leasing Partnership 1	Leasing Business	United Kingdom	Limited Partnership interest	100
The SC Transport Leasing Partnership 2	Leasing Business	United Kingdom	Limited Partnership interest	100
The SC Transport Leasing Partnership 3	Leasing Business	United Kingdom	Limited Partnership interest	100
The SC Transport Leasing Partnership 4	Leasing Business	United Kingdom	Limited Partnership interest	100
The BW Leasing Partnership 1 LP[2]	Leasing Business	United Kingdom	Limited Partnership interest	100
The BW Leasing Partnership 2 LP[2]	Leasing Business	United Kingdom	Limited Partnership interest	100
The BW Leasing Partnership 3 LP[2]	Leasing Business	United Kingdom	Limited Partnership interest	100
The BW Leasing Partnership 4 LP[2]	Leasing Business	United Kingdom	Limited Partnership interest	100
The BW Leasing Partnership 5 LP[2]	Leasing Business	United Kingdom	Limited Partnership interest	100
Zodia Markets (UK) Limited	Banking & Financial Services	United Kingdom	$1.00 Ordinary shares	100
Zodia Markets Holdings Limited	Banking & Financial Services	United Kingdom	$1.00 Ordinary shares	75.01
The following companies have the address of 2 More London Riverside, London SE1 2JT, United Kingdom				
Bricks (C&K) LP[2]	Limited Partnership interest	United Kingdom	Limited Partnership interest	100
Bricks (C) LP[2]	Limited Partnership interest	United Kingdom	Limited Partnership interest	100
Bricks (T) LP[2]	Limited Partnership interest	United Kingdom	Limited Partnership interest	100
The following companies have the address of 8th Floor, 20 Farringdon Street, London, EC4A 4AB, United Kingdom.				
SC Ventures G.P. Limited[1]	Investment Holding Company	United Kingdom	£1.00 Ordinary shares	100
Assembly Payments UK Ltd	Payment Services Provider	United Kingdom	$1.00 Ordinary shares	100

39. Related undertakings of the Group continued

Name and registered address	Activity	Place of incorporation	Description of shares	Proportion of shares held (%)
The following company has the address of 1 Bartholomew Lane, London, EC2N 2AX, United Kingdom				
Corrasi Covered Bonds LLP[1]	Trustee Services	United Kingdom	Membership Interest	50
The following companies have the address of Thomas House, 84 Eccleston Square, London, SW1V 1PX, United Kingdom				
Zodia Custody Limited	Custody services	United Kingdom	$1.00 Ordinary shares	95.1
Zodia Holdings Limited	Investment holding company	United Kingdom	$1.00 Ordinary shares	100
The following company has the address of Robert Denholm House, Bletchingly Road, Nutfield, Redhill, RH1 4HW, United Kingdom				
CurrencyFair (UK) Limited	Banking & Financial Services	United Kingdom	£1.00 Ordinary shares	100
The following company has the address of 23 De Walden Street, London, W1G 8RW, United Kingdom				
Shoal Limited	Digital marketplace for sustainable and "green" products.	United Kingdom	US$1.00 Ordinary	100
The following company has the address of 1 Poultry, London, EC2R 8EJ, United Kingdom				
Zai Technologies Limited	Payment Services Provider.	United Kingdom	£1.00 Ordinary	100
The following company has the address Edifício Kilamba, 8 Andar Avenida 4 de Fevereiro, Marginal, Luanda, Angola				
Standard Chartered Bank Angola S.A.	Banking & Financial Services	Angola	AOK8,742.05 Ordinary shares	60
The following company has the address of Level 5, 345 George St, Sydney NSW 2000, Australia				
Standard Chartered Grindlays Pty Limited[1]	Investment Holding Company	Australia	AUD Ordinary shares	100
The following company has the address of 17/31 Queen Street, Melbourne VIC 3000, Australia				
Assembly Payments Australia Pty Ltd	Holding Company	Australia	$ Ordinary shares	100
The following company has the address of Wilsons Landing, Level 5, 6A Glen Street, Milsons Point NSW 2061, Australia				
CurrencyFair Australia Pty Ltd	Foreign Currency conversion services.	Australia	AUD Ordinary	100
The following company has the address of Level 20, 31 Queen Street, Melbourne VIC 3000, Australia				
Zai Australia Pty Ltd	Payment Service Provider	Australia	$1.00 Ordinary	100
			AUD0.01 Ordinary shares	
The following companies have the address of 5th Floor Standard House Bldg, The Mall, Queens Road, PO Box 496, Gaborone, Botswana				
Standard Chartered Bank Insurance Agency (Proprietary) Limited	Insurance Services	Botswana	BWP Ordinary shares	100
Standard Chartered Investment Services (Proprietary) Limited	Nominee Services	Botswana	BWP Ordinary shares	100
Standard Chartered Bank Botswana Limited	Banking & Financial Services	Botswana	BWP Ordinary shares	75.8
Standard Chartered Botswana Nominees (Proprietary) Limited	Nominee Services	Botswana	BWP Ordinary shares	100
Standard Chartered Botswana Education Trust[1,3]	CSR programme.	Botswana	Interest in Trust	100
The following company has the address of Avenida Brigadeiro Faria Lima, no 3.477, 6 andar, conjunto 62 – Torre Norte, Condominio Patio Victor Malzoni, CEP 04538-133, Sao Paulo, Brazil				
Standard Chartered Representação e Participações Ltda[1]	Banking & Financial Services	Brazil	BRL1.00 Ordinary shares	100
The following company has the address of G01-02, Wisma Haji Mohd Taha Building, Jalan Gadong, BE4119, Brunei Darussalam				
Standard Chartered Securities (B) Sdn Bhd[1]	Investment Management	Brunei Darussalam	BND1.00 Ordinary shares	100
The following company has the address of Standard Chartered Bank Cameroon S.A, 1155, Boulevard de la Liberté, Douala, B.P. 1784, Cameroon				
Standard Chartered Bank Cameroon S.A.	Banking & Financial Services	Cameroon	XAF10,000.00 Ordinary shares	100
The following company has the address of 66 Wellington Street, West, Suite 4100, Toronto Dominion Centre, Toronto ON M5K 1B7, Canada				
CurrencyFair (Canada) Ltd	Dormant	Canada	CAD$ Common shares	100

39. Related undertakings of the Group continued

Name and registered address	Activity	Place of incorporation	Description of shares	Proportion of shares held (%)
The following company has the address of Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman KY1-1104, Cayman Islands				
Cerulean Investments LP	Investment Holding Company	Cayman Islands	Limited Partnership interest	100
The following company has the address of Maples Finance Limited, PO Box 1093 GT, Queensgate House, Georgetown, Grand Cayman, Cayman Islands				
SCB Investment Holding Company Limited[1]	Investment Holding Company	Cayman Islands	US$1,000.00 Ordinary-A	99.99
The following company has the address of No. 35, Xinhuanbei Road, TEDA, Tianjin, 300457, China				
Standard Chartered Global Business Services Co. Limited[1,4]	Research, development, other services	China	$ Ordinary shares	100
The following company has the address of Room 2619, No 9, Linhe West Road, Tianhe District, Guangzhou, China				
Guangzhou CurrencyFair Information Technology Limited	Providers of Foreign Currency conversion services.	China	CNY Ordinary shares	100
The following company has the address of Standard Chartered Bank Cote d'Ivoire, 23 Boulevard de la République, Abidjan 17, 17 B.P. 1141, Cote d'Ivoire				
Standard Chartered Bank Cote d' Ivoire SA	Banking & Financial Services	Cote d'Ivoire	XOF100,000.00 Ordinary shares	100
The following company has the address of 8 Ecowas Avenue, Banjul, Gambia				
Standard Chartered Bank Gambia Limited	Banking & Financial Services	Gambia	GMD1.00 Ordinary shares	74.852
The following company has the address of Taunusanlage 16, 60325, Frankfurt am Main, Germany				
Standard Chartered Bank AG[1]	Banking & Financial Services	Germany	€ Ordinary shares	100
The following companies have the address of Standard Chartered Bank Building, 87 Independence Avenue, P.O. Box 768, Accra,Ghana				
Standard Chartered Bank Ghana PLC	Banking & Financial Services	Ghana	GHS Ordinary shares	69.4
			GHS0.52 Non-cumulative Irredeemable Preference Shares	87.0
Standard Chartered Ghana Nominees Limited	Nominee Services	Ghana	GHS Ordinary shares	100
The following company has the address of Standard Chartered Bank Ghana Limited, 87, Independence Avenue, Post Office Box 678, Accra, Ghana				
Standard Chartered Wealth Management Limited Company	Investment Management	Ghana	GHS Ordinary shares	100
The following companies have the address of 14th Floor, One Taikoo Place, 979 King's Road, Quarry Bay, Hong Kong.				
Kozagi Limited	Investment Holding Company	Hong Kong	HKD Ordinary shares	100
Standard Chartered PF Real Estate (Hong Kong) Limited	Investment Holding Company	Hong Kong	$ Ordinary shares	100
The following company has the address of 13/F Standard Chartered Bank Building, 4-4A Des Voeux Road Central, Hong Kong				
Standard Chartered Private Equity Limited	Investment Holding Company	Hong Kong	HKD Ordinary shares	100
The following company has the address of 21/F, Standard Chartered Tower, 388 Kwun Tong Road, Kwun Tong, Kowloon, Hong Kong				
Standard Chartered Asia Limited	Investment Holding Company	Hong Kong	HKD Deferred shares	100
			HKD Ordinary shares	100
The following company has the address of 31/F, Tower 2 Times Square, 1 Matheson St, Causeway Bay, Hong Kong				
Assembly Payments HK Limited	Online payment platform	Hong Kong	HKD Ordinary Shares	100
The following company has the address of Suites 1103-4 AXA Tower, Landmark East, 100 How Ming Street, Kwun Tong, Hong Kong				
Currencyfair Asia Limited	Foreign Currency conversion services.	Hong Kong	HKD Ordinary shares	100
The following company has the address of 2 Floor Sabari Complex 24 Field Marshal, Capriappa RD Shanthala Nagar, Ashok Nagar, Bangalore, Karnataka, , 560025, India				
Assembly Payments India Private Limited	Activities auxiliary to financial intermediation	India	INR100.00 Ordinary	100

39. Related undertakings of the Group continued

Name and registered address	Activity	Place of incorporation	Description of shares	Proportion of shares held (%)
The following company has the address of 1st Floor, Europe Building, No.1, Haddows Road, Nungambakkam, Chennai, 600 006, India				
Standard Chartered Global Business Services Private Limited	Offshore Support Services	India	INR10.00 Equity shares	100
The following company has the address of 90 M.G.Road, II Floor, Fort, Mumbai, Maharashtra, 400 001, India				
Standard Chartered Finance Private Limited[1]	Support Services	India	INR10.00 Ordinary shares	98.68
The following company has the address of Ground Floor, Crescenzo Building, G Block, C 38/39 , Bandra Kurla Complex, Bandra (East) , Mumbai , Mumbai , Maharashtra , 400051, India				
Standard Chartered Private Equity Advisory (India) Private Limited	Support Services	India	INR1,000.00 Ordinary shares	100
The following company has the address of Second Floor, Indiqube Edge, Khata No. 571/630/6/4, Sy.No.6/4, Ambalipura Village, Varthur Hobli, Marathahalli Sub-Division, Ward No. 150, Bengaluru, 560102, India.				
Standard Chartered Research and Technology India Private Limited	Support Services	India	INR10.00 A Equity shares	100
			INR10.00 Cumulative Redeemable Preference	100
The following company has the address of Crescenzo, 6th Floor, Plot No 38-39 G Block , Bandra Kurla Complex, Bandra East, Mumbai , Maharashtra , 400051, India				
Standard Chartered Capital Limited[1]	Banking & Financial Services	India	INR10.00 Equity shares	100
The following company has the address of 2nd Floor, 23-25 M.G. Road, Fort, Mumbai, 400 001, India				
Standard Chartered Securities (India) Limited	Banking & Financial Services	India	INR10.00 Equity shares	100
The following company has the address of Ground Floor, Crescenzo Building, G Block, C 38/39, Bandra Kurla Complex, Bandra (East) , Mumbai , Mumbai , Maharashtra , 400051, India				
St Helen's Nominees India Private Limited[1]	Nominee Services	India	INR10.00 Equity shares	100
The following company has the address of Vaishnavi Serenity, First Floor, No. 112, Koramangala Industrial Area, 5th Block, Koramangala, Bangalore, Karnataka, 560095, India				
Standard Chartered (India) Modeling and Analytics Centre Private Limited[1]	Support Services	India	INR10.00 Equity shares	100
The following companies have the address of 91 Pembroke Road, Dublin 4, Ballsbridge, Dublin, DO4 EC42, Ireland				
CurrencyFair (Canada) Limited	Dormant	Ireland	€1.00 Ordinary	100
CurrencyFair Nominees Limited	Nominee company	Ireland	€1.00 Ordinary	100
The following company has the address of 32 Molesworth Street, Dublin 2, D02Y512, Ireland				
Zodia Markets (Ireland) Limited	Banking & Financial Services	Ireland	$1.00 Ordinary shares	100
The following company has the address of 27 Fitzwilliam Street, Dublin, D02 TP23, Ireland				
Zodia Custody (Ireland) Limited	Custody services	Ireland	$1.00 Ordinary shares	100
The following company has the address of 91 Pembroke Road, Dublin 4, Ballsbridge, Dublin, DO4 EC42, Ireland				
CurrencyFair Limited	FX transfer services	Ireland	€0.001 A Ordinary shares	100
			€0.001 A Ordinary shares	27.951
The following companies have the address of 1st Floor, Goldie House, 1-4 Goldie Terrace, Upper Church Street, Douglas, IM1 1EB, Isle of Man				
Standard Chartered Assurance Limited[1]	Insurance Services	Isle of Man	$1.00 Ordinary shares	100
			US$1.00 Redeemable Preference	100
Standard Chartered Isle of Man Limited[1,6]	Insurance & Reinsurance Company	Isle of Man	$1.00 Ordinary shares	100
The following company has the address of 21/F, Sanno Park Tower, 2-11-1 Nagatacho, Chiyoda-ku, Tokyo, 100-6155, Japan				
Standard Chartered Securities (Japan) Limited[1]	Banking & Financial Services	Japan	JPY Ordinary	100
The following company has the address of 15 Castle Street, St Helier, JE4 8PT, Jersey				
SCB Nominees (CI) Limited[1]	Nominee Services	Jersey	$1.00 Ordinary shares	100
The following companies have the address of StandardChartered@Chiromo, Number 48, Westlands Road, P. O. Box 30003 – 00100, Nairobi, Kenya				

39. Related undertakings of the Group continued

Name and registered address	Activity	Place of incorporation	Description of shares	Proportion of shares held (%)
Solveazy Technology Kenya Ltd	B2B digital platform	Kenya	KES1,000.00 Ordinary	100
Standard Chartered Bancassurance Intermediary Limited	Insurance Services	Kenya	KES100.00 Ordinary shares	100
Standard Chartered Investment Services Limited	Investment services	Kenya	KES20.00 Ordinary shares	100
Standard Chartered Bank Kenya Limited	Banking & Financial Services	Kenya	KES5.00 Ordinary shares	74.32
			KES5.00 Preference	100.00
Standard Chartered Securities (Kenya) Limited	Corporate Finance & Advisory Services	Kenya	KES10.00 Ordinary shares	100
Standard Chartered Financial Services Limited	Merchant Banking	Kenya	KES20.00 Ordinary shares	100
Standard Chartered Kenya Nominees Limited[1]	Nominee Services	Kenya	KES20.00 Ordinary shares	100
Tawi Fresh Kenya Limited	Digital Marketplace, Ecommerce	Kenya	KES1,000.00 Ordinary	100
The following company has the address of Atrium Building, Maarad Street, 3rd Floor, P.O.Box: 11-4081 Riad El Solh, Beirut, Beirut Central District, Lebanon				
Standard Chartered Metropolitan Holdings SAL	Investment Holding Company	Lebanon	$10.00 Ordinary A shares	100
The following companies have the address of Level 26, Equatorial Plaza, Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia				
Cartaban (Malaya) Nominees Sdn Berhad	Nominee Services	Malaysia	RM Ordinary shares	100
Cartaban Nominees (Asing) Sdn Bhd	Nominee Services	Malaysia	RM Ordinary shares	100
Cartaban Nominees (Tempatan) Sdn Bhd	Nominee Services	Malaysia	RM Ordinary shares	100
Golden Maestro Sdn Bhd	Investment Holding Company	Malaysia	RM Ordinary shares	100
Price Solutions Sdn Bhd	Direct Sales/ Collection Services	Malaysia	RM Ordinary shares	100
SCBMB Trustee Berhad	Trustee Services	Malaysia	RM Ordinary shares	100
Standard Chartered Bank Malaysia Berhad	Banking & Financial Services	Malaysia	RM Irredeemable Convertible Preference shares	100
			RM Ordinary shares	100
Standard Chartered Saadiq Berhad	Banking & Financial Services	Malaysia	RM Ordinary shares	100
The following company has the address of Suite 18-1, Level 18, Vertical Corporate Tower B, Avenue 10, The Vertical, Bangsar South City, No. 8, Jalan Kerinchi , 59200 Kuala Lumpur, Wilayah Persekutuan, Malaysia				
Resolution Alliance Sdn Bhd	Investment Holding Company	Malaysia	RM Ordinary shares	100
			Irredeemable Preference	100
The following company has the address of 12th Floor, Menara Symphony , No. 5, Jalan Prof. Khoo Kay Kim, Seksyen 13, 46200 Petaling Jaya , Selangor, Malaysia				
Solv Sdn. Bhd.	B2B digital platform offering financial services	Malaysia	RM5.00 Ordinary	100
The following company has the address of Level 1, Wisma Standard Chartered, Jalan Teknologi 8, Taman Teknologi Malaysia, 57000 Bukit Jalil, Kuala Lumpur, Wilayah Persekutuan, Malaysia				
Standard Chartered Global Business Services Sdn Bhd[1]	Offshore Support Services	Malaysia	RM Ordinary shares	100
The following company has the address of 10th Floor, Menara Hap Seng, No. 1&3, Jalan P. Ramlee, 50250 Kuala Lumpur, Malaysia				
Assembly Payments Malaysia Sdn. Bhd.	Other financial service activities	Malaysia	RM Ordinary shares	100
The following companies have the address of 6/F, Standard Chartered Tower, 19, Bank Street, Cybercity, Ebene, 72201, Mauritius				
Standard Chartered Bank (Mauritius) Limited[1]	Banking & Financial Services	Mauritius	$ Ordinary shares	100
Standard Chartered Private Equity (Mauritius) Limited[1]	Investment Management	Mauritius	$1.00 Ordinary shares	100
Standard Chartered Private Equity (Mauritius) II Limited	Investment Management	Mauritius	$1.00 Ordinary shares	100

39. Related undertakings of the Group continued

Name and registered address	Activity	Place of incorporation	Description of shares	Proportion of shares held (%)
Standard Chartered Private Equity (Mauritius) III Limited	Investment Management	Mauritius	$1.00 Ordinary shares	100
The following company has the address of Mondial Management Services Ltd, Unit 2L, 2nd Floor Standard Chartered Tower, 19 Cybercity, Ebene, Mauritius				
Subcontinental Equities Limited	Investment Holding Company	Mauritius	$1.00 Ordinary shares	100
The following company has the address of IQEQ Corporate Services (Mauritius) Ltd, 33, Edith Cavell Street, Port Louis, 11324, Mauritius				
Actis Treit Holdings (Mauritius) Limited[2]	Investment Holding Company	Mauritius	Class A $1.00 Ordinary shares	62.001
The following company has the address of Standard Chartered Bank Nepal Limited, Madan Bhandari Marg, Ward No.34, Kathmandu Metropolitan City, Kathmandu District, Bagmati Zone, Kathmandu, Nepal				
Standard Chartered Bank Nepal Limited	Banking & Financial Services	Nepal	NPR100.00 Ordinary shares	70.21
The following companies have the address of 1 Basinghall Avenue, London, EC2V 5DD, United Kingdom				
Standard Chartered Holdings (Africa) B.V.[6]	Holding company	Netherlands	€4.50 Ordinary shares	100
Standard Chartered Holdings (Asia Pacific) B.V.[6]	Holding company	Netherlands	€4.50 Ordinary shares	100
Standard Chartered Holdings (International) B.V.[6]	Holding company	Netherlands	€4.50 Ordinary shares	100
Standard Chartered MB Holdings B.V.[6]	Holding company.	Netherlands	€4.50 Ordinary shares	100
The following company has the address of 4 All good Place, Rototuna North, Hamilton, New Zealand, 3210				
PromisePay Limited	Payment Services Provider	New Zealand	NZD Ordinary shares	100
The following companies have the address of 142, Ahmadu Bello Way, Victoria Island, Lagos, 101241, Nigeria				
Standard Chartered Bank Nigeria Limited	Banking & Financial Services	Nigeria	NGN1.00 B Redeemable Preference	100
			NGN1.00 Irredeemable Non Cumulative Preference	100
			NGN1.00 Ordinary	100
Standard Chartered Capital & Advisory Nigeria Limited	Corporate Finance & Advisory Services	Nigeria	NGN1.00 Ordinary shares	100
Standard Chartered Nominees (Nigeria) Limited	Custody Services	Nigeria	NGN1.00 Ordinary shares	100
The following company has the address of P.O. Box No. 5556I.I. Chundrigar Road, Karachi, 74000, Pakistan				
Standard Chartered Bank (Pakistan) Limited[1]	Banking & Financial Services	Pakistan	PKR10.00 Ordinary shares	98.99
The following company has the address of Rondo Ignacego Daszyńskiego 2B, 00-843, Warsaw, Poland				
Standard Chartered Global Business Services spółka z ograniczoną odpowiedzialnością1	Offshore Support Services	Poland	PLN50.00 Ordinary shares	100
The following company has the address of Al Faisaliah Office Tower Floor No 7 (T07D) , King Fahad Highway, Olaya District, Riyadh P.O box 295522, Riyadh, 11351, Saudi Arabia				
Standard Chartered Capital (Saudi Arabia)[1]	Custody Services	Saudi Arabia	SAR10.00 Ordinary shares	100
The following company has the address of 9 & 11, Lightfoot Boston Street, Freetown, Sierra Leone				
Standard Chartered Bank Sierra Leone Limited	Banking & Financial Services	Sierra Leone	SLL1.00 Ordinary shares	80.7
The following companies have the address of 9 Raffles Place, #27-00 Republic Plaza, 048619, Singapore				
Actis Treit Holdings No.1 (Singapore) Private Limited[2]	Investment Holding Company	Singapore	SGD Ordinary	100
Actis Treit Holdings No.2 (Singapore) Private Limited[2]	Investment Holding Company	Singapore	SGD Ordinary	100
The following company has the address of 7 Changi Business Park Crescent, #03-00 Standard Chartered @ Changi, 486028, Singapore				
Raffles Nominees (Pte.) Limited	Nominee Services	Singapore	SGD Ordinary shares	100
The following companies have the address of 8 Marina Boulevard, #27-01 Marina Bay Financial Centre Tower 1, 018981, Singapore				

39. Related undertakings of the Group continued

Name and registered address	Activity	Place of incorporation	Description of shares	Proportion of shares held (%)
SCTS Capital Pte. Ltd	Nominee Services	Singapore	SGD Ordinary shares	100
SCTS Management Pte. Ltd.	Nominee Services	Singapore	SGD Ordinary shares	100
Standard Chartered Bank (Singapore) Limited	Banking & Financial Services	Singapore	SGD Non-cumulative Class C Tier-1 preference	100
			SGD Ordinary-A	100
			US$ Non-cumulative Class B Tier-1 Preference	100
			US$ Ordinary-A	100
			US$ Ordinary-B	100
			US$ Ordinary-C	100
Standard Chartered Trust (Singapore) Limited[1]	Trustee Services	Singapore	SGD Ordinary shares	100
Standard Chartered Holdings (Singapore) Private Limited	Investment Holding Company	Singapore	SGD Ordinary	100
			US$ Ordinary	100
Standard Chartered Nominees (Singapore) Pte Ltd[1]	Nominee Services	Singapore	SGD Ordinary shares	100
The following companies have the address of 80 Robinson Road, #02-00, 068898, Singapore				
Autumn Life Pte. Ltd.	Support Services	Singapore	$ Ordinary shares	100
Cardspal Pte. Ltd.	Support Services	Singapore	$ Ordinary shares	100
Audax Financial Technology Pte. Ltd	Support Services	Singapore	$ Ordinary shares	100
Letsbloom Pte. Ltd.	Others	Singapore	$ Ordinary shares	100
SCV Research and Development Pte. Ltd.	Others	Singapore	$ Ordinary shares	100
Pegasus Dealmaking Pte. Ltd.	Mergers and Acquisitions (M&A) marketplace	Singapore	$ Ordinary shares	100
The following companies have the address of Tricor WP Corporate Services Pte Ltd, 80 Robinson Road #02-00, 068898, Singapore				
Power2SME Pte. Ltd.	Investment Holding Entity	Singapore	$ Ordinary shares	90.6
SCV Master Holding Company Pte. Ltd.	Investment Holding Entity	Singapore	$ Ordinary shares	100
Solv-India Pte. Ltd.	Investment Holding Entity	Singapore	$ Ordinary shares	100
The following company has the address of 77 Robinson Road, #25-00 Robinson 77, 068896, Singapore				
Trust Bank Singapore Limited	Banking & Financial Services	Singapore	SGD Ordinary shares	60
The following company has the address of 1 Robinson Road, #17-00, AIA Tower, 048542, Singapore				
CurrencyFair (Singapore) Pte.Ltd	Foreign Currency conversion services.	Singapore	SGD Ordinary shares	100
The following companies have the address of 38 Beach Road, #29-11 South Beach Tower, 189767, Singapore				
Assembly Payments SGP Pte. Ltd.	Transaction/Payment Processing Services	Singapore	SGD Ordinary shares	100
Assembly Payments Pte. Ltd.	Investment holding company	Singapore	$ Ordinary shares	100
			$ Preference shares	100
The following company has the address of Abogado Pte Ltd, No. 8 Marina Boulevard, #05-02 MBFC Tower 1, 018981, Singapore				
Standard Chartered IL&FS Management (Singapore) Pte. Limited[1]	Investment Management	Singapore	$ Ordinary	50
The following companies have the address of 2nd Floor, 115 West Street, Sandton, Johannesburg, 2196, South Africa				
CMB Nominees (RF) PTY Limited[1]	Nominee Services	South Africa	ZAR1.00 Ordinary shares	100
Standard Chartered Nominees South Africa Proprietary Limited (RF)[1]	Nominee Services	South Africa	ZAR Ordinary shares	100
The following company has the address of 6 Fort Street, PO 785848, Birnam, Sandton, 2196 2146, South Africa				
Promisepay (PTY) Ltd	Payment Services Provider	South Africa	ZAR1.00 Ordinary	100
The following companies have the address of 1 Floor, International House, Shaaban Robert Street/Garden Avenue, PO Box 9011, Dar Es Salaam, Tanzania, United Republic of				

39. Related undertakings of the Group continued

Name and registered address	Activity	Place of incorporation	Description of shares	Proportion of shares held (%)
Standard Chartered Bank Tanzania Limited	Banking & Financial Services	Tanzania	TZS1,000.00 Ordinary shares	100
			TZS1,000.00 Preference	100
Standard Chartered Tanzania Nominees Limited	Nominee Services	Tanzania	TZS1,000.00 Ordinary shares	100
The following company has the address of No. 140, 11th, 12th and 14th Floor, Wireless Road, Lumpini, Patumwan, Bangkok, 10330, Thailand				
Standard Chartered Bank (Thai) Public Company Limited	Banking & Financial Services	Thailand	THB10.00 Ordinary shares	99.90
The following company has the address of Buyukdere Cad. Yapi Kredi Plaza C Blok, Kat 15, Levent, Istanbul, 34330, Turkey				
Standard Chartered Yatirim Bankasi Turk Anonim Sirketi	Banking & Financial Services	Turkey	TRL0.10 Ordinary shares	100
The following company has the address of Standard Chartered Bank Bldg, 5 Speke Road, PO Box 7111, Kampala, Uganda				
Standard Chartered Bank Uganda Limited	Banking & Financial Services	Uganda	UGS1,000.00 Ordinary shares	100
The following company has the address of EX-26, Ground Floor, Bldg 16-Co Work, Dubai Internet City, Dubai, United Arab Emirates				
Appro Onboarding Solutions FZ-LLC	IT solutions provider and support service provider.	United Arab Emirates	AED1,000.00 Ordinary shares	100
The following company has the address of Suites 507, 508, 509, 15th Floor, Al Sarab Tower, Adgm Square, Al Maryah Island, Abu Dhabi				
Financial Inclusion Technologies Ltd	Digital wallet and technology payments platform	United Arab Emirates	US$1.00 Ordinary	100
The following company has the address of 505 Howard St. #201, San Francisco, CA 94105, United States				
SC Studios, LLC[1]	Offshore Support Services	United States	Membership Interest	100
The following company has the address of Standard Chartered Bank, 37F, 1095 Avenue of the Americas, New York 10036, United States				
Standard Chartered Bank International (Americas) Limited	Banking & Financial Services	United States	$1,000.00 Ordinary shares	100
The following companies have the address of Corporation Trust Centre, 1209 Orange Street, Wilmington DE 19801, United States				
Standard Chartered Holdings Inc[1]	Investment Holding Company	United States	$100.00 Common shares	100
Standard Chartered Securities (North America) LLC	Banking & Financial Services	United States	Membership Interest	100
The following company has the address of 50 Fremont Street, San Francisco CA 94105, United States				
Standard Chartered Overseas Investment, Inc.	Investment Holding Company	United States	$10.00 Ordinary shares	100
The following companies have the address of C/O Corporation Service Company, 251 Little Falls Drive, Wilmington DE 19808, United States				
CurrencyFair (USA) Inc	Dormant	United States	$1.00 Uncertificated Shares	100
Standard Chartered Trade Services Corporation	Trade Services	United States	$0.01 Common shares	100
The following company has the address of 25 Taylor St, San Francisco, CA, 94102-3916				
Assembly Escrow Inc	Payment Services Provider	United States	$0.0001 Ordinary	100
The following company has the address of 555 Washington Av, St Louis, MO, United States of America, 63101				
Assembly Payments, Inc	Payment services provider	United States	$0.0001 Ordinary	100
The following company has the address of Level 3, #CP1.L01 and #CP2.L01, Capital Place, 29 Lieu Giai Street, Ngoc Khanh Ward, Ba Dinh District, Ha Noi, 10000, Vietnam				
Standard Chartered Bank (Vietnam) Limited	Banking & Financial Services	Vietnam	VND Charter Capital shares	100
The following companies have the address of Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG1110, Virgin Islands, British				
Sky Favour Investments Limited[5]	Investment Holding Company	Virgin Islands, British	$1.00 Ordinary shares	100
Sky Harmony Holdings Limited[5]	Investment Holding Company	Virgin Islands, British	$1.00 Ordinary shares	100

39. Related undertakings of the Group continued

Name and registered address	Activity	Place of incorporation	Description of shares	Proportion of shares held (%)
The following companies have the address of Stand No. 4642, Corner of Mwaimwena Road and Addis Ababa Dri, Lusaka, Zambia, 10101, Zambia				
Standard Chartered Bank Zambia Plc	Banking & Financial Services	Zambia	ZMW0.25 Ordinary shares	90
Standard Chartered Zambia Securities Services Nominees Limited	Nominee Services	Zambia	ZMW1.00 Ordinary shares	100
The following companies have the address of Africa Unity Square Building, 68 Nelson Mandela Avenue, Harare, Zimbabwe				
Africa Enterprise Network Trust[3]	Investment Holding Company	Zimbabwe	Interest in Trust	100
Standard Chartered Bank Zimbabwe Limited	Banking & Financial Services	Zimbabwe	$1.00 Ordinary shares	100
Standard Chartered Nominees Zimbabwe (Private) Limited	Nominee Services	Zimbabwe	$2.00 Ordinary shares	100

1 Directly held related undertaking

2 The Group has determined that these undertakings are excluded from being consolidated into the Groups accounts, and do not meet the definition of a Subsidiary under IFRS. See notes 31 and 32 for the consolidation policy and disclosure of the undertaking.

3 No share capital by virtue of being a trust

4 Limited liability company

5 The Group has determined the principal place of operation to be Hong Kong

6 The Group has determined the principal place of operation to be United Kingdom

7 Company is exempt from the requirements of the companies Act relating to the audit of individual accounts by virtue of S479A

8 Company numbers of the subsidiaries taking an audit exemption are SC Transport Leasing 1 LTD – 06787116, SC Transport Leasing 2 Limited – 06787090 and Standard Chartered Leasing (UK) Limited – 05513184

Joint ventures

Name	Activity	Place of Incorporation	Description of shares	Proportion of shares held (%)
The following company has the address of Tricor WP Corporate Services Pte Ltd, 80 Robinson Road #02-00, 068898, Singapore				
Olea Global Pte. Ltd.	Provision of trade finance products and services.	Singapore	$ Ordinary shares	50
			$ Preference shares	100

Associates

Name	Activity	Place of Incorporation	Description of shares	Proportion of shares held (%)
The following company has the address of 41 Luke Street, London, EC2A 4DP , United Kingdom				
Fintech for International Development Ltd	Financial intermediation	United Kingdom	$0.0001 Ordinary-A	44.445
The following company has the address of 1 Raffles Quay, #23-01, One Raffles Quay, 048583, Singapore				
Clifford Capital Holdings Pte. Ltd.	Investment Holding Company	Singapore	$1.00 Ordinary shares	9.9
The following company has the address of 10 Marina Boulevard #08-08, Marina Bay, Financial Centre, 018983, Singapore				
Verified Impact Exchange Holdings Pte. Ltd	Exchange offering liquidity of trade	Singapore	SGD Ordinary shares	15
			$ Redeemable Convertible Preference shares	28.571
The following company has the address of Victoria House, State House Avenue, Victoria, MAHE, Seychelles				
Seychelles International Mercantile Banking Corporation Limited.	Commercial Bank	Seychelles	SCR1,000.00 Ordinary shares	22
The following company has the address of Avenue de Tivoli 2, 1007, Lausanne, Switzerland				
Metaco SA	Integrated infrastructure solutions	Switzerland	CHF 0.01 Preference A Shares	29.505

39. Related undertakings of the Group continued

Significant investment holdings and other related undertakings

Name	Activity	Place of Incorporation	Description of shares	Proportion of shares held (%)
The following company has the address of 1 Bartholomew Lane, London, EC2N 2AX, United Kingdom				
Corrasi Covered Bonds (LM) Limited[1]	Liquidation member representing the bond holders	United Kingdom	£1.00 Ordinary	20
The following company has the address of Intertrust Corporate Services (Cayman) Limited, 190 Elgin Avenue, George Town, Grand Cayman , KY1-9005, Cayman Islands				
ATSC Cayman Holdco Limited	Investment holding	Cayman Islands	$0.01 Ordinary-A shares	5.272
			$0.01 Ordinary-B shares	100
The following company has the address of 3, Floor 1, No.1, Shiner Wuxingcaiyuan, West Er Huan Rd, , Xi Shan District, Kunming, Yunnan Province, PRC , China				
Yunnan Golden Shiner Property Development Co., Ltd.	Real Estate Developers	China	CNY1.00 Ordinary shares	37.5
The following companies have the address of Unit 605-08, 6/F Wing On Centre, 111 Connaught Road, Central, Sheung Wan, Hong Kong				
Actis Temple Stay Holdings (HK) Limited	Investment holding	Hong Kong	$ Class A Ordinary shares	39.689
			$ Class B Ordinary shares	39.689
Actis Rivendell Holdings (HK) Limited	Investment holding	Hong Kong	$ Class A Ordinary shares	39.689
			$ Class B Ordinary shares	39.689
The following company has the address of 1221 A, Devika Tower, 12th Floor, 6 Nehru Place, New Delhi 110019, New Delhi, 110019, India				
Mikado Realtors Private Limited	Other business activities	India	INR10.00 Ordinary shares	26
The following company has the address of 4thFloor, 274, Chitalia House, Dr. Cawasji Hormusji Road, Dhobi Talao, Mumbai City, Maharashtra, India 400 002, Mumbai, 400 002, India				
Industrial Minerals and Chemical Co. Pvt. Ltd	Minerals and Chemical	India	INR100.00 Ordinary shares	26
The following company has the address of Deloitte Anjin Korea, 5F., One IFC, 23, Yoido-dong, Youngdeungpo-gu, Seoul, Korea, Republic of				
Ascenta III	Investment making	Korea	KRW Class B Equity Interest	31
The following company has the address of 49, Sungei Kadut Avenue, #03-01 S729673, Singapore				
Omni Centre Pte. Ltd.	Real Estate Owners & Developers	Singapore	SGD Redeemable Convertible Preference shares	99.998
The following company has the address of 251 Little Falls Drive, Wilmington, New Castle DE 19808, United States				
Paxata, Inc.	Data Analytics	United States	US$0.0001 Series C2 Preferred Stock	40.74
			US$0.0001 Series C3 Preferred Stock	8.91

1 Directly held related undertaking

39. Related undertakings of the Group continued

In liquidation

Subsidiary undertakings

Name	Activity	Place of Incorporation	Description of shares	Proportion of shares held (%)
The following company has the address of "C/O Teneo Restructuring Limited 156 Great Charles Street Queensway Birmingham West Midlands B3 3HN"				
Standard Chartered Masterbrand Licensing Limited	To manage intellectual property for Group	United Kingdom	$1.00 Ordinary Shares	100
The following companies have the address of Bucktrout House, Glategny Esplanade, St Peter Port, GY1 3HQ, Guernsey				
Birdsong Limited	Fiduciary Services	Guernsey	£1.00 Ordinary shares	100
Nominees One Limited	Fiduciary Services	Guernsey	£1.00 Ordinary shares	100
Nominees Two Limited	Fiduciary Services	Guernsey	£1.00 Ordinary shares	100
Songbird Limited	Fiduciary Services	Guernsey	£1.00 Ordinary shares	100
Standard Chartered Secretaries (Guernsey) Limited	Fiduciary Services	Guernsey	£1.00 Ordinary shares	100
Standard Chartered Trust (Guernsey) Limited[1]	Fiduciary Services	Guernsey	£1.00 Ordinary shares	100
The following company has the address of 30 Rue Schrobilgen, 2526, Luxembourg				
Standard Chartered Financial Services (Luxembourg) S.A.	Corporate Finance & Advisory Services	Luxembourg	€25.00 Ordinary shares	100
The following company has the address of Jiron Huascar 2055, Jesus Maria, Lima 15072, Peru				
Banco Standard Chartered en Liquidacion[1]	Used to provide banking services	Peru	$75.133 Ordinary shares	100
The following company has the address of Luis Alberto de Herrera 1248, Torre II, Piso 11, Esc. 1111, Uruguay				
Standard Chartered Uruguay Representacion S.A.[1]	financial counselling services	Uruguay	UYU1.00 Ordinary shares	100
The following company has the address of C/o WALKERS CORPORATE LIMITED, 190 Elgin Avenue George Town Grand Cayman KY1-9008 , Cayman Islands				
Sirat Holdings Limited[1]	Investment Holding Entity	Cayman Islands	$0.01 Ordinary shares	100
The following company has the address of c/o Ocorian Corporate Services (Mauritius) Ltd, 6th Floor, Tower A, 1 Cybercity, Ebene, 72201, Mauritius				
Standard Chartered Financial Holdings	Investment Holding Company	Mauritius	$1.00 Ordinary shares	100
The following company has the address of 142, Ahmadu Bello Way, Victoria Island, Lagos, 101241, Nigeria				
Cherroots Nigeria Limited	Investment Holding Company	Nigeria	NGN1.00 Ordinary Shares	100

1 Directly held related undertaking

39. Related undertakings of the Group continued

Liquidated/dissolved/sold

Subsidiary undertakings

Name	Activity	Place of Incorporation	Description of shares	Proportion of shares held (%)
The following companies have the address of Unit 605-08, 6/F Wing On Centre, 111 Connaught Road, Central, Sheung Wan, Hong Kong				
Actis Jack Holdings (HK) Limited	Investment holding	Hong Kong	$ Class A Ordinary shares	39.689
			$ Class B Ordinary shares	39.689
Actis Young City Holdings (HK) Limited	Investment holding	Hong Kong	$ Class A Ordinary shares	39.689
			$ Class B Ordinary shares	39.689
The following company has the address of 2 More London Riverside, London SE1 2JT, United Kingdom				
Bricks (M) LP2	Investment Holding Company	United Kingdom	Limited Partnership interest	100
The following company has the address of 1 Basinghall Avenue, London, EC2V 5DD, United Kingdom				
Standard Chartered Strategic Investments Limited[2]	Investment holding Company	United Kingdom	$1.00 Ordinary shares	100
The following company has the address of "C/O Teneo Restructuring Limited 156 Great Charles Street Queensway Birmingham West Midlands B3 3HN"				
Compass Estates Limited[1]	Investment holding Company	United Kingdom	£1.00 Ordinary shares	100
The following company has the address of Menara Standard Chartered, 3rd Floor, Jl. Prof.Dr. Satrio no. 164, Setiabudi, Jarkarta Selatan, Indonesia				
PT Solusi Cakra Indonesia (dalam likuidasi)[1]	Banking & Financial Services	Indonesia	IDR23,809,600.00 Ordinary shares	99
The following company has the address of No. 157 – 157 A, Jakarta Barat, 11130, Indonesia.				
PT. Price Solutions Indonesia (dalam likuidasi)	Direct Sales/ Collection Services	Indonesia	$100.00 Ordinary shares	100
The following company has the address of Standard Chartered@Chiromo, Number 48, Westlands Road, P. O. Box 30003-00100, Nairobi, Kenya				
Standard Chartered Management Services Limited	Investment Management	Kenya	KES20.00 Ordinary shares	100
The following company has the address of M6-2701, West 27Fl, Suha-dong, 26, Eulji-ro 5-gil, Jung-gu, Seoul, Korea, Republic of				
Resolution Alliance Korea Ltd	Investment Management	Korea, Republic of	KRW5,000.00 Ordinary shares	100
The following company has the address of 8/Floor, Gloucester Tower , The Landmark, 15 Queen's Road Central, Hong Kong				
Leopard Hong Kong Limited	Holding Company	Hong Kong	$ Ordinary shares	100
The following company has the address of 8 Marina Boulevard, Level 27, Marina Bay Financial Centre, Tower 1, 018981, Singapore				
Standard Chartered (2000) Limited	Others	Singapore	SGD1.00 Ordinary shares	100
The following companies has the address of C/o IQ EQ Corporate Services (Mauritius) Ltd, 33 Edith Cavell Street, Port Louis, 11324, Mauritius				
FAI Limited	Investment Advisory services	Mauritius	$1.00 Ordinary shares	76.598
The following company has the address of Level 26, Equatorial Plaza, Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia				
Popular Ambience Sdn Bhd	To undertake investments in non-performing loans	Malaysia	RM Ordinary shares	100
The following company has the address of Lot 6.05, Level 6, KPMG Tower, 8 First Avenue, Bandar Utama, 47800 Petaling Jaya, Selangor, Malaysia				
House Network SDN BHD	Administration of shared ATM network	Malaysia	RM1.00 Ordinary shares	25

1 Directly held related undertaking

2 Internal sale to Standard Chartered I H Ltd

Insured and uninsured deposits

SCB operates and provides services to customers across many countries and insured deposit is determined on the basis of limits enacted within local regulations.

	2022 Bank deposits $million	2022 Customer accounts $million	2021 Bank deposits $million	2021 Customer accounts $million
Insured deposits	28	16,218	90	17,956
Current accounts	8	8,336	10	10,694
Savings deposits	–	4,352	–	4,199
Time deposits	20	3,467	80	2,841
Other deposits	–	63	–	222
Uninsured deposits	31,244	279,269	30,266	287,882
Current accounts	18,970	107,316	21,710	115,582
Savings deposits	–	14,339	–	16,946
Time deposits	5,381	110,379	3,217	96,841
Other deposits	6,893	47,235	5,339	58,514
Total	31,272	295,487	30,356	305,838

Classification of insured deposits is based on the local deposits insurance regulations existing in the jurisdictions in which the Group operates. The jurisdiction with the most significant levels of customer deposits is Singapore, which provides insurance for deposits up to SGD 75,000, in each case based on the total relationship value.

UK and non-UK deposits

The following table summarises the split of Bank and Customer deposits into UK and Non-UK deposits for respective account lines based on the domicile or residence of the clients.

	2022 Bank deposits $million	2022 Customer accounts $million	2021 Bank deposits $million	2021 Customer accounts $million
UK deposits	4,109	36,461	2,554	30,232
Current accounts	849	7,481	1,631	10,215
Savings deposits	–	34	–	29
Time deposits	1,004	6,558	112	7,484
Other deposits	2,256	22,388	811	12,504
Non-UK deposits	27,163	259,026	27,802	275,606
Current accounts	18,129	108,171	20,089	116,061
Savings deposits	–	18,657	–	21,116
Time deposits	4,397	107,288	3,185	92,198
Other deposits	4,637	24,910	4,528	46,231
Total	31,272	295,487	30,356	305,838

Contractual maturity of Loans, Investment securities and Deposits

2022	Loans and advances to banks $million	Loans and advances to customers $million	Investment securities – Treasury and other eligible Bills $million	Investment securities – Debt securities $million	Investment securities – Equity shares $million	Bank deposits $million	Customer accounts $million
One year or less	47,334	139,074	25,668	20,194	–	29,918	288,472
Between one and five years	3,549	28,958	430	40,005	–	1,348	6,860
Between five and ten years	361	9,435	–	17,884	–	6	90
Between ten years and fifteen years	92	6,387	–	12,843	–	–	48
More than fifteen years and undated	182	17,394	–	8,811	2,490	–	17
Total	51,518	201,248	26,098	99,737	2,490	31,272	295,487
Total amortised cost and FVOCI exposures	27,383	158,126					
Fixed interest rate exposures	26,083	89,636					
Floating interest rate exposures	1,300	68,490					

	2021						
	Loans and advances to banks $million	Loans and advances to customers $million	Investment securities – Treasury and other eligible Bills $million	Investment securities – Debt securities $million	Investment securities – Equity shares $million	Bank deposits $million	Customer accounts $million
One year or less	49,284	148,126	13,159	17,657	–	30,236	300,933
Between one and five years	2,750	28,892	393	48,951	–	118	4,572
Between five and ten years	143	8,293	–	19,402	–	2	324
Between ten years and fifteen years	–	–	–	17,547	–	–	10
More than fifteen years and undated	152	23,698	–	–	5,160	–	–
Total	52,329	209,009	13,552	103,557	5,160	30,356	305,839

Total amortised cost and FVOCI exposures	29,999	144,799
Fixed interest rate exposures	27,870	76,689
Floating interest rate exposures	2,129	68,110

Maturity and yield of Debt securities, alternative tier one and other eligible bills held at amortised cost

	2022									
	One year or less		**Between one and five years**		**Between five and ten years**		**More than ten years**		**Total**	
	$million	**Yield %**	**$million**	**Yield %**	**$million**	**Yield %**	**$million**	**Yield %**	**$million**	**Yield %**
Central and other government agencies										
– US	**1,860**	**1.56**	**3,803**	**1.42**	**4,900**	**1.27**	**4,498**	**3.47**	**15,062**	**2.00**
– UK	**–**	**–**	**85**	**1.98**	**60**	**0.50**	**47**	**0.90**	**191**	**1.26**
– Other	**579**	**2.58**	**5,401**	**2.39**	**3,056**	**2.21**	**–**	**–**	**9,036**	**2.34**
Other debt securities	**3,188**	**4.66**	**1,982**	**5.64**	**1,453**	**3.82**	**10,890**	**3.32**	**17,513**	**3.87**
As at 31 December 2022	**5,627**	**3.42**	**11,271**	**2.63**	**9,469**	**1.96**	**15,435**	**3.36**	**41,802**	**2.85**

	2021									
	One year or less		Between one and five years		Between five and ten years		More than ten years		Total	
	$million	Yield %	$million	Yield %	$million	Yield %	$million	Yield %	$million	Yield %
Central and other government agencies										
– US	250	1.75	4,366	1.38	4,763	1.18	3,418	3.00	12,797	1.75
– UK	–	–	49	2.67	114	0.81	52	0.91	215	1.26
– Other	937	1.55	2,550	1.89	1,286	1.41	–	–	4,773	1.69
Other debt securities	1,584	6.43	1,368	5.34	685	3.12	7,792	0.76	11,429	2.24
As at 31 December 2021	2,771	4.36	8,333	2.19	6,848	1.41	11,262	1.44	29,214	1.93

The maturity distributions are presented in the above table on the basis of contractual maturity dates. The weighted average yield for each range of maturities is calculated by dividing the annualised interest income for the year by the book amount of debt securities at that date.

Average balance sheets and yields and volume and price variances

Average balance sheets and yields

For the purposes of calculating net interest margin the following adjustments are made:

Statutory net interest income is adjusted to remove interest expense on amortised cost liabilities used to provide funding to the financial Markets business.

Financial instruments measured at fair value through profit or loss are classified as non-interest earning Premiums on financial guarantees purchased to manage interest earning assets are treated as interest expense In the Group's view this results in a net interest margin that is more reflective of banking book performance.

The following tables set out the average balances and yields for the SC Bank Group's assets and liabilities for the periods ended 31 December 2022 and 31 December 2021 under the revised definition of net interest margin.

For the purpose of these tables, average balances have been determined on the basis of daily balances, except for certain categories, for which balances have been determined less frequently. The Group does not believe that the information presented in these tables would be significantly different had such balances been determined on a daily basis.

	2022				
Average assets	**Average non-interest earning balance $million**	**Average interest earning balance $million**	**Interest income $million**	**Gross yield %**	**Gross yield total balance %**
Cash and balances at central banks	**14,190**	**52,002**	**745**	**1.43**	**1.13**
Gross loans and advances to banks	**28,252**	**28,560**	**635**	**2.22**	**1.12**
Gross loans and advances to customers	**56,483**	**155,518**	**5,766**	**3.71**	**2.72**
Impairment provisions against loans and advances to banks and customers	**–**	**(4,804)**	**–**	**–**	**–**
Investment securities – Treasury and Other Eligible Bills	**3,485**	**14,113**	**518**	**3.67**	**2.94**
Investment securities – Debt Securities	**9,776**	**92,171**	**2,037**	**2.21**	**2.00**
Investment securities – Equity Shares	**2,860**	**–**	**–**	**–**	**–**
Due from subsidiary undertakings and other related parties	**–**	**6,387**	**64**	**1.00**	**1.00**
Property, plant and equipment and intangible assets	**3,873**	**–**	**–**	**–**	**–**
Prepayments, accrued income and other assets	**111,206**	**–**	**–**	**–**	**–**
Investment associates and joint ventures	**220**	**–**	**–**	**–**	**–**
Total average assets	**230,345**	**343,947**	**9,765**	**2.84**	**1.70**

	2021				
Average assets	Average non-interest earning balance $million	Average interest earning balance $million	Interest income $million	Gross yield %	Gross yield total balance %
Cash and balances at central banks	15,793	52,988	67	0.13	0.10
Gross loans and advances to banks	20,323	27,751	321	1.16	0.67
Gross loans and advances to customers	51,613	154,699	4,231	2.73	2.05
Impairment provisions against loans and advances to banks and customers	–	(5,542)	–	–	–
Investment securities – Treasury and Other Eligible Bills	3,359	9,991	285	2.85	2.13
Investment securities – Debt Securities	10,836	83,287	1,240	1.49	1.32
Investment securities – Equity Shares	3,481	–	–	–	–
Due from subsidiary undertakings and other related parties	–	7,011	41	0.58	0.58
Property, plant and equipment and intangible assets	3,771	–	–	–	–
Prepayments, accrued income and other assets	85,066	–	–	–	–
Investment associates and joint ventures	138	–	–	–	–
Total average assets	194,380	330,185	6,185	1.87	1.18

Average liabilities	2022 Average non-interest bearing balance $million	Average interest bearing balance $million	Interest expense $million	Rate paid %	Rate paid total balance %
Deposits by banks	12,185	22,783	358	1.57	1.02
Customer accounts:					
Current accounts	31,956	100,431	968	0.96	0.73
Savings deposits	–	20,621	454	2.20	2.20
Time deposits	7,736	94,825	1,295	1.37	1.26
Other deposits	52,918	3,888	78	2.01	0.14
Debt securities in issue	6,250	29,800	367	1.23	1.02
Due to parent companies, subsidiary undertakings & other related parties	–	29,003	1,204	4.15	4.15
Accruals, deferred income and other liabilities	102,775	548	28	5.11	0.03
Subordinated liabilities and other borrowed funds	–	15,065	562	3.73	3.73
Non-controlling interests	2,972	–	–	–	–
Shareholders' funds	40,536	–	–	–	–
	257,328	316,964	5,314	1.68	0.93
Adjustment for Financial Markets funding costs			(324)		
Financial guarantee fees on interest earning assets			80		
Total average liabilities and shareholders' funds	257,328	316,964	5,070	1.60	0.88

Average liabilities	2021 Average non-interest bearing balance $million	Average interest bearing balance $million	Interest expense $million	Rate paid %	Rate paid total balance %
Deposits by banks	12,764	23,476	68	0.29	0.19
Customer accounts:					
Current accounts	31,049	87,603	210	0.24	0.18
Savings deposits	–	19,996	245	1.23	1.23
Time deposits	6,765	87,965	207	0.24	0.22
Other deposits	45,027	6,373	22	0.35	0.04
Debt securities in issue	4,622	26,705	98	0.37	0.31
Due to parent companies, subsidiary undertakings & other related parties	–	30,392	825	2.71	2.71
Accruals, deferred income and other liabilities	81,827	624	34	5.45	0.04
Subordinated liabilities and other borrowed funds	–	15,087	424	2.81	2.81
Non-controlling interests	3,036	–	–	–	–
Shareholders' funds	41,255	–	–	–	–
	226,344	298,221	2,133	0.72	0.41
Adjustment for Financial Markets funding costs			(121)		
Financial guarantee fees on interest earning assets			99		
Total average liabilities and shareholders' funds	226,344	298,221	2,111	0.71	0.40

Net interest margin

	2022 $million	2021 $million
Interest income (statutory)	**9,765**	6,185
Average interest earning assets	**343,947**	330,185
Gross yield (%)	**2.84**	1.87
Interest expense (statutory)	**5,314**	2,133
Adjustment for Financial Markets funding costs	**(324)**	(121)
Financial guarantee fees on interest earning assets	**80**	99
Adjusted interest expense used to fund financial instruments held at fair value	**5,070**	2,111
Average interest-bearing liabilities	**316,964**	298,221
Rate paid (%)	**1.60**	0.71
Net yield (%)	**1.24**	1.16
Net interest income adjusted for Financial Markets funding costs and Financial guarantee fees on interest earning assets	**4,695**	4,074
Net interest margin (%)	**1.37**	1.23

Volume and price variances

The following table analyses the estimated change in the Group's net interest income attributable to changes in the average volume of interest-earning assets and interest-bearing liabilities, and changes in their respective interest rates for the years presented.

Volume and rate variances have been determined based on movements in average balances and average exchange rates over the year and changes in interest rates on average interest-earning assets and average interest- bearing liabilities.

	2022 versus 2021		
	(Decrease)/increase in interest due to:		Net increase/ (decrease) in interest
	Volume $million	Rate $million	$million
Interest earning assets			
Cash and unrestricted balances at central banks	(14)	692	678
Loans and advances to banks	18	296	314
Loans and advances to customers	59	1,475	1,534
Investment securities	313	717	1,030
Due from subsidiary undertakings and other related parties	(6)	30	24
Total interest earning assets	370	3,210	3,580
Interest bearing liabilities			
Subordinated liabilities and other borrowed funds	–	138	138
Deposits by banks	(11)	301	290
Customer accounts:			
Current accounts and savings deposits	89	818	907
Time and other deposits	88	1,111	1,199
Debt securities in issue	39	230	269
Due to parent companies, subsidiary undertakings & other related parties	(58)	436	378
Total interest bearing liabilities	147	3,034	3,181

	2021 versus 2020		
	(Decrease)/increase in interest due to:		Net increase/ (decrease) in interest $million
	Volume $million	Rate $million	
Interest earning assets			
Cash and unrestricted balances at central banks	15	(38)	(23)
Loans and advances to banks	(71)	(161)	(232)
Loans and advances to customers	(36)	(797)	(833)
Investment securities	120	(632)	(512)
Due from subsidiary undertakings and other related parties	(15)	(8)	(23)
Total interest earning assets	13	(1,636)	(1,623)
Interest bearing liabilities			
Subordinated liabilities and other borrowed funds	(9)	(106)	(115)
Deposits by banks	1	(88)	(87)
Customer accounts:			
Current accounts and savings deposits	(12)	(239)	(251)
Time and other deposits	(29)	(841)	(870)
Debt securities in issue	9	(160)	(151)
Due to parent companies, subsidiary undertakings & other related parties	(3)	(96)	(99)
Total interest bearing liabilities	(43)	(1,530)	(1,573)

Glossary

AT1 or Additional Tier 1 capital
Additional Tier 1 capital consists of instruments other than Common Equity Tier 1 that meet the Capital Requirements Regulation (CRR) criteria for inclusion in Tier 1 capital.

Additional value adjustment
See Prudent valuation adjustment.

Advanced Internal Rating Based (AIRB) approach
The AIRB approach under the Basel framework is used to calculate credit risk capital based on the Group's own estimates of prudential parameters.

Alternative performance measures
A financial measure of historical or future financial performance, financial position, or cash flows, other than a financial measure defined or specified in the applicable financial reporting framework.

ASEAN
Association of South East Asian Nations (ASEAN) which includes the Group's operations in Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam.

AUM or Assets under management
Total market value of assets such as deposits, securities and funds held by the Group on behalf of the clients.

Basel II
The capital adequacy framework issued by the Basel Committee on Banking Supervision (BCBS) in June 2006 in the form of the International Convergence of Capital Measurement and Capital Standards.

Basel III
The global regulatory standards on bank capital adequacy and liquidity, originally issued in December 2010 and updated in June 2011. In December 2017, the BCBS published a document setting out the finalisation of the Basel III framework. The latest requirements issued in December 2017 will be implemented from 2022.

BCBS or Basel Committee on Banking Supervision
A forum on banking supervisory matters which develops global supervisory standards for the banking industry. Its members are officials from 45 central banks or prudential supervisors from 27 countries and territories.

Basic earnings per share (EPS)
Represents earnings divided by the basic weighted average number of shares.

Basis point (bps)
One hundredth of a per cent (0.01 per cent); 100 basis points is 1 per cent.

CRD or Capital Requirements Directive
A capital adequacy legislative package adopted by the PRA. CRD comprises the Capital Requirements Directive and the UK onshored Capital Requirements Regulation (CRR). The package implements the Basel III framework together with transitional arrangements for some of its requirements. CRD IV came into force on 1 January 2014. The EU CRR II and CRD V amending the existing package came into force in June 2019 with most changes starting to apply from 28 June 2021. Only those parts of the EU CRR II that applied on or before 31 December 2020, when the UK was a member of the EU, have been implemented. The PRA recently finalised the UK's version of the CRR II for implementation on 1 January 2022.

Capital-lite income
Income derived from products with low RWA consumption or products which are non-funding in nature.

Capital resources
Sum of Tier 1 and Tier 2 capital after regulatory adjustments.

CGU or Cash-generating unit
The smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

Cash shortfall
The difference between the cash flows that are due in accordance with the contractual terms of the instrument and the cash flows that the Group expects to receive over the contractual life of the instrument.

Clawback
An amount an individual is required to pay back to the Group, which has to be returned to the Group under certain circumstances.

Commercial real estate
Includes office buildings, industrial property, medical centres, hotels, malls, retail stores, shopping centres, farm land, multi-family housing buildings, warehouses, garages, and industrial properties. Commercial real estate loans are those backed by a package of commercial real estate assets.

CET1 or Common Equity Tier 1 capital
Common Equity Tier 1 capital consists of the common shares issued by the Group and related share premium, retained earnings, accumulated other comprehensive income and other disclosed reserves, eligible non-controlling interests and regulatory adjustments required in the calculation of Common Equity Tier 1.

CET1 ratio
A measure of the Group's CET1 capital as a percentage of risk-weighted assets.

Contractual maturity
Contractual maturity refers to the final payment date of a loan or other financial instrument, at which point all the remaining outstanding principal and interest is due to be paid.

Countercyclical capital buffer
The countercyclical capital buffer (CCyB) is part of a set of macroprudential instruments, designed to help counter procyclicality in the financial system. CCyB as defined in the Basel III standard provides for an additional capital requirement of up to 2.5 per cent of risk-weighted assets in a given jurisdiction. The Bank of England's Financial Policy Committee has the power to set the CCyB rate for the United Kingdom. Each bank must calculate its 'institution-specific' CCyB rate, defined as the weighted average of the CCyB rates in effect across the jurisdictions in which it has credit exposures. The institution-specific CCyB rate is then applied to a bank's total risk-weighted assets.

Counterparty credit risk
The risk that a counterparty defaults before satisfying its obligations under a derivative, a securities financing transaction (SFT) or a similar contract.

CCF or Credit conversion factor
An estimate of the amount the Group expects a customer to have drawn further on a facility limit at the point of default. This is either prescribed by CRR or modelled by the bank.

CDS or Credit default swaps
A credit derivative is an arrangement whereby the credit risk of an asset (the reference asset) is transferred from the buyer to the seller of protection. A credit default swap is a contract where the protection seller receives premium or interest-related payments in return for contracting to make payments to the protection buyer upon a defined credit event. Credit events normally include bankruptcy, payment default on a reference asset or assets, or downgrades by a rating agency.

Credit institutions
An institution whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account.

Credit risk mitigation
Credit risk mitigation is a process to mitigate potential credit losses from any given account, customer or portfolio by using a range of tools such as collateral, netting agreements, credit insurance, credit derivatives and guarantees.

CVA or Credit valuation adjustments
An adjustment to the fair value of derivative contracts that reflects the possibility that the counterparty may default such that the Group would not receive the full market value of the contracts.

Customer accounts
Money deposited by all individuals and companies which are not credit institutions including securities sold under repurchase agreement (see repo/reverse repo). Such funds are recorded as liabilities in the Group's balance sheet under customer accounts.

Days past due
One or more days that interest and/or principal payments are overdue based on the contractual terms.

DVA or Debit valuation adjustment
An adjustment to the fair value of derivative contracts that reflects the possibility that the Group may default and not pay the full market value of contracts.

Debt securities
Debt securities are assets on the Group's balance sheet and represent certificates of indebtedness of credit institutions, public bodies or other undertakings excluding those issued by central banks.

Debt securities in issue
Debt securities in issue are transferable certificates of indebtedness of the Group to the bearer of the certificate. These are liabilities of the Group and include certificates of deposits.

Deferred tax asset
Income taxes recoverable in future periods in respect of deductible temporary differences between the accounting and tax base of an asset or liability that will result in tax deductible amounts in future periods, the carry-forward of tax losses or the carry-forward of unused tax credits.

Deferred tax liability
Income taxes payable in future periods in respect of taxable temporary differences between the accounting and tax base of an asset or liability that will result in taxable amounts in future periods.

Default
Financial assets in default represent those that are at least 90 days past due in respect of principal or interest and/or where the assets are otherwise considered to be unlikely to pay, including those that are credit-impaired.

Defined benefit obligation
The present value of expected future payments required to settle the obligations of a defined benefit scheme resulting from employee service.

Defined benefit scheme
Pension or other post-retirement benefit scheme other than a defined contribution scheme.

Defined contribution scheme
A pension or other post-retirement benefit scheme where the employer's obligation is limited to its contributions to the fund.

Delinquency
A debt or other financial obligation is considered to be in a state of delinquency when payments are overdue. Loans and advances are considered to be delinquent when consecutive payments are missed. Also known as arrears.

Deposits by banks
Deposits by banks comprise amounts owed to other domestic or foreign credit institutions by the Group including securities sold under repo.

Dividend per share
Represents the entitlement of each shareholder in the share of the profits of the Company. Calculated in the lowest unit of currency in which the shares are quoted.

Early alert, purely and non-purely precautionary
A borrower's account which exhibits risks or potential weaknesses of a material nature requiring closer monitoring, supervision, or attention by management. Weaknesses in such a borrower's account, if left uncorrected, could result in deterioration of repayment prospects and the likelihood of being downgraded to credit grade 12 or worse. When an account is on early alert, it is classified as either purely precautionary or non-purely precautionary. A purely precautionary account is one that exhibits early alert characteristics, but these do not present any imminent credit concern. If the symptoms present an imminent credit concern, an account will be considered for classification as non-purely precautionary.

Effective tax rate
The tax on profit/(losses) on ordinary activities as a percentage of profit/(loss) on ordinary activities before taxation.

Encumbered assets
On-balance sheet assets pledged or used as collateral in respect of certain of the Group's liabilities.

EU or European Union
The European Union (EU) is a political and economic union of 27 member states that are located primarily in Europe.

Eurozone
Represents the 19 EU countries that have adopted the euro as their common currency.

ECL or Expected credit loss
Represents the present value of expected cash shortfalls over the residual term of a financial asset, undrawn commitment or financial guarantee.

Expected loss
The Group measure of anticipated loss for exposures captured under an internal ratings-based credit risk approach for capital adequacy calculations. It is measured as the Group-modelled view of anticipated loss based on probability of default, loss given default and exposure at default, with a one-year time horizon.

Exposures
Credit exposures represent the amount lent to a customer, together with any undrawn commitments.

EAD or Exposure at default
The estimation of the extent to which the Group may be exposed to a customer or counterparty in the event of, and at the time of, that counterparty's default. At default, the customer may not have drawn the loan fully or may already have repaid some of the principal, so that exposure is typically less than the approved loan limit.

ECAI or External Credit Assessment Institution
External credit ratings are used to assign risk-weights under the standardised approach for sovereigns, corporates and institutions. The external ratings are from credit rating agencies that are registered or certified in accordance with the credit rating agencies regulation or from a central bank issuing credit ratings which is exempt from the application of this regulation.

FCA or Financial Conduct Authority
The Financial Conduct Authority regulates the conduct of financial firms and, for certain firms, prudential standards in the UK. It has a strategic objective to ensure that the relevant markets function well.

Forbearance
Forbearance takes place when a concession is made to the contractual terms of a loan in response to an obligor's financial difficulties. The Group classifies such modified loans as either 'Forborne – not impaired loans' or 'Loans subject to forbearance – impaired'. Once a loan is categorised as either of these, it will remain in one of these two categories until the loan matures or satisfies the 'curing' conditions described in Note 8 to the financial statements.

Forborne – not impaired loans
Loans where the contractual terms have been modified due to financial difficulties of the borrower, but the loan is not considered to be impaired. See 'Forbearance'.

Funded/unfunded exposures
Exposures where the notional amount of the transaction is funded or unfunded. Represents exposures where a commitment to provide future funding is made but funds have been released/not released.

FVA or Funding valuation adjustments
FVA reflects an adjustment to fair value in respect of derivative contracts that reflects the funding costs that the market participant would incorporate when determining an exit price.

G-SIBs or Global Systemically Important Banks
Global banking financial institutions whose size, complexity and systemic interconnectedness mean that their distress or failure would cause significant disruption to the wider financial system and economic activity. The list of G-SIBs is assessed under a framework established by the FSB and the BCBS. In the UK, the G-SIB framework is implemented via the CRD and G-SIBs are referred to as Global Systemically Important Institutions (G-SIIs).

G-SIB buffer
A CET1 capital buffer which results from designation as a G-SIB. The G-SIB buffer is between 1 per cent and 3.5 per cent, depending on the allocation to one of five buckets based on the annual scoring. In the EU, the G-SIB buffer is implemented via CRD IV as Global Systemically Important Institutions (G-SII) buffer requirement.

Hong Kong regional hub
Standard Chartered Bank (Hong Kong) Limited and its subsidiaries including the primary operating entities in China, Korea and Taiwan. Standard Chartered PLC is the ultimate parent company of Standard Chartered Bank (Hong Kong) Limited.

Interest rate risk
The risk of an adverse impact on the Group's income statement due to changes in interest rates.

IRB or internal ratings-based approach
Risk-weighting methodology in accordance with the Basel Capital Accord where capital requirements are based on a firm's own estimates of prudential parameters.

Internal model approach
The approach used to calculate market risk capital and RWA with an internal market risk model approved by the PRA under the terms of CRD/CRR.

IAS or International Accounting Standard
A standard that forms part of the International Financial Reporting Standards framework.

IASB or International Accounting Standards Board
An independent standard-setting body responsible for the development and publication of IFRS, and approving interpretations of IFRS standards that are recommended by the IFRS Interpretations Committee (IFRIC).

IFRS or International Financial Reporting Standards
A set of international accounting standards developed and issued by the International Accounting Standards Board, consisting of principles-based guidance contained within IFRSs and IASs. All companies that have issued publicly traded securities in the EU are required to prepare annual and interim reports under IFRS and IAS standards that have been endorsed by the EU.

IFRIC
The IFRS Interpretations Committee supports the IASB in providing authoritative guidance on the accounting treatment of issues not specifically dealt with by existing IFRSs and IASs.

Income return on risk weighted assets (IRORWA)
Annualised income excluding Debit Valuation Adjustment as a percentage of Average RWA.

Investment grade
A debt security, treasury bill or similar instrument with a credit rating measured by external agencies of AAA to BBB.

Leverage ratio
A ratio introduced under CRD IV that compares Tier 1 capital to total exposures, including certain exposures held off-balance sheet as adjusted by stipulated credit conversion factors. Intended to be a simple, non-risk-based backstop measure.

Liquidation portfolio
A portfolio of assets which is beyond our current risk appetite metrics and is held for liquidation.

LCR or Liquidity coverage ratio
The ratio of the stock of high-quality liquid assets to expected net cash outflows over the following 30 days. High-quality liquid assets should be unencumbered, liquid in markets during a time of stress and, ideally, be central bank eligible.

Loan exposure
Loans and advances to customers reported on the balance sheet held at amortised cost or FVOCI, non-cancellable credit commitments and cancellable credit commitments for credit cards and overdraft facilities.

Loans and advances to customers
This represents lending made under bilateral agreements with customers entered into in the normal course of business and is based on the legal form of the instrument.

Loans and advances to banks
Amounts loaned to credit institutions including securities bought under Reverse repo.

LTV or loan-to-value ratio
A calculation which expresses the amount of a first mortgage lien as a percentage of the total appraised value of real property. The loan-to-value ratio is used in determining the appropriate level of risk for the loan and therefore the correct price of the loan to the borrower.

Loans past due
Loans on which payments have been due for up to a maximum of 90 days including those on which partial payments are being made.

Loans subject to forbearance – impaired
Loans where the terms have been renegotiated on terms not consistent with current market levels due to financial difficulties of the borrower. Loans in this category are necessarily impaired. See 'Forbearance'.

Loss rate
Uses an adjusted gross charge-off rate, developed using monthly write-off and recoveries over the preceding 12 months and total outstanding balances.

LGD or Loss given default
The percentage of an exposure that a lender expects to lose in the event of obligor default.

Low returning clients
See 'Perennial sub-optimal clients'.

Malus
An arrangement that permits the Group to prevent vesting of all or part of the amount of an unvested variable remuneration award, due to a specific crystallised risk, behaviour, conduct or adverse performance outcome.

Master netting agreement
An agreement between two counterparties that have multiple derivative contracts with each other that provides for the net settlement of all contracts through a single payment, in a single currency, in the event of default on, or termination of, any one contract.

Mezzanine capital
Financing that combines debt and equity characteristics. For example, a loan that also confers some profit participation to the lender.

MREL or minimum requirement for own funds and eligible liabilities
A requirement under the Bank Recovery and Resolution Directive for EU resolution authorities to set a minimum requirement for own funds and eligible liabilities for banks, implementing the FSB's Total Loss Absorbing Capacity (TLAC) standard. MREL is intended to ensure that there is sufficient equity and specific types of liabilities to facilitate an orderly resolution that minimises any impact on financial stability and ensures the continuity of critical functions and avoids exposing taxpayers to loss.

Net asset value (NAV) per share
Ratio of net assets (total assets less total liabilities) to the number of ordinary shares outstanding at the end of a reporting period.

Net exposure
The aggregate of loans and advances to customers/loans and advances to banks after impairment provisions, restricted balances with central banks, derivatives (net of master netting agreements), investment debt and equity securities, and letters of credit and guarantees.

NII or Net interest income
The difference between interest received on assets and interest paid on liabilities.

NSFR or Net stable funding ratio
The ratio of available stable funding to required stable funding over a one-year time horizon, assuming a stressed scenario. It is a longer-term liquidity measure designed to restrain the amount of wholesale borrowing and encourage stable funding over a one-year time horizon.

NPLs or non-performing loans
An NPL is any loan that is more than 90 days past due or is otherwise individually impaired. This excludes Retail loans renegotiated at or after 90 days past due, but on which there has been no default in interest or principal payments for more than 180 days since renegotiation, and against which no loss of principal is expected.

Non-linearity
Non-linearity of expected credit loss occurs when the average of expected credit loss for a portfolio is higher than the base case (median) due to the fact that bad economic environment could have a larger impact on ECL calculation than good economic environment.

Normalised items
See 'Underlying/Normalised' on page 30.

Operating expenses
Staff and premises costs, general and administrative expenses, depreciation and amortisation. Underlying operating expenses exclude expenses as described in 'Underlying earnings'. A reconciliation between underlying and statutory earnings is contained in Note 2 to the financial statements.

Operating income or operating profit
Net interest, net fee and net trading income, as well as other operating income. Underlying operating income represents the income line items above, on an underlying basis. See 'Underlying earnings'.

OTC or Over-the-counter derivatives
A bilateral transaction (e.g. derivatives) that is not exchange traded and that is valued using valuation models.

OCA or Own credit adjustment
An adjustment to the Group's issued debt designated at fair value through profit or loss that reflects the possibility that the Group may default and not pay the full market value of the contracts.

Perennial sub-optimal clients
Clients that have returned below 3% return on risk-weighted assets for the last three years

Physical risks
The risk of increased extreme weather events including flood, drought and sea level rise.

Pillar 1
The first pillar of the three pillars of the Basel framework which provides the approach to calculation of the minimum capital requirements for credit, market and operational risk. Minimum capital requirements are 8 per cent of the Group's risk-weighted assets.

Pillar 2
The second pillar of the three pillars of the Basel framework which requires banks to undertake a comprehensive assessment of their risks and to determine the appropriate amounts of capital to be held against these risks where other suitable mitigants are not available.

Pillar 3
The third pillar of the three pillars of the Basel framework which aims to provide a consistent and comprehensive disclosure framework that enhances comparability between banks and further promotes improvements in risk practices.

Priority Banking
Priority Banking customers are individuals who have met certain criteria for deposits, AUM, mortgage loans or monthly payroll. Criteria varies by country.

Private equity investments
Equity securities in operating companies generally not quoted on a public exchange. Investment in private equity often involves the investment of capital in private companies. Capital for private equity investment is raised by retail or institutional investors and used to fund investment strategies such as leveraged buyouts, venture capital, growth capital, distressed investments and mezzanine capital.

PD or Probability of default
PD is an internal estimate for each borrower grade of the likelihood that an obligor will default on an obligation over a given time horizon.

Probability weighted
Obtained by considering the values the metric can assume, weighted by the probability of each value occurring.

Profit (loss) attributable to ordinary shareholders
Profit (loss) for the year after non-controlling interests and dividends declared in respect of preference shares classified as equity.

PVA or Prudent valuation adjustment
An adjustment to CET1 capital to reflect the difference between fair value and prudent value positions, where the application of prudence results in a lower absolute carrying value than recognised in the financial statements.

PRA or Prudential Regulation Authority
The Prudential Regulation Authority is the statutory body responsible for the prudential supervision of banks, building societies, credit unions, insurers and a small number of significant investment firms in the UK. The PRA is a part of the Bank of England.

Regulatory consolidation
The regulatory consolidation of Standard Chartered PLC differs from the statutory consolidation in that it includes Ascenta IV, Olea Global Pte. Ltd. Seychelles International Mercantile Banking Corporation Limited.,and all of the legal entities in the Currency Fair group on a proportionate consolidation basis. These entities are considered associates for statutory accounting purposes.

The regulatory consolidation further excludes the following entities, which are consolidated for statutory accounting purposes;, Autumn Life Pte. Ltd., Cardspal Pte. Ltd. Discovery Technology Services Pte. Ltd, Nexco Pte. Ltd, SCV Research and Development Pte. Ltd., Standard Chartered Assurance Limited, Standard Chartered Isle of Man Limited, Corrasi Covered Bonds LLP, Pegasus Dealmaking Pte. Ltd., Standard Chartered Botswana Education Trust, Standard Chartered Bancassurance Intermediary Limited, Standard Chartered Bank Insurance Agency (Proprietary) Limited, Standard Chartered Research and Technology India Private Limited, Standard Chartered Trading (Shanghai) Limited.

Repo/reverse repo
A repurchase agreement or repo is a short-term funding agreement, which allows a borrower to sell a financial asset, such as asset-backed securities or government bonds as collateral for cash. As part of the agreement the borrower agrees to repurchase the security at some later date, usually less than 30 days, repaying the proceeds of the loan. For the party on the other end of the transaction (buying the security and agreeing to sell in the future), it is a reverse repurchase agreement or reverse repo.

Residential mortgage
A loan to purchase a residential property which is then used as collateral to guarantee repayment of the loan. The borrower gives the lender a lien against the property, and the lender can foreclose on the property if the borrower does not repay the loan per the agreed terms. Also known as a home loan.

RoRWA or Return on risk-weighted assets
Profit before tax for year as a percentage of RWA. Profit may be statutory or underlying and is specified where used. See 'RWA' and 'Underlying earnings'.

RWA or Risk-weighted assets
A measure of a bank's assets adjusted for their associated risks, expressed as a percentage of an exposure value in accordance with the applicable standardised or IRB approach provisions.

Risks-not-in-VaR (RNIV)
A framework for identifying and quantifying marginal types of market risk that are not captured in the Value at Risk (VaR) measure for any reason, such as being a far-tail risk or the necessary historical market data not being available.

Roll rate
Uses a matrix that gives average loan migration rate from delinquency states from period to period. A matrix multiplication is then performed to generate the final PDs by delinquency bucket over different time horizons.

Secured (fully and partially)
A secured loan is a loan in which the borrower pledges an asset as collateral for a loan which, in the event that the borrower defaults, the Group is able to take possession of. All secured loans are considered fully secured if the fair value of the collateral is equal to or greater than the loan at the time of origination. All other secured loans are considered to be partly secured.

Securitisation
Securitisation is a process by which credit exposures are aggregated into a pool, which is used to back new securities. Under traditional securitisation transactions, assets are sold to a structured entity which then issues new securities to investors at different levels of seniority (credit tranching). This allows the credit quality of the assets to be separated from the credit rating of the originating institution and transfers risk to external investors in a way that meets their risk appetite. Under synthetic securitisation transactions, the transfer of risk is achieved by the use of credit derivatives or guarantees, and the exposures being securitised remain exposures of the originating institution.

Senior debt
Debt that takes priority over other unsecured or otherwise more 'junior' debt owed by the issuer. Senior debt has greater seniority in the issuer's capital structure than subordinated debt. In the event the issuer goes bankrupt, senior debt theoretically must be repaid before other creditors receive any payment.

SICR or Significant increase in credit risk
Assessed by comparing the risk of default of an exposure at the reporting date to the risk of default at origination (after considering the passage of time).

Solo
The solo regulatory group as defined in the Prudential Regulation Authority waiver letter dated 10 August 2020 differs from Standard Chartered Bank Company in that it includes the full consolidation of nine subsidiaries, namely Standard Chartered Holdings (International) B.V., Standard Chartered MB Holdings B.V., Standard Chartered UK Holdings Limited, Standard Chartered Grindlays PTY Limited, SCMB Overseas Limited, Standard Chartered Capital Management (Jersey) LLC, Cerulean Investments L.P., SC Ventures Innovation Investment L.P. and SC Ventures G.P. Limited.

Sovereign exposures
Exposures to central governments and central government departments, central banks and entities owned or guaranteed by the aforementioned. Sovereign exposures, as defined by the European Banking Authority, include only exposures to central governments.

Stage 1
Assets have not experienced a significant increase in credit risk since origination and impairment recognised on the basis of 12 months expected credit losses.

Stage 2
Assets have experienced a significant increase in credit risk since origination and impairment is recognised on the basis of lifetime expected credit losses.

Stage 3
Assets that are in default and considered credit-impaired (non-performing loans).

Standardised approach
In relation to credit risk, a method for calculating credit risk capital requirements using External Credit Assessment Institutions (ECAI) ratings and supervisory risk weights. In relation to operational risk, a method of calculating the operational capital requirement by the application of a supervisory defined percentage charge to the gross income of eight specified business lines.

Structured note
An investment tool which pays a return linked to the value or level of a specified asset or index and sometimes offers capital protection if the value declines. Structured notes can be linked to equities, interest rates, funds, commodities and foreign currency.

Subordinated liabilities
Liabilities which, in the event of insolvency or liquidation of the issuer, are subordinated to the claims of depositors and other creditors of the issuer.

Tier 1 capital
The sum of Common Equity Tier 1 capital and Additional Tier 1 capital.

Tier 1 capital ratio
Tier 1 capital as a percentage of risk-weighted assets.

Tier 2 capital
Tier 2 capital comprises qualifying subordinated liabilities and related share premium accounts.

TLAC or Total loss absorbing capacity
An international standard for TLAC issued by the FSB, which requires G-SIBs to have sufficient loss-absorbing and recapitalisation capacity available in resolution, to minimise impacts on financial stability, maintain the continuity of critical functions and avoid exposing public funds to loss.

Transition risks
The risk of changes to market dynamics or sectoral economics due to governments' response to climate change.

UK bank levy
A levy that applies to certain UK banks and the UK operations of foreign banks. The levy is payable each year based on a percentage of the chargeable equities and liabilities on the Group's UK tax resident entities' balance sheets. Key exclusions from chargeable equities and liabilities include Tier 1 capital, insured or guaranteed retail deposits, repos secured on certain sovereign debt and liabilities subject to netting.

Unbiased
Not overly optimistic or pessimistic, represents information that is not slanted, weighted, emphasised, de-emphasised or otherwise manipulated to increase the probability that the financial information will be received favourably or unfavourably by users.

Unlikely to pay
Indications of unlikeliness to pay shall include placing the credit obligation on non-accrued status; the recognition of a specific credit adjustment resulting from a significant perceived decline in credit quality subsequent to the Group taking on the exposure; selling the credit obligation at a material credit-related economic loss; the Group consenting to a distressed restructuring of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or, where relevant fees; filing for the obligor's bankruptcy or a similar order in respect of an obligor's credit obligation to the Group; the obligor has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of a credit obligation to the Group.

VaR or Value at Risk
A quantitative measure of market risk estimating the potential loss that will not be exceeded in a set time period at a set statistical confidence level.

ViU or Value-in-Use
The present value of the future expected cash flows expected to be derived from an asset or CGU.

Write-downs
After an advance has been identified as impaired and is subject to an impairment provision, the stage may be reached whereby it is concluded that there is no realistic prospect of further recovery. Write-downs will occur when, and to the extent that, the whole or part of a debt is considered irrecoverable.

XVA
The term used to incorporate credit, debit and funding valuation adjustments to the fair value of derivative financial instruments. See 'CVA', 'DVA' and 'FVA'.