NatWest Group

National Westminster Bank Plc

2022 Annual Report and Accounts

Strategic report

Presentation of information

National Westminster Bank Plc ('NWB Plc') is a wholly-owned subsidiary of NatWest Holdings Limited ('NWH Ltd' or 'the intermediate holding company'). The term 'NWB Group' or 'we' refers to NWB Plc and its subsidiary and associated undertakings. The term 'NWH Group' refers to NWH Ltd and its subsidiary and associated undertakings. NatWest Group plc is 'the ultimate holding company'. The term 'NatWest Group' refers to NatWest Group plc and its subsidiary and associated undertakings.

NWB Plc publishes its financial statements in pounds sterling ('£' or 'sterling'). The abbreviations '£m' and '£bn' represent millions and thousands of millions of pounds sterling ('GBP'), respectively, and references to 'pence' represent pence where amounts are denominated in sterling. Reference to 'dollars' or '$' are to United States of America ('US') dollars. The abbreviations '$m' and '$bn' represent millions and thousands of millions of dollars, respectively. The abbreviation '€' represents the 'euro', and the abbreviations '€m' and '€bn' represent millions and thousands of millions of euros, respectively.

Description of business

The principal entities under NWH Ltd are National Westminster Bank Plc (which wholly owns Coutts & Company and Ulster Bank Limited), The Royal Bank of Scotland plc and Ulster Bank Ireland DAC (UBIDAC).

Principal activities and operating segments

NWB Group serves customers across the UK with a range of retail and commercial banking products and services. A wide range of personal products are offered including current accounts, credit cards, personal loans, mortgages and wealth management services. NWB Plc is the main provider of shared services for NatWest Group.

On 27 January 2022, NatWest Group announced that a new business segment, Commercial & Institutional, would be created, bringing together the Commercial, NatWest Markets and RBSI businesses to form a single business segment, with common management and objectives, to best support our customers across the full non-personal customer lifecycle. Comparatives have been re-presented. The re-presentation of operating segments does not change the consolidated financial results of NWB Group.

The reportable operating segments are as follows:

Retail Banking serves personal customers in the UK and includes Ulster Bank customers.

Private Banking serves UK-connected, high-net-worth, individuals and their business interests.

Commercial & Institutional offers SME's, Commercial, Corporate and Institutional clients comprehensive banking and financing solutions throughout the UK and internationally.

Central items & other includes corporate functions, such as ring-fenced bank and NatWest Group treasury, finance, risk management, compliance, legal, communications and human resources. The services are mainly provided to NWH Group, however, in certain instances, where permitted, services are also provided to the wider NatWest Group including the non ring-fenced business.

Performance overview

Strong financial performance

NWB Group profit for the year was £3,689 million compared with £2,907 million in 2021, driven by increased income, partially offset by additional operating expenses and net impairment losses.

Total income increased by £2,474 million compared with 2021, reflecting the beneficial impact of interest rate increases, combined with higher fee income.

Operating expenses increased by £89 million compared with 2021, primarily reflecting continued investment in technology and data capabilities, partially offset by a reduction in conduct and litigation charges. The cost:income ratio decreased from 66.9% to 53.5%.

Net impairment losses of £341 million principally reflects the latest macro-economics, including updated scenarios, with more weight being placed on the downside scenarios. Underlying book performance remains strong. Total impairment provisions increased by £0.1 billion to £2.6 billion in the year, which resulted in a reduction in the ECL coverage ratio from 0.85% at 31 December 2021 to 0.84%.

Robust balance sheet with strong capital levels

Total assets decreased by £25.1 billion to £409.5 billion compared with £434.6 billion at 31 December 2021. This was primarily driven by a net decrease of £28.1 billion in cash balances, resulting from growth in loans to customers and customer deposit outflows.

Loans to customers increased by £14.7 billion primarily driven by growth in mortgage balances and an increase in commercial lending due to increased facility utilisation, partially offset by continued UK Government financial support scheme repayments.

Customer deposits decreased by £6.8 billion primarily reflecting higher outflows from savings and current account balances due to an overall market liquidity contraction.

The CET1 ratio decreased 480 basis points over the period due to a £1.2 billion decrease in CET1 capital and a £26.2 billion increase in RWAs. The CET1 decrease reflects the attributable profit in the period, offset by dividends paid, the removal of the adjustment for the prudential amortisation on software development costs and an increase in intangible assets.

Total RWAs increased by £26.2 billion to £112.4 billion mainly reflecting an increase in credit risk RWAs, due to new regulations impacting model adjustments, combined with increased exposures, partially offset by improved credit risk metrics.

Stakeholder engagement and s.172(1) statement

This statement describes how the directors have had regard to the matters set out in section 172(1) (a) to (f) of the Companies Act 2006 (section 172) when performing their duty to promote the success of the company.

Board engagement with stakeholders

The Board reviews and confirms its key stakeholder groups for the purposes of section 172 annually. For 2022, they remained customers, investors, regulators colleagues, communities, and suppliers. Examples of how the Board has engaged with key stakeholders, including the impact on principal decisions, can be found in this statement and on page 81 (Corporate governance statement).

Supporting effective Board discussions and decision-making

NatWest Group's purpose – *championing potential, helping people, families and businesses to thrive* – continues to influence Board discussions and decision-making.

Board and Committee terms of reference reinforce the importance of considering both NatWest Group's purpose and the matters set out in section 172. The Board and Committee paper template includes a section for authors to explain how the proposal or update aligns with NatWest Group's purpose and a separate section for them to include an assessment of the relevant stakeholder impacts for the directors to consider.

Directors are mindful that it is not always possible to achieve an outcome which meets the expectations of all stakeholders who may be impacted. For decisions which are particularly challenging or complex, an optional page in the paper template provides directors with further information to support purposeful decision-making. This additional page uses the Blueprint for Better Business framework as a base and is aligned to NatWest Group's broader purpose framework.

Principal decisions

Principal decisions are those decisions taken by the Board that are material or of strategic importance to the company, or are significant to the company's key stakeholders.

This statement describes an example of a principal decision taken by the Board during 2022. Further information on the Board's principal activities can be found in the Corporate governance statement on pages 80 to 86.

Key

A – Likely long-term consequences
B – Employee interests
C – Relationships with customers, suppliers and others
D – The impact on community and environment
E – Maintaining a reputation for high standards of business conduct
F – Acting fairly between members of the company

Case Study – Approving capital distributions

Factors considered: A C

What was the decision-making process?

During 2022, the Board approved two interim dividends. The Board received comprehensive papers from management and its decision was informed by 2022 capital plans as well as regular updates on NWB Plc's financial and capital positions.

The Board Risk Committee also reviewed all capital distributions proposals in advance of Board consideration and recommended them to the Board for approval.

How did the directors fulfil their duties under section 172 and how were stakeholders considered?

In taking decisions, the directors were mindful of their duties under section 172. The dividend proposal included a stakeholder overview which set out relevant stakeholder impacts and considerations.

How was NatWest Group's purpose considered as part of the decision?

The Board is aware that in taking decisions on capital distributions, it also needs to consider the financial implications of those decisions in terms of continuing to support customers and maintaining financial stability.

Actions and outcomes

The Board approved an interim dividend of £993 million which was paid on 22 February 2022 and an interim dividend of £2.3 billion which was paid on 29 July 2022, with both interim dividends payable to NWH Ltd as the sole shareholder.

Further details on how NatWest Group engages with its stakeholders can be found in the NatWest Group plc 2022 Annual Report and Accounts and at natwestgroup.com.

Board of directors and secretary

Approval of Strategic report

The Strategic report for the year ended 31 December 2022 set out on pages 1 to 79 was approved by the Board of directors on 16 February 2023.

By order of the Board
Jan Cargill

Chief Governance Officer and Company Secretary
16 February 2023

Chairman
Howard Davies

Executive directors
Alison Rose DBE (CEO)
Katie Murray (CFO)

Non-executive directors
Francesca Barnes
Graham Beale
Ian Cormack
Roisin Donnelly
Patrick Flynn
Morten Friis
Yasmin Jetha
Mike Rogers
Mark Seligman
Lena Wilson

Board and committee membership

Nominations Committee
Howard Davies (Chair)
Graham Beale
Patrick Flynn
Morten Friis
Mark Seligman
Lena Wilson

Audit Committee
Patrick Flynn (Chair)
Graham Beale
Ian Cormack
Morten Friis
Mark Seligman

Board Risk Committee
Morten Friis (Chair)
Francesca Barnes
Graham Beale
Ian Cormack
Patrick Flynn
Lena Wilson

Performance and Remuneration Committee
Lena Wilson (Chair)
Ian Cormack
Mike Rogers
Mark Seligman

Senior independent non-executive director
Graham Beale

Chief Governance Officer and Company Secretary
Jan Cargill

Board changes in 2022
Roisin Donnelly (non-executive director) appointed on 1 October 2022.

Robert Gillespie (non-executive director) resigned on 15 December 2022.

For additional detail on the activities of the Committees above, refer to the Report of the directors.

Auditor

Ernst & Young LLP
Chartered Accountants and Statutory Auditor
25 Churchill Place
London E14 5EY

Registered office and Head office

250 Bishopsgate
London, EC2M 4AA
Telephone: +44 (0)20 7085 5000

Other principal offices

Ulster Bank Limited
11-16 Donegall Square East, Belfast, Co Antrim, BT1 5UB, Northern Ireland

Coutts & Company
440 Strand
London WC2R 0QS

Lombard North Central PLC
250 Bishopsgate
London EC2M 4AA

National Westminster Bank Plc
Registered in England No. 929027

Top and emerging threats

A continuous process is used to identify and manage NatWest Bank's top and emerging threats. These are threats that could have a significant negative impact on the ability to operate or meet strategic objectives.

Externally-focused top and emerging threats		Trend
Economic and political risks	NatWest Bank was affected by uncertain and volatile economic conditions in 2022 which created a challenging operating environment. The outlook for the UK and global economy remains uncertain including due to falling economic activity, high inflation, rising interest rates, elevated energy prices, and the Russian invasion of Ukraine. These conditions could deteriorate, depending on a number of factors including market volatility, volatility in commodity prices, escalating geopolitical tensions or concerns regarding sovereign debt or sovereign credit ratings. Economic conditions could also be affected by changing demographics in the markets that NatWest Bank serves including increasing social inequalities or the threat of new and widespread public health crises (including any future epidemics or pandemics). The UK experienced significant political uncertainty in 2022, which may persist into the future. This could lead to a loss of confidence in the UK by investors, which could in turn negatively impact NatWest Bank. NatWest Bank also faces political uncertainty in Scotland as a result of a possible second Scottish independence referendum. A range of complementary approaches is used to mitigate these risks, including targeted customer reviews, including for customer segments most vulnerable to inflationary impacts, scenario analysis, stress tests and review of risk appetite.	Increased risk
Climate change	Climate-related risks represent a source of systemic risk in the global financial system. Financial and non-financial risks from climate change can arise through physical and transition risks. In addition, physical and transition risks can trigger further losses, stemming directly or indirectly from legal claims, litigation and conduct liability (referred to as liability risk). As a result, NatWest Bank and its customers, suppliers and counterparties face significant climate-related risks. Further progress was made in 2022 in managing climate related risks including progress with embedding climate risk into NatWest Bank's risk framework, financial planning and development of a transition plan. The successful implementation of NatWest Bank's climate change-related strategy, ambitions and NatWest Group's transition plan will depend to a large extent on many factors and uncertainties beyond NatWest Bank's control including the macroeconomic environment, and the effectiveness of actions of governments, regulators, businesses, investors, and customers to mitigate the impact of climate-related risks.	Stable risk
Cyber threats	NatWest Bank experiences a constant threat from cyberattacks across NatWest Bank and against NatWest Bank's supply chain. NatWest Bank and its supply chain can be subjected to Distributed Denial of Service and ransomware attacks, which are a pervasive and significant threat to the global financial services industry. The focus is to manage the impact of the attacks and sustain availability of services for NatWest Bank's customers. As cyberattacks evolve and become more sophisticated, NatWest Bank continues to invest in additional capability designed to defend against emerging threats.	Increased risk
Competitive environment	NatWest Bank operates in markets that are highly competitive and with increasing competitive pressures and technology disruption, raising the threat of reduced revenue and lower profitability. The risks mainly relate to changes in regulation, developments in financial technology (including digital currency), new entrants to the market and shifts in customer behaviour. NatWest Bank closely monitors the competitive environment and adapts strategy as appropriate to deliver innovative and compelling propositions for customers.	Stable risk
Regulatory, legal and conduct risks	NatWest Bank is subject to extensive laws and regulations and disclosure requirements, which present ongoing compliance and conduct risks. For example, in 2022 this included increased regulatory focus on customer protection via the FCA's Consumer Duty policy statement and final rules and guidance. NatWest Bank implements new regulatory requirements, where applicable, and incorporates the implications of related changes in its strategic and financial plans. NatWest Bank expects government and regulatory focus on the financial services industry to remain high for the foreseeable future.	Stable risk

Top and emerging threats

Internally-focused top and emerging threats		Trend
Change risk	The implementation of NatWest Group's purpose-led strategy, including the creation of the Commercial & Institutional segment, carry significant execution and operational risks. NatWest Bank continues to manage and implement change in line with its strategic plans, while assessing execution risks and taking appropriate mitigating action. In addition, NatWest Bank continues to monitor and strengthen its control environment via robust governance and control frameworks.	Stable risk
Financial crime	Financial crime continues to evolve, whether through fraud, scams, or other criminal activity. NatWest Bank has made and continues to make significant, multi-year investments to strengthen and improve its overall financial crime control framework with prevention systems and capabilities. As part of its ongoing programme of investment, there is current and future investment planned to further strengthen financial crime controls, including investment in new technologies and capabilities to further enhance customer due diligence, transaction monitoring, sanctions and anti-bribery and corruption systems. NatWest Bank continues to work with law enforcement agencies, industry bodies and regulators to develop intelligence and collaborative solutions to prevent financial crime.	Decreased risk
People risk	NatWest Bank's success depends on its ability to attract, retain and develop highly-skilled, qualified and diverse personnel, including for technology and data-focused roles, in a highly competitive market and under internal cost reduction pressures. A combination of developing a strong people proposition, close monitoring of attrition levels and colleague wellbeing including versus industry benchmarks are key mitigants.	Stable risk
Third-party suppliers	Operational risks arise from NatWest Bank's reliance on third-party suppliers and outsourcing of certain activities across a broad range of activity including the provision of IT services and the adoption of new technology. While the ineffective management of risks related to third-party suppliers could adversely affect NatWest Bank, significant resources and planning have been devoted to mitigate the risks. This includes robust due diligence, identification of strategic suppliers, appropriate oversight and monitoring, and building close working relationships with the third parties on which NatWest Bank relies.	Increased risk
Data management	NatWest Bank relies on the effective use of accurate data to support, monitor, evaluate, manage and enhance its operations and deliver its strategy. The availability of current, complete, detailed and accurate data, together with appropriate governance and accountability for data, is fast becoming a critical strategic asset, which is subject to increased regulatory focus. Failure to have that data, or the ineffective use or governance of that data, could result in a failure to manage and report important risks and opportunities or satisfy customers' expectations including the inability to deliver innovative products and services. NatWest Bank continues to be focused on delivering a long-term data strategy alongside enhancing control and policy frameworks governing data usage.	Stable risk

Financial review

Summary consolidated income statement for the year ended 31 December 2022

	Retail Banking	Private Banking	Commercial & Institutional	Central items & other	Year ended 31 December 2022	Year ended 31 December 2021	Variance	
	£m	£m	£m	£m	£m	£m	£m	%
Net interest income	4,494	754	2,740	(456)	7,532	6,002	1,530	25
Non-interest income	399	271	1,286	2,255	4,211	3,267	944	29
Total income	4,893	1,025	4,026	1,799	11,743	9,269	2,474	27
Operating expenses	(2,115)	(596)	(1,939)	(1,638)	(6,288)	(6,199)	(89)	1
Profit before impairment losses/releases	2,778	429	2,087	161	5,455	3,070	2,385	78
Impairment (losses)/releases	(218)	2	(126)	1	(341)	813	(1,154)	(142)
Operating profit before tax	2,560	431	1,961	162	5,114	3,883	1,231	32
Tax charge					(1,425)	(976)	(449)	46
Profit for the year					3,689	2,907	782	27

Key metrics and ratios	2022	2021
Cost:income ratio (%)(1)	53.5	66.9
Loan impairment rate (bps) (2)	11	(28)
CET1 ratio (%) (3)	11.3	16.1
Leverage ratio (%) (4)	4.4	4.8
Risk weighted assets (RWAs) (£bn)	112.4	86.2
Loan:deposit ratio (%) (5)	90	83

(1) Cost:income ratio is total operating expenses divided by total income.
(2) Loan impairment rate is the loan impairment charge divided by gross customer loans.
(3) Common Equity Tier 1 (CET1) ratio is CET1 capital divided by RWAs.
(4) Leverage ratio is Tier 1 capital divided by total exposure. This is in accordance with changes to the UK's leverage ratio framework, refer to page 63 for further details.
(5) Loan deposit ratio is total loans divided by total deposits.

NWB Group reported a profit of £3,689 million compared with £2,907 million in 2021, driven by an increase in total income of £2,474 million, partially offset by an increase in operating expenses of £89 million and net impairment losses of £341 million compared with releases of £813 million in 2021.

Total income increased by £2,474 million, or 27%, to £11,743 million compared with £9,269 million in 2021.

Net interest income increased by £1,530 million, or 25%, to £7,532 million compared with £6,002 million in 2021, reflecting mortgage balance growth and a beneficial impact from interest rate increases.

Non-interest income increased by £944 million, or 29%, to £4,211 million compared with £3,267 million in 2021.
- Net fees and commissions increased by £144 million to £1,626 million, primarily due to higher transaction-related fee income.

Other operating income increased by £800 million to £2,585 million compared with £1,785 million in 2021, reflecting:
- £676 million higher income from hedging activities, including gains on economic hedging derivatives, due to interest rate rises;
- non-repeat of 2021 incurred losses of £117 million upon partial redemption of debt instruments and £44 million upon the sale of properties;
- an £80 million profit from insurance liabilities; and
- additional £152 million income from the recharging of costs to other NatWest Group entities, principally reflecting the impact of organisational restructure activity; partially offset by
- bond disposal losses of £88 million in 2022, a reduction of £208 million compared with gains of £120 million in 2021 and a number of other small movements.

Operating expenses increased by £89 million to £6,288 million, compared with £6,199 million in 2021, reflecting:
- a staff costs increase of £81 million primarily due to continued investment in key areas, including Data, Technology and Financial Crime, as well as an increase in costs subsequently recharged to other NatWest Group entities;
- additional increases in premises and equipment and outsourcing costs resulting from investment in technology and data capabilities, partially offset by
- non-repeat of one-off conduct and litigation charges in 2021.

Net impairment losses of £341 million principally reflects the latest macro-economics, including updated scenarios, with more weight being placed on the downside scenarios. Underlying book performance remains strong. Total impairment provisions increased by £0.1 billion to £2.6 billion in the year, which resulted in a reduction in the ECL coverage ratio from 0.85% at 31 December 2021 to 0.84%.

Segmental performance

Retail Banking

Operating profit was £2,560 million, compared with £1,992 million in 2021.

Net interest income increased by £953 million to £4,494 million compared with £3,541 million in 2021, primarily reflecting £16.1 billion balance growth in mortgages and higher deposit income supported by interest rate rises.

Non-interest income increased by £54 million to £399 million, compared with £345 million in 2021, primarily reflecting higher transaction-related fee income.

Operating expenses increased by £198 million to £2,115 million compared with £1,917 million in 2021, primarily reflecting continued investment in key areas, including Financial Crime prevention and Data capabilities.

Net impairment losses of £218 million reflects additional losses relating to good book exposures, driven by a revision of the economic outlook scenario assumptions. Stage 3 defaults continue to be at a low level.

Loans to customers increased by £17.0 billion to £181.5 billion, reflecting strong mortgage growth of £16.1 billion, with gross new mortgage lending of £40.3 billion. Personal advances increased by £0.3 billion and credit cards balances increased by £0.2 billion in 2022 reflecting continued strong customer demand.

Customer deposits decreased by £0.3 billion to £151.9 billion driven by higher outflows from savings accounts due to increases in inflation and costs of living.

Private Banking

Operating profit was £431 million compared with £264 million in 2021.

Net interest income increased by £293 million to £754 million in 2022, reflecting lending balance growth, combined with higher deposit income supported by interest rate rises.

Non-interest income increased by £8 million to £271 million in 2022, primarily reflecting higher transaction-related fee income.

Operating expenses increased by £83 million to £596 million in 2022, principally due to continued investment in people and technology to enhance AUMA growth propositions and increased investment in financial crime prevention.

A net impairment release of £2 million in 2022 mainly reflects ECL provision releases in non-default portfolios, partially offset by a revision of the economic outlook scenario assumptions.

Loans to customers increased by £1.5 billion to £19.2 billion, driven by continued strong mortgage lending growth.

Customer deposits increased by £4.1 billion to £41.2 billion, with continued savings growth.

Commercial & Institutional

Operating profit was £1,961 million, compared with a profit of £2,056 million in 2021.

Net interest income increased by £569 million to £2,740 million, compared with £2,171 million in 2021, primarily driven by lending growth and a beneficial impact from interest rate increases.

Non-interest income increased by £246 million to £1,286 million, primarily reflecting higher card payment fees driven by transaction volume growth, and higher income from hedging activities resulting from recent interest rate rises.

Operating expenses increased by £47 million to £1,939 million, compared with £1,892 million in 2021, primarily reflecting investment in technology and data capabilities.

Net impairment losses of £126 million was primarily driven by the downward revision of economic outlook scenario assumptions.

Loans to customers increased by £4.5 billion to £81.6 billion, primarily due to increased facility utilisation, partially offset by continued UK Government financial support scheme repayments.

Customer deposits decreased by £6.2 billion driven by higher outflows from savings and current accounts due to overall market liquidity contraction in the second half of the year.

Central items & other

Operating profit was £162 million in 2022 compared with a loss of £429 million in 2021.

Total income increased by £351 million to £1,799 million in 2022, compared with £1,448 million in 2021, reflecting higher income from hedging activities, including gains on economic hedging derivatives, due to interest rate rises; £80 million profit from insurance liabilities; and non-repeat of 2021 incurred losses of £117 million upon partial redemption of debt instruments and £44 million upon sale of properties. These were partially offset by a £208 million reduction in income from bond disposals.

Operating expenses decreased by £239 million to £1,638 million, compared with £1,877 million in 2021, principally due to the non-repeat of 2021 litigation and conduct costs. £1,514 million of total expenses were recovered through service charges in non-interest income.

Summary consolidated balance sheet as at 31 December 2022

	2022	2021	Variance	
	£m	£m	£m	%
Assets				
Cash and balances at central banks	**73,065**	101,213	(28,148)	(28)
Derivatives	**4,407**	2,460	1,947	79
Loans to banks - amortised cost	**3,197**	4,182	(985)	(24)
Loans to customers - amortised cost	**301,684**	286,971	14,713	5
Amounts due from holding companies and fellow subsidiaries	**4,903**	3,519	1,384	39
Other financial assets	**14,546**	29,031	(14,485)	(50)
Other assets	**7,667**	7,187	480	7
Total assets	**409,469**	434,563	(25,094)	(6)
Liabilities				
Bank deposits	**16,060**	22,831	(6,771)	(30)
Customer deposits	**322,614**	329,440	(6,826)	(2)
Amounts due to holding companies and fellow subsidiaries	**38,771**	45,136	(6,365)	(14)
Derivatives	**2,088**	4,119	(2,031)	(49)
Other financial liabilities	**5,384**	7,251	(1,867)	(26)
Subordinated liabilities	**197**	211	(14)	(7)
Notes in circulation	**809**	904	(95)	(11)
Other liabilities	**3,470**	3,934	(464)	(12)
Total liabilities	**389,393**	413,826	(24,433)	(6)
Total equity	**20,076**	20,737	(661)	(3)
Total liabilities and equity	**409,469**	434,563	(25,094)	(6)

Total assets decreased by £25.1 billion to £409.5 billion at 31 December 2022, compared with £434.6 billion at 31 December 2021.

Cash and balances at central banks decreased by £28.1 billion to £73.1 billion, compared with £101.2 billion at 31 December 2021, driven primarily by:

- £25.0 billion decrease resulting from growth in loans to customers and customer deposit outflows;
- £8.9 billion decrease in balances held at central banks; and
- £3.5 billion decrease due to repo activity; partially offset by
- £11.7 billion net increase in liquidity assets held.

Loans to banks – amortised cost decreased by £1.0 billion to £3.2 billion, compared with £4.2 billion at 31 December 2021, mainly representing a decrease in US dollar and European Central Bank balances as part of treasury activities.

Loans to customers increased by £14.7 billion to £301.7 billion, compared with £287.0 billion at 31 December 2021, driven by:

- £17.6 billion mortgage growth as a result of strong gross new lending;
- £4.5 billion increase in commercial lending, primarily due to increased facility utilisation, whilst repayments drove further reductions in UK Government scheme balances;
- £6.8 billion net decrease in relation to Treasury reverse repo activity; and
- £1.4 billion decrease due to collateral placed for net repo trades.

Amounts due from holding companies and fellow subsidiaries increased by £1.4 billion to £4.9 billion, compared with £3.5 billion at 31 December 2021, primarily reflecting loans and advances provided to UBIDAC to support liquidity management during the phased withdrawal from the Republic of Ireland.

Other financial assets decreased by £14.5 billion to £14.5 billion, primarily driven by bond disposals and maturities of £25.4 billion, a reduction in fair value of the remaining bond portfolio of £1.6 billion due to changes in interest and FX rates, partially offset by bond purchases of £11.9 billion.

Bank deposits decreased by £6.8 billion to £16.1 billion, driven by a £6.5 billion decrease in repo balances.

Customer deposits decreased by £6.8 billion to £322.6 billion, driven by:

- £5.9 billion reflecting higher outflows from savings and current account balances due to an overall market liquidity contraction;
- £5.0 billion decrease in repos facing customers; partially offset by
- £4.1 billion deposit growth in Private Banking.

Amounts due to holding companies and fellow subsidiaries decreased by £6.4 billion to £38.8 billion, compared with £45.1 billion at 31 December 2021, primarily due to movements on balances with NWG Plc and NWH Ltd.

Derivative liabilities decreased by £2.0 billion to £2.1 billion, compared with £4.1 billion at 31 December 2021, driven by interest rate rises across all currencies and GBP spot rate depreciation.

Other financial liabilities decreased by £1.9 billion to £5.4 billion, compared with £7.3 billion at 31 December 2021, driven by a reduction in long term fixed rate investment products, as a result of the current market environment and increasing rates outlook.

Other liabilities decreased by £0.5 billion to £3.5 billion, compared with £3.9 billion at the 31 December 2021, primarily due to a reduction in financial guarantees and accruals.

Total equity decreased by £0.7 billion to £20.1 billion, compared with £20.7 billion at 31 December 2021. The decrease reflects dividends paid to NatWest Holdings and decreases in cash flow hedging reserves due to interest rate rises, partially offset by attributable profit of £3.7 billion.

Risk and capital management

Presentation of information

Where marked as audited in the section header, certain information in the Risk and capital management section (pages 9 to 79) is within the scope of the Independent auditor's report. Risk and capital management is generally conducted on an overall basis within NatWest Group such that common policies, procedures, frameworks and models apply across NatWest Group. Therefore, for the most part, discussion on these qualitative aspects reflects those in NatWest Group as relevant for the businesses and operations in NWB Group.

Risk management framework

Introduction

NWB Group operates under NatWest Group's enterprise-wide risk management framework, which is centred on the embedding of a strong risk culture. The framework ensures the governance, capabilities and methods are in place to facilitate risk management and decision-making across the organisation.

The framework ensures that NWB Group's principal risks – which are detailed in this section – are appropriately controlled and managed. It sets out the standards and objectives for risk management as well as defining the division of roles and responsibilities.

This seeks to ensure a consistent approach to risk management across NWB Group. It aligns risk management with NWB Group's overall strategic objectives.

The framework, which is designed and maintained by NatWest Group's independent Risk function, is owned by the NatWest Group Chief Risk Officer. It is reviewed and approved annually by the NatWest Group Board. The framework incorporates risk governance, NatWest Group's three lines of defence operating model and the Risk function's mandate.

Risk appetite, supported by a robust set of principles, policies and practices, defines the levels of tolerance for a variety of risks and provides a structured approach to risk-taking within agreed boundaries.

While all NWB Group colleagues are responsible for managing risk, the Risk function provides oversight and monitoring of risk management activities, including the implementation of the framework and adherence to its supporting policies, standards and operational procedures. The Chief Risk Officer plays an integral role in providing the Board with advice on NWB Group's risk profile, the performance of its controls and in providing challenge where a proposed business strategy may exceed risk tolerance.

In addition, there is a process to identify and manage top and emerging threats, which are those that could have a significant negative impact on NWB Group's ability to meet its strategic objectives. Both top and emerging threats may incorporate aspects of – or correlate to – a number of principal risks and are reported alongside them to the Board on a regular basis.

Risk management framework continued

Culture

Risk culture is at the heart of NWB Group's risk management framework and its risk management practice. In 2022, the approach to risk culture was refreshed under the new banner of Intelligent Risk Taking to re-intensify focus on robust risk management behaviours and practices. NWB Group expects leaders to act as role models for strong risk behaviours and practices building clarity, developing capability and motivating employees to reach the required standards set out in the Intelligent Risk Taking approach. Colleagues are expected to:

- Consistently role-model the values and behaviours in Our Code, based on strong ethical standards which underpin Our Purpose.
- Empower others to take risks aligned to NWB Group's strategy, explore issues from a fresh perspective, and tackle challenges in new and better ways across organisational boundaries.
- Manage risk in line with appropriate risk appetite.
- Ensure each decision made keeps NWB Group, colleagues, customers, communities and shareholders safe and secure.
- Understand their role in managing risk, remaining clear and capable, grounded in knowledge of regulatory obligations.
- Consider risk in all actions and decisions.
- Escalate risks and issues early; taking action to mitigate risks and learning from mistakes and near-misses, reporting and communicating these transparently.
- Challenge others' attitudes, ideas and actions.

The target Intelligent Risk Taking behaviours are embedded in NatWest Group's Critical People Capabilities and are clearly aligned to the core values of inclusive, curious, robust, sustainable and ambitious. These aim to act as an effective basis for a strong risk culture because the Critical People Capabilities form the basis of all recruitment and selection processes.

Training

Enabling employees to have the capabilities and confidence to manage risk is core to NatWest Group's learning strategy. NatWest Group offers a wide range of learning, both technical and behavioural, across the risk disciplines. This training may be mandatory, role-specific or for personal development. Mandatory learning for all staff is focused on keeping employees, customers and NatWest Group safe. This is easily accessed online and is assigned to each person according to their role and business area. The system allows monitoring at all levels to ensure completion.

Our Code

NatWest Group's conduct guidance, Our Code, provides direction on expected behaviour and sets out the standards of conduct that support the values. The code explains the effect of decisions that are taken and describes the principles that must be followed.

These principles cover conduct-related issues as well as wider business activities. They focus on desired outcomes, with practical guidelines to align the values with commercial strategy and actions. The embedding of these principles facilitates sound decision-making and a clear focus on good customer outcomes.

Where appropriate, if conduct falls short of NatWest Group's required standards, the accountability review process is used to assess how this should be reflected in pay outcomes for the individuals concerned. The NatWest Group remuneration policy ensures that the remuneration arrangements for all employees reflect the principles and standards prescribed by the PRA rulebook and the FCA handbook. Any employee falling short of the expected standards would also be subject to internal disciplinary policies and procedures. If appropriate, the relevant authority would be notified.

Risk management framework continued

Governance

Committee structure

The diagram shows NWB Group's risk committee structure in 2022 and the main purposes of each committee.

NWB Plc Board

Reviews and considers risk appetite measures for key risks in accordance with the Risk Management Framework. Monitors performance against risk appetite. Considers any materials risks and approves, as appropriate, actions recommended by the Board Risk Committee.

Board Risk Committee

Provides oversight and advice to the Board on current and potential future risk exposures, and risk appetite. Oversees the effectiveness of the risk management framework within NWB Plc and (with the Audit Committee) the system of internal controls required to manage risk.

Audit Committee

Assists the Board in carrying out its accounting, internal control and financial reporting responsibilities. including relevant non-financial disclosures or related controls. Reviews the effectiveness of the system of internal controls relating to financial management and compliance with financial reporting, asset safeguarding and accounting standards.

Executive Risk Committee

Supports the CEO in discharging her risk management accountabilities. Reviews and challenges all material risk and control matters.

Executive Committee

Supports the CEO in discharging her individual accountabilities, reflecting the authority delegated to her by the NWB Plc Board. Reviews, challenges and debates all aspects of NWB Plc, including strategic, financial, capital, risk and operational issues. Supports the CEO in forming recommendations to the Board and committees.

Asset & Liability Management Committee

Supports the CFO in overseeing the effective balance sheet management of NWB Plc, ensuring they operate within risk appetite, policies and chosen business strategy as well as comply with regulatory and legal requirements

Business and function risk committees

Risk committees review and monitor all risks, providing guidance, recommendations and decisions on risks affecting the businesses and functions.

(1) The NatWest Group Chief Executive Officer also performs the role of NWB Plc Chief Executive Officer.
(2) The NatWest Group Chief Risk Officer also performs the role of NWB Plc Chief Risk Officer.
(3) The NatWest Group Chief Financial Officer also performs the role of NWB Plc Chief Financial Officer.

Risk management framework continued

Risk management structure

The diagram shows NWB Group's risk management structure in 2022 and key risk management responsibilities.

NatWest Group Chief Executive Officer

NWB Chief Executive Officer

NatWest Group Chief Risk Officer

NWB Chief Risk Officer

Director of Risk, Retail Banking
Design and delivery of Retail Banking risk strategy and service proposition. Oversight of risk management across Retail Banking. Supports the Ringfence DINEDs[1] through the identification, documentation, resolution and escalation of any potential ring-fencing conflicts of interest relating to decisions made by the Ringfence and Group Chief Risk Officer.

Director of Risk, Commercial & Institutional Banking
Design and delivery of Commercial & Institutional Banking risk strategy and service proposition. Oversight of risk management across Commercial & Institutional Banking.

Chief Risk Officer, Coutts & Company
Design and delivery of the Coutts & Company risk strategy and service proposition. Oversight of risk management (including Compliance) across Coutts & Company.

Chief Operating Officer
Centralised support for the risk management function and model risk oversight including framework design and development.

Director of Financial & Strategic Risk
Centralised oversight of financial and strategic risks across NWB, specialist advice on top and emerging risks and responsibility for model development.

Director of Non-Financial Risk
Centralised oversight of non-financial risk across NWB. Design and delivery of compliance & conduct strategy and service proposition. Design and delivery of financial crime strategy and service proposition, oversight of financial crime risk management. Provides specialist technical advice to the Directors of Risk responsible for business oversight.

Head of Restructuring
Design and delivery of Restructuring strategy and service proposition.

(1) Double Independent Non-Executive Directors.
(2) The NatWest Group Chief Executive Officer also performs the role of NWB Chief Executive Officer.
(3) The NatWest Group Chief Risk Officer also performs the role of NWB Chief Risk Officer.
(4) The NWB Chief Risk Officer reports directly to the NWB Chief Executive Officer. There is a further secondary reporting line to the chair of the Board Risk Committee and a right of access to the Committee, including the deputy chair.
(5) The Risk function is independent of the customer-facing business segments and support functions. Its structure is divided into three parts (Directors of Risk, Specialist Risk Directors and Chief Operating Officer) to facilitate effective management of the risks facing NWB. Risk committees in the customer businesses and key functional risk committees oversee risk exposures arising from management and business activities and focus on ensuring that these are adequately monitored and controlled. The directors of Risk (Retail Banking; Commercial & Institutional Banking; Financial & Strategic Risk; Non-Financial Risk and Compliance & Conduct) as well as the Director, Financial Crime Risk NatWest Holdings; the Chief Risk Officer, Coutts & Company and the Chief Operating Officer report to the NWB Chief Risk Officer

Risk management framework continued

Three lines of defence

NatWest Group uses the industry-standard three lines of defence model to articulate accountabilities and responsibilities for managing risk. This supports the embedding of effective risk management throughout the organisation.

First line of defence

The first line of defence incorporates most roles in NatWest Group, including those in the customer-facing businesses, Technology and Services as well as support functions such as People and Transformation, Legal and Finance.

The first line of defence is empowered to take risks within the constraints of the risk management framework, policies, risk appetite statements set by NatWest Group and measures set by the NWB Group Board.

The first line of defence is responsible for managing its direct risks, and with the support of specialist functions, it is also responsible for managing its consequential risks, by identifying, assessing, mitigating, monitoring and reporting risks.

Second line of defence

The second line of defence comprises the Risk function and is independent of the first line.

The second line of defence is empowered to design and maintain the risk management framework and its components. It undertakes proactive risk oversight and continuous monitoring activities to confirm that NWB Group engages in permissible and sustainable risk-taking activities.

The second line of defence advises on, monitors, challenges, approves and escalates where required and reports on the risk-taking activities of the first line, ensuring that these are within the constraints of the risk management framework, policies, risk appetite statements set by NatWest Group and measures set by the NWB Group Board.

Third line of defence

The third line of defence is the Internal Audit function and is independent of the first and second lines.

The third line of defence is responsible for providing independent assurance to the NatWest Group Board, its subsidiary legal entity boards and executive management on the overall design and operating effectiveness of the risk management framework and its components. This includes the adequacy and effectiveness of key internal controls, governance and the risk management in place to monitor, manage and mitigate the principal risks to NatWest Group and its subsidiary companies achieving their objectives.

The third line of defence executes its duties freely and objectively in accordance with the Chartered Institute of Internal Auditors' Code of Ethics and International Standards on independence and objectivity.

Risk appetite

Risk appetite defines the type and aggregate level of risk NWB Group is willing to accept in pursuit of its strategic objectives and business plans. Risk appetite supports sound risk-taking, the promotion of robust risk practices and risk behaviours, and is calibrated annually.

For certain principal risks, risk capacity defines the maximum level of risk NWB Group can assume before breaching constraints determined by regulatory capital and liquidity requirements, the operational environment, and from a conduct perspective. Establishing risk capacity helps determine where risk appetite should be set, ensuring there is a buffer between internal risk appetite and NWB Group's ultimate capacity to absorb losses.

Risk appetite framework

The risk appetite framework supports effective risk management by promoting sound risk-taking through a structured approach, within agreed boundaries. It also ensures emerging threats and risk-taking activities that might be out of appetite are identified, assessed, escalated and addressed in a timely manner.

To facilitate this, a detailed annual review of the framework is carried out. The review includes:

- Assessing the adequacy of the framework compared to internal and external expectations.
- Ensuring the framework remains effective and acts as a strong control environment for risk appetite.
- Assessing the level of embedding of risk appetite across the organisation.

The Board reviews and approves the risk appetite framework annually.

Establishing risk appetite

In line with the risk appetite framework, risk appetite is maintained across NWB Group through risk appetite statements. These are in place for all principal risks and describe the extent and type of activities that can be undertaken.

Risk appetite statements consist of qualitative statements of appetite supported by risk limits and triggers that operate as a defence against excessive risk-taking. Risk measures and their associated limits are an integral part of the risk appetite approach and a key part of embedding risk appetite in day-to-day risk management decisions. A clear tolerance for each principal risk is set in alignment with business activities.

The annual process of reviewing and updating risk appetite statements is completed alongside the business and financial planning process. This ensures that plans and risk appetite are appropriately aligned.

The Board sets risk appetite for all principal risks to help ensure NWB Group is well placed to meet its priorities and long-term targets, even in challenging economic environments. This supports NWB Group in remaining resilient and secure as it pursues its strategic business objectives.

NWB Group's risk profile is continually monitored and frequently reviewed. Management focus is concentrated on all principal risks as well as the top and emerging threats that may correlate to them. Risk profile relative to risk appetite is reported regularly to senior management and the Board.

NatWest Group policies directly support the qualitative aspects of risk appetite. They define the qualitative expectations, guidance and standards that stipulate the nature and extent of permissible risk-taking and are consistently applied across NatWest Group and its subsidiaries.

Risk management framework continued

Identification and measurement

Identification and measurement within the risk management process comprises:

- Regular assessment of the overall risk profile, incorporating market developments and trends, as well as external and internal factors.
- Monitoring of the risks associated with lending and credit exposures.
- Assessment of trading and non-trading portfolios.
- Review of potential risks in new business activities and processes.
- Analysis of potential risks in any complex and unusual business transactions.

The financial and non-financial risks that NWB Group faces are detailed in the NatWest Group Risk Directory. This provides a common risk language to ensure consistent terminology is used across NWB Group. The NatWest Group Risk Directory is subject to annual review to ensure it continues to fully reflect the risks that NWB Group faces.

Mitigation

Mitigation is a critical aspect of ensuring that risk profile remains within risk appetite. Risk mitigation strategies are discussed and agreed within NWB Group.

When evaluating possible strategies, costs and benefits, residual risks (risks that are retained) and secondary risks (those that arise from risk mitigation actions themselves) are also considered. Monitoring and review processes are in place to evaluate results. Early identification, and effective management of changes in legislation and regulation are critical to the successful mitigation of compliance and conduct risk. The effects of all changes are managed to ensure the timely achievement of compliance. Those changes assessed as having a high or medium-high impact are managed more closely. Emerging threats that could affect future results and performance are also closely monitored. Action is taken to mitigate potential risks as and when required. Further in-depth analysis, including the stress testing of exposures, is also carried out.

Testing and monitoring

Specific activities relating to compliance and conduct, credit and financial crime risk are subject to testing and monitoring by the Risk function. This confirms to both internal and external stakeholders – including the Board, senior management, the customer-facing businesses, Internal Audit and NWB Group's regulators – that risk policies and procedures are being correctly implemented and that they are operating adequately and effectively. Selected key controls are also reviewed for adequacy and effectiveness. Thematic reviews and targeted reviews are also carried out where relevant to ensure appropriate customer outcomes.

Independent testing and monitoring is also completed on principal risk processes and controls – including controls within the scope of Section 404 of the Sarbanes-Oxley Act 2002.

The NatWest Group Risk Testing & Monitoring Forum assesses and validates the annual plan as well as the ongoing programme of reviews.

Stress testing

Stress testing – capital management

Stress testing is a key risk management tool and a fundamental component of NatWest Group's approach to capital management. It is used to quantify and evaluate the potential impact of specified changes to risk factors on the financial strength of NatWest Group, including its capital position.

Stress testing includes:

- Scenario testing, which examines the impact of a hypothetical future state to define changes in risk factors.
- Sensitivity testing, which examines the impact of an incremental change to one or more risk factors.

The process for stress testing consists of four broad stages:

Define scenarios	– Identify macro and NatWest Group-specific vulnerabilities and risks. – Define and calibrate scenarios to examine risks and vulnerabilities. – Formal governance process to agree scenarios.
Assess impact	– Translate scenarios into risk drivers. – Assess impact to current and projected P&L and balance sheet across NatWest Group.
Calculate results and assess implications	– Aggregate impacts into overall results. – Results form part of the risk management process. – Scenario results are used to inform NatWest Group's business and capital plans.
Develop and agree management actions	– Scenario results are analysed by subject matter experts. Appropriate management actions are then developed. – Scenario results and management actions are reviewed by the relevant Executive Risk Committees and Board Risk Committees, and agreed by the relevant Boards.

Risk management framework continued

Stress testing is used widely across NatWest Group. The diagram below summarises key areas of focus.

Specific areas that involve capital management include:

- Strategic financial and capital planning – by assessing the impact of sensitivities and scenarios on the capital plan and capital ratios.
- Risk appetite – by gaining a better understanding of the drivers of, and the underlying risks associated with, risk appetite.
- Risk monitoring – by monitoring the risks and horizon-scanning events that could potentially affect NatWest Group's financial strength and capital position.
- Risk mitigation – by identifying actions to mitigate risks, or those that could be taken, in the event of adverse changes to the business or economic environment. Principal risk mitigating actions are documented in NatWest Group's recovery plan.

Capital sufficiency – going concern forward-looking view

Going concern capital requirements are examined on a forward-looking basis – including as part of the annual budgeting process – by assessing the resilience of capital adequacy and leverage ratios under hypothetical future states. These assessments include assumptions about regulatory and accounting factors (such as IFRS 9). They incorporate economic variables and key assumptions on balance sheet and P&L drivers, such as impairments, to demonstrate that NatWest Group and its operating subsidiaries maintain sufficient capital. A range of future states are tested. In particular, capital requirements are assessed:

- Based on a forecast of future business performance, given expectations of economic and market conditions over the forecast period.
- Based on a forecast of future business performance under adverse economic and market conditions over the forecast period. Scenarios of different severity may be examined.

The examination of capital requirements under both normal and adverse economic and market conditions enables NatWest Group to determine whether its projected business performance meets internal plans and regulatory capital requirements.

The potential impact of normal and adverse economic and market conditions on capital requirements is assessed through stress testing, the results of which are not only used widely across NatWest Group but also by the regulators to set specific capital buffers. NatWest Group takes part in stress tests run by regulatory authorities to test industry-wide vulnerabilities under crystallising global and domestic systemic risks.

Stress and peak-to-trough movements are used to help assess the amount of capital NatWest Group needs to hold in stress conditions in accordance with the capital risk appetite framework.

Internal assessment of capital adequacy

An internal assessment of material risks is carried out annually to enable an evaluation of the amount, type and distribution of capital required to cover these risks. This is referred to as the Internal Capital Adequacy Assessment Process (ICAAP). The ICAAP consists of a point-in-time assessment of exposures and risks at the end of the financial year together with a forward-looking stress capital assessment. The ICAAP is approved by the Board and submitted to the PRA.

The ICAAP is used to form a view of capital adequacy separately to the minimum regulatory requirements. The ICAAP is used by the PRA to assess NatWest Group's specific capital requirements through the Pillar 2 framework.

Capital allocation

NatWest Group has mechanisms to allocate capital across its legal entities and businesses. These aim to optimise the use of capital resources taking into account applicable regulatory requirements, strategic and business objectives and risk appetite. The framework for allocating capital is approved by the CFO with support from the Asset & Liability Management Committee.

Governance

Capital management is subject to substantial review and governance. The Board approves the capital plans, including those for key legal entities and businesses as well as the results of the stress tests relating to those capital plans.

Stress testing – liquidity

Liquidity risk monitoring and contingency planning

A suite of tools is used to monitor, limit and stress test the liquidity and funding risks on the balance sheet. Limit frameworks are in place to control the level of liquidity risk, asset and liability mismatches and funding concentrations. Liquidity and funding risks are reviewed at significant legal entity and business levels daily, with performance reported to the Asset & Liability Management Committee on a regular basis. Liquidity Condition Indicators are monitored daily. This ensures any build-up of stress is detected early and the response escalated appropriately through recovery planning.

Risk management framework continued

Internal assessment of liquidity

Under the liquidity risk management framework, NatWest Group maintains the Internal Liquidity Adequacy Assessment Process. This includes assessment of net stressed liquidity outflows under a range of severe but plausible stress scenarios. Each scenario evaluates either an idiosyncratic, market-wide or combined stress event as described in the table below.

Type	Description
Idiosyncratic scenario	The market perceives NatWest Group to be suffering from a severe stress event, which results in an immediate assumption of increased credit risk or concerns over solvency.
Market-wide scenario	A market stress event affecting all participants in a market through contagion, potential counterparty failure and other market risks. NatWest Group is affected under this scenario but no more severely than any other participants with equivalent exposure.
Combined scenario	This scenario models the combined impact of an idiosyncratic and market stress occurring at once, severely affecting funding markets and the liquidity of some assets.

NatWest Group uses the most severe outcome to set the internal stress testing scenario which underpins its internal liquidity risk appetite. This complements the regulatory liquidity coverage ratio requirement.

Stress testing – recovery and resolution planning

The NatWest Group recovery plan explains how NatWest Group and its subsidiaries – as a consolidated group – would identify and respond to a financial stress event and restore its financial position so that it remains viable on an ongoing basis.

The recovery plan ensures risks that could delay the implementation of a recovery strategy are highlighted and preparations are made to minimise the impact of these risks. Preparations include:

- Developing a series of recovery indicators to provide early warning of potential stress events.
- Clarifying roles, responsibilities and escalation routes to minimise uncertainty or delay.
- Developing a recovery playbook to provide a concise description of the actions required during recovery.
- Detailing a range of options to address different stress conditions.
- Appointing dedicated option owners to reduce the risk of delay and capacity concerns.

The plan is intended to enable NatWest Group to maintain critical services and products it provides to its customers, maintain its core business lines and operate within risk appetite while restoring NatWest Group's financial condition. It is assessed for appropriateness on an ongoing basis and is updated annually. The plan is reviewed and approved by the Board prior to submission to the PRA each year. Individual recovery plans are also prepared for NatWest Holdings Limited, NatWest Markets Plc, RBS International Limited and NatWest Markets N.V.. These plans detail the recovery options, recovery indicators and escalation routes for each entity.

Fire drill simulations of possible recovery events are used to test the effectiveness of NatWest Group and individual legal entity recovery plans. The fire drills are designed to replicate possible financial stress conditions and allow senior management to rehearse the responses and decisions that may be required in an actual stress event. The results and lessons learnt from the fire drills are used to enhance NatWest Group's approach to recovery planning.

Under the resolution assessment part of the PRA rulebook, NatWest Group is required to carry out an assessment of its preparations for resolution, submit a report of the assessment to the PRA and publish a summary of this report.

Resolution would be implemented if NatWest Group was assessed by the UK authorities to have failed and the appropriate regulator put it into resolution. The process of resolution is owned and implemented by the Bank of England (as the UK resolution authority). NatWest Group ensures ongoing maintenance and enhancements of its resolution capabilities, in line with regulatory requirements.

Stress testing – market risk

Non-traded market risk

Non-traded exposures are reported to the PRA on a quarterly basis. This provides the regulator with an overview of NatWest Group's banking book interest rate exposure. The report includes detailed product information analysed by interest rate driver and other characteristics, including accounting classification, currency and counterparty type.

Scenario analysis based on hypothetical adverse scenarios is performed on non-traded exposures as part of the Bank of England and European Banking Authority stress test exercises. NatWest Group also produces an internal scenario analysis as part of its financial planning cycles.

Non-traded exposures are capitalised through the ICAAP. This covers gap risk, basis risk, credit spread risk, pipeline risk, structural foreign exchange risk, prepayment risk, equity risk and accounting volatility risk. The ICAAP is completed with a combination of value and earnings measures. The total non-traded market risk capital requirement is determined by adding the different charges for each sub risk type. The ICAAP methodology captures at least ten years of historical volatility, produced with a 99% confidence level. Methodologies are reviewed by NatWest Group Model Risk and the results are approved by the NatWest Group Technical Asset & Liability Management Committee.

Non-traded market risk stress results are combined with those for other risks into the capital plan presented to the Board. The cross-risk capital planning process is conducted once a year, with a planning horizon of five years. The scenario narratives cover both regulatory scenarios and macroeconomic scenarios identified by NatWest Group.

Vulnerability-based stress testing begins with the analysis of a portfolio and expresses its key vulnerabilities in terms of plausible vulnerability scenarios under which the portfolio would suffer material losses. These scenarios can be historical, macroeconomic or forward-looking/hypothetical. Vulnerability-based stress testing is used for internal management information and is not subject to limits. The results for relevant scenarios are reported to senior management.

Risk management framework continued

Internal scenarios

During 2022, NatWest Group ran a number of internal scenarios developed in the immediate aftermath of Russia's invasion of Ukraine.

These scenarios considered different outcomes to the conflict, including an assumed broadening of the conflict, and how those might manifest in terms of macroeconomic impact. This included commodity market and associated inflationary pressures, supply chain impacts, financial sector linkages and broader knock-on impacts to the UK labour and asset markets. Impacts on operational aspects to NatWest Group were also considered.

Applying the macro-scenarios to NatWest Group's earnings, capital, liquidity and funding positions did not result in a breach of any regulatory thresholds.

Regulatory stress testing

The Bank of England returned to the annual cyclical scenario (ACS) stress test framework in 2022 and published the scenario on 26 September 2022. This follows two years of COVID-19 crisis-related stress testing and the decision to postpone the test in March following Russia's invasion of Ukraine. NatWest Group has participated in this stress test and the results will be published in summer 2023 and, along with other relevant information, will be used to help inform NatWest Group capital buffers (both the UK countercyclical capital buffer rate and PRA buffers).

The 2022 stress test aims to assess the impact of a UK and global macroeconomic stress on UK banks, spanning a five-year period from Q3 2022 to Q2 2027. It is a coherent 'tail risk' scenario designed to be severe and broad enough to assess the resilience of UK banks to a range of adverse shocks.

The stress scenario is broadly similar to the 2019 ACS and more severe overall than the global financial crisis, with the key difference being elevated levels of inflation. Annual UK inflation averages around 11% over the first three years of the scenario, while peaking at 17% in early 2023 and does not begin to fall until the second half of the year.

The stress is based on an end-of-June 2022 balance sheet starting position.

Further details on the scenario and ACS Stress test can be found at https://www.bankofengland.co.uk/stress-testing/2022/key-elements-of-the-2022-stress-test

Following the UK's exit from the European Union on 31 December 2020, only relevant European subsidiaries of NatWest Group will take part in the European Banking Authority stress tests going forward. NatWest Group itself will not participate.

NatWest Group also took part in the Bank of England's Climate Biennial Exploratory Scenario conducted in late 2021 and early 2022.

Credit risk

Definition (audited)

Credit risk is the risk that customers, counterparties or issuers fail to meet their contractual obligation to settle outstanding amounts.

Sources of risk (audited)

The principal sources of credit risk for NWB Group are lending and related undrawn commitments. Derivatives and securities financing and debt securities are also a source of credit risk, primarily related to Treasury activities for NWB Group. NWB Group is also exposed to settlement risk through foreign exchange and payments activities.

Governance (audited)

The Credit Risk function provides oversight and challenge of frontline credit risk management activities. Governance activities include:

- Defining credit risk appetite measures for the management of concentration risk and credit policy to establish the key causes of risk in the process of providing credit and the controls that must be in place to mitigate them.
- Approving and monitoring operational limits for business segments and credit limits for customers.
- Oversight of the first line of defence to ensure that credit risk remains within the appetite set by the Board and that controls are being operated adequately and effectively.
- Assessing the adequacy of expected credit loss (ECL) provisions including approving key IFRS 9 inputs (such as significant increase in credit risk (SICR) thresholds) and any necessary in-model and post model adjustments through NatWest Group and business unit provisions and model committees.
- Development and approval of credit grading models.

Risk appetite

Credit risk appetite aligns to the strategic risk appetite set by the Board and is set and monitored through risk appetite frameworks tailored to the Group's Personal and Wholesale segments.

Personal

The Personal credit risk appetite framework sets limits that control the quality and concentration of both existing and new business for each relevant business segment. These risk appetite measures consider the segments' ability to grow sustainably and the level of losses expected under stress. Credit risk is further controlled through operational limits specific to customer or product characteristics.

Wholesale

For Wholesale credit, the framework has been designed to reflect factors that influence the ability to operate within risk appetite. Tools such as stress testing and economic capital are used to measure credit risk volatility and develop links between the framework and risk appetite limits.

Four formal frameworks are used, classifying, measuring and monitoring credit risk exposure across single name, sector and country concentrations and product and asset classes with heightened risk characteristics.

The framework is supported by a suite of transactional acceptance standards that set out the risk parameters within which businesses should operate.

Credit policy standards are in place for both the Wholesale and Personal portfolios. They are expressed as a set of mandatory controls.

Identification and measurement

Credit stewardship (audited)

Risks are identified through relationship management and credit stewardship of customers and portfolios. Credit risk stewardship takes place throughout the customer relationship, beginning with the initial approval. It includes the application of credit assessment standards, credit risk mitigation and collateral, ensuring that credit documentation is complete and appropriate, carrying out regular portfolio or customer reviews and problem debt identification and management.

Asset quality (audited)

All credit grades map to an asset quality (AQ) scale, used for financial reporting. This AQ scale is based on Basel probability of defaults. Performing loans are defined as AQ1-AQ9 (where the probability of default (PD) is less than 100%) and defaulted non-performing loans as AQ10 or Stage 3 under IFRS 9 (where the PD is 100%). Loans are defined as defaulted when the payment status becomes 90 days past due, or earlier if there is clear evidence that the borrower is unlikely to repay, for example bankruptcy or insolvency.

Counterparty credit risk

Counterparty credit risk arises from the obligations of customers under derivative and securities financing transactions.

NWB Group mitigates counterparty credit risk through collateralisation and netting agreements, which allow amounts owed by NWB Group to a counterparty to be netted against amounts the counterparty owes NWB Group.

Mitigation

Mitigation techniques, as set out in the appropriate credit policies and transactional acceptance standards, are used in the management of credit portfolios across NWB Group. These techniques mitigate credit concentrations in relation to an individual customer, a borrower group or a collection of related borrowers. Where possible, customer credit balances are netted against obligations. Mitigation tools can include structuring a security interest in a physical or financial asset, the use of credit derivatives including credit default swaps, credit-linked debt instruments and securitisation structures, and the use of guarantees and similar instruments (for example, credit insurance) from related and third parties. Property is used to mitigate credit risk across a number of portfolios, in particular residential mortgage lending and commercial real estate (CRE).

The valuation methodologies for collateral in the form of residential mortgage property and CRE are detailed below.

Residential mortgages – NWB Group takes collateral in the form of residential property to mitigate the credit risk arising from mortgages. NWB Group values residential property individually during the loan underwriting process, either by obtaining an appraisal by a suitably qualified appraiser (for example Royal Institution of Chartered Surveyors (RICS)) or using a statistically valid model. In both cases, a sample of the valuation outputs are periodically reviewed by an independent RICS qualified appraiser. NWB Group updates Retail Banking UK residential property values quarterly using country (Scotland, Wales and Northern Ireland) or English regional specific Office for National Statistics House Price indices.

Within the Private Banking segment, properties securing loans greater than £2.5 million are revalued every three years.

The current indexed value of the property is a component of the ECL provisioning calculation.

Credit risk continued

Commercial real estate valuations – NWB Group has an actively managed panel of chartered surveying firms that cover the spectrum of geography and property sectors in which NWB Group takes collateral. Suitable RICS registered valuers for particular assets are typically contracted through a service agreement to ensure consistency of quality and advice. In the UK, an independent third-party market indexation is applied to update external valuations for commercial property once they are more than a year old. For obligations in excess of £2.5 million and where the charged property has a book value in excess of £0.5 million, a formal valuation review is commissioned at least every three years.

Assessment and monitoring

Practices for credit stewardship – including credit assessment, approval and monitoring as well as the identification and management of problem debts – differ between the Personal and Wholesale portfolios.

Personal

Personal customers are served through a lending approach that entails offering a large number of small-value loans. To ensure that these lending decisions are made consistently, NWB Group analyses internal credit information as well as external data supplied by credit reference agencies (including historical debt servicing behaviour of customers with respect to both NWB Group and other lenders). NWB Group then sets its lending rules accordingly, developing different rules for different products.

The process is then largely automated, with each customer receiving an individual credit score that reflects both internal and external behaviours and this score is compared with the lending rules set. For relatively high-value, complex personal loans, including some residential mortgage lending, specialist credit managers make the final lending decisions. These decisions are made within specified delegated authority limits that are issued dependent on the experience of the individual.

Underwriting standards and portfolio performance are monitored on an ongoing basis to ensure they remain adequate in the current market environment and are not weakened materially to sustain growth.

The actual performance of each portfolio is tracked relative to operational limits. The limits apply to a range of credit risk-related measures including projected credit default rates across products and the loan-to-value (LTV) ratio of the mortgage portfolios. Where operational limits identify areas of concern management action is taken to adjust credit or business strategy.

Wholesale

Wholesale customers – including corporates, banks and other financial institutions – are grouped by industry sectors and geography as well as by product/asset class and are managed on an individual basis. Customers are aggregated as a single risk when sufficiently interconnected.

A credit assessment is carried out before credit facilities are made available to customers. The assessment process is dependent on the complexity of the transaction. Credit approvals are subject to environmental, social and governance risk policies which restrict exposure to certain highly carbon intensive industries as well as those with potentially heightened reputational impacts. Customer specific climate risk commentary is now mandatory.

In response to COVID-19, a new framework was introduced to categorise clients in a consistent manner across the Wholesale portfolio, based on the effect of COVID-19 on their financial position and outlook in relation to the sector risk appetite. This framework has been retained, updated and aligned with the Risk of Credit Loss framework (further details below) to consider viability impacts more generally beyond those directly related to COVID-19 and classification via the framework is now mandatory and must be refreshed at least annually. The framework extends to all Wholesale borrowing customers in assessing whether customers exhibit a SICR, if support is considered to be granting forbearance and the time it would take for customers to return to operating within transactional acceptance standards.

For lower risk transactions below specific thresholds, credit decisions can be approved through self-sanctioning within the business. This process is facilitated through an auto-decision making system, which utilises scorecards, strategies and policy rules.

For all other transactions credit is only granted to customers following joint approval by an approver from the business and the credit risk function or by two credit officers. The joint business and credit approvers act within a delegated approval authority under the Wholesale Credit Authorities Framework Policy. The level of delegated authority held by approvers is dependent on their experience and expertise with only a small number of senior executives holding the highest approval authority. Both business and credit approvers are accountable for the quality of each decision taken, although the credit risk approver holds ultimate sanctioning authority.

Transactional acceptance standards provide detailed transactional lending and risk acceptance metrics and structuring guidance. As such, these standards provide a mechanism to manage risk appetite at the customer/transaction level and are supplementary to the established credit risk appetite.

Credit grades and loss given default (LGD) are reviewed and if appropriate reapproved annually. The review process assesses borrower performance, including reconfirmation or adjustment of risk parameter estimates; the adequacy of security; compliance with terms and conditions; and refinancing risk.

Problem debt management

Personal

Early problem identification

Pre-emptive triggers are in place to help identify customers that may be at risk of being in financial difficulty. These triggers are both internal, using NWB Group's data, and external using information from credit reference agencies. Proactive contact is then made with the customer to establish if they require help with managing their finances. By adopting this approach, the aim is to prevent a customer's financial position deteriorating which may then require intervention from the Collections and Recoveries teams.

Personal customers experiencing financial difficulty are managed by the Collections team. If the Collections team is unable to provide appropriate support after discussing suitable options with the customer, management of that customer moves to the Recoveries team. If at any point in the collections and recoveries process, the customer is identified as being potentially vulnerable, the customer will be separated from the regular process and supported by a specialist team to ensure the customer receives appropriate support for their circumstances.

Credit risk continued

Collections

When a customer exceeds an agreed limit or misses a regular monthly payment the customer is contacted by NWB Group and requested to remedy the position. If the situation is not regularised then, where appropriate, the Collections team will become more involved and the customer will be supported by skilled debt management staff who endeavour to provide customers with bespoke solutions. Solutions include short-term account restructuring, refinance loans and forbearance which can include interest suspension and 'breathing space'. All treatments available to customers experiencing financial difficulties are reviewed to ensure they remain appropriate for customers impacted by current economic conditions. In the event that an affordable and sustainable agreement with a customer cannot be reached, the debt will transition to the Recoveries team. For provisioning purposes, under IFRS 9, exposure to customers managed by the Collections team is categorised as Stage 2 and subject to a lifetime loss assessment, unless it is 90 days past due or has triggered any other unlikeliness to pay indicators, in which case it is categorised as Stage 3.

Recoveries

The Recoveries team will issue a notice of intention to default to the customer and, if appropriate, a formal demand, while also registering the account with credit reference agencies where appropriate. Following this, the customer's debt may then be placed with a third-party debt collection agency, or alternatively a solicitor, in order to agree an affordable repayment plan with the customer. An option that may also be considered, is the sale of unsecured debt. Exposures subject to formal debt recovery are defaulted and, under IFRS 9, categorised as Stage 3.

Wholesale

Early problem identification

Each segment and sector have defined early warning indicators to identify customers experiencing financial difficulty, and to increase monitoring if needed. Early warning indicators may be internal, such as a customer's bank account activity, or external, such as a publicly-listed customer's share price. If early warning indicators show a customer is experiencing potential or actual difficulty, or if relationship managers or credit officers identify other signs of financial difficulty, they may decide to classify the customer within the Risk of Credit Loss framework. Broader macro-economic trends including commodity prices, foreign exchange rates and consumer and government spend are also tracked, helping inform decisions on sector risk appetite. Customer level early warning indicators are regularly reviewed to ensure alignment with prevailing economic conditions, ensuring both the volume and focus of alerts is aligned to the point-in-time risk within each sector.

The aligned Risk of Credit Loss and viability framework

This framework focuses on all Wholesale customers to provide early identification of credit deterioration, support intelligent risk-taking, ensure fair and consistent customer outcomes and provide key insights into Wholesale lending portfolios. Expert judgment is applied by experienced credit risk officers to classify cases into categories that reflect progressively deteriorating credit risk to NWB Group. There are two classifications in the framework that apply to non-defaulted customers who are in financial stress – Heightened Monitoring and Risk of Credit Loss. For the purposes of provisioning, all exposures categorised as Heightened Monitoring or Risk of Credit Loss are categorised as Stage 2 and subject to a lifetime loss assessment. The framework also applies to those customers that have met NWB Group's default criteria (AQ10 exposures). Defaulted exposures are categorised as Stage 3 impaired for provisioning purposes.

Heightened Monitoring customers are performing customers that have met certain characteristics, which have led to significant credit deterioration. Collectively, characteristics reflect circumstances that may affect the customer's ability to meet repayment obligations. Characteristics include trading issues, covenant breaches, material PD downgrades and past due facilities. Heightened Monitoring customers require pre-emptive actions (outside the customer's normal trading patterns) to return or maintain their facilities within NWB Group's current risk appetite.

Risk of Credit Loss customers are performing customers that have met the criteria for Heightened Monitoring and also pose a risk of credit loss to NWB Group in the next 12 months should mitigating action not be taken or not be successful.

Once classified as either Heightened Monitoring or Risk of Credit Loss, a number of mandatory actions are taken in accordance with policies. Actions include a review of the customer's credit grade, facility and security documentation and the valuation of security. Depending on the severity of the financial difficulty and the size of the exposure, the customer relationship strategy is reassessed by credit officers, by specialist credit risk or relationship management units in the relevant business, or by Restructuring.

Agreed customer management strategies are regularly monitored by both the business and credit teams. The largest Risk of Credit Loss exposures are regularly reviewed by a Risk of Credit Loss forum. The forum members are experienced credit, business and restructuring specialists. The purpose of the forum is to review and challenge the strategies undertaken for customers that pose the largest risk of credit loss to NWB Group.

Appropriate corrective action is taken when circumstances emerge that may affect the customer's ability to service its debt (refer to Heightened Monitoring characteristics). Corrective actions may include granting a customer various types of concessions. Any decision to approve a concession will be a function of specific appetite, the credit quality of the customer, the market environment and the loan structure and security. All customers granted forbearance are classified Heightened Monitoring as a minimum.

Other potential outcomes of the relationship review are to: return the customer to a satisfactory status, offer additional lending and continue monitoring, transfer the relationship to Restructuring if appropriate, or exit the relationship.

The aligned Risk of Credit Loss and viability framework does not apply to problem debt management for business banking customers. These customers are, where necessary, managed by specialist problem debt management teams, depending on the size of exposure or by the business banking recoveries team where a loan has been impaired.

Credit risk continued

Restructuring

Where customers are categorised as Risk of Credit Loss and the lending exposure is above £1 million, relationships are supported by the Restructuring team. The objective of Restructuring is to protect NWB Group's capital. Restructuring does this by working with corporate and commercial customers in financial difficulty to help them understand their options and how their restructuring or repayment strategies can be delivered. Helping viable customers return to financial health and restoring a normal banking relationship is always the preferred outcome, however, where this is not possible, NWB Group will work with customers to achieve a solvent outcome. Throughout this period, the mainstream relationship manager will remain an integral part of the customer relationship. Insolvency is considered as a last resort and if deemed necessary, NWB Group will work to recover its capital in a fair and efficient manner, while upholding the fair treatment of customers and NWB Group's core values.

Forbearance (audited)

Forbearance takes place when a concession is made on the contractual terms of a loan/debt in response to a customer's financial difficulties.

The aim of forbearance is to support and restore the customer to financial health while minimising risk. To ensure that forbearance is appropriate for the needs of the customer, minimum standards are applied when assessing, recording, monitoring and reporting forbearance.

A credit exposure may be forborne more than once, generally where a temporary concession has been granted and circumstances warrant another temporary or permanent revision of the loan's terms.

Loans are reported as forborne until they meet the exit criteria as detailed in the appropriate regulatory guidance. These include being classified as performing for two years since the last forbearance event, making regular repayments and the loan/debt being less than 30 days past due.

Types of forbearance

Personal

In the Personal portfolio, forbearance may involve payment concessions and loan rescheduling (including extensions in contractual maturity) and capitalisation of arrears. Forbearance support is provided for both mortgages and unsecured lending.

Wholesale

In the Wholesale portfolio, forbearance may involve covenant waivers, amendments to margins, payment concessions and loan rescheduling (including extensions in contractual maturity), capitalisation of arrears, and debt forgiveness or debt-for-equity swaps.

Monitoring of forbearance

Personal

For Personal portfolios, forborne loans are separated and regularly monitored and reported while the forbearance strategy is implemented, until they exit forbearance.

Wholesale

In the Wholesale portfolio, customer PDs and facility LGDs are reassessed prior to finalising any forbearance arrangement. The ultimate outcome of a forbearance strategy is highly dependent on the co-operation of the borrower and a viable business or repayment outcome. Where forbearance is no longer appropriate, NWB Group will consider other options such as the enforcement of security, insolvency proceedings or both, although these are options of last resort.

Provisioning requirements on forbearance are detailed in the Provisioning for forbearance section.

Credit grading models

Credit grading models is the collective term used to describe all models, frameworks and methodologies used to calculate PD, exposure at default (EAD), LGD, maturity and the production of credit grades.

Credit grading models are designed to provide:
- An assessment of customer and transaction characteristics.
- A meaningful differentiation of credit risk.
- Accurate internal default rate, loss and exposure estimates that are used in the capital calculation or wider risk management purposes.

Impairment, provisioning and write-offs (audited)

In the overall assessment of credit risk, impairment provisioning and write-offs are used as key indicators of credit quality.

NWB Group's IFRS 9 provisioning models, which use existing Basel models as a starting point, incorporate term structures and forward-looking information. Regulatory conservatism within the Basel models has been removed as appropriate to comply with the IFRS 9 requirement for unbiased ECL estimates.

Five key areas may materially influence the measurement of credit impairment under IFRS 9 – two of these relate to model build and three relate to model application:

- Model build:
  - The determination of economic indicators that have most influence on credit loss for each portfolio and the severity of impact (this leverages existing stress testing models which are reviewed annually).
  - The build of term structures to extend the determination of the risk of loss beyond 12 months that will influence the impact of lifetime loss for exposures in Stage 2.
- Model application:
  - The assessment of the SICR and the formation of a framework capable of consistent application.
  - The determination of asset lifetimes that reflect behavioural characteristics while also representing management actions and processes (using historical data and experience).
  - The choice of forward-looking economic scenarios and their respective probability weights.

Refer to Accounting policies 2.3 for further details.

IFRS 9 ECL model design principles (audited)

Modelling of ECL for IFRS 9 follows the conventional approach to divide the estimation of credit losses into its component parts of PD, LGD and EAD.

To meet IFRS 9 requirements, the PD, LGD and EAD parameters differ from their Pillar 1 internal ratings based (IRB) counterparts in the following aspects:

- Unbiased – material regulatory conservatism has been removed from IFRS 9 parameters to produce unbiased estimates.
- Point-in-time – IFRS 9 parameters reflect actual economic conditions at the reporting date instead of long-run average or downturn conditions.
- Forward-looking – IFRS 9 PD estimates and, where appropriate, EAD and LGD estimates reflect forward-looking economic conditions.

Credit risk continued

- Lifetime measurement – IFRS 9 PD, LGD and EAD are provided as multi-period term structures up to exposure lifetimes instead of over a fixed one-year horizon.

IFRS 9 requires that at each reporting date, an entity shall assess whether the credit risk on an account has increased significantly since initial recognition. Part of this assessment requires a comparison to be made between the current lifetime PD (i.e. the PD over the remaining lifetime at the reporting date) and the equivalent lifetime PD as determined at the date of initial recognition.

For assets originated before IFRS 9 was introduced, comparable lifetime origination PDs did not exist. These have been retrospectively created using the relevant model inputs applicable at initial recognition.

PD estimates

Personal models

Personal PD models follow a discrete multi-horizon survival approach, predicting quarterly PDs up to lifetime at account level, with a key driver being scores from related IRB PD models. Forward-looking economic information is brought in by economic response models, which leverage the existing stress test model suite. The current suite of PD models was introduced in 2022 replacing the previous, first-generation models to remediate a range of model weaknesses.

Wholesale models

Wholesale PD models use a point-in-time/through-the-cycle framework to convert one-year regulatory PDs into point-in-time estimates that reflect economic conditions at the reporting date. The framework utilises credit cycle indices (CCIs) for a comprehensive set of region/industry segments. Further detail on CCIs is provided in the Economic loss drivers section.

One year point-in-time PDs are extended to forward-looking lifetime PDs using a conditional transition matrix approach and a set of econometric forecasting models.

LGD estimates

The general approach for the IFRS 9 LGD models is to leverage corresponding IRB LGD models with bespoke adjustments to ensure estimates are unbiased and, where relevant, forward-looking.

Personal

Forward-looking information has only been incorporated for the secured portfolios, where changes in property prices can be readily accommodated. Analysis has shown minimal impact of economic conditions on LGDs for the other Personal portfolios.

Wholesale

Forward-looking economic information is incorporated into LGD estimates using the existing CCI framework. For low default portfolios, including sovereigns and banks, loss data is too scarce to substantiate estimates that vary with economic conditions. Consequently, for these portfolios, LGD estimates are assumed to be constant throughout the projection horizon.

EAD estimates

Personal

The IFRS 9 Personal modelling approach for EAD is dependent on product type.

- Revolving products use the existing Basel models as a basis, with appropriate adjustments incorporating a term structure based on time to default.
- Amortising products use an amortising schedule, where a formula is used to calculate the expected balance based on remaining terms and interest rates.
- Analysis has indicated that there is minimal impact on EAD arising from changes in the economy for all Personal portfolios except mortgages. Therefore, forward-looking information is only incorporated in the mortgage EAD model (through forecast changes in interest rates).

Wholesale

For Wholesale, EAD values are projected using product specific credit conversion factors (CCFs), closely following the product segmentation and approach of the respective Basel model. However, the CCFs are estimated over multi-year time horizons and contain no regulatory conservatism or downturn assumptions.

No explicit forward-looking information is incorporated, on the basis of analysis showing the temporal variation in CCFs is mainly attributable to changes in exposure management practices rather than economic conditions.

Governance and post model adjustments (audited)

The IFRS 9 PD, EAD and LGD models are subject to NWB Group's model risk policy that stipulates periodic model monitoring, periodic re-validation and defines approval procedures and authorities according to model materiality. Various post model adjustments were applied where management judged they were necessary to ensure an adequate level of overall ECL provision. All post model adjustments were subject to formal approval through provisioning governance, and were categorised as follows (business level commentary is provided below):

- Deferred model calibrations – ECL adjustments where PD model monitoring indicated that actual defaults were below estimated levels but where it was judged that an implied ECL release was not supportable due to the influence of government support schemes on default levels in the past two years. As a consequence, any potential ECL release was deferred and retained on the balance sheet until modelled ECL levels are affirmed by new model parallel runs or similar analyses.
- Economic uncertainty – ECL adjustments primarily arising from uncertainties associated with the high inflation environment as well as supply chain disruption, along with the residual effect of COVID-19 and government support schemes. In all cases, management judged that additional ECL was required until further credit performance data became available as the full effects of these issues matures.
- Other adjustments – ECL adjustments where it was judged that the modelled ECL required amendment.

Post model adjustments will remain a key focus area of NWB Group's ongoing ECL adequacy assessment process. A holistic framework has been established including reviewing a range of economic data, external benchmark information and portfolio performance trends with a particular focus on segments of the portfolio (both commercial and consumer) that are likely to be more susceptible to the high inflation environment and supply chain disruption.

Credit risk continued

ECL post model adjustments (audited)

The table below shows ECL post model adjustments.

	Retail Banking		Private	Commercial	
	Mortgages	Other	Banking	& Institutional	Total
2022	£m	£m	£m	£m	£m
Deferred model calibrations	**—**	**—**	**—**	**—**	**—**
Economic uncertainty	**91**	**40**	**6**	**151**	**288**
Other adjustments	**7**	**15**	**—**	**11**	**33**
Total	**98**	**55**	**6**	**162**	**321**
Of which:					
- Stage 1	***58***	***21***	***3***	***50***	***132***
- Stage 2	***29***	***34***	***3***	***108***	***174***
- Stage 3	***11***	***—***	***—***	***4***	***15***
2021					
Deferred model calibrations	48	80	—	51	179
Economic uncertainty	46	80	5	285	416
Other adjustments	26	—	—	2	28
Total	120	160	5	338	623
Of which:					
- Stage 1	*8*	*5*	*—*	*10*	*23*
- Stage 2	*99*	*134*	*5*	*328*	*566*
- Stage 3	*13*	*21*	*—*	*—*	*34*

Post model adjustments have reduced significantly since 31 December 2021, with notable shifts in all categories. This reflected:

- Removal of deferred model calibration post model adjustments following the implementation of new models as well as COVID-19 adjustments no longer being required.
- Economic uncertainty adjustments significantly reduced as many COVID-19 adjustments were no longer required, plus the deteriorating economic outlook and improved modelling approaches, resulted in increases in modelled ECL.
- Retail Banking – The judgemental post model adjustment for deferred model calibrations of £128 million held at 31 December 2021 was no longer required due to the implementation of new PD models across the Retail portfolios implemented during the year, negating the need for management judgement on PD calibration adjustments. The post model adjustments for economic uncertainty were held at a broadly consistent level to 31 December 2021, totalling £131 million (2021 – £126 million). The primary element of the economic uncertainty adjustment was a £112 million ECL uplift to capture the risk on segments of the Retail portfolio that are more susceptible to the effects of a high inflation environment and the impacts on affordability. This focuses on key affordability lenses, including customers with lower incomes in fuel poverty, over-indebted borrowers and customers vulnerable to a potential mortgage rate shock impact on their affordability. This adjustment superseded the previously held £22 million for COVID-19 payment holiday high-risk customers and the £55 million judgemental ECL release holdback at 31 December 2021. The current post model adjustment allocates more ECL to Stage 1 given the forward-looking nature of the risks on affordability driven by the high inflation environment, whereas the previous COVID-19 post model adjustments were focused on Stage 2, due to specific customer events (for example, high-risk payment holiday cases migrated into Stage 2).

Other judgmental overlays included a £15 million uplift to reflect forward-looking provisions relating to credit cards EAD and limit utilisation modelling considerations. There is also an ECL adjustment for higher risk residential interest only mortgages of £7 million. The £11 million post model adjustment previously held for cladding risk was removed due to management's view on the positive developments in this segment.

Commercial & Institutional – The post model adjustment for economic uncertainty reduced from £285 million to £151 million during the year. It included an overlay of £90 million to cover the residual risks from COVID-19, including the risk that government support schemes could affect future recoveries and concerns surrounding associated debt, to customers that have utilised government support schemes. Inflation and supply chain issues present significant headwinds for a number of sectors which are not fully captured in the models. A £61 million mechanistic adjustment, via a sector-level downgrade, was applied to the sectors that were considered most at risk from these headwinds.

The judgemental overlay for deferred model calibrations on the business banking portfolio was removed as COVID-19 no longer impedes the mechanistic modelling approach.

Other adjustments consisted of an £11 million overlay to mitigate the effect of operational timing delays in the identification and flagging of a SICR.

Credit risk continued

Exposures that are considered significantly credit deteriorated since initial recognition are classified in Stage 2 and assessed for lifetime ECL measurement (exposures not considered deteriorated carry a 12 month ECL). NWB Group has adopted a framework to identify deterioration based primarily on relative movements in lifetime PD supported by additional qualitative backstops. The principles applied are consistent across NWB Group and align to credit risk management practices, where appropriate.

The framework comprises the following elements:

- IFRS 9 lifetime PD assessment (the primary driver) – on modelled portfolios, the assessment is based on the relative deterioration in forward-looking lifetime PD and is assessed monthly. To assess whether credit deterioration has occurred, the residual lifetime PD at balance sheet date (which PD is established at date of initial recognition (DOIR)) is compared to the current PD. If the current lifetime PD exceeds the residual origination PD by more than a threshold amount, deterioration is assumed to have occurred and the exposure transferred into Stage 2 for a lifetime loss assessment. For Wholesale, a doubling of PD would indicate a SICR subject to a minimum PD uplift of 0.1%. For Personal portfolios, the criteria vary by risk band, with lower risk exposures needing to deteriorate more than higher risk exposures, as outlined in the following table:

Personal risk bands	PD bandings (based on residual lifetime PD calculated at DOIR)	PD deterioration threshold criteria
Risk band A	<0.762%	PD@DOIR + 1%
Risk band B	<4.306%	PD@DOIR + 3%
Risk band C	>=4.306%	1.7 x PD@DOIR

- Qualitative high-risk backstops – the PD assessment is complemented with the use of qualitative high-risk backstops to further inform whether significant deterioration in lifetime risk of default has occurred. The qualitative high-risk backstop assessment includes the use of the mandatory 30+ days past due backstop, as prescribed by IFRS 9 guidance, and other features such as forbearance support, Wholesale exposures managed within the Risk of Credit Loss framework, and adverse credit bureau results for Personal customers.
- Persistence (Personal and business banking customers only) – the persistence rule ensures that accounts which have met the criteria for PD driven deterioration are still considered to be significantly deteriorated for three months thereafter. This additional rule enhances the timeliness of capture in Stage 2. The persistence rule is applied to PD driven deterioration only.

Significant increase in credit risk (SICR) (audited)

The criteria are based on a significant amount of empirical analysis and seek to meet three key objectives:

- Criteria effectiveness – the criteria should be effective in identifying significant credit deterioration and prospective default population.
- Stage 2 stability – the criteria should not introduce unnecessary volatility in the Stage 2 population.
- Portfolio analysis – the criteria should produce results which are intuitive when reported as part of the wider credit portfolio.

Monitoring the effect on relative PD deterioration when originating new lending at times of weaker economic outlook (therefore, higher PDs at initial recognition) is important to ensure SICR criteria remains effective.

Provisioning for forbearance (audited)

Personal

The methodology used for provisioning in respect of Personal forborne loans will differ depending on whether the loans are performing or non-performing and which business is managing them due to local market conditions.

Granting forbearance will only change the arrears status of the loan in specific circumstances, which can include capitalisation of principal and interest in arrears, where the loan may be returned to the performing book if the customer has demonstrated an ability to meet regular payments and is likely to continue to do so.

The loan would continue to be reported as forborne until it meets the exit criteria set out by the appropriate regulatory guidance.

For ECL provisioning, all forborne but performing exposures are categorised as Stage 2 and are subject to a lifetime loss provisioning assessment. Where the forbearance treatment includes the cessation of interest on the customer balance (i.e. non-accrual), this will be treated as a Stage 3 default.

For non-performing forborne loans, the Stage 3 loss assessment process is the same as for non-forborne loans.

Wholesale

Provisions for forborne loans are assessed in accordance with normal provisioning policies. The customer's financial position and prospects – as well as the likely effect of the forbearance, including any concessions granted, and revised PD or LGD gradings – are considered in order to establish whether an impairment provision increase is required.

Wholesale loans granted forbearance are individually credit assessed in most cases. Performing loans subject to forbearance treatment are categorised as Stage 2 and subject to a lifetime loss assessment.

Credit risk continued

Forbearance may result in the value of the outstanding debt exceeding the present value of the estimated future cash flows. This difference will lead to a customer being classified as non-performing.

In the case of non-performing forborne loans, an individual loan impairment provision assessment generally takes place prior to forbearance being granted. The amount of the loan impairment provision may change once the terms of the forbearance are known, resulting in an additional provision charge or a release of the provision in the period the forbearance is granted.

The transfer of Wholesale loans from impaired to performing status follows assessment by relationship managers and credit. When no further losses are anticipated and the customer is expected to meet the loan's revised terms, any provision is written-off or released and the balance of the loan can be returned to performing status once exit criteria, as set out by regulatory guidance, is met.

Asset lifetimes (audited)

The choice of initial recognition and asset duration is another critical judgment in determining the quantum of lifetime losses that apply.

- The date of initial recognition reflects the date that a transaction (or account) was first recognised on the balance sheet; the PD recorded at that time provides the baseline used for subsequent determination of SICR as detailed above.
- For asset duration, the approach applied (in line with IFRS 9 requirements) is:
- Term lending – the contractual maturity date, reduced for behavioural trends where appropriate (such as, expected prepayment and amortisation).
- Revolving facilities – for Personal portfolios (except credit cards), asset duration is based on behavioural life and this is normally greater than contractual life (which would typically be overnight). For Wholesale portfolios, asset duration is based on annual customer review schedules and will be set to the next review date.

In the case of credit cards, the most significant judgment is to reflect the operational practice of card reissuance and the associated credit assessment as enabling a formal re-origination trigger. As a consequence, a capped lifetime approach of up to 36 months is used on credit card balances. If the approach was uncapped the ECL impact is estimated at approximately £62 million (2021 – £60 million). However, credit card balances originated under the 0% balance transfer product, and representing approximately 20% of performing card balances, have their ECL calculated on a behavioural lifetime approach as opposed to being capped at a maximum of three years.

The capped approach reflects NWB Group's practice of a credit-based review of customers prior to credit card issuance and complies with IFRS 9. Benchmarking information indicates that peer UK banks use behavioural approaches in the main for credit card portfolios with average durations between three and ten years. Across Europe, durations are shorter and are, in some cases, as low as one year.

Economic loss drivers (audited)

Introduction

The portfolio segmentation and selection of economic loss drivers for IFRS 9 follow closely the approach used in stress testing. To enable robust modelling the forecasting models for each portfolio segment (defined by product or asset class and where relevant, industry sector and region) are based on a selected, small number of economic variables, (typically three to four) that best explain the temporal variations in portfolio loss rates. The process to select economic loss drivers involves empirical analysis and expert judgment.

The most material economic loss drivers are shown in the table below.

Portfolio	Economic loss drivers
UK retail mortgages	UK unemployment rate, sterling swap rate, UK house price index, UK household debt to income
UK retail unsecured	UK unemployment rate, sterling swap rate, UK household debt to income
UK corporates	UK stock price index, UK GDP, Bank of England base rate
UK commercial real estate	UK stock price index, UK commercial property price index, UK GDP, Bank of England base rate

(1) This is not an exhaustive list of economic loss drivers but shows the most material drivers for the most significant portfolios.

Economic scenarios

At 31 December 2022, the range of anticipated future economic conditions was defined by a set of four internally developed scenarios and their respective probabilities. In addition to the base case, they comprised upside, downside and extreme downside scenarios. The scenarios primarily reflected the current risks faced by the economy, particularly related to high inflation resulting in a fall in real household income, economic slowdown, a rise in unemployment and asset price declines.

For 2022, the four scenarios were deemed appropriate in capturing the uncertainty in economic forecasts and the non-linearity in outcomes under different scenarios. These four scenarios were developed to provide sufficient coverage across potential rises in unemployment, inflation, asset price declines and the degree of permanent damage to the economy, around which there remains pronounced levels of uncertainty.

Upside – This scenario assumes a robust growth through 2023 as consumers dip into excess savings built up since the COVID-19 pandemic and further helped by fiscal support and strong business investment. The labour market remains resilient, with the unemployment rate remaining below pre-COVID-19 levels. Inflation retraces sharply and that does not necessitate significantly more tightening. The housing market slows down compared to the previous year but still remains robust.

Credit risk continued

Base case – High inflation and significant monetary policy tightening leads to a mild recession in 2023. Fiscal support remains key in containing the impact. Unemployment rate rises modestly but job losses are contained. Inflation moderates over medium-term and falls to the target levels in 2024. Housing market experiences price decline and lower activity but the extent of the decline is lower than that experienced during prior stresses.

Since 31 December 2021, the outlook has deteriorated as energy prices surged and cost of living crisis intensified. As a result, the base case is more pessimistic. The mild recession in 2023 contrasts with last year's assumption of a muted growth. House price correction contrasts with previous year's assumptions of a modest growth. In previous scenario, unemployment rate was expected to increase very modestly while inflation and interest rate rises last year were also relatively muted.

Downside – Inflation rises on the back of further energy price spikes. The high inflation environment leads to the economy falling under recession. As demand dries up, inflation rapidly declines. Policy rates are raised initially but then quickly eased to assist in recovery. Unemployment is more than the base case scenario while house prices experience declines comparable to previous episodes of stress.

Extreme downside – This scenario assumes high and persistent inflation. Households see the highest recorded decline in real income. Policy rate rises to levels last seen in early 2000. Resulting economic recession is deep and leads to widespread job losses. House prices lose approximately a third of their value while unemployment rate rises to level above those seen during the 2008 financial crisis.

The previous year's extreme downside also included a deep recession, labour market deterioration and asset price falls, but the current scenario explores these risks in a high inflation, high rates environment.

The tables and commentary below provide details of the key economic loss drivers under the four scenarios.

The main macroeconomic variables for each of the four scenarios used for ECL modelling are set out in the main macroeconomic variables table below. The compound annual growth rate (CAGR) for GDP is shown. It also shows the five-year average for unemployment and the Bank of England base rate. The house price index and commercial real estate figures show the total change in each asset over five years.

Economic loss drivers (audited)

Main macroeconomic variables

	2022					2021				
	Upside	Base case	Downside	Extreme downside	Weighted average	Upside	Base case	Downside	Extreme downside	Weighted average
Five-year summary	%	%	%	%	%	%	%	%	%	%
GDP - CAGR	1.6	0.8	0.2	(0.2)	0.7	2.4	1.7	1.4	0.6	1.8
Unemployment - average	3.9	4.6	5.1	7.2	5.0	3.5	4.2	4.8	6.7	4.2
House price index - total change	21.5	(1.3)	(6.0)	(22.4)	(1.3)	22.7	12.1	4.3	(5.3)	12.8
Bank of England base rate - average	2.6	3.3	1.5	4.9	3.1	1.5	0.8	0.7	(0.5)	0.9
Commercial real estate price - total change	(0.1)	(14.4)	(17.2)	(38.3)	(16.1)	18.2	7.2	5.5	(6.4)	9.5
Consumer price index - CAGR	2.4	3.0	3.1	7.0	3.6	2.7	2.5	3.1	1.5	2.6
UK stock price index - total change	22.6	13.9	1.8	(8.5)	9.5	36.6	24.9	12.5	0.2	24.7
World GDP - CAGR	3.7	3.3	1.6	1.0	2.7	3.5	3.2	2.6	0.6	3.1
Probability weight	18.6	45.0	20.8	15.6		30.0	45.0	20.0	5.0	

(1) The five year period starts after Q3 2022 for 31 December 2022 and Q3 2021 for 31 December 2021.
(2) CAGR and total change figures are not comparable with 31 December 2021 data, as the starting quarters are different.

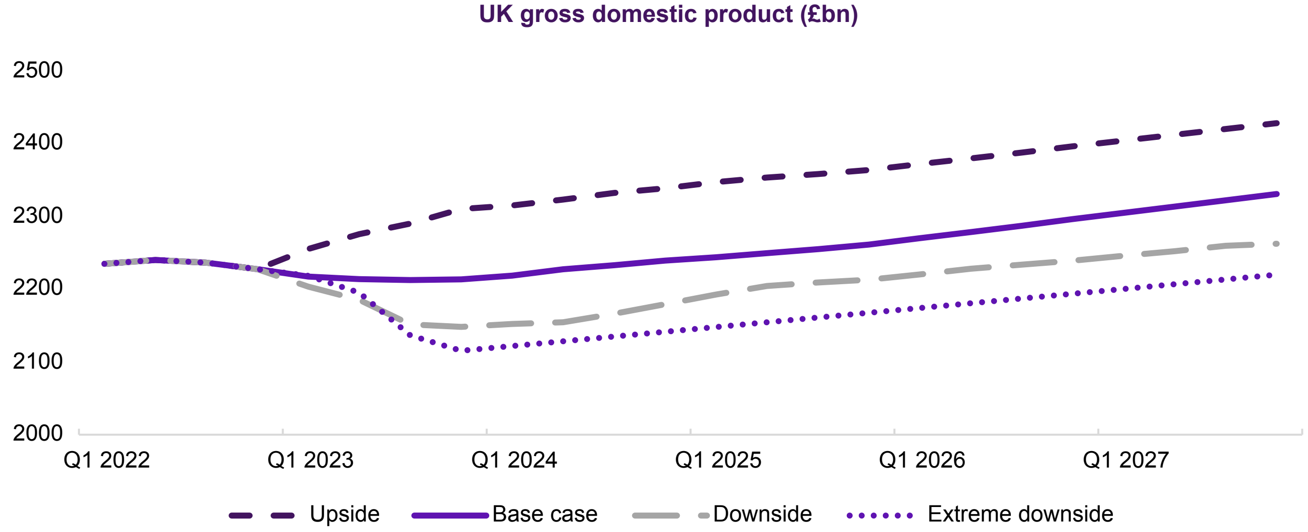
Probability weightings of scenarios

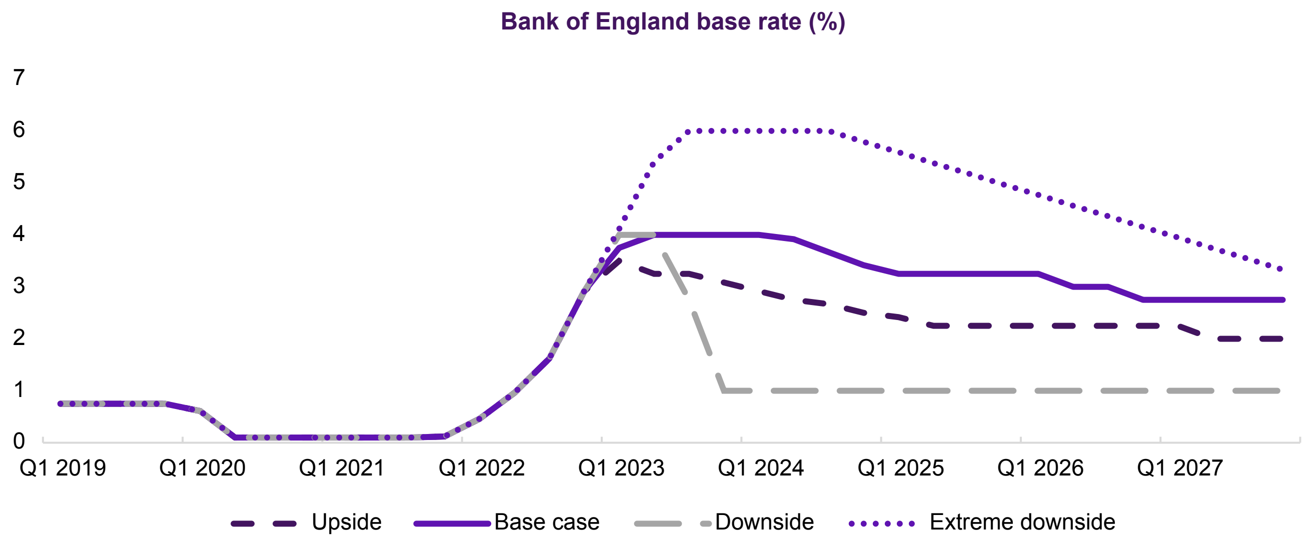
A subjective approach for assigning probability weight was used during COVID-19 due to the scale of the economic effect of COVID-19 and the range of recovery paths. Similarly, a subjective approach was used at 30 September 2022, to reflect the deteriorating outlook and shifting balance of risks in the given set of scenarios. However, NWB Group's quantitative approach to IFRS 9 multiple economic scenarios (MES) involves selecting a suitable set of discrete scenarios to characterise the distribution of risks in the economic outlook and assigning appropriate probability weights. This quantitative approach has been reinstated and is used for 31 December 2022.

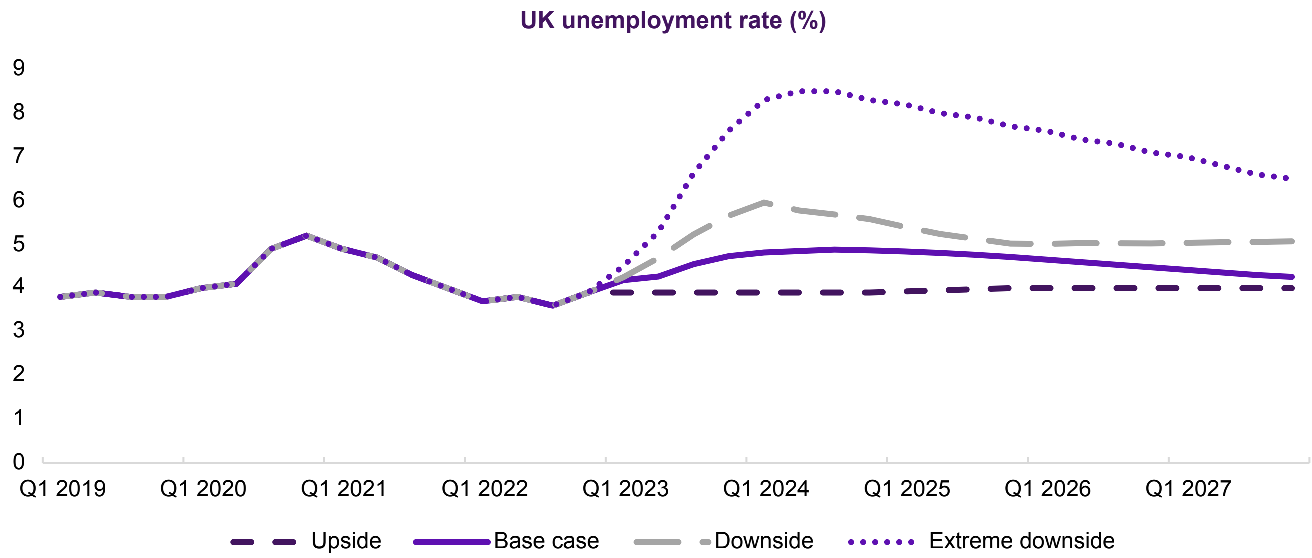
The approach involves comparing UK GDP paths for NWB Group's scenarios against a set of 1,000 model runs, following which, a percentile in the distribution is established that most closely corresponded to the scenario. Probability weight for base case is set first based on judgement, while probability weights for the alternate scenarios are assigned based on these percentiles scores.

The assigned probability weights were judged to be aligned with the subjective assessment of balance of the risks in the economy. Since 31 December 2021, high inflation posed significant challenge to the economy and there is considerable uncertainty to the economic outlook, with respect to persistence and range of outcomes on inflation and its subsequent effects on household real income and economic activity. Given that backdrop, NWB Group judges it appropriate to assign higher probability weights on downside-biased scenarios than at 31 December 2021. It presents good coverage to the range of outcomes assumed in the scenarios, including the potential for a robust recovery on the upside and exceptionally challenging outcomes on the downside. A 18.6% weighting was applied to the upside scenario, a 45.0% weighting applied to the base case scenario, a 20.8% weighting applied to the downside scenario and a 15.6% weighting applied to the extreme downside scenario. Compared to 30 June 2022, the probability weights were broadly similar, but with additional modest downside skew.

Credit risk continued
Economic loss drivers







Credit risk continued

Economic loss drivers (audited)

Annual figures

GDP - annual growth

	Upside %	Base case %	Downside %	Extreme downside %	Weighted average %
2022	4.4	4.4	4.4	4.4	4.4
2023	2.2	(0.9)	(2.8)	(3.1)	(1.1)
2024	1.9	0.7	(0.4)	(1.6)	0.4
2025	1.2	1.0	1.9	1.2	1.3
2026	1.2	1.4	1.2	1.2	1.3
2027	1.4	1.5	1.1	1.2	1.4

Commercial real estate price - four quarter change

	Upside %	Base case %	Downside %	Extreme downside %	Weighted average %
2022	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)
2023	2.1	(8.4)	(19.7)	(22.4)	(11.0)
2024	1.9	(0.5)	2.8	(29.1)	(3.2)
2025	2.7	1.3	3.7	6.7	2.6
2026	2.2	1.0	3.8	8.5	2.6
2027	0.6	1.0	2.3	8.6	2.0

Unemployment rate - annual average

	Upside %	Base case %	Downside %	Extreme downside %	Weighted average %
2022	3.8	3.8	3.8	3.8	3.8
2023	3.9	4.4	5.0	6.0	4.7
2024	3.9	4.9	5.7	8.4	5.4
2025	4.0	4.8	5.2	8.0	5.2
2026	4.0	4.6	5.0	7.4	5.0
2027	4.0	4.3	5.1	6.7	4.8

Consumer price index - four quarter change

	Upside %	Base case %	Downside %	Extreme downside %	Weighted average %
2022	11.2	11.2	11.2	11.2	11.2
2023	2.2	3.7	6.0	17.0	6.0
2024	1.0	2.7	1.0	8.8	3.1
2025	2.0	2.0	2.0	2.7	2.1
2026	2.0	1.9	2.0	2.3	2.0
2027	2.0	1.9	2.0	2.0	2.0

House price index - four quarter change

	Upside %	Base case %	Downside %	Extreme downside %	Weighted average %
2022	6.9	6.9	6.9	6.9	6.9
2023	7.5	(7.8)	(13.7)	(10.4)	(6.6)
2024	4.5	(0.9)	(7.7)	(15.2)	(3.2)
2025	3.0	2.9	4.8	(8.3)	1.8
2026	3.5	3.4	8.3	7.2	4.8
2027	3.4	3.4	6.3	6.6	4.3

UK stock price index - four quarter change

	Upside %	Base case %	Downside %	Extreme downside %	Weighted average %
2022	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)
2023	9.1	4.1	(20.6)	(45.0)	(7.8)
2024	4.0	1.9	9.7	24.9	5.9
2025	4.5	4.0	8.8	16.7	6.4
2026	4.9	4.4	7.0	11.0	5.8
2027	4.0	4.3	6.6	9.9	5.4

Bank of England base rate - annual average

	Upside %	Base case %	Downside %	Extreme downside %	Weighted average %
2022	1.49	1.49	1.49	1.49	1.49
2023	3.27	3.94	2.94	5.38	3.83
2024	2.71	3.75	1.00	5.95	3.33
2025	2.29	3.25	1.00	5.28	2.92
2026	2.25	3.00	1.00	4.46	2.67
2027	2.06	2.75	1.00	3.64	2.40

Worst points

	31 December 2022					31 December 2021				
	Downside %	Quarter	Extreme downside %	Quarter	Weighted average %	Downside %	Quarter	Extreme downside %	Quarter	Weighted average %
GDP	(3.9)	Q4 2023	(5.4)	Q4 2023	(1.5)	(1.8)	Q1 2022	(7.9)	Q1 2022	—
Unemployment rate (peak)	6.0	Q1 2024	8.5	Q3 2024	5.4	5.4	Q1 2023	9.4	Q4 2022	4.5
House price index	(21.3)	Q1 2025	(31.7)	Q3 2025	(10.6)	(3.0)	Q3 2023	(26.0)	Q2 2023	—
Bank of England base rate	4.0	Q1 2023	6.0	Q1 2024	4.1	1.5	Q4 2022	(0.5)	Q2 2022	1.2
Commercial real estate price	(26.8)	Q4 2023	(50.3)	Q3 2024	(21.8)	(2.5)	Q1 2022	(29.8)	Q3 2022	—
Consumer price index	15.7	Q1 2023	17.0	Q4 2023	11.7	7.9	Q4 2022	4.3	Q1 2022	5.5
UK stock price index	(24.0)	Q4 2023	(47.3)	Q4 2023	(11.7)	(12.2)	Q1 2022	(37.1)	Q2 2022	(1.2)

(1) For the unemployment rate, the figures show the peak levels. For the Bank of England base rate, the figures show highest or lowest levels. For the consumer price index, the figures show the highest annual percentage change. For other parameters, the figures show falls relative to the starting period. The calculations are performed over five years, with a starting point of Q3 2022 for 31 December 2022 scenarios.

Credit risk continued

Use of the scenarios in Personal lending

Personal lending follows a discrete scenario approach. The PD and LGD values for each discrete scenario are calculated using product specific economic response models. Each account has a PD and LGD calculated as probability weighted averages across the suite of economic scenarios.

Use of the scenarios in Wholesale lending

The Wholesale lending ECL methodology is based on the concept of CCIs. The CCIs represent, similar to the exogenous component in Personal, all relevant economic loss drivers for a region/industry segment aggregated into a single index value that describes the loss rate conditions in the respective segment relative to its long-run average. A CCI value of zero corresponds to loss rates at long-run average levels, a positive CCI value corresponds to loss rates below long-run average levels and a negative CCI value corresponds to loss rates above long-run average levels.

The individual economic scenarios are translated into forward-looking projections of CCIs using a set of econometric models. Subsequently the CCI projections for the individual scenarios are averaged into a single central CCI projection according to the given scenario probabilities. The central CCI projection is then overlaid with an additional mean reversion assumption to gradually revert to the long-run average CCI value of zero in the outer years of the projection horizon.

Finally, ECL is calculated using a Monte Carlo approach by averaging PD and LGD values arising from many CCI paths simulated around the central CCI projection.

The rationale for the Wholesale approach is the long-standing observation that loss rates in Wholesale portfolios tend to follow regular cycles. This allows NWB Group to enrich the range and depth of future economic conditions embedded in the final ECL beyond what would be obtained from using the discrete macro-economic scenarios alone.

Business banking, while part of the Wholesale segment for reporting purposes, utilises the Personal lending rather than the Wholesale lending methodology.

UK economic uncertainty

The high inflation environment and supply chain disruption are presenting significant headwinds for some businesses and sectors. These are a result of various factors and in many cases are compounding and look set to remain a feature of the economic environment into 2023. NWB Group has considered where these are most likely to affect the customer base. Furthermore, the rising cost of borrowing during 2022 for both businesses and consumers presents an additional affordability challenge for many borrowers.

The effects of these risks are not expected to be fully captured by forward-looking credit modelling, particularly given the unique high inflation environment, low unemployment base-case outlook. Any incremental ECL effects for these risks will be captured via post model adjustments and are detailed further in the Governance and post model adjustments section.

Model monitoring and enhancement

Throughout 2022, default rates in the UK Personal and Wholesale portfolios moderately increased but remained generally at, or somewhat below, pre-COVID-19 levels. This is based on a normalised view removing the effects of the new definition of default, introduced from 1 January 2022, in accordance with new prudential regulation. As in 2021, model recalibrations to adjust for overprediction have been deferred where applicable, based on the judgment that default rate actuals may still be supressed as a result of government support provided throughout COVID-19.

The suite of UK Personal PD models and some Personal LGD models were redeveloped in 2022 removing the need for a number of previously applied post model ECL adjustments to account for model weaknesses.

In Wholesale lending, new economic response models were introduced in 2022 for the UK corporate segments, that follow an improved modelling approach and put higher weight on stock price indices compared to previous models.

The economic response models for Personal and Wholesale do not include direct inflation drivers, due to low inflation seen throughout the data history available for modelling (typically starting in early 2000s with some variation across products).

The effect of inflation is deemed to be partially reflected through other drivers present in the models, especially in Wholesale lending, where new models with a higher weight on stock price indices were introduced for the most material portfolios.

As detailed in the Governance and post model adjustments section, ECL adjustments were applied where management judged inflation risk was not fully reflected through the models.

The use of direct inflation drivers in the economic response models will be reviewed considering additional credit outcome data in 2023.

Credit risk continued

Government guarantees

A number of support schemes were introduced in response to COVID-19 with the UK government guaranteeing part of the loan. The Bounce Back Loan Scheme is 100% guaranteed. For the Coronavirus Business Interruption Loan Scheme and the Coronavirus Large Business Interruption Loan Scheme the government guarantee is 80%. NWB Group recognises lower LGDs for these lending products as a result, with 0% applied to the government-guaranteed part of the exposure. NWB Group does not directly adjust the measurement of PD due to the government guarantee and continues to move exposures into Stage 2 and Stage 3 where a significant deterioration in credit risk or a default is identified.

Measurement uncertainty and ECL sensitivity analysis (audited)

The recognition and measurement of ECL is complex and involves the use of significant judgment and estimation, particularly in times of economic volatility and uncertainty. This includes the formulation and incorporation of multiple forward-looking economic conditions into ECL to meet the measurement objective of IFRS 9. The ECL provision is sensitive to the model inputs and economic assumptions underlying the estimate.

The focus of the simulations is on ECL provisioning requirements on performing exposures in Stage 1 and Stage 2. The simulations are run on a stand-alone basis and are independent of each other; the potential ECL impacts reflect the simulated impact at 31 December 2022. Scenario impacts on SICR should be considered when evaluating the ECL movements of Stage 1 and Stage 2. In all scenarios the total exposure was the same but exposure by stage varied in each scenario.

Stage 3 provisions are not subject to the same level of measurement uncertainty – default is an observed event as at the balance sheet date. Stage 3 provisions therefore were not considered in this analysis.

The impact arising from the base case, upside, downside and extreme downside scenarios was simulated. These scenarios are used in the methodology for Personal multiple economic scenarios as described in the Economic loss drivers section. In the simulations, NWB Group has assumed that the economic macro variables associated with these scenarios replace the existing base case economic assumptions, giving them a 100% probability weighting and therefore serving as a single economic scenario.

These scenarios were applied to all modelled portfolios in the analysis below, with the simulation impacting both PDs and LGDs. Post model adjustments included in the ECL estimates that were modelled were sensitised in line with the modelled ECL movements, but those that were judgmental in nature, primarily those for deferred model calibrations and economic uncertainty, were not (refer to the Governance and post model adjustments section). As expected, the scenarios create differing impacts on ECL by portfolio and the impacts are deemed reasonable. In this simulation, it is assumed that existing modelled relationships between key economic variables and loss drivers hold, but in practice other factors would also have an impact, for example, potential customer behaviour changes and policy changes by lenders that might impact on the wider availability of credit.

NWB Group's core criterion to identify a SICR is founded on PD deterioration, as discussed above. Under the simulations, PDs change and result in exposures moving between Stage 1 and Stage 2 contributing to the ECL impact.

Credit risk continued

Measurement uncertainty and ECL sensitivity analysis (audited)

2022	Actual	Base scenario	Moderate upside scenario	Moderate Downside scenario	Extreme downside scenario
Stage 1 modelled loans (£m)					
Retail Banking - mortgages	152,235	152,946	158,549	151,254	141,735
Retail Banking - unsecured	6,232	6,382	6,843	6,168	5,040
Wholesale - property	17,468	18,068	18,523	16,769	11,120
Wholesale - non-property	71,917	76,232	78,627	67,333	51,291
	247,852	253,628	262,542	241,524	209,186
Stage 1 modelled ECL (£m)					
Retail Banking - mortgages	67	67	71	66	61
Retail Banking - unsecured	139	141	143	141	113
Wholesale - property	80	60	48	102	94
Wholesale - non-property	196	184	162	224	223
	482	452	424	533	491
Stage 1 coverage (%)					
Retail Banking - mortgages	0.04%	0.04%	0.04%	0.04%	0.04%
Retail Banking - unsecured	2.23%	2.21%	2.09%	2.29%	2.24%
Wholesale - property	0.46%	0.33%	0.26%	0.61%	0.85%
Wholesale - non-property	0.27%	0.24%	0.21%	0.33%	0.43%
	0.19%	0.18%	0.16%	0.22%	0.23%
Stage 2 modelled loans (£m)					
Retail Banking - mortgages	16,546	15,835	10,232	17,527	27,046
Retail Banking - unsecured	2,521	2,371	1,910	2,585	3,713
Wholesale - property	2,981	2,381	1,926	3,680	9,329
Wholesale - non-property	15,777	11,462	9,067	20,361	36,403
	37,825	32,049	23,135	44,153	76,491
Stage 2 modelled ECL (£m)					
Retail Banking - mortgages	55	52	35	58	88
Retail Banking - unsecured	316	304	246	325	451
Wholesale - property	75	57	36	93	410
Wholesale - non-property	357	247	187	421	1,067
	803	660	504	897	2,016
Stage 2 coverage (%)					
Retail Banking - mortgages	0.33%	0.33%	0.34%	0.33%	0.33%
Retail Banking - unsecured	12.53%	12.82%	12.88%	12.57%	12.15%
Wholesale - property	2.52%	2.39%	1.87%	2.53%	4.39%
Wholesale - non-property	2.26%	2.15%	2.06%	2.07%	2.93%
	2.12%	2.06%	2.18%	2.03%	2.64%
Stage 1 and Stage 2 modelled loans (£m)					
Retail Banking - mortgages	168,781	168,781	168,781	168,781	168,781
Retail Banking - unsecured	8,753	8,753	8,753	8,753	8,753
Wholesale - property	20,449	20,449	20,449	20,449	20,449
Wholesale - non-property	87,694	87,694	87,694	87,694	87,694
	285,677	285,677	285,677	285,677	285,677
Stage 1 and Stage 2 modelled ECL (£m)					
Retail Banking - mortgages	122	119	106	124	149
Retail Banking - unsecured	455	445	389	466	564
Wholesale - property	155	117	84	195	504
Wholesale - non-property	553	431	349	645	1,290
Stage 1 and Stage 2 coverage (%)					
Retail Banking - mortgages	0.07%	0.07%	0.06%	0.07%	0.09%
Retail Banking - unsecured	5.20%	5.08%	4.44%	5.32%	6.44%
Wholesale - property	0.76%	0.57%	0.41%	0.95%	2.46%
Wholesale - non-property	0.63%	0.49%	0.40%	0.74%	1.47%
Reconciliation to Stage 1 and Stage 2 ECL (£m)					
ECL on modelled exposures	1,285	1,112	928	1,430	2,507
ECL on non-modelled exposures	34	34	34	34	34
Total Stage 1 and Stage 2 ECL (£m)	1,319	1,146	962	1,464	2,541
Variance to actual total Stage 1 and Stage 2 ECL (£m)		(173)	(357)	145	1,222

Credit risk continued

Measurement uncertainty and ECL sensitivity analysis continued (audited)

2022	Actual	Base scenario	Moderate upside scenario	Moderate Downside scenario	Extreme downside scenario
Reconcilliation to Stage 1 and Stage 2 Flow Exposure (£m)					
Modelled loans	285,677	285,677	285,677	285,677	285,677
Non-modelled loans	18,946	18,946	18,946	18,946	18,946
Other asset classes	93,896	93,896	93,896	93,896	93,896

(1) Variations in future undrawn exposure values across the scenarios are modelled, however the exposure position reported is that used to calculate modelled ECL as at 31 December 2022 and therefore does not include variation in future undrawn exposure values.
(2) Reflects ECL for all modelled exposure in scope for IFRS 9. The analysis excludes non-modelled portfolios and exposure relating to bonds and cash.
(3) All simulations are run on a stand-alone basis and are independent of each other, with the potential ECL impact reflecting the simulated impact as at 31 December 2022. The simulations change the composition of Stage 1 and Stage 2 exposure but total exposure is unchanged under each scenario as the loan population is static.
(4) Refer to the Economic loss drivers section for details of economic scenarios.
(5) Refer to the NWB Group 2021 Annual Report and Accounts for 2021 comparatives.

- During 2022, overall modelled ECL increased reflecting portfolio growth alongside a deteriorating view on economic outlook. Judgmental ECL post model adjustments, although reduced in value terms since 31 December 2021, continued to reflect economic uncertainty with the expectation of increased defaults in 2023 and beyond, and represented 12% of total ECL (2021 – 25%).
- If the economics were as negative as observed in the extreme downside, total Stage 1 and Stage 2 ECL was simulated to increase by £1.2 billion (approximately 93%). In this scenario, Stage 2 exposure increased significantly and was the key driver of the simulated ECL rise. The movement in Stage 2 balances in the other simulations was less significant.
- In the Wholesale portfolio, there was a significant increase in ECL under both a moderate and extreme downside scenario. The Wholesale property ECL increase was driven by commercial real estate prices which show negative growth until 2024 and significant deterioration in the stock index. The non-property increase was mainly due to GDP contraction and significant deterioration in the stock index.

Measurement uncertainty and ECL adequacy

The changes in the economic outlook and scenarios used in the IFRS 9 MES framework at 31 December 2022 resulted in an increase in modelled ECL. Given that continued uncertainty remains due to the high inflation environment and supply chain disruption, NWB Group utilised a framework of quantitative and qualitative measures to support the directional change and levels of ECL coverage, including economic data, credit performance insights and problem debt trends. This was particularly important for consideration of post model adjustments.

As the effects of the high inflation environment and supply chain disruption evolve during 2022 and into 2023 and government support schemes have to be serviced, there is a risk of credit deterioration. However, the income statement effect of this will be mitigated by the forward-looking provisions retained on the balance sheet at 31 December 2022.

There are a number of key factors that could drive further downside to impairments, through deteriorating economic and credit metrics and increased stage migration as credit risk increases for more customers. Such factors would include an adverse deterioration in GDP and unemployment in the economies in which NWB Group operates.

Credit risk – Banking activities

Introduction

This section details the credit risk profile of NWB Group's banking activities.

Refer to Accounting policies note 3.2 and Note 13 to the financial statements for policies and critical judgments relating to impairment loss determination.

Financial instruments within the scope of the IFRS 9 ECL framework (audited)

Refer to Note 9 to the financial statements for balance sheet analysis of financial assets that are classified as amortised cost or fair value through other comprehensive income (FVOCI), the starting point for IFRS 9 ECL framework assessment.

Financial assets

	31 December 2022			31 December 2021		
	Gross £bn	ECL £bn	Net £bn	Gross £bn	ECL £bn	Net £bn
Balance sheet total gross amortised cost and FVOCI	394.6			423.6		
In scope of IFRS 9 ECL framework	394.4			422.4		
% in scope	100%			100%		
Loans to customers - in scope - amortised cost	304.5	2.6	301.9	289.2	2.4	286.8
Loans to customers - in scope - FVOCI	—	—	—	0.2	—	0.2
Loans to banks - in scope - amortised cost	3.2	—	3.2	4.2	—	4.2
Total loans - in scope	307.7	2.6	305.1	293.6	2.4	291.2
Stage 1	266.7	0.5	266.2	264.6	0.2	264.4
Stage 2	37.2	0.8	36.4	26.0	1.0	25.0
Stage 3	3.8	1.3	2.5	3.0	1.2	1.8
Other financial assets - in scope - amortised cost	77.0	—	77.0	102.9	—	102.9
Other financial assets - in scope - FVOCI	9.7	—	9.7	25.9	—	25.9
Total other financial assets - in scope	86.7	—	86.7	128.8	—	128.8
Stage 1	85.9	—	85.9	128.6	—	128.6
Stage 2	0.8	—	0.8	0.2	—	0.2
Stage 3	—	—	—	—	—	—
Out of scope of IFRS 9 ECL framework	0.2	na	0.2	1.2	na	1.2
Loans to customers - out of scope - amortised cost	(0.3)	na	(0.3)	0.1	na	0.1
Loans to banks - out of scope - amortised cost	—	na	—	—	na	—
Other financial assets - out of scope - amortised cost	0.5	na	0.5	1.1	na	1.1
Other financial assets - out of scope - FVOCI	—	na	—	—	na	—

na = not applicable

The assets outside the scope of IFRS 9 ECL framework were as follows:

- Settlement balances, items in the course of collection, cash balances and other non-credit risk assets of £0.7 billion (2021 – £0.7 billion). These were assessed as having no ECL unless there was evidence that they were defaulted.
- Fair value adjustments on loans hedged by interest rate swaps, where the underlying loan was within the IFRS 9 ECL scope of £(0.5) billion (2021 – £0.1 billion).
- NWB Group originated securitisations, where ECL was captured on the underlying loans of nil (2021 – £0.4 billion).

In scope assets also include an additional £4.2 billion (2021 – £2.6 billion) of inter-Group assets not shown in table above.

Contingent liabilities and commitments

In addition to contingent liabilities and commitments disclosed in Note 26 to the financial statements, reputationally-committed limits are also included in the scope of the IFRS 9 ECL framework. Total contingent liabilities (including financial guarantees) and commitments within IFRS 9 ECL scope of £92.1 billion (2021 – £84.6 billion) comprised Stage 1 £79.3 billion (2021 – £78.5 billion); Stage 2 £12.2 billion (2021 – £5.6 billion); and Stage 3 £0.5 billion (2021 – £0.5 billion).

The ECL relating to off balance sheet exposures was £0.1 billion (2021 – £0.1 billion). The total ECL in the remainder of the credit risk section of £0.1 billion included ECL for both on and off-balance sheet exposures.

Credit risk – Banking activities continued

Segment analysis – portfolio summary (audited)

The table below shows gross loans and ECL, by segment and stage, within the scope of the IFRS 9 ECL framework.

2022	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
Loans - amortised cost and FVOCI					
Stage 1	161,743	18,368	64,407	22,204	266,722
Stage 2	18,768	801	17,563	84	37,216
Stage 3	1,988	241	1,554	—	3,783
Inter-Group (1)	—	—	—	4,220	4,220
	182,499	19,410	83,524	26,508	311,941
ECL provisions (2)					
Stage 1	213	22	259	12	506
Stage 2	371	14	419	9	813
Stage 3	713	25	524	—	1,262
Inter-Group	—	—	—	4	4
	1,297	61	1,202	25	2,585
ECL provisions coverage (3)					
Stage 1 (%)	0.13	0.12	0.40	0.05	0.19
Stage 2 (%)	1.98	1.75	2.39	10.71	2.18
Stage 3 (%)	35.87	10.37	33.72	—	33.36
Inter-Group (%)	—	—	—	0.09	0.09
	0.71	0.31	1.44	0.11	0.84
Impairment (releases)/losses					
ECL (release)/charge (4)					
Stage 1	(116)	2	(119)	(10)	(243)
Stage 2	232	(7)	116	7	348
Stage 3	102	3	129	(1)	233
Inter-Group	—	—	—	3	3
	218	(2)	126	(1)	341
Amounts written-off	167	15	139	—	321

For the notes to this table refer to the following page.

Credit risk – Banking activities continued
Segment analysis – portfolio summary (audited)

2021	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
Loans - amortised cost and FVOCI					
Stage 1	153,151	16,969	63,325	31,211	264,656
Stage 2	11,019	942	13,951	91	26,003
Stage 3	1,385	263	1,337	—	2,985
Inter-Group (1)	—	—	—	2,555	2,555
	165,555	18,174	78,613	33,857	296,199
ECL provisions (2)					
Stage 1	112	11	95	13	231
Stage 2	479	27	588	11	1,105
Stage 3	641	37	489	—	1,167
Inter-Group	—	—	—	1	1
	1,232	75	1,172	25	2,504
ECL provisions coverage (3)					
Stage 1 (%)	0.07	0.06	0.15	0.04	0.09
Stage 2 (%)	4.35	2.87	4.21	12.09	4.25
Stage 3 (%)	46.28	14.07	36.57	—	39.10
Inter-Group (%)	—	—	—	0.04	0.04
	0.74	0.41	1.49	0.08	0.85
Impairment (releases)/losses					
ECL (release)/charge (4)					
Stage 1	(329)	(45)	(619)	(2)	(995)
Stage 2	144	(15)	(162)	3	(30)
Stage 3	162	7	44	—	213
Inter-Group	—	—	—	(1)	(1)
	(23)	(53)	(737)	—	(813)
Amounts written-off	170	6	212	—	388

(1) NWB Group's intercompany assets are classified in Stage 1.
(2) Includes £2 million (2021 – £3 million) related to assets classified as FVOCI.
(3) ECL provisions coverage is calculated as ECL provisions divided by loans - amortised cost and FVOCI. It is calculated on third party loans and total ECL provisions.
(4) Includes a £0 million charge (2021 – £1 million charge) related to other financial assets, of which a £1 million release (2021 – £2 million charge) related to assets classified as FVOCI; and a £0 million release (2021 – £13 million charge) related to contingent liabilities
(5) The table shows gross loans only and excludes amounts that are outside the scope of the ECL framework. Refer to the Financial instruments within the scope of the IFRS 9 ECL framework section for further details. Other financial assets within the scope of the IFRS 9 ECL framework were cash and balances at central banks totalling £72.5 billion (2021 – £100.6 billion) and debt securities of £14.1 billion (2021 – £28.2 billion).
(6) The stage allocation of the ECL charge was aligned to the stage transition approach that underpins the analysis in the Flow statement section.
(7) Intercompany impairment charges are shown in Central items & other. In Note 4 to the financial statements - Segmental analysis - they are shown in the segments where the charges are booked.

- Stage 1 and Stage 2 modelled ECL increased due to deterioration in forward looking economics, although the Stage 2 growth was more than offset by reductions in post model adjustments.
- Stage 2 loans increased during 2022 in line with portfolio growth alongside deterioration in forward-looking economics as a result of the high inflation environment and supply chain disruption growing throughout the second half of the year.
- Stage 3 loans increased, as write-offs and repayments were more than offset by the effect of the new regulatory definition of default, which in isolation led to an increase of approximately £0.5 billion in Stage 3 balances, mostly in mortgages.
- Underlying flows into default remained subdued during 2022. However, it is expected that defaults will increase in 2023 as growing inflationary pressures on businesses, consumers and the broader economy continue to evolve.

Credit risk – Banking activities continued

Segmental loans and impairment metrics (audited)

The table below shows gross loans and ECL provisions, by days past due, by segment and stage, within the scope of the ECL framework.

	Gross loans							ECL provisions (2)						
		Stage 2 (1)							Stage 2 (1)					
	Stage 1	Not past due	1-30 DPD	>30 DPD	Total	Stage 3	Total	Stage 1	Not past due	1-30 DPD	>30 DPD	Total	Stage 3	Total
2022	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Retail Banking	**161,743**	**18,026**	**496**	**246**	**18,768**	**1,988**	**182,499**	**213**	**334**	**12**	**25**	**371**	**713**	**1,297**
Private Banking	**18,368**	**730**	**39**	**32**	**801**	**241**	**19,410**	**22**	**14**	**—**	**—**	**14**	**25**	**61**
Personal	***15,182***	***122***	***35***	***16***	***173***	***207***	***15,562***	***7***	***2***	**—**	**—**	***2***	***17***	***26***
Wholesale	***3,186***	***608***	***4***	***16***	***628***	***34***	***3,848***	***15***	***12***	**—**	**—**	***12***	***8***	***35***
Commercial & Institutional	**64,407**	**16,302**	**762**	**499**	**17,563**	**1,554**	**83,524**	**259**	**385**	**21**	**13**	**419**	**524**	**1,202**
Central items & other	**22,204**	**84**	**—**	**—**	**84**	**—**	**22,288**	**12**	**9**	**—**	**—**	**9**	**—**	**21**
Total loans	**266,722**	**35,142**	**1,297**	**777**	**37,216**	**3,783**	**307,721**	**506**	**742**	**33**	**38**	**813**	**1,262**	**2,581**
Of which:														
Personal	***176,925***	***18,148***	***531***	***262***	***18,941***	***2,195***	***198,061***	***220***	***336***	***12***	***25***	***373***	***730***	***1,323***
Wholesale	***89,797***	***16,994***	***766***	***515***	***18,275***	***1,588***	***109,660***	***286***	***406***	***21***	***13***	***440***	***532***	***1,258***
2021														
Retail Banking	153,151	9,967	691	361	11,019	1,385	165,555	112	419	31	29	479	641	1,232
Private Banking	16,969	880	26	36	942	263	18,174	11	27	—	—	27	37	75
Personal	*13,753*	*136*	*23*	*11*	*170*	*225*	*14,148*	*5*	*1*	—	—	*1*	*19*	*25*
Wholesale	*3,216*	*744*	*3*	*25*	*772*	*38*	*4,026*	*6*	*26*	—	—	*26*	*18*	*50*
Commercial & Institutional	63,325	13,015	384	552	13,951	1,337	78,613	95	558	20	10	588	489	1,172
Central items & other	31,211	91	—	—	91	—	31,302	13	11	—	—	11	—	24
Total loans	264,656	23,953	1,101	949	26,003	2,985	293,644	231	1,015	51	39	1,105	1,167	2,503
Of which:														
Personal	*166,904*	*10,103*	*714*	*372*	*11,189*	*1,610*	*179,703*	*117*	*420*	*31*	*29*	*480*	*660*	*1,257*
Wholesale	*97,752*	*13,850*	*387*	*577*	*14,814*	*1,375*	*113,941*	*114*	*595*	*20*	*10*	*625*	*507*	*1,246*

For the notes to this table refer to the following page.

Credit risk – Banking activities continued

Segmental loans and impairment metrics (audited)

The table below shows ECL and ECL provisions coverage, by days past due, by segment and stage, within the scope of the ECL framework.

	ECL provisions coverage							ECL	
		Stage 2 (1,2)							
	Stage 1	Not past due	1-30 DPD	>30 DPD	Total	Stage 3	Total	Total (release) / charge	Amounts written-off
2022	%	%	%	%	%	%	%	£m	£m
Retail Banking	**0.13**	**1.85**	**2.42**	**10.16**	**1.98**	**35.87**	**0.71**	**218**	**167**
Private Banking	**0.12**	**1.92**	**—**	**—**	**1.75**	**10.37**	**0.31**	**(2)**	**15**
Personal	***0.05***	***1.64***	***—***	***—***	***1.16***	***8.21***	***0.17***	***(2)***	***—***
Wholesale	***0.47***	***1.97***	***—***	***—***	***1.91***	***23.53***	***0.91***	***—***	***15***
Commercial & Institutional	**0.40**	**2.36**	**2.76**	**2.61**	**2.39**	**33.72**	**1.44**	**126**	**139**
Central items & other	**0.05**	**10.71**	**—**	**—**	**10.71**	**—**	**0.09**	**(4)**	**—**
Total loans	**0.19**	**2.11**	**2.54**	**4.89**	**2.18**	**33.36**	**0.84**	**338**	**321**
Of which:									
Personal	***0.12***	***1.85***	***2.26***	***9.54***	***1.97***	***33.26***	***0.67***	***216***	***167***
Wholesale	***0.32***	***2.39***	***2.74***	***2.52***	***2.41***	***33.50***	***1.15***	***122***	***154***
2021									
Retail Banking	0.07	4.20	4.49	8.03	4.35	46.28	0.74	(23)	170
Private Banking	0.06	3.07	—	—	2.87	14.07	0.41	(53)	6
Personal	*0.04*	*0.74*	*—*	*—*	*0.59*	*8.44*	*0.18*	*2*	*3*
Wholesale	*0.19*	*3.49*	*—*	*—*	*3.37*	*47.37*	*1.24*	*(55)*	*3*
Commercial & Institutional	0.15	4.29	5.21	1.81	4.21	36.57	1.49	(737)	212
Central items & other	0.04	12.09	—	—	12.09	—	0.08	1	—
Total loans	0.09	4.24	4.63	4.11	4.25	39.10	0.85	(812)	388
Of which:									
Personal	*0.07*	*4.16*	*4.34*	*7.80*	*4.29*	*40.99*	*0.70*	*(21)*	*173*
Wholesale	*0.12*	*4.30*	*5.17*	*1.73*	*4.22*	*36.87*	*1.09*	*(791)*	*215*

(1) 30 DPD – 30 days past due, the mandatory 30 days past due backstop as prescribed by IFRS 9 for a SICR.
(2) ECL provisions on contingent liabilities and commitments are included within the financial assets section so as not to distort ECL coverage ratios.

- Retail Banking – Balance sheet growth during 2022 was primarily within mortgages with new lending a result of strong housing demand and re-mortgage activity and increased buy-to-let lending. Unsecured lending balances also increased as consumer demand and spending recovered following the easing of COVID-19 restrictions and with selective relaxation of lending criteria. Total ECL coverage reduced slightly during 2022, reflective of low unemployment and stable portfolio performance, while maintaining sufficient ECL coverage for key portfolios above 2019 levels, given increased inflationary and economic pressures. Increasing Stage 2 size and portfolio coverage in the second half of the year reflected the deterioration in economic outlook, with portfolio performance remaining broadly stable. Stage 3 ECL increased overall, mainly because of the IFRS 9 alignment to the new regulatory default definition, implemented on 1 January 2022. The implementation of new mortgage IFRS 9 models resulted in lower Stage 3 ECL coverage due to reduced loss estimates for cases where the customer was not subject to repossession activity and was the primary reason for the change in overall retail Stage 3 coverage during 2022.

- Commercial & Institutional – There was growth in Commercial & Institutional, particularly as a result of increased exposure to larger corporate customers, primarily within information technology, telecommunications and power utilities. There were also continued repayments of COVID-19 government lending schemes, and strategic reductions in certain sectors. Sector appetite continues to be reviewed regularly, with particular focus on sector clusters and sub-sectors that are vulnerable to inflationary pressures or deemed to represent a heightened risk. Stage 1 and Stage 2 modelled ECL increased due to deterioration in forward-looking economics, although the Stage 2 growth was more than offset by reductions in post model adjustments. Coverage reduced with the reduction in COVID-19 post model adjustments, but coverage on Stage 1 and Stage 2 was significantly above 2019 levels, reflecting current inflationary and economic pressures.

- Other – Balance sheet reduction in 2022 compared to 2021 was mainly due to a reduction in central items held in the course of treasury related management activities.

Credit risk – Banking activities continued

Sector analysis – portfolio summary (audited)

The table below shows financial assets and off-balance sheet exposures gross of ECL and related ECL provisions, impairment and past due by sector, asset quality and geographical region.

	Personal				Wholesale					Total
2022	Mortgages (1) £m	Credit cards £m	Other personal £m	Total £m	Property £m	Corporate £m	FI £m	Sovereign £m	Total £m	£m
Loans by geography	186,650	3,509	7,902	198,061	21,684	59,613	24,436	3,927	109,660	307,721
- UK	186,650	3,509	7,902	198,061	21,050	51,383	21,550	3,117	97,100	295,161
- RoI	—	—	—	—	10	837	42	—	889	889
- Other Europe	—	—	—	—	283	3,526	537	102	4,448	4,448
- RoW	—	—	—	—	341	3,867	2,307	708	7,223	7,223
Loans by stage and asset quality (2)	186,650	3,509	7,902	198,061	21,684	59,613	24,436	3,927	109,660	307,721
Stage 1	168,675	2,590	5,660	176,925	18,379	43,846	23,748	3,824	89,797	266,722
- AQ1	1,383	—	198	1,581	877	515	3,247	1,674	6,313	7,894
- AQ2	1,689	—	179	1,868	2,017	787	15,943	563	19,310	21,178
- AQ3	3,494	3	190	3,687	1,990	3,868	247	1,406	7,511	11,198
- AQ4	101,451	71	420	101,942	3,605	8,475	2,480	44	14,604	116,546
- AQ5	51,653	755	481	52,889	5,666	17,033	1,029	4	23,732	76,621
- AQ6	3,981	935	2,746	7,662	2,516	7,740	572	9	10,837	18,499
- AQ7	4,571	744	1,113	6,428	1,512	4,791	218	123	6,644	13,072
- AQ8	291	78	308	677	186	607	12	1	806	1,483
- AQ9	162	4	25	191	10	30	—	—	40	231
Stage 2	16,511	834	1,596	18,941	2,874	14,669	653	79	18,275	37,216
- AQ1	6	—	—	6	54	73	—	13	140	146
- AQ2	3	—	2	5	10	130	—	—	140	145
- AQ3	96	—	2	98	58	288	—	7	353	451
- AQ4	8,009	—	105	8,114	208	2,746	375	55	3,384	11,498
- AQ5	6,074	29	80	6,183	537	2,651	110	—	3,298	9,481
- AQ6	861	146	531	1,538	943	3,668	95	—	4,706	6,244
- AQ7	525	423	336	1,284	773	3,478	46	4	4,301	5,585
- AQ8	414	209	434	1,057	216	1,362	19	—	1,597	2,654
- AQ9	523	27	106	656	75	273	8	—	356	1,012
Stage 3	1,464	85	646	2,195	431	1,098	35	24	1,588	3,783
- AQ10	1,464	85	646	2,195	431	1,098	35	24	1,588	3,783
Loans past due analysis (3,4)	186,650	3,509	7,902	198,061	21,684	59,613	24,436	3,927	109,660	307,721
- Not past due	184,826	3,417	7,190	195,433	20,831	56,700	24,322	3,920	105,773	301,206
- Past due 1-30 days	733	24	69	826	491	2,070	86	—	2,647	3,473
- Past due 31-89 days	400	21	84	505	166	399	2	7	574	1,079
- Past due 90-180 days	294	18	65	377	27	21	23	—	71	448
- Past due >180 days	397	29	494	920	169	423	3	—	595	1,515
Loans - Stage 2	16,511	834	1,596	18,941	2,874	14,669	653	79	18,275	37,216
- Not past due	15,837	809	1,502	18,148	2,581	13,694	647	72	16,994	35,142
- Past due 1-30 days	476	13	42	531	149	613	4	—	766	1,297
- Past due 31-89 days	198	12	52	262	144	362	2	7	515	777

For the notes to this table refer to page 41.

Credit risk – Banking activities continued
Sector analysis – portfolio summary (audited)

2022	Personal Mortgages (1) £m	Personal Credit cards £m	Personal Other personal £m	Personal Total £m	Wholesale Property £m	Wholesale Corporate £m	Wholesale FI £m	Wholesale Sovereign £m	Wholesale Total £m	Total £m
Weighted average life*										
- ECL measurement (years)	8	2	6	6	5	6	3	2	5	6
Weighted average 12 months PDs*										
- IFRS 9 (%)	0.47	2.52	4.72	0.66	2.02	2.19	0.26	0.22	1.64	1.01
- Basel (%)	0.61	2.90	3.09	0.74	1.16	1.50	0.19	0.22	1.09	0.86
ECL provisions by geography	278	197	848	1,323	275	935	38	10	1,258	2,581
- UK	*278*	*197*	*848*	*1,323*	*265*	*778*	*25*	*9*	*1,077*	*2,400*
- RoI	—	—	—	—	—	*4*	—	—	*4*	*4*
- Other Europe	—	—	—	—	*8*	*63*	*3*	*1*	*75*	*75*
- RoW	—	—	—	—	*2*	*90*	*10*	—	*102*	*102*
ECL provisions by stage	278	197	848	1,323	275	935	38	10	1,258	2,581
- Stage 1	*75*	*48*	*97*	*220*	*80*	*182*	*15*	*9*	*286*	*506*
- Stage 2	*55*	*92*	*226*	*373*	*75*	*355*	*9*	*1*	*440*	*813*
- Stage 3	*148*	*57*	*525*	*730*	*120*	*398*	*14*	—	*532*	*1,262*
ECL provisions coverage (%)	0.15	5.61	10.73	0.67	1.27	1.57	0.16	0.25	1.15	0.84
- Stage 1 (%)	*0.04*	*1.85*	*1.71*	*0.12*	*0.44*	*0.42*	*0.06*	*0.24*	*0.32*	*0.19*
- Stage 2 (%)	*0.33*	*11.03*	*14.16*	*1.97*	*2.61*	*2.42*	*1.38*	*1.27*	*2.41*	*2.18*
- Stage 3 (%)	*10.11*	*67.06*	*81.27*	*33.26*	*27.84*	*36.25*	*40.00*	—	*33.50*	*33.36*
ECL (release)/charge - Third party	(30)	35	211	216	102	15	7	(2)	122	338
Amounts written-off	18	50	99	167	20	94	40	—	154	321
Other financial assets by asset quality (2)	—	—	—	—	—	9	7,785	78,829	86,623	86,623
- AQ1-AQ4	—	—	—	—	—	9	7,556	78,829	86,394	86,394
- AQ5-AQ8	—	—	—	—	—	—	*229*	—	*229*	*229*
Off-balance sheet	15,894	12,287	7,030	35,211	10,207	42,637	3,596	411	56,851	92,062
Loan commitments	*15,894*	*12,287*	*6,979*	*35,160*	*9,879*	*40,229*	*3,344*	*411*	*53,863*	*89,023*
Financial guarantees	—	—	*51*	*51*	*328*	*2,408*	*252*	—	*2,988*	*3,039*
Off-balance sheet by asset quality (2)	*15,894*	*12,287*	*7,030*	*35,211*	*10,207*	*42,637*	*3,596*	*411*	*56,851*	*92,062*
- AQ1-AQ4	*15,212*	*370*	*6,170*	*21,752*	*7,505*	*24,944*	*2,592*	*308*	*35,349*	*57,101*
- AQ5-AQ8	*674*	*11,687*	*839*	*13,200*	*2,684*	*17,456*	*1,003*	*84*	*21,227*	*34,427*
- AQ9	*2*	*3*	*4*	*9*	*3*	*16*	—	—	*19*	*28*
- AQ10	*6*	*227*	*17*	*250*	*15*	*221*	*1*	*19*	*256*	*506*

*Not within audit scope.

For the notes to this table refer to page 41.

Credit risk – Banking activities continued
Sector analysis – portfolio summary (audited)

	Personal				Wholesale					Total
2021	Mortgages (1) £m	Credit cards £m	Other personal £m	Total £m	Property £m	Corporate £m	FI £m	Sovereign £m	Total £m	£m
Loans by geography	169,181	3,016	7,506	179,703	21,074	55,148	33,302	4,417	113,941	293,644
- UK	169,181	3,016	7,506	179,703	20,479	49,974	29,056	3,446	102,955	282,658
- RoI	—	—	—	—	5	578	112	—	695	695
- Other Europe	—	—	—	—	237	2,642	1,026	479	4,384	4,384
- RoW	—	—	—	—	353	1,954	3,108	492	5,907	5,907
Loans by stage and asset quality (2)	169,181	3,016	7,506	179,703	21,074	55,148	33,302	4,417	113,941	293,644
Stage 1	159,228	2,215	5,461	166,904	18,645	42,018	32,710	4,379	97,752	264,656
- AQ1	3,010	—	374	3,384	764	828	2,166	2,324	6,082	9,466
- AQ2	—	—	—	—	1,789	643	25,150	401	27,983	27,983
- AQ3	2,037	—	—	2,037	2,074	2,885	631	1,506	7,096	9,133
- AQ4	80,144	37	339	80,520	2,925	8,266	3,527	36	14,754	95,274
- AQ5	67,170	664	878	68,712	4,512	12,515	635	—	17,662	86,374
- AQ6	3,151	751	2,441	6,343	4,517	10,942	430	16	15,905	22,248
- AQ7	3,260	693	1,017	4,970	1,735	5,184	112	89	7,120	12,090
- AQ8	177	66	365	608	308	686	57	7	1,058	1,666
- AQ9	279	4	47	330	21	69	2	—	92	422
Stage 2	8,921	734	1,534	11,189	2,038	12,172	567	37	14,814	26,003
- AQ1	5	—	—	5	56	46	—	—	102	107
- AQ2	—	—	—	—	113	—	—	—	113	113
- AQ3	14	—	—	14	—	94	—	—	94	108
- AQ4	2,541	1	78	2,620	31	723	14	35	803	3,423
- AQ5	3,463	54	89	3,606	247	2,143	287	—	2,677	6,283
- AQ6	977	179	667	1,823	643	3,553	163	—	4,359	6,182
- AQ7	556	375	288	1,219	583	3,590	36	1	4,210	5,429
- AQ8	941	97	299	1,337	258	1,509	65	1	1,833	3,170
- AQ9	424	28	113	565	107	514	2	—	623	1,188
Stage 3	1,032	67	511	1,610	391	958	25	1	1,375	2,985
- AQ10	1,032	67	511	1,610	391	958	25	1	1,375	2,985
Loans past due analysis (3,4)	169,181	3,016	7,506	179,703	21,074	55,148	33,302	4,417	113,941	293,644
- Not past due	167,180	2,932	6,868	176,980	20,211	53,632	33,267	4,414	111,524	288,504
- Past due 1-30 days	877	21	96	994	427	653	32	2	1,114	2,108
- Past due 31-89 days	377	19	59	455	212	390	1	1	604	1,059
- Past due 90-180 days	245	16	51	312	67	174	—	—	241	553
- Past due >180 days	502	28	432	962	157	299	2	—	458	1,420
Loans - Stage 2	8,921	734	1,534	11,189	2,038	12,172	567	37	14,814	26,003
- Not past due	7,989	709	1,405	10,103	1,719	11,532	563	36	13,850	23,953
- Past due 1-30 days	626	12	76	714	112	272	3	—	387	1,101
- Past due 31-89 days	306	13	53	372	207	368	1	1	577	949

For the notes to this table refer to the following page.

Credit risk – Banking activities continued

Sector analysis – portfolio summary (audited)

	Personal				Wholesale					Total
2021	Mortgages (1) £m	Credit cards £m	Other personal £m	Total £m	Property £m	Corporate £m	FI £m	Sovereign £m	Total £m	£m
Weighted average life*										
- ECL measurement (years)	8	2	5	5	5	6	3	—	6	6
Weighted average 12 months PDs*										
- IFRS 9 (%)	0.11	5.14	2.77	0.30	0.88	1.91	0.16	0.15	1.13	0.64
- Basel (%)	0.70	3.28	3.29	0.85	1.34	1.81	0.14	0.16	1.16	0.97
ECL provisions by geography	311	209	737	1,257	218	973	43	12	1,246	2,503
- UK	311	209	737	1,257	201	846	38	12	1,097	2,354
- RoI	—	—	—	—	—	9	3	—	12	12
- Other Europe	—	—	—	—	17	68	1	—	86	86
- RoW	—	—	—	—	—	50	1	—	51	51
ECL provisions by stage	311	209	737	1,257	218	973	43	12	1,246	2,503
- Stage 1	22	48	47	117	17	79	6	12	114	231
- Stage 2	123	115	242	480	70	520	35	—	625	1,105
- Stage 3	166	46	448	660	131	374	2	—	507	1,167
ECL provisions coverage (%)	0.18	6.93	9.82	0.70	1.03	1.76	0.13	0.27	1.09	0.85
- Stage 1 (%)	0.01	2.17	0.86	0.07	0.09	0.19	0.02	0.27	0.12	0.09
- Stage 2 (%)	1.38	15.67	15.78	4.29	3.43	4.27	6.17	—	4.22	4.25
- Stage 3 (%)	16.09	68.66	87.67	40.99	33.50	39.04	8.00	—	36.87	39.10
ECL (release)/charge - Third party	(45)	(8)	32	(21)	(278)	(513)	(1)	1	(791)	(812)
Amounts written-off	5	55	113	173	111	99	5	—	215	388
Other financial assets by asset quality (2)	—	—	—	—	—	10	6,502	122,284	128,796	128,796
- AQ1-AQ4	—	—	—	—	—	10	6,342	122,282	128,634	128,634
- AQ5-AQ8	—	—	—	—	—	—	160	2	162	162
Off-balance sheet	13,481	11,809	6,907	32,197	10,175	38,097	3,390	734	52,396	84,593
- Loan commitments	13,481	11,809	6,851	32,141	9,888	36,326	3,310	734	50,258	82,399
- Financial guarantees	—	—	56	56	287	1,771	80	—	2,138	2,194
Off-balance sheet by asset quality (2)	13,481	11,809	6,907	32,197	10,175	38,097	3,390	734	52,396	84,593
- AQ1-AQ4	12,165	207	5,485	17,857	7,276	21,673	2,487	586	32,022	49,879
- AQ5-AQ8	1,313	11,366	1,411	14,090	2,882	16,180	902	148	20,112	34,202
- AQ9	—	4	3	7	4	37	1	—	42	49
- AQ10	3	232	8	243	13	207	—	—	220	463

*Not within audit scope.

(1) Includes a portion of Private Banking lending secured against residential real estate, in line with ECL calculation methodology. Private Banking mortgages are reported in UK, reflecting the country of lending origination.

(2) AQ bandings are based on Basel PDs and mapping is as follows:

Internal asset quality band	Probability of default range	Indicative S&P rating
AQ1	0% - 0.034%	AAA to AA
AQ2	0.034% - 0.048%	AA to AA-
AQ3	0.048% - 0.095%	A+ to A
AQ4	0.095% - 0.381%	BBB+ to BBB-
AQ5	0.381% - 1.076%	BB+ to BB
AQ6	1.076% - 2.153%	BB- to B+
AQ7	2.153% - 6.089%	B+ to B
AQ8	6.089% - 17.222%	B- to CCC+
AQ9	17.222% - 100%	CCC to C
AQ10	100%	D

£0.2 billion (2021 – £0.2 billion) AQ10 Personal balances primarily relate to loan commitments, the drawdown of which is effectively prohibited.

(3) 30 DPD – 30 days past due, the mandatory 30 days past due backstop prescribed by IFRS 9 for a SICR.

Credit risk – Banking activities continued

Sector analysis – portfolio summary (audited)

The table below shows ECL by stage, for the Personal portfolios and key sectors of the Wholesale portfolios that continue to be affected by COVID-19.

	Loans - amortised cost and FVOCI				Off-balance sheet		ECL provisions			
	Stage 1	Stage 2	Stage 3	Total	Loan commitments	Contingent liabilities	Stage 1	Stage 2	Stage 3	Total
2022	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Personal	176,925	18,941	2,195	198,061	35,160	51	220	373	730	1,323
Mortgages	168,675	16,511	1,464	186,650	15,894	—	75	55	148	278
Credit cards	2,590	834	85	3,509	12,287	—	48	92	57	197
Other personal	5,660	1,596	646	7,902	6,979	51	97	226	525	848
Wholesale	89,797	18,275	1,588	109,660	53,863	2,988	286	440	532	1,258
Property*	18,379	2,874	431	21,684	9,879	328	80	75	120	275
Financial institutions	23,748	653	35	24,436	3,344	252	15	9	14	38
Sovereign	3,824	79	24	3,927	411	—	9	1	—	10
Corporate	43,846	14,669	1,098	59,613	40,229	2,408	182	355	398	935
Of which:										
Agriculture*	3,065	824	67	3,956	739	17	17	25	29	71
Airlines and aerospace*	367	1,048	17	1,432	919	61	2	37	7	46
Automotive*	5,270	1,409	20	6,699	3,194	41	17	16	8	41
Chemicals*	323	113	1	437	546	11	1	2	1	4
Health	2,812	764	96	3,672	394	2	16	20	29	65
Industrials*	1,923	694	73	2,690	2,638	129	8	13	19	40
Land transport and logistics*	3,184	1,045	22	4,251	2,694	129	11	29	9	49
Leisure*	2,769	2,855	174	5,798	1,386	51	22	97	84	203
Mining and metals*	157	40	2	199	349	2	—	1	1	2
Oil and gas*	608	111	37	756	1,079	136	2	1	27	30
Power Utilities*	3,715	404	1	4,120	3,916	1,115	9	11	—	20
Retail*	4,919	1,248	126	6,293	3,475	335	17	25	56	98
Shipping*	141	129	14	284	78	14	—	6	6	12
Water and waste*	2,970	303	7	3,280	1,796	79	4	4	4	12
Total	266,722	37,216	3,783	307,721	89,023	3,039	506	813	1,262	2,581
2021										
Personal	166,904	11,189	1,610	179,703	32,141	56	117	480	660	1,257
Mortgages	159,228	8,921	1,032	169,181	13,481	—	22	123	166	311
Credit cards	2,215	734	67	3,016	11,809	—	48	115	46	209
Other personal	5,461	1,534	511	7,506	6,851	56	47	242	448	737
Wholesale	97,752	14,814	1,375	113,941	50,258	2,138	114	625	507	1,246
Property*	18,645	2,038	391	21,074	9,888	287	17	70	131	218
Financial institutions	32,710	567	25	33,302	3,310	80	6	35	2	43
Sovereign	4,379	37	1	4,417	734	—	12	—	—	12
Corporate	42,018	12,172	958	55,148	36,326	1,771	79	520	374	973
Of which:										
Agriculture*	2,973	942	47	3,962	737	15	9	29	18	56
Airlines and aerospace*	584	471	36	1,091	1,107	52	1	30	8	39
Automotive*	4,640	1,206	31	5,877	2,617	48	8	28	8	44
Chemicals*	290	42	1	333	551	13	—	—	—	1
Health	2,503	864	78	3,445	449	2	6	38	22	66
Industrials*	1,908	546	19	2,473	2,110	138	3	12	8	23
Land transport and logistics*	3,183	663	35	3,881	2,322	59	4	42	10	56
Leisure*	2,747	3,036	199	5,982	1,192	46	8	159	87	254
Mining and metals*	224	39	1	264	506	2	—	2	1	3
Oil and gas*	916	110	33	1,059	610	419	1	6	23	30
Power Utilities*	3,119	217	5	3,342	3,850	344	2	3	—	5
Retail*	4,562	1,057	142	5,761	3,676	297	7	23	51	81
Shipping*	458	310	14	782	69	4	1	11	6	18
Water and waste*	2,522	188	4	2,714	1,394	70	2	4	2	9
Total	264,656	26,003	2,985	293,644	82,399	2,194	231	1,105	1,167	2,503

* Wholesale sectors marked with an asterisk contain an element of exposure classified as Heightened climate-related risk. Elements of the personal mortgage portfolio are also exposed to heightened climate-related risk This is not within the audit scope.

Wholesale forbearance (audited)

The table below shows Wholesale forbearance, Heightened Monitoring and Risk of Credit Loss by sector. Personal forbearance is disclosed in the Personal portfolio section. This table show current exposure but reflects risk transfers where there is a guarantee by another customer

2022	Property £m	FI £m	Other corporate £m	Total £m
Forbearance (flow)	**383**	**105**	**2,108**	**2,596**
Forbearance (stock)	**500**	**106**	**3,669**	**4,275**
Heightened Monitoring and Risk of Credit Loss	**517**	**68**	**2,786**	**3,371**
2021				
Forbearance (flow)	373	25	2,816	3,214
Forbearance (stock)	562	32	4,279	4,873
Heightened Monitoring and Risk of Credit Loss	646	65	3,410	4,121

Credit risk – Banking activities continued

Sector analysis – portfolio summary (audited)

- Loans by geography and sector – In line with NWB Group's strategic focus, exposures continued to be mainly in the UK. In Personal exposure increased primarily as a result of increased mortgage lending. In Wholesale, there was a reduction in the balance sheet in Q4, following a period of growth up to Q3. This was mainly due to a reduction in central items held in the course of treasury related management activities. There was growth in Commercial & Institutional, particularly as a result of increased exposure to larger corporate customers, primarily within information technology, telecommunications and power utilities. Repayment performance under COVID-19 government lending schemes is closely tracked and exposure continued to decrease due to scheduled repayment activity and account closures. Exposures under the Bounce Bank Loan Scheme (BBLS) that benefit from the 100% government guarantee account for approximately 70% of remaining government scheme exposures. BBLS missed repayment rate and recoveries stock have increased but volumes continue to be in line with other lenders.
- Loans by stage – In both Wholesale and Personal, deterioration in forward-looking economics resulted in a larger proportion of accounts exhibiting a SICR compared to 2021. There was, therefore, a migration of exposures from Stage 1 into Stage 2 during 2022. Personal customers who had accessed payment holiday support, and where their risk profile was identified as relatively high, are no longer collectively migrated into Stage 2. The relevance of this collective SICR identification was no longer considered as pertinent in the context of the current high inflation environment and related uncertainty.
- Loans – Past due analysis – The implementation of the new regulatory default definition included refinements to the days past due calculations. This contributed to an increase in arrears in H1 2022 in Personal, however this moderated through the year. In Wholesale, there was an increase in past due 1-30 days in corporates.
- Weighted average 12 months PDs – In Personal, the Basel II point-in-time PDs improved slightly during 2022 due to a stable credit performance in the portfolios. For IFRS 9 PDs, there were increases across mortgages and other personal lending as a result of new PD model implementations during the year, coupled with the deteriorating economic outlook in the second half of the year. For credit cards, the new IFRS 9 PD model implementation drove a net reduction in PD levels, primarily resulting from more accurate modelling of defaults driven by shifts in general unemployment. In Wholesale, the Basel II PDs were based on a through-the-cycle approach and improved reflecting positive portfolio performance. The IFRS 9 PDs increased due the deterioration in forward looking economics. For further details refer to the Asset quality section.
- ECL provision by geography – In line with loans by geography, the vast majority of ECL related to exposures in the UK.
- ECL provisions by stage – As mentioned above, Stage 1 and Stage 2 modelled ECL increased due to deterioration in forward-looking economics, although the Stage 2 growth was more than offset by reductions in post model adjustments. Stage 3 provisions have yet to be materially affected by the high inflation environment and supply chain disruption, with increases relating to the introduction of the new regulatory definition of default, largely offset by write offs.
- ECL provisions coverage – Overall provisions coverage reduced, due to a change in product mix and a decrease in judgemental post model adjustments which more than offset increases from the deteriorating economic outlook.
- The ECL charge and loss rate – ECL charge and loss rate was low, with charges from a deterioration in forward-looking economics countered by reductions in post model adjustments and the continued stable portfolio performance and low default trends.
- Other financial assets by asset quality – Consisting almost entirely of cash and balances at central banks and debt securities, held in the course of treasury related management activities, these assets were mainly within the AQ1-AQ4 bands.
- Off-balance sheet exposures by asset quality – In Personal, undrawn exposures were reflective of available credit lines in credit cards and current accounts. Additionally, the mortgage portfolio had undrawn exposures, where a formal offer had been made to a customer but had not yet drawn down; the value increased in line with the pipeline of offers. There was also a legacy portfolio of flexible mortgages where a customer had the right and ability to draw down further funds. The asset quality was aligned to the wider portfolio. In Wholesale, growth was primarily loan commitments to financial institutions and corporate sectors in the AQ1-AQ4 bands.
- Wholesale forbearance – Forbearance flow and stock decreased in 2022 compared to 2021, noting that 2021 was adversely affected by COVID-19. Increased levels of forbearance were observed in Q4 2022. The retail & leisure, property and services sectors represented the largest share of forbearance flow. Labour shortages, the high inflation environment, rising fuel and energy costs, interest rate impacts and supply chain issues continue to weigh on these sectors. Payment holidays and covenant waivers were the most common forms of forbearance granted.
- Heightened Monitoring and Risk of Credit Loss – Economic headwinds continue to present an uncertain outlook. Risk of Credit Loss framework exposures and inflows decreased in 2022 compared to 2021, noting again that 2021 was adversely affected by COVID-19. Inflows into the framework began to increase in Q4 2022. The sector breakdown of exposures within the framework remained consistent with prior periods. Retail SME customers do not form part of the Wholesale Risk of Credit Loss framework. Customers in financial difficulty within this group are managed by specialist problem debt management teams. The number of customers in arrears and recoveries increased significantly during 2022, driven by BBLS exposures. Excluding BBLS customers, the number of customers in this population in problem debt remains stable.

Credit risk – Banking activities continued

Credit risk enhancement and mitigation (audited)

The table below shows exposures of modelled portfolios within the scope of the ECL framework and related credit risk enhancement and mitigation (CREM).

2022	Gross exposure £bn	ECL £bn	Maximum credit risk Total £bn	Maximum credit risk Stage 3 £bn	CREM by type Financial (1) £bn	CREM by type Property £bn	CREM by type Other (2) £bn	CREM coverage Total £bn	CREM coverage Stage 3 £bn	Exposure post CREM Total £bn	Exposure post CREM Stage 3 £bn
Financial assets											
Cash and balances at central banks	**72.5**	**—**	**72.5**	**—**	**—**	**—**	**—**	**—**	**—**	**72.5**	**—**
Loans - amortised cost (3)	**307.8**	**2.5**	**305.3**	**2.6**	**28.3**	**214.2**	**17.8**	**260.4**	**2.2**	**44.9**	**0.4**
Personal (4)	**198.1**	**1.3**	**196.8**	**1.5**	**0.9**	**185.9**	**—**	**186.9**	**1.3**	**9.9**	**0.2**
Wholesale (5)	**109.7**	**1.2**	**108.5**	**1.1**	**27.4**	**28.3**	**17.8**	**73.5**	**0.9**	**35.0**	**0.2**
Debt securities	**14.1**	**—**	**14.1**	**—**	**—**	**—**	**—**	**—**	**—**	**14.1**	**—**
Total financial assets	**394.4**	**2.5**	**391.9**	**2.6**	**28.3**	**214.2**	**17.8**	**260.4**	**2.2**	**131.5**	**0.4**
Contingent liabilities and commitments											
Personal (6,7)	**35.2**	**—**	**35.2**	**0.2**	**0.6**	**1.9**	**—**	**2.5**	**—**	**32.7**	**0.2**
Wholesale	**56.9**	**0.1**	**56.8**	**0.3**	**0.9**	**4.5**	**3.3**	**8.7**	**—**	**48.1**	**0.3**
Total off-balance sheet	**92.1**	**0.1**	**92.0**	**0.5**	**1.5**	**6.4**	**3.3**	**11.2**	**—**	**80.8**	**0.5**
Total exposure	**486.5**	**2.6**	**483.9**	**3.1**	**29.8**	**220.6**	**21.1**	**271.6**	**2.2**	**212.3**	**0.9**

2021	Gross exposure £bn	ECL £bn	Maximum credit risk Total £bn	Maximum credit risk Stage 3 £bn	CREM by type Financial (1) £bn	CREM by type Property £bn	CREM by type Other (2) £bn	CREM coverage Total £bn	CREM coverage Stage 3 £bn	Exposure post CREM Total £bn	Exposure post CREM Stage 3 £bn
Financial assets											
Cash and balances at central banks	100.6	—	100.6	—	—	—	—	—	—	100.6	—
Loans - amortised cost (3)	293.6	2.4	291.2	1.9	37.3	195.1	19.0	251.4	1.7	39.8	0.2
Personal (4)	*179.7*	*1.2*	*178.5*	*1.0*	*1.0*	*168.2*	—	*169.2*	*0.9*	*9.3*	*0.1*
Wholesale (5)	*113.9*	*1.2*	*112.7*	*0.9*	*36.3*	*26.9*	*19.0*	*82.2*	*0.8*	*30.5*	*0.1*
Debt securities	28.2	—	28.2	—	—	—	—	—	—	28.2	—
Total financial assets	422.4	2.4	420.0	1.9	37.3	195.1	19.0	251.4	1.7	168.6	0.2
Contingent liabilities and commitments											
Personal (6,7)	32.2	0.1	32.1	0.2	0.5	2.1	—	2.6	—	29.5	0.2
Wholesale	52.4	—	52.4	0.3	1.3	4.7	3.1	9.1	—	43.3	0.3
Total off-balance sheet	84.6	0.1	84.5	0.5	1.8	6.8	3.1	11.7	—	72.8	0.5
Total exposure	507.0	2.5	504.5	2.4	39.1	201.9	22.1	263.1	1.7	241.4	0.7

(1) Includes cash and securities collateral.
(2) Includes guarantees, charges over trade debtors, other asset finance related physical collateral as well as the amount by which credit risk exposure is reduced through netting arrangements, mainly cash management pooling, which give NWB Group a legal right to set off the financial asset against a financial liability due to the same counterparty.
(3) NWB Group holds collateral in respect of individual loans – amortised cost to banks and customers. This collateral includes mortgages over property (both personal and commercial); charges over business assets such as plant and equipment, inventories and trade debtors; and guarantees of lending from parties other than the borrower. NWB Group obtains collateral in the form of securities in reverse repurchase agreements. Collateral values are capped at the value of the loan.
(4) Stage 3 mortgage exposures have relatively limited uncovered exposure reflecting the security held. On unsecured credit cards and other personal borrowing, the residual uncovered amount reflects historical experience of continued cash recovery post default through ongoing engagement with customers.
(5) Stage 3 exposures post credit risk enhancement and mitigation in Wholesale mainly represent enterprise value and the impact of written down collateral values; an individual assessment to determine ECL will consider multiple scenarios and in some instances allocate a probability weighting to a collateral value in excess of the written down value.
(6) £0.2 billion (2021 – £0.2 billion) Personal Stage 3 balances primarily relate to loan commitments, the draw down of which is effectively prohibited.
(7) The Personal gross exposure value includes £13.8 billion (2021 – £11.4 billion) in respect of pipeline mortgages where a committed offer has been made to a customer but where the funds have not yet been drawn down. When drawn down, the exposure would be covered by a security over the borrower's property

Credit risk – Banking activities continued

Personal portfolio (audited)

Disclosures in the Personal portfolio section include drawn exposure (gross of provisions).

	2022			2021		
	Retail Banking	Private Banking	Total	Retail Banking	Private Banking	Total
Personal lending	£m	£m	£m	£m	£m	£m
Mortgages	**172,941**	**13,709**	**186,650**	157,027	12,210	169,237
Of which:						
Owner occupied	**156,261**	**12,096**	**168,357**	143,969	10,712	154,681
Buy-to-let	**16,680**	**1,613**	**18,293**	13,058	1,498	14,556
Interest only - variable	**1,980**	**3,286**	**5,266**	2,427	4,714	7,141
Interest only - fixed	**16,267**	**8,591**	**24,858**	12,471	5,707	18,178
Mixed (1)	**8,746**	**1**	**8,747**	7,447	—	7,447
Impairment provisions (2)	**269**	**9**	**278**	303	7	310
Other personal lending (3)	**9,567**	**1,853**	**11,420**	8,585	1,937	10,522
Impairment provisions (2)	**1,026**	**15**	**1,041**	927	18	945
Total personal lending	**182,508**	**15,562**	**198,070**	165,612	14,147	179,759
Mortgage LTV ratios						
- Total portfolio	**53%**	**59%**	**53%**	55%	59%	55%
- *Stage 1*	***53%***	***59%***	***53%***	*55%*	*59%*	*55%*
- *Stage 2*	***53%***	***61%***	***53%***	*54%*	*59%*	*54%*
- *Stage 3*	***47%***	***59%***	***48%***	*50%*	*64%*	*47%*
- Buy-to-let	**51%**	**59%**	**52%**	51%	57%	53%
- *Stage 1*	***51%***	***59%***	***52%***	*51%*	*58%*	*53%*
- *Stage 2*	***49%***	***53%***	***49%***	*52%*	*55%*	*50%*
- *Stage 3*	***47%***	***55%***	***50%***	*52%*	*53%*	*49%*
Gross new mortgage lending	**40,248**	**2,968**	**43,216**	34,161	2,790	36,951
Of which:						
Owner occupied	**35,394**	**2,701**	**38,095**	32,555	2,509	35,064
Weighted average LTV	**69%**	**65%**	**69%**	69%	65%	68%
Buy-to-let	**4,854**	**267**	**5,121**	1,606	281	1,887
Weighted average LTV	**64%**	**66%**	**64%**	64%	65%	64%
Interest only - variable rate	**16**	**329**	**345**	12	811	823
Interest only - fixed rate	**5,213**	**2,335**	**7,548**	2,284	1,532	3,816
Mixed (1)	**2,266**	**—**	**2,266**	2,186	—	2,186
Mortgage forbearance						
Forbearance flow	**152**	**7**	**159**	229	16	245
Forbearance stock	**744**	**16**	**760**	789	3	792
Current	***473***	***8***	***481***	*495*	—	*495*
1-3 months in arrears	***108***	**—**	***108***	*110*	*2*	*112*
>3 months in arrears	***163***	***8***	***171***	*184*	*1*	*185*

(1) Includes accounts which have an interest only sub-account and a capital and interest sub-account to provide a more comprehensive view of interest only exposures.
(2) Retail Banking excludes a non-material amount of provisions held on relatively small legacy portfolios.
(3) Comprises unsecured lending except for Private Banking, which includes both secured and unsecured lending. It excludes loans that are commercial in nature.

- The mortgage portfolio grew steadily during 2022, benefiting from buoyant housing market activity and customers re-mortgaging as interest rates rose across the market.
- LTV ratios improved as house prices increased as a result of housing market demand.
- The existing mortgage stock and new business were closely monitored against agreed risk appetite parameters. These included loan-to-value ratios, buy-to-let concentrations, new-build concentrations and credit quality.
- Affordability assessments and assumptions were continuously reviewed considering inflationary pressure, interest rate rises and taxation changes during the year.
- The buy-to-let portfolio grew in 2022. This growth was expected and within risk appetite following strategy and customer journey simplification implemented in H2 2021
- Aligned to strong overall portfolio quality and low levels of early arrears, forbearance flows have decreased compared to the prior year.
- Unsecured lending increased during 2022, with resilient customer demand after the easing of COVID-19 restrictions.
- As noted previously, ECL increased, for further detail of movements in ECL provisions at product level refer to the Flow statements section.

Credit risk – Banking activities continued

Personal portfolio (audited)

Mortgage LTV distribution by stage

The table below shows gross mortgage lending and related ECL by LTV band for Retail Banking. Mortgage lending not within the scope of IFRS 9 ECL reflected portfolios carried at fair value.

	Mortgages						ECL provisions				ECL provisions coverage (2)			
2022	Stage 1 £m	Stage 2 £m	Stage 3 £m	Not within IFRS 9 ECL scope £m	Total £m	Of which: gross new lending £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total (1) £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %
≤50%	63,446	6,809	742	50	71,047	7,187	23	17	77	117	—	0.3	10.4	0.2
>50% and ≤70%	65,419	7,118	495	5	73,037	13,790	31	27	47	105	0.1	0.4	9.5	0.1
>70% and ≤80%	17,227	1,540	52	1	18,820	10,978	7	6	7	20	—	0.4	13.5	0.1
>80% and ≤90%	7,714	889	14	1	8,618	6,950	6	4	4	14	0.1	0.5	28.6	0.2
>90% and ≤100%	1,363	17	4	—	1,384	1,341	2	—	1	3	0.2	—	25.0	0.2
>100%	34	7	9	—	50	2	2	—	4	6	5.9	—	44.4	12.0
Total with LTVs	155,203	16,380	1,316	57	172,956	40,248	71	54	140	265	0.1	0.3	10.6	0.2
Other	40	1	1	—	42	—	3	—	1	4	7.5	—	100.0	9.5
Total	155,243	16,381	1,317	57	172,998	40,248	74	54	141	269	0.1	0.3	10.7	0.2
2021														
≤50%	52,817	3,390	421	—	56,628	5,521	6	42	85	133	—	1.2	20.2	0.2
>50% and ≤70%	64,362	3,919	353	—	68,634	12,024	10	49	56	115	—	1.3	15.9	0.2
>70% and ≤80%	23,260	1,167	72	—	24,499	10,716	3	17	10	30	—	1.5	13.9	0.1
>80% and ≤90%	5,822	236	18	60	6,136	4,846	—	8	3	11	—	3.4	16.7	0.2
>90% and ≤100%	1,080	55	8	—	1,143	1,053	—	5	2	7	—	9.1	25.0	0.6
>100%	13	17	5	—	35	—	—	2	2	4	—	11.8	40.0	11.4
Total with LTVs	147,354	8,784	877	60	157,075	34,160	19	123	158	300	—	1.4	18.0	0.2
Other	10	1	1	—	12	1	—	—	—	—	—	—	—	—
Total	147,364	8,785	878	60	157,087	34,161	19	123	158	300	—	1.4	18.0	0.2

(1) Excludes a non-material amount of provisions held on relatively small legacy portfolios.
(2) ECL provisions coverage is ECL provisions divided by mortgages.

- The reduced coverage level in the lower LTV bands for Retail Banking, relative to 31 December 2021, reflected the implementation of a new IFRS 9 LGD model with a modelling approach that now captures a reduced loss expectation from non-repossession recovery action.
- Continued stable portfolio performance alongside the new IFRS 9 PD and LGD model implementations resulted in reduced coverage across most LTV bands in Stage 2 and Stage 3. The increased ECL across Stage 1 LTV bands was mainly due to higher Stage 1 PDs as a result of the new PD model implementation and also the proportionate allocation of the economic uncertainty post model adjustment to Stage 1.

Credit risk – Banking activities continued

Personal portfolio (audited)

Mortgage LTV distribution by region

The table below shows gross mortgage lending by LTV band for Retail Banking, by geographical region.

2022	≤50% £m	50%≤80% £m	80%≤100% £m	>100% £m	Total £m	Weighted average LTV %	Other £m	Total £m
South East	14,606	17,383	1,388	1	33,378	51	3	33,381
Greater London	13,876	17,199	1,324	1	32,400	52	3	32,403
Scotland	2,546	4,466	952	—	7,964	58	—	7,964
North West	6,315	8,133	1,205	2	15,655	54	1	15,656
South West	7,315	7,782	621	—	15,718	51	1	15,719
West Midlands	4,948	6,815	853	1	12,617	54	1	12,618
East of England	8,484	11,304	981	2	20,771	53	2	20,773
Rest of the UK	12,907	18,769	2,677	43	34,396	55	31	34,427
Total	70,997	91,851	10,001	50	172,899	53	42	172,941
2021								
South East	11,897	17,824	879	1	30,601	53	3	30,604
Greater London	11,891	16,248	1,463	1	29,603	54	3	29,606
Scotland	2,026	4,462	428	1	6,917	58	—	6,917
North West	5,215	8,408	633	2	14,258	54	1	14,259
South West	5,566	8,364	495	1	14,426	53	2	14,428
West Midlands	3,797	7,127	546	1	11,471	56	1	11,472
East of England	6,678	11,365	814	1	18,858	55	1	18,859
Rest of the UK	9,559	19,336	1,961	24	30,880	57	2	30,882
Total	56,629	93,134	7,219	32	157,014	55	13	157,027

Commercial real estate (CRE)*

The CRE portfolio comprises exposures to entities involved in the development of, or investment in, commercial and residential properties (including house builders but excluding housing associations, construction and the building materials sub-sector). The sector is reviewed regularly by senior executive committees. Reviews include portfolio credit quality, capital consumption and control frameworks.

By sub-sector	2022 £m	2021 £m
Investment		
Residential (1)	3,221	2,980
Office (2)	1,592	1,664
Retail (3)	2,098	2,144
Industrial (4)	2,002	1,718
Mixed/other (5)	724	936
	9,637	9,442
Development		
Residential (1)	1,266	1,295
Office (2)	69	68
Retail (3)	17	21
Industrial (4)	48	35
Mixed/other (5)	11	15
	1,411	1,434
Total (6)	11,048	10,876

*Not within audit scope

(1) Properties including houses, flats and student accommodation.
(2) Properties including offices in central business districts, regional headquarters and business parks.
(3) Properties including high street retail, shopping centres, restaurants, bars and gyms.
(4) Properties including distribution centres, manufacturing and warehouses.
(5) Properties that do not fall within the other categories. Mixed generally relates to a mixture of retail/office with residential.
(6) 99% (2021 – 99%) of the total exposure relates to the UK.

Credit risk – Banking activities continued

Commercial real estate (audited)

CRE LTV distribution by stage

The table below shows CRE current exposure and related ECL by LTV band.

	Current exposure (gross of provisions) (1,2)					ECL provisions				ECL provisions coverage (4)			
2022	Stage 1 £m	Stage 2 £m	Stage 3 £m	Not within IFRS 9 ECL scope (3) £m	Total £m	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %
≤50%	**4,306**	**276**	**31**	**—**	**4,613**	**22**	**8**	**7**	**37**	**0.5**	**2.9**	**22.6**	**0.8**
>50% and ≤70%	**2,458**	**424**	**30**	**—**	**2,912**	**18**	**8**	**8**	**34**	**0.7**	**1.9**	**26.7**	**1.2**
>70% and ≤100%	**205**	**23**	**30**	**—**	**258**	**1**	**1**	**3**	**5**	**0.5**	**4.4**	**10.0**	**1.9**
>100%	**84**	**6**	**12**	**—**	**102**	**1**	**—**	**8**	**9**	**1.2**	**—**	**66.7**	**8.8**
Total with LTVs	**7,053**	**729**	**103**	**—**	**7,885**	**42**	**17**	**26**	**85**	**0.6**	**2.3**	**25.2**	**1.1**
Total portfolio average LTV (%)	**47%**	**52%**	**69%**	**—**	**48%**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Other (5)	**1,229**	**484**	**38**	**—**	**1,751**	**6**	**12**	**15**	**33**	**0.5**	**2.5**	**39.5**	**1.9**
Development (6)	**1,258**	**126**	**28**	**—**	**1,412**	**12**	**3**	**16**	**31**	**1.0**	**2.4**	**57.1**	**2.2**
Total	**9,540**	**1,339**	**169**	**—**	**11,048**	**60**	**32**	**57**	**149**	**0.6**	**2.4**	**33.7**	**1.4**
2021													
≤50%	3,955	232	13	—	4,200	1	4	3	8	—	1.7	23.1	0.2
>50% and ≤70%	2,851	108	29	—	2,988	2	1	17	20	0.1	0.9	58.6	0.7
>70% and ≤100%	266	21	25	—	312	1	—	11	12	0.4	—	44.0	3.9
>100%	205	4	19	—	228	—	1	12	13	—	25.0	63.2	5.7
Total with LTVs	7,277	365	86	—	7,728	4	6	43	53	0.1	1.6	50.0	0.7
Total portfolio average LTV (%)	50%	49%	76%	—	50%	—	—	—	—	—	—	—	—
Other (5)	1,485	194	35	—	1,714	3	9	13	25	0.2	4.7	37.1	1.5
Development (6)	1,271	125	38	—	1,434	2	2	20	24	0.2	1.6	52.6	1.7
Total	10,033	684	159	—	10,876	9	17	76	102	0.1	2.5	47.8	0.9

(1) Comprises gross lending, interest rate hedging derivatives and other assets carried at fair value that are managed as part of the overall CRE portfolio.
(2) The exposure in Stage 3 mainly relates to legacy assets.
(3) Includes exposures relating to non-modelled portfolios and other exposures carried at fair value, including derivatives.
(4) ECL provisions coverage is ECL provisions divided by current exposure.
(5) Relates mainly to business banking, rate risk management products and unsecured corporate lending.
(6) Relates to the development of commercial and residential properties. LTV is not a meaningful measure for this type of lending activity.

– Overall – The majority of the CRE portfolio was located and managed in the UK. Business appetite and strategy was aligned across NWB Group.

  2022 trends – The commercial property cycle turned around mid-year as rising interest rates started to put upward pressure on property yields. Commercial property values declined by an average of approximately 20% from their mid-year peak, ending the year approximately 14% lower. The industrial sector saw values fall fastest to date, yet it continues to attract strong occupier demand and may, therefore, be the first sector to see values stabilise. Secondary offices which don't match modern sustainability standards appear most at risk from further value loss. The residential sector has yet to show significant value declines, but transaction activity has slowed materially and is expected to remain weak until values have adjusted. The spike in mortgage costs last year would be expected to push prices down across the market in 2023. In contrast, residential rents appreciated rapidly in 2022 and professionally managed rental assets are expected to be relatively robust in 2023.

– Credit quality – Credit quality was stable for the first nine months of the year but the impacts from the increase in base rate, projected capital value falls, inflationary pressures and concerns over recession for some customers began to materialise. Inflows into the Risk of Credit Loss framework picked up in Q4, but remained relatively low in volume terms, compared to previous downturns.

– Risk appetite – Lending appetite is subject to regular review with some level of tightening undertaken in 2022. Demand for facilities reduced significantly in Q4 as the market reacted to the various negative news points.

Credit risk – Banking activities continued

Flow statements (audited)

The flow statements that follow show the main ECL and related income statement movements. They also show the changes in ECL as well as the changes in related financial assets used in determining ECL. Due to differences in scope, exposures may differ from those reported in other tables, principally in relation to exposures in Stage 1 and Stage 2. These differences do not have a material ECL effect. Other points to note:

- Financial assets include treasury liquidity portfolios, comprising balances at central banks and debt securities, as well as loans. Both modelled and non-modelled portfolios are included.
- Stage transfers (for example, exposures moving from Stage 1 into Stage 2) are a key feature of the ECL movements, with the net re-measurement cost of transitioning to a worse stage being a primary driver of income statement charges. Similarly, there is an ECL benefit for accounts improving stage.
- Changes in risk parameters shows the reassessment of the ECL within a given stage, including any ECL overlays and residual income statement gains or losses at the point of write-off or accounting write-down.
- Other (P&L only items) includes any subsequent changes in the value of written-down assets (for example, fortuitous recoveries) along with other direct write-off items such as direct recovery costs. Other (P&L only items) affects the income statement but does not affect balance sheet ECL movements.

Amounts written-off represent the gross asset written-down against accounts with ECL, including the net asset write-down for any debt sale activity.

- There were flows from Stage 1 into Stage 3 including transfers due to unexpected default events.
- The effect of any change in post model adjustments during the year is typically reported under changes in risk parameters, as are any effects arising from changes to the underlying models. Refer to the section on Governance and post model adjustments for further details.
- All movements are captured monthly and aggregated. Interest suspended post default is included within Stage 3 ECL with the movement in the value of suspended interest during the year reported under currency translation and other adjustments.

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL
NWB Group total	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	388,953	231	27,337	1,105	3,147	1,167	419,437	2,503
Currency translation and other adjustments	3,029	(1)	105	(0)	40	30	3,173	29
Inter-Group transfers	522	1	43	—	4	—	569	1
Transfers from Stage 1 to Stage 2	(44,102)	(183)	44,102	183	—	—	—	—
Transfers from Stage 2 to Stage 1	24,228	675	(24,228)	(675)	—	—	—	—
Transfers to Stage 3	(512)	(3)	(2,884)	(203)	3,396	206	—	—
Transfers from Stage 3	361	29	587	52	(948)	(81)	—	—
Net re-measurement of ECL on stage transfer		(575)		892		288		605
Changes in risk parameters		224		(326)		104		2
Other changes in net exposure	(13,047)	108	(5,975)	(215)	(1,456)	(64)	(20,477)	(171)
Other (P&L only items)		—		(3)		(95)		(98)
Income statement (releases)/charges		(243)		348		233		338
Amounts written-off	—	—	—	—	(321)	(321)	(321)	(321)
Unwinding of discount		—		—		(67)		(67)
At 31 December 2022	359,432	506	39,087	813	3,862	1,262	402,381	2,581
Net carrying amount	358,926		38,274		2,600		399,800	
At 1 January 2021	303,032	365	60,326	2,060	3,272	1,285	366,630	3,710
2021 movements	85,921	(134)	(32,989)	(955)	(125)	(118)	52,807	(1,207)
At 31 December 2021	388,953	231	27,337	1,105	3,147	1,167	419,437	2,503
Net carrying amount	388,722		26,232		1,980		416,934	

Credit risk – Banking activities continued
Flow statements (audited)

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL
Retail Banking - mortgages	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	146,450	22	8,692	123	875	158	156,017	303
Currency translation and other adjustments	—	—	—	—	12	12	12	12
Transfers from Stage 1 to Stage 2	(16,744)	(8)	16,744	8	—	—	—	—
Transfers from Stage 2 to Stage 1	6,878	56	(6,878)	(56)	—	—	—	—
Transfers to Stage 3	(44)	—	(991)	(26)	1,035	26	—	—
Transfers from Stage 3	33	1	269	9	(302)	(10)	—	—
Net re-measurement of ECL on stage transfer		(54)		85		(10)		21
Changes in risk parameters		55		(76)		21		—
Other changes in net exposure	17,218	2	(1,279)	(12)	(281)	(11)	15,658	(21)
Other (P&L only items)		1		(1)		(30)		(30)
Income statement (releases)/charges		4		(4)		(30)		(30)
Amounts written-off	—	—	—	—	(18)	(18)	(18)	(18)
Unwinding of discount		—		—		(29)		(29)
At 31 December 2022	153,791	74	16,557	55	1,321	139	171,669	268
Net carrying amount	153,717		16,502		1,182		171,401	
At 1 January 2021	118,490	21	24,415	181	849	143	143,754	345
2021 movements	27,960	1	(15,723)	(58)	26	15	12,263	(42)
At 31 December 2021	146,450	22	8,692	123	875	158	156,017	303
Net carrying amount	146,428		8,569		717		155,714	

- Despite the strong portfolio growth during 2022, ECL levels for mortgages reduced during the year, primarily as a result of stable portfolio performance alongside the implementation of new IFRS 9 models in Q1 2022.
- More specifically, in H1 2022, strong credit performance resulted in the migration of assets from Stage 2 into Stage 1, with an associated decrease from lifetime ECL to a 12 month ECL. ECL levels increased in the second half of the year as the portfolio continued to grow and the economic outlook deteriorated, increasing IFRS 9 PDs and the level of migrations from Stage 1 into Stage 2.
- The economic uncertainty post model adjustment allocated more ECL to Stage 1 given the forward-looking nature of the inflation threat on customer affordability, whereas the previous COVID-19 post model adjustment was focused on Stage 2 (for example, high risk payment holiday cases migrated into Stage 2). Refer to the Governance and post model adjustments section for more information.
- The Stage 3 inflow was amplified by the adoption of the new regulatory definition of default in January 2022. However, Stage 3 ECL levels decreased since 31 December 2021, primarily due to reduced LGD estimates as a result of the new model implementation in Q1 2022 alongside stable underlying default levels. The relatively small ECL cost for net re-measurement on stage transfer included the effect of risk targeted ECL adjustments, when previously in Stage 2. Refer to the Governance and post model adjustments section for further details.
- Write-off typically occurs once the repossessed property has been sold and there is a residual shortfall balance remaining outstanding. This would typically be within five years from default but can be longer.

Credit risk – Banking activities continued
Flow statements (audited)

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL
Retail Banking - credit cards	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	2,096	47	751	114	69	45	2,916	206
Currency translation and other adjustments	—	—	—	—	1	1	1	1
Transfers from Stage 1 to Stage 2	(1,001)	(33)	1,001	33	—	—	—	—
Transfers from Stage 2 to Stage 1	760	84	(760)	(84)	—	—	—	—
Transfers to Stage 3	(18)	(1)	(80)	(34)	98	35	—	—
Transfers from Stage 3	2	—	6	3	(8)	(3)	—	—
Net re-measurement of ECL on stage transfer		(53)		130		22		99
Changes in risk parameters		2		(28)		12		(14)
Other changes in net exposure	581	1	(63)	(43)	(21)	—	497	(42)
Other (P&L only items)		—		—		(7)		(7)
Income statement (releases)/charges		(50)		59		27		36
Amounts written-off	—	—	—	—	(51)	(51)	(51)	(51)
Unwinding of discount		—		—		(4)		(4)
At 31 December 2022	2,420	47	855	91	88	57	3,363	195
Net carrying amount	2,373		764		31		3,168	
At 1 January 2021	1,676	41	1,071	178	83	55	2,830	274
2021 movements	420	6	(320)	(64)	(14)	(10)	86	(68)
At 31 December 2021	2,096	47	751	114	69	45	2,916	206
Net carrying amount	2,049		637		24		2,710	

- ECL remained broadly stable during 2022 reflecting stable portfolio performance and the unwind of ECL held for COVID-19 related risks in the first half of the year that resulted in reduced levels of SICR identification and ECL requirement. In addition, a new credit card PD model implementation resulted in a net ECL decrease of £26 million. This is included in changes in risk parameters for Stage 1 and Stage 2.
- Similar to mortgages, ECL levels increased in the second half of the year as the economic outlook deteriorated, increasing IFRS 9 PDs and the level of migrations from Stage 1 into Stage 2.
- Credit card balances grew since 31 December 2021, in line with industry trends in the UK, as unsecured borrowing demand increased.
- Reflecting the strong credit performance observed during 2022, Stage 3 inflows remained subdued and the effect of the adoption of the new regulatory definition of default was minimal for credit cards.
- Charge-off (analogous to partial write-off) typically occurs after 12 missed payments.

Credit risk – Banking activities continued
Flow statements (audited)

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL
Retail Banking - other personal unsecured	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	3,636	43	1,574	242	510	438	5,720	723
Currency translation and other adjustments	—	—	—	—	8	8	8	8
Transfers from Stage 1 to Stage 2	(2,309)	(72)	2,309	72	—	—	—	—
Transfers from Stage 2 to Stage 1	1,575	188	(1,575)	(188)	—	—	—	—
Transfers to Stage 3	(33)	(1)	(295)	(93)	328	94	—	—
Transfers from Stage 3	4	3	33	16	(37)	(19)	—	—
Net re-measurement of ECL on stage transfer		(148)		250		93		195
Changes in risk parameters		30		(27)		30		33
Other changes in net exposure	940	49	(380)	(47)	(73)	(21)	487	(19)
Other (P&L only items)		—		—		3		3
Income statement (releases)/charges		(69)		176		105		212
Amounts written-off	—	—	—	—	(98)	(98)	(98)	(98)
Unwinding of discount		—		—		(9)		(9)
At 31 December 2022	3,813	92	1,666	225	638	516	6,117	833
Net carrying amount	3,721		1,441		122		5,284	
At 1 January 2021	2,668	49	2,802	372	479	398	5,949	819
2021 movements	968	(6)	(1,228)	(130)	31	40	(229)	(96)
At 31 December 2021	3,636	43	1,574	242	510	438	5,720	723
Net carrying amount	3,593		1,332		72		4,997	

- Overall, there was a modest ECL increase, mainly due to portfolio growth in the personal loan portfolio during 2022 and Stage 3 ECL, linked to the adoption of the new regulatory definition of default in January 2022, with underlying Stage 3 inflows remaining stable.
- Similar to the other personal portfolios, after reductions in the first half of the year, Stage 2 ECL levels increased in the second half of the year as the economic outlook deteriorated, increasing IFRS 9 PDs and the level of migrations from Stage 1 into Stage 2.
- Unsecured retail lending balances grew since 31 December 2021, in line with industry trends in the UK, as unsecured borrowing demand increased.
- Write-off occurs once recovery activity with the customer has been concluded or there are no further recoveries expected, but no later than six years after default.

Credit risk – Banking activities continued
Flow statements (audited)

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL
Commercial & Institutional total	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	61,223	96	15,055	588	1,422	486	77,700	1,170
Currency translation and other adjustments	570	(2)	113	—	17	8	700	6
Inter-group transfers	(65)	—	—	—	—	—	(65)	—
Transfers from Stage 1 to Stage 2	(21,430)	(63)	21,430	63	—	—	—	—
Transfers from Stage 2 to Stage 1	13,357	322	(13,357)	(322)	—	—	—	—
Transfers to Stage 3	(186)	(1)	(1,306)	(50)	1,492	51	—	—
Transfers from Stage 3	136	25	122	21	(258)	(46)	—	—
Net re-measurement of ECL on stage transfer		(302)		406		177		281
Changes in risk parameters (model inputs)		131		(187)		39		(17)
Other changes in net exposure	10,239	53	(3,697)	(100)	(967)	(31)	5,575	(78)
Other (P&L only items)		(1)		(3)		(56)		(60)
Income statement (releases)/charges		(119)		116		129		126
Amounts written-off	—	—	—	—	(139)	(139)	(139)	(139)
Unwinding of discount		—		—		(21)		(21)
At 31 December 2022	63,844	259	18,360	419	1,567	524	83,771	1,202
Net carrying amount	63,585		17,941		1,043		82,569	

- Exposure growth was mainly due to increased exposure to larger corporate customers, notably information technology, telecommunications and power utilities.
- Stage 1 and Stage 2 ECL levels increased in the second half of the year as the economic outlook deteriorated, increasing IFRS 9 PDs and the level of migrations from Stage 1 into Stage 2.
- Stage 2 ECL increases were more than offset by reductions in post model adjustments.
- There were significant flows into Stage 3 due to defaults on government scheme lending, with exposure reductions where payments on guarantees have been received.

Credit risk – Banking activities continued
Flow statements (audited)

Commercial & Institutional - corporate	Stage 1 Financial assets £m	Stage 1 ECL £m	Stage 2 Financial assets £m	Stage 2 ECL £m	Stage 3 Financial assets £m	Stage 3 ECL £m	Total Financial assets £m	Total ECL £m
At 1 January 2022	39,009	74	12,141	492	1,014	361	52,164	927
Currency translation and other adjustments	429	(2)	109	—	13	16	551	14
Inter-group transfers	(56)	1	—	(4)	—	—	(56)	(3)
Transfers from Stage 1 to Stage 2	(16,439)	(49)	16,439	49	—	—	—	—
Transfers from Stage 2 to Stage 1	10,718	247	(10,718)	(247)	—	—	—	—
Transfers to Stage 3	(149)	(1)	(932)	(38)	1,081	39	—	—
Transfers from Stage 3	98	20	89	16	(187)	(36)	—	—
Net re-measurement of ECL on stage transfer		(230)		317		134		221
Changes in risk parameters (model inputs)		79		(161)		(9)		(91)
Other changes in net exposure	6,759	36	(2,466)	(80)	(746)	(26)	3,547	(70)
Other (P&L only items)		(1)		(3)		(56)		(60)
Income statement (releases)/charges		(116)		73		43		—
Amounts written-off	—	—	—	—	(82)	(82)	(82)	(82)
Unwinding of discount		—		—		(12)		(12)
At 31 December 2022	40,369	175	14,662	344	1,093	385	56,124	904
Net carrying amount	40,194		14,318		708		55,220	

- Exposure growth was driven by increased exposure to larger corporate customers, notably information technology, telecommunications and power utilities.
- Stage 1 and Stage 2 ECL levels increased in the second half of the year as the economic outlook deteriorated, increasing IFRS 9 PDs and the level of migrations from Stage 1 into Stage 2.
- Stage 2 ECL increases were more than offset by reductions in post model adjustments.
- There were significant flows into Stage 3 due to defaults on government scheme lending, with exposure reductions where payments on guarantees have been received.

Credit risk – Banking activities continued
Flow statements (audited)

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL
Commercial & Institutional - property	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	16,804	17	1,993	59	381	124	19,178	199
Currency translation and other adjustments	17	—	—	—	1	(10)	18	(10)
Inter-group transfers	(9)	—	—	—	—	—	(9)	—
Transfers from Stage 1 to Stage 2	(3,823)	(12)	3,823	12	—	—	—	—
Transfers from Stage 2 to Stage 1	1,857	35	(1,857)	(35)	—	—	—	—
Transfers to Stage 3	(37)	—	(303)	(11)	340	11	—	—
Transfers from Stage 3	33	4	34	5	(67)	(9)	—	—
Net re-measurement of ECL on stage transfer		(35)		73		33		71
Changes in risk parameters		50		(21)		14		43
Other changes in net exposure	1,964	14	(819)	(16)	(259)	(8)	886	(10)
Other (P&L only items)		—		—		—		—
Income statement (releases)/charges		29		36		39		104
Amounts written-off	—	—	—	—	(18)	(18)	(18)	(18)
Of which: Portfolio debt sales		—		—		—		—
Unwinding of discount		—		—		(10)		(10)
At 31 December 2022	16,806	73	2,871	66	378	126	20,055	265
Net carrying amount	16,733		2,805		252		19,790	

- Stage 1 and Stage 2 ECL levels increased in the second half of the year as the economic outlook deteriorated, increasing IFRS 9 PDs and the level of migrations from Stage 1 into Stage 2.
- Stage 2 ECL increases were partially offset by reductions in post model adjustments.
- There were significant flows into Stage 3 due to defaults on government scheme lending, with exposure reductions where payments on guarantees have been received.

Credit risk – Banking activities continued
Flow statements (audited)

Commercial & Institutional - other	Stage 1 Financial assets £m	Stage 1 ECL £m	Stage 2 Financial assets £m	Stage 2 ECL £m	Stage 3 Financial assets £m	Stage 3 ECL £m	Total Financial assets £m	Total ECL £m
At 1 January 2022	5,410	5	921	37	27	2	6,358	44
Currency translation and other adjustments	125	—	3	—	3	2	131	2
Inter-group transfers	—	—	—	4	—	—	—	4
Transfers from Stage 1 to Stage 2	(1,168)	(2)	1,168	2	—	—	—	—
Transfers from Stage 2 to Stage 1	781	40	(781)	(40)	—	—	—	—
Transfers to Stage 3	—	—	(72)	(1)	72	1	—	—
Transfers from Stage 3	4	—	—	—	(4)	—	—	—
Net re-measurement of ECL on stage transfer		(37)		15		11		(11)
Changes in risk parameters		2		(5)		34		31
Other changes in net exposure	1,517	3	(412)	(3)	37	2	1,142	2
Other (P&L only items)		—		—		—		—
Income statement (releases)/charges		(32)		7		47		22
Amounts written-off	—	—	—	—	(39)	(39)	(39)	(39)
Of which: Portfolio debt sales		—		—		—		—
Unwinding of discount		—		—		—		—
At 31 December 2022	6,669	11	827	9	96	13	7,592	33
Net carrying amount	6,658		818		83		7,559	

- Stage 1 and Stage 2 ECL levels increased in the second half of the year as the economic outlook deteriorated, increasing IFRS 9 PDs and the level of migrations from Stage 1 into Stage 2.
- Stage 2 ECL increases were more than offset by reductions in post model adjustments.

Credit risk – Banking activities continued
Stage 2 decomposition – arrears status and contributing factors
The tables below show Stage 2 decomposition for the Personal and Wholesale portfolios.

	UK mortgages		Credit cards		Other		Total	
	Loans	ECL	Loans	ECL	Loans	ECL	Loans	ECL
2022	£m	£m	£m	£m	£m	£m	£m	£m
Personal								
Currently >30 DPD	156	1	7	4	41	15	204	20
Currently <=30 DPD	16,355	54	827	88	1,555	211	18,737	353
- PD deterioration	14,484	50	620	72	845	114	15,949	236
- PD persistence	767	2	160	11	150	13	1,077	26
- Other driver (adverse credit, forbearance etc)	*1,104*	*2*	*47*	*5*	*560*	*84*	*1,711*	*91*
Total Stage 2	16,511	55	834	92	1,596	226	18,941	373
2021								
Personal								
Currently >30 DPD	298	7	8	4	39	12	345	23
Currently <=30 DPD	8,623	116	726	111	1,495	230	10,844	457
- PD deterioration	*1,760*	*41*	*433*	*80*	*765*	*137*	*2,958*	*258*
- PD persistence	*2,476*	*30*	*214*	*18*	*605*	*75*	*3,295*	*123*
- Other driver (adverse credit, forbearance etc)	*4,387*	*45*	*79*	*13*	*125*	*18*	*4,591*	*76*
Total Stage 2	8,921	123	734	115	1,534	242	11,189	480

- The deterioration in economic outlook during the second half of the year resulted in increased account level IFRS 9 PDs at the year end. Consequently, compared to 2021, a larger proportion of accounts exhibited significant PD deterioration causing Stage 2 exposures to increase significantly since 30 June 2022.
- Personal customers who had accessed COVID-19 payment holiday support, and where their risk profile was identified as relatively high risk are no longer collectively migrated into Stage 2, given the lack of default emergence from these segments and with the focus of high risk segment monitoring now shifting to the effects of a high inflation environment on customers.
- Accounts that are less than 30 days past due continue to represent the vast majority of the Stage 2 population. As expected, ECL coverage was higher in accounts that were more than 30 days past due than those in Stage 2 for other reasons.

	Property		Corporate				Other		Total	
	Loans	ECL	Loans	ECL	Loans	ECL	Loans	ECL	Loans	ECL
2022	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Wholesale										
Currently >30 DPD	139	2	355	9	2	—	7	—	503	11
Currently <=30 DPD	2,735	73	14,314	346	651	9	72	1	17,772	429
- PD deterioration	1,806	51	11,695	280	581	6	1	—	*14,083*	*337*
- PD persistence	70	2	212	8	4	—	—	—	*286*	*10*
- Other driver (forbearance, RoCL etc)	*859*	*20*	*2,407*	*58*	*66*	*3*	*71*	*1*	*3,403*	*82*
Total Stage 2	2,874	75	14,669	355	653	9	79	1	18,275	440
2021										
Wholesale										
Currently >30 DPD	198	2	346	7	1	—	1	—	546	9
Currently <=30 DPD	1,840	68	11,826	513	566	35	36	—	14,268	616
- PD deterioration	*585*	*38*	*8,421*	*412*	*489*	*33*	*1*	—	*9,496*	*483*
- PD persistence	*107*	*7*	*426*	*28*	*5*	—	*1*	—	*539*	*35*
- Other driver (forbearance, RoCL etc)	*1,148*	*23*	*2,979*	*73*	*72*	*2*	*34*	—	*4,233*	*98*
Total Stage 2	2,038	70	12,172	520	567	35	37	—	14,814	625

- The deteriorating economic outlook, including lower growth in GDP and the stock index as well as a reduction in commercial real estate prices, resulted in a significant increase in IFRS 9 PDs. Consequently, compared to 2021, a larger proportion of exposure exhibited a SICR and migrated into Stage 2, resulting in an increase in Stage 2 exposure.
- PD deterioration remained the primary trigger for identifying a SICR and Stage 2 treatment, proportionally increasing due to the deteriorating economic outlook.
- There was a decrease in Risk of Credit Loss partially due to PD deterioration being the primary trigger. Overall, there was a decrease in flows on to the Risk of Credit Loss framework, although inflows into the framework began to increase in Q4 2022.

Credit risk – Banking activities continued
Stage 2 decomposition by a significant increase in credit risk trigger

	UK mortgages		Credit cards		Other		Total	
2022	£m	%	£m	%	£m	%	£m	%
Personal trigger (1)								
PD movement	**14,598**	**88.4**	**626**	**75.1**	**873**	**54.7**	**16,097**	**85.0**
PD persistence	**767**	**4.6**	**161**	**19.3**	**150**	**9.4**	**1,078**	**5.7**
Adverse credit bureau recorded with credit reference agency	**725**	**4.4**	**39**	**4.7**	**79**	**4.9**	**843**	**4.5**
Forbearance support provided	**75**	**0.5**	**1**	**0.1**	**14**	**0.9**	**90**	**0.5**
Customers in collections	**133**	**0.8**	**1**	**0.1**	**3**	**0.2**	**137**	**0.7**
Collective SICR and other reasons (2)	**171**	**1.0**	**6**	**0.7**	**466**	**29.2**	**643**	**3.3**
Days past due >30	**42**	**0.3**	**—**	**—**	**11**	**0.7**	**53**	**0.3**
	16,511	**100**	**834**	**100**	**1,596**	**100**	**18,941**	**100**
2021								
Personal trigger (1)								
PD movement	2,010	22.5	440	59.9	796	51.9	3,246	29.0
PD persistence	2,486	27.9	214	29.2	606	39.5	3,306	29.5
Adverse credit bureau recorded with credit reference agency	3,124	35.0	45	6.1	58	3.8	3,227	29.0
Forbearance support provided	134	1.5	2	0.3	22	1.4	158	1.4
Customers in collections	67	0.8	2	0.3	12	0.8	81	0.7
Collective SICR and other reasons (2)	1,065	11.9	31	4.2	36	2.3	1,132	10.1
Days past due >30	35	0.4	—	—	4	0.3	39	0.3
	8,921	100	734	100	1,534	100	11,189	100

– During the first half of the year, the stable credit performance of the portfolio resulted in either decreased or stable account level IFRS 9 PDs for most products. UK mortgages was the exception, where the implementation of a new IFRS 9 PD model in Q1 2022 increased the proportion of accounts exhibiting significant PD deterioration.
– However, in the second half of the year, the economic uncertainty and high inflation environment, which is reflected in the recent updates to the IFRS 9 MES scenarios, resulted in PDs increasing again. This is reflected both in an increase in Stage 2 across all products compared to 31 December 2021 and an increased proportion of Stage 2 driven by PD deterioration.
– Personal customers who had accessed COVID-19 payment holiday support, and where their risk profile was identified as relatively high risk are no longer collectively migrated into Stage 2, given the lack of default emergence from these segments and with the focus of high risk segment monitoring now shifting to the effects of a high inflation environment on customers.

Credit risk – Banking activities continued
Stage 2 decomposition by a significant increase in credit risk trigger

	Property		Corporate		FI		Other		Total	
2022	**£m**	**%**	**£m**	**%**	**£m**	**%**	**£m**	**%**	**£m**	**%**
Wholesale trigger (1)										
PD movement	**1,865**	**65.0**	**11,903**	**81.1**	**584**	**89.4**	**1**	**1.3**	**14,353**	**78.5**
PD persistence	**70**	**2.4**	**212**	**1.4**	**4**	**0.6**	**—**	**—**	**286**	**1.6**
Risk of Credit Loss	**343**	**11.9**	**1,343**	**9.2**	**29**	**4.4**	**55**	**69.6**	**1,770**	**9.7**
Forbearance support provided	**26**	**0.9**	**334**	**2.3**	**19**	**2.9**	**—**	**—**	**379**	**2.1**
Customers in collections	**9**	**0.3**	**32**	**0.2**	**—**	**—**	**—**	**—**	**41**	**0.2**
Collective SICR and other reasons (2)	**487**	**16.9**	**716**	**4.9**	**17**	**2.7**	**16**	**20.2**	**1,236**	**6.8**
Days past due >30	**74**	**2.6**	**129**	**0.9**	**—**	**—**	**7**	**8.9**	**210**	**1.1**
	2,874	**100**	**14,669**	**100**	**653**	**100**	**79**	**100**	**18,275**	**100**
2021										
Wholesale trigger (1)										
PD movement	622	30.6	8,548	70.3	491	86.6	1	2.7	9,662	65.3
PD persistence	107	5.3	426	3.5	5	0.9	1	2.7	539	3.6
Risk of Credit Loss	544	26.7	1,920	15.8	53	9.3	34	91.9	2,551	17.2
Forbearance support provided	68	3.3	346	2.8	4	0.7	—	—	418	2.8
Customers in collections	21	1.0	66	0.5	—	—	—	—	87	0.6
Collective SICR and other reasons (2)	539	26.4	767	6.3	14	2.5	1	2.7	1,321	8.9
Days past due >30	137	6.7	99	0.8	—	—	—	—	236	1.6
	2,038	100	12,172	100	567	100	37	100	14,814	100

(1) The table is prepared on a hierarchical basis from top to bottom, for example, accounts with PD deterioration may also trigger backstop(s) but are only reported under PD deterioration.
(2) Includes customers where a PD assessment cannot be undertaken due to missing PDs.

- PD deterioration continued to be the primary trigger of migration of exposures from Stage 1 into Stage 2. There was an increase in cases triggering PD deterioration reflecting the deteriorating economic outlook.
- Moving exposures on to the Risk of Credit Loss framework remained an important backstop indicator of a SICR. The exposures classified under the Stage 2 Risk of Credit Loss framework decreased over the period due to the increase in PD deterioration.
- PD persistence related to the Business Banking portfolio only. A reduction in PDs in 2021 meant that some Business Banking customers returned to Stage 1 in early 2022, although a number of these customers returned through PD movement in the second half of the year due to the deteriorating economic outlook.

Capital, liquidity and funding risk

NWH Group continually ensures a comprehensive approach is taken to the management of capital, liquidity and funding, underpinned by frameworks, risk appetite and policies, to manage and mitigate capital, liquidity and funding risks. The framework ensures the tools and capability are in place to facilitate the management and mitigation of risk ensuring the Group operates within its regulatory requirements and risk appetite.

Definitions (audited)

Regulatory capital consists of reserves and instruments issued that are available, have a degree of permanency and are capable of absorbing losses. A number of strict conditions set by regulators must be satisfied to be eligible as capital.

Capital risk is the risk that there is or will be insufficient capital and other loss absorbing debt instruments to operate effectively including meeting minimum regulatory requirements, operating within Board approved risk appetite and supporting its strategic goals.

Liquidity consists of assets that can be readily converted to cash within a short timeframe at a reliable value. Liquidity risk is the risk of being unable to meet financial obligations as and when they fall due.

Funding consists of on-balance sheet liabilities that are used to provide cash to finance assets. Funding risk is the risk of not maintaining a diversified, stable and cost-effective funding base. Liquidity and funding risks arise in a number of ways, including through the maturity transformation role that banks perform. The risks are dependent on factors such as:

- Maturity profile;
- Composition of sources and uses of funding;
- The quality and size of the liquidity portfolio;
- Wholesale market conditions; and
- Depositor and investor behaviour.

Sources of risk (audited)

Capital

The eligibility of instruments and financial resources as regulatory capital is laid down by applicable regulation. Capital is categorised by applicable regulation under two tiers (Tier 1 and Tier 2) according to the ability to absorb losses on either a going or gone concern basis, degree of permanency and the ranking of absorbing losses. There are three broad categories of capital across these two tiers:

- CET1 capital - CET1 capital must be perpetual and capable of unrestricted and immediate use to cover risks or losses as soon as these occur. This includes ordinary shares issued and retained earnings.
- Additional Tier 1 (AT1) capital - This is the second type of loss absorbing capital and must be capable of absorbing losses on a going concern basis. These instruments are either written down or converted into CET1 capital when the CET1 ratio falls below a pre-specified level.
- Tier 2 capital - Tier 2 capital is the bank entities' supplementary capital and provides loss absorption on a gone concern basis. Tier 2 capital absorbs losses after Tier capital. It typically consists of subordinated debt securities with a minimum maturity of five years at the point of issuance.

Minimum requirement for own funds and eligible liabilities (MREL)

In addition to capital, other specific loss absorbing instruments, including senior notes issued by NWB Plc, may be used to cover certain gone concern capital requirements which, is referred to as MREL. Gone concern refers to the situation in which resources must be available to enable an orderly resolution, in the event that the Bank of England (BoE) deems that NWB Group has failed or is likely to fail.

Liquidity

Liquidity risk within NWB Plc is managed as part of the UK Domestic Liquidity Sub-Group (UK DoLSub), which is regulated by the PRA and comprises NWH Group's three licensed deposit taking UK banks: National Westminster Bank Plc, The Royal Bank of Scotland plc and Coutts & Company. On 3 May 2021, the Ulster Bank Limited business transferred to National Westminster Bank Plc. Ulster Bank Limited was removed from the UK DoLSub effective 1 January 2022 and its banking license was revoked following regulatory approval on 29 December 2022.

NWH Group maintains a prudent approach to the definition of liquidity resources. NWH Group manages its liquidity to ensure it is always available when and where required, taking into account regulatory, legal and other constraints.

Liquidity resources are divided into primary and secondary liquidity as follows:

- Primary liquid assets include cash and balances at central banks, Treasury bills and other high quality government and US agency bonds.
- Secondary liquid assets are eligible as collateral for local central bank liquidity facilities. These assets include own-issued securitisations or whole loans that are retained on balance sheet and pre-positioned with a central bank so that they may be converted into additional sources of liquidity at very short notice.

Funding

NWB Plc maintains a diversified set of funding sources, including customer deposits, wholesale deposits and term debt issuance. NWB Plc also retains access to central bank funding facilities.

For further details on capital constituents and the regulatory framework covering capital, liquidity and funding requirements, please refer to the NatWest Holdings Group and NWB Plc Pillar 3 Reports 2022.

Managing capital requirements: regulated entities

In line with paragraph 135 of IAS 1 'Presentation of Financial Statements', NWB Group manages capital having regard to regulatory requirements. Regulatory capital is monitored and reported on an individual regulated bank legal entity basis ('bank entities'), as relevant in the jurisdiction for large subsidiaries of NatWest Group. NatWest Group itself is monitored and reported on a consolidated basis.

Capital, liquidity and funding risk continued

Capital management

Capital management is the process by which the bank entities ensure that they have sufficient capital and other loss-absorbing instruments to operate effectively including meeting minimum regulatory requirements, operating within Board-approved risk appetite, maintaining credit ratings and supporting strategic goals.

Capital management is critical in supporting the bank entities' businesses and is also considered at Group level. It is enacted through a NatWest Group-wide end to end framework.

Capital planning is integrated into NWB Group's wider annual budgeting process and is assessed and updated at least monthly. This is summarised below. Other elements of capital management, including risk appetite and stress testing, are set out on pages 13 and 14.

Capital planning is one of the tools that NWB Group uses to monitor and manage capital risk on a going and gone concern basis, including the risk of excessive leverage.

Produce capital plans	– Capital plans are produced for NWB Group, its key operating entities and its businesses over a five year planning horizon under expected and stress conditions. Stressed capital plans are produced to support internal stress testing in the ICAAP for regulatory purposes. – Shorter term forecasts are developed frequently in response to actual performance, changes in internal and external business environment and to manage risks and opportunities.
Assess capital Adequacy	– Capital plans are developed to maintain capital of sufficient quantity and quality to support NWB Group's business, its subsidiaries and strategic plans over the planning horizon within approved risk appetite, as determined via stress testing, and minimum regulatory requirements. – Capital resources and capital requirements are assessed across a defined planning horizon. – Impact assessment captures input from across NWB Group including from businesses.
Inform capital actions	– Capital planning informs potential capital actions including buybacks, redemptions, dividends and new issuance to external investors or via internal transactions. – Decisions on capital actions will be influenced by strategic and regulatory requirements, risk appetite, costs and prevailing market conditions. – As part of capital planning, NatWest Group will monitor its portfolio of issued capital securities and assess the optimal blend and most cost effective means of financing.

Liquidity risk management

NWH Group manages its liquidity risk taking into account regulatory, legal and other constraints to ensure sufficient liquidity is available where required to cover liquidity stresses.

The size of the liquidity portfolio held in the UK DoLSub is determined by referencing NWH Group's liquidity risk appetite. NWH Group retains a prudent approach to setting the composition of the liquidity portfolio, which is subject to internal policies and limits over quality of counterparty, maturity mix and currency mix.

NWB Plc manages the majority of the UK DoLSub's liquidity portfolio under the responsibility of the NatWest Group Treasurer.

Funding risk management

NWB Group manages funding risk through a comprehensive framework which measures and monitors the funding risk on the balance sheet.

The asset and liability types broadly match. Customer deposits provide more funding than customer loans utilise.

Capital, liquidity and funding risk continued

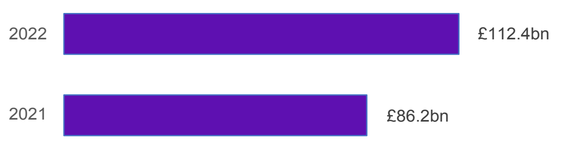
Key points

CET1 ratio

The CET1 ratio decreased 480 basis points over the period due to a £1.2 billion decrease in CET1 capital and a £26.2 billion increase in RWAs. The CET1 decrease reflects the attributable profit in the period of £3.3 billion, offset by the items:

- dividends paid of £2.3 billion;
- foreseeable dividend of £0.9 billion;
- adjustment for pension trusts of £0.4 billion;
- the removal of the adjustment for the prudential amortisation on software development costs £0.4 billion and an increase in intangible assets capital deduction £0.4billion.

RWA

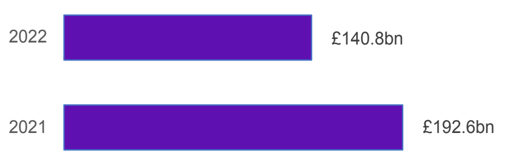


Total RWAs increased by £26.2 billion to £112.4 billion mainly reflecting an increase in credit risk RWAs. This was primarily due to model adjustments applied as a result of new regulation applicable to IRB models from 1 January 2022, in addition to increased exposures within Commercial & Institutional and Retail Banking. This was partially offset by improved credit risk metrics within Commercial & Institutional.

Leverage

The leverage ratio at 31 December 2022 is 4.4% and has been calculated in accordance with changes to the UK's leverage ratio framework. As at 31 December 2021, the UK leverage ratio was 4.8%, which was calculated under the prior year's UK leverage methodology. The key driver of the decrease is a £1.1 billion decrease in Tier 1 capital.

Liquidity portfolio

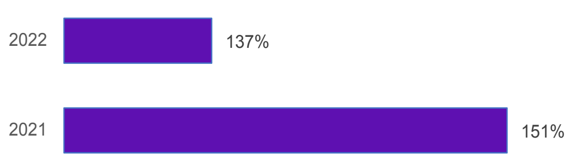


The liquidity portfolio decreased by £51.8 billion YTD as of 31 December 2022 to £140.8 billion with primary liquidity decreasing by £40.2 billion to £83.5 billion. The decrease in primary liquidity is driven by an increase in lending, a decrease in deposits, net repo positions, shareholder distributions (share buyback and dividends), redemptions of senior debt and maturing commercial paper and certificates of deposit. The reduction in secondary liquidity is due to a reduction in the pre-positioned collateral at the Bank of England.

Liquidity coverage ratio

The UK DoLSub Liquidity Coverage Ratio (LCR) decreased during the year to 131% driven by a decrease in the liquidity portfolio and a lower than proportionate reduction in net outflows. The decrease in liquidity portfolio was primarily driven by growth in customer lending and reduced customer deposits.

NSFR



The UK DoLSub net stable funding ratio (NSFR) for FY 2022 was 137% compared to 151% in prior year. The decrease is due to lower deposits combined with higher lending.

Capital, liquidity and funding risk continued

Minimum requirements

Capital adequacy ratios

The bank entities are subject to minimum capital requirements relative to RWAs. The table below summarises the minimum ratios of capital to RWAs that the UK bank entities are expected to have to meet.

Type	CET1	Total Tier 1	Total capital
Minimum capital requirements	4.5%	6.0%	8.0%
Capital conservation buffer	2.5%	2.5%	2.5%
Countercyclical capital buffer (1) (2)	0.9%	0.9%	0.9%
Total (3)	7.9%	9.4%	11.4%

(1) The Financial Policy Committee increased UK CCyB rate from 0% to 1% effective from 13 December 2022. A further increase from 1% to 2% is anticipated from 5 July 2023.
(2) In June 2022, the Central Bank of Ireland announced that the CCyB on Irish exposures will increase from 0% to 0.5%, applicable from 15 June 2023. This is the first step towards a gradual increase which, conditional on macro-financial developments, would see a CCyB of 1.5% announced by mid-2023, which is expected to be applicable from June 2024
(3) The minimum requirements do not include any capital that the bank entities may be required to hold as a result of the Pillar 2 assessment.

Leverage ratio

Following the publication of the new UK leverage ratio framework on 8 October 2021, NWB Plc is expected to manage its leverage ratio at the same level as firms in scope from and will be subject to the minimum requirement from 1 January 2023. There is also an expectation that non-scope firms, which includes NWB Plc, should manage their leverage ratio in line with the minimum requirement from 1 January 2022.

Liquidity and funding ratios

The table below summarises the minimum requirements for key liquidity and funding metrics under the PRA framework. The binding NSFR requirement became effective as of 1 January 2022. NWB Plc is a member of the UK DoLSub which is presented below.

Type	
Liquidity coverage ratio (LCR)	100%
Net stable funding ratio (NSFR)	100%

Measurement

Capital, RWAs and leverage

The table below sets out the key capital and leverage ratios on a PRA transitional basis.

Capital adequacy ratios	2022 %	2021 %
CET1 (1)	11.3	16.1
Tier 1	13.3	18.6
Total	15.9	22.0
Capital	£m	£m
CET1 (1)	12,713	13,924
Tier 1	14,956	16,039
Total	17,877	18,945
Risk-weighted assets		
Credit risk	98,913	72,716
Counterparty credit risk	497	574
Market risk	26	53
Operational risk	12,992	12,874
Total RWAs	112,428	86,217
Leverage		
Tier 1 capital (£m)	14,956	16,039
Leverage exposure (£m) (2)	341,308	426,681
Leverage ratio (%) (1) (3)	4.4	3.8

(1) Includes an IFRS 9 transitional adjustment of £0.3 billion (2021 - £0.4 billion). Excluding this adjustment, the CET1 ratio would be 11.1% (2021 – 15.7%) and the leverage ratio would be 4.3% (2021 – 3.7%).
(2) Leverage exposure is broadly aligned to the accounting value of on and off-balance sheet exposures albeit subject to specific adjustments for derivatives, securities financing positions and off-balance sheet exposures.
(3) The leverage ratio for December 2022 has been calculated in accordance with current PRA rules. The comparatives reflect the previous CRR framework which was applicable to NWB Plc prior to 1 January 2022. As at 31 December 2021, the UK leverage ratio for NWB Plc would have been 4.8%, reflecting PRA's UK leverage methodology in 2021.

Capital, liquidity and funding risk continued

Liquidity key metrics

Liquidity within NWB Plc is managed and regulated as part of the UK DoLSub. The table below sets out the key liquidity and related metrics for the UK DoLSub.

2022	UK DoLSub
Liquidity coverage ratio	**131%**
Stressed outflow coverage (1)	**131%**
Net stable funding ratio	**137%**
2021	
Liquidity coverage ratio	169%
Stressed outflow coverage (1)	195%
Net stable funding ratio	151%

(1) NatWest Group's stressed outflow coverage (SOC) is an internal measure calculated by reference to liquid assets as a percentage of net stressed contractual and behavioural outflows over three months under the worst of three severe stress scenarios of a market-wide stress, an idiosyncratic stress and a combination of both as per ILAAP. This assessment is performed in accordance with PRA guidance.

Leverage exposure

From 1 January 2022, the leverage metrics for UK entities are calculated in accordance with the Leverage ratio (CRR) part of the PRA Rulebook. The comparatives reflect the previous CRR framework which was applicable prior to 1 January 2022.

Leverage	2022 £m	2021 £m
Cash and balances at central banks	**73,062**	101,210
Derivatives	**4,430**	2,547
Financial assets	**316,584**	314,852
Other assets	**7,671**	7,502
Total assets	**401,747**	426,111
Derivatives		
- netting and variation margin	**(3,313)**	(2,782)
- potential future exposures	**1,692**	1,405
Securities financing transactions gross up	**2,391**	146
Undrawn commitments	**29,593**	25,448
Regulatory deductions and other adjustments	**(2,023)**	(1,769)
Exclusion of core UK-group exposure	**(22,080)**	(21,878)
Claims on central banks	**(62,228)**	—
Exclusion of bounce back loans	**(4,471)**	—
Leverage exposure	**341,308**	426,681

Liquidity portfolio (audited)

The table below shows the liquidity portfolio by product, with primary liquidity aligned to internal stressed outflow coverage and regulatory Liquidity coverage ratio (LCR) categorisation. Secondary liquidity comprises assets eligible for discount at central banks, which do not form part of the liquid asset portfolio for LCR or internal stressed outflow purposes.

	31 December 2022		31 December 2021	
	UK DoLSub £m	NWB Plc £m	UK DoLSub (1) £m	NWB Plc £m
Cash and balances at central banks	**103,708**	**72,524**	136,154	100,934
AAA to AA- rated governments	**9,843**	**9,843**	21,123	21,123
A+ and lower rated governments	**—**	**—**	—	—
Government guaranteed issuers, public sector entities and government sponsored entities	**100**	**100**	174	174
International organisations and multilateral development banks	**1,021**	**1,021**	1,466	1,466
Level 1 bonds	**10,964**	**10,964**	22,763	22,763
LCR level 1 eligible assets	**114,672**	**83,488**	158,917	123,697
LCR level 2 eligible assets	**—**	**—**	—	—
Non-LCR eligible assets	**—**	**—**	—	—
Primary liquidity	**114,672**	**83,488**	158,917	123,697
Secondary liquidity (1)	**63,849**	**57,308**	76,573	68,939
Total liquidity value	**178,521**	**140,796**	235,490	192,636

(1) Comprises assets eligible for discounting at the Bank of England and other central banks.

Capital, liquidity and funding risk continued

Funding sources (audited)

	2022			2021		
	Short-term less than 1 year £m	Long-term more than 1 year £m	Total £m	Short-term less than 1 year £m	Long-term more than 1 year £m	Total £m
Bank deposits						
Repos	595	—	595	7,132	—	7,132
Other bank deposits	3,465	12,000	15,465	3,699	12,000	15,699
	4,060	12,000	16,060	10,831	12,000	22,831
Customer deposits						
Repos	9,575	—	9,575	14,541	—	14,541
Personal	178,865	1,009	179,874	176,510	674	177,184
Corporate	114,157	16	114,173	116,983	18	117,001
Non-bank financial institutions	18,987	5	18,992	20,714	—	20,714
	321,584	1,030	322,614	328,748	692	329,440
Other financial liabilities (1)						
Debt securities in issue						
Commercial papers and certificates of deposit	1,664	—	1,664	3,399	—	3,399
Covered bonds	804	2,038	2,842	53	2,833	2,886
Securitisations	—	859	859	—	867	867
	2,468	2,897	5,365	3,452	3,700	7,152
Subordinated liabilities	74	123	197	88	123	211
Amounts due to holding company and fellow subsidiaries (2)						
Bank and customer deposits	29,333	—	29,333	35,749	525	36,274
MREL	221	6,118	6,339	33	5,654	5,687
Subordinated liabilities	714	2,227	2,941	13	3,060	3,073
	30,268	8,345	38,613	35,795	9,239	45,034
Total funding	358,454	24,395	382,849	378,914	25,754	404,668
Of which: available in resolution (3)			*9,297*			*8,761*

(1) Excludes settlement balances of £2 million (2021 – Nil) and derivative cash collateral of £17 million (2021 – £99 million).
(2) Amounts due to holding companies and fellow subsidiaries relating to non-financial instruments of £156 million (2021 - £102 million) and intercompany settlement balances of £2 million (2021- Nil) have been excluded from the table.
(3) Eligible liabilities (as defined in the Banking Act 2009 as amended from time to time) that meet the eligibility criteria set out in the regulations, rules, policies, guidelines, or statements of the Bank of England including the Statement of Policy published by the Bank of England in December 2021 (updating June 2018).

Capital, liquidity and funding risk continued

Contractual maturity (audited)

The table shows the residual maturity of third party financial instruments, based on contractual date of maturity of NWB Group's banking activities, including third party and intercompany hedging derivatives. Mandatory fair value through profit or loss (MFVTPL) assets and held-for-trading (HFT) liabilities have been excluded from the maturity analysis and are shown in total in the table below.

	Banking activities										
2022	Less than 1 month £m	1-3 months £m	3-6 months £m	6 months - 1 year £m	Subtotal £m	1-3 years £m	3-5 years £m	More than 5 years £m	Total £m	MFVTPL and HFT £m	Total £m
Cash and balances at central banks	73,065	—	—	—	73,065	—	—	—	73,065	—	73,065
Derivatives	—	39	59	145	243	380	90	30	743	3,664	4,407
Loans to banks - amortised cost	1,606	—	1,341	—	2,947	—	250	—	3,197	—	3,197
Loans to customers - amortised cost (1)	26,926	13,094	9,946	13,178	63,144	45,898	34,680	160,472	304,194	—	304,194
Personal	3,709	1,991	2,771	5,509	13,980	20,567	19,344	143,812	197,703	—	197,703
Corporate	15,474	2,796	3,109	6,838	28,217	24,019	14,744	16,600	83,580	—	83,580
Non-bank financial institutions	7,743	8,307	4,066	831	20,947	1,312	592	60	22,911	—	22,911
Other financial assets	149	79	63	529	820	3,873	5,182	4,254	14,129	417	14,546
Total financial assets	101,746	13,212	11,409	13,852	140,219	50,151	40,202	164,756	395,328	4,081	399,409
2021											
Total financial assets	140,416	18,891	15,008	16,315	190,630	42,679	35,274	155,126	423,709	2,573	426,282

2022											
Bank deposits excluding repos	3,465	—	—	—	3,465	3,800	8,200	—	15,465	—	15,465
Bank repos	436	159	—	—	595	—	—	—	595	—	595
Customer repos	9,559	6	10	—	9,575	—	—	—	9,575	—	9,575
Customer deposits excluding repos	298,543	6,301	4,408	2,757	312,009	1,019	—	11	313,039	—	313,039
Personal	172,795	2,343	2,295	1,432	178,865	1,009	—	—	179,874	—	179,874
Corporate	107,571	3,356	1,977	1,253	114,157	5	—	11	114,173	—	114,173
Non-bank financial institutions	18,177	602	136	72	18,987	5	—	—	18,992	—	18,992
Derivatives	3	9	14	53	79	67	56	56	258	1,830	2,088
Other financial liabilities	735	1,560	150	23	2,468	2,334	375	188	5,365	19	5,384
CPs and CDs	685	810	146	23	1,664	—	—	—	1,664	—	1,664
Covered bonds	50	750	4	—	804	2,038	—	—	2,842	—	2,842
Securitisations	—	—	—	—	—	296	375	188	859	—	859
Bank deposits	—	—	—	—	—	—	—	—	—	7	7
Customer deposits	—	—	—	—	—	—	—	—	—	10	10
Settlement balances	—	—	—	—	—	—	—	—	—	2	2
Subordinated liabilities	72	—	2	—	74	—	—	123	197	—	197
Notes in circulation	809	—	—	—	809	—	—	—	809	—	809
Lease liabilities	12	19	28	53	112	184	148	457	901	—	901
Total financial liabilities	313,634	8,054	4,612	2,886	329,186	7,404	8,779	835	346,204	1,849	348,053
2021											
Total financial liabilities	321,685	18,211	2,695	1,645	344,236	3,708	12,435	1,238	361,617	4,147	365,764

(1) Loans to customers excludes £2,510 million (2021 - £2,425 million) of impairment provisions.

Capital, liquidity and funding risk continued

Encumbrance (audited)

NWB Group evaluates the extent to which assets can be financed in a secured form (encumbrance), but certain asset types lend themselves more readily to encumbrance. The typical characteristics that support encumbrance are an ability to pledge those assets to another counterparty or entity through operation of law without necessarily requiring prior notification, homogeneity, predictable and measurable cash flows, and a consistent and uniform underwriting and collection process. Retail assets including residential mortgages and credit card receivables display many of these features.

NWB Group categorises its assets into four broad groups, those that are:

- Already encumbered and used to support funding currently in place through own-asset securitisations, covered bonds and securities repurchase agreements.
- Pre-positioned with central banks as part of funding schemes and those encumbered under such schemes.
- Ring-fenced to meet regulatory requirements, where NWB Group has in place an operational continuity in resolution (OCIR) investment mandate wherein the PRA requires critical service providers to hold segregated liquidity buffers covering at least 50% of their annual fixed overheads.
- Not currently encumbered. In this category, NWB Group has in place an enablement programme which seeks to identify assets capable of being encumbered and to identify the actions to facilitate such encumbrance whilst not affecting customer relationships or servicing.

Balance sheet encumbrance - third party

	Encumbered as a result of transactions with counterparties other than central banks			Pre-positioned	Collateral	Unencumbered assets not pre-positioned with central banks				
2022	Covered bonds and securitisations (1) £bn	SFT, Derivatives & similar (2) £bn	Total (3) £bn	& encumbered assets held at central bank (4) £bn	ring-fenced to meet reg requirement (5) £bn	Readily available (6) £bn	Other available (7) £bn	Cannot be used (8) £bn	Total £bn	Total third party (9) £bn
Cash and balances at central banks	—	2.6	2.6	—	—	70.5	—	—	70.5	73.1
Derivatives	—	—	—	—	—	—	—	4.4	4.4	4.4
Loans to banks - amortised cost	—	0.1	0.1	—	—	2.6	0.2	0.3	3.1	3.2
Loans to customers - amortised cost	7.0	0.4	7.4	91.3	—	84.6	82.7	35.7	203.0	301.7
- residential mortgages	7.0	—	7.0	91.3	—	74.5	12.7	—	87.2	185.5
- credit cards	—	—	—	—	—	3.3	0.1	—	3.4	3.4
- personal loans	—	—	—	—	—	4.2	2.1	1.2	7.5	7.5
- other	—	0.4	0.4	—	—	2.6	67.8	34.5	104.9	105.3
Other financial assets	—	2.9	2.9	—	1.8	8.8	—	1.0	9.8	14.5
Intangible assets	—	—	—	—	—	—	—	1.6	1.6	1.6
Other assets	—	—	—	—	—	—	2.5	3.6	6.1	6.1
Total assets	7.0	6.0	13.0	91.3	1.8	166.5	85.4	46.6	298.5	404.6
Amounts due from holding companies and fellow subsidiaries										4.9
										409.5
2021										
Total assets	8.3	17.7	26.0	109.6	2.0	163.5	78.6	51.4	293.5	431.1
Amounts due from holding companies and fellow subsidiaries										3.5
										434.6

(1) Covered bonds and securitisations include securitisations, conduits and covered bonds.
(2) Repos and other secured deposits, cash, coin and nostro balance held with the Bank of England as collateral against deposits and notes in circulation are included here rather than within those positioned at the central bank as they are part of normal banking operations. Securities financing transactions (SFT) include collateral given to secure derivative liabilities.
(3) Total assets encumbered as a result of transactions with counterparties other than central banks are those that have been pledged to provide security and are therefore not available to secure funding or to meet other collateral needs.
(4) Assets pre-positioned at the central banks include loans provided as security as part of funding schemes and those encumbered under such schemes.
(5) Ring-fenced to meet regulatory requirement includes assets ring fenced to meet operational continuity in resolution (OCIR) investment mandate.
(6) Readily available for encumbrance: including assets that have been enabled for use with central banks but not pre-positioned; cash and high quality debt securities that form part of NWB Group's liquidity portfolio and unencumbered debt securities.
(7) Other assets that are capable of being encumbered are those assets on the balance sheet that are available for funding and collateral purposes but are not readily realisable in their current form. These assets include loans that could be prepositioned with central banks but have not been subject to internal and external documentation review and diligence work.
(8) Cannot be used includes:
   a. Derivatives, reverse repurchase agreements and trading related settlement balances.
   b. Non-financial assets such as intangibles, prepayments and deferred tax.
   c. Loans that cannot be pre-positioned with central banks based on criteria set by the central banks, including those relating to date of origination and level of documentation.
   d. Non-recourse invoice financing balances and certain shipping loans whose terms and structure prohibit their use as collateral
(9) In accordance with market practice, NWB Group employs securities recognised on the balance sheet, and securities received under reverse repo transactions as collateral for repos.

Non-traded market risk

Definition (audited)

Non-traded market risk is the risk to the value of assets or liabilities outside the trading book, or the risk to income, that arises from changes in market prices such as interest rates, foreign exchange rates and equity prices, or from changes in managed rates.

Sources of risk (audited)

The key sources of NWB Group's non-traded market risk are interest rate risk, credit spread risk and foreign exchange risk.

Key developments in 2022

- Interest rates in the UK increased sharply in 2022, to levels higher than expected at the end of 2021. The Bank of England base rate rose from 0.25% at 31 December 2021 to 3.5% at 31 December 2022. The five-year sterling overnight index interest rate swap rate rose from 1.05% at 31 December 2021 to 4.10% at 31 December 2022. The corresponding ten-year rate rose from 0.95% to 3.75%.
- Overall, non-traded VaR decreased over the year, driven by a decrease in credit spread VaR. This reflected reduced holdings of bonds in the liquidity portfolio. Interest rate VaR rose, reflecting higher interest rate volatility, particularly in sterling. By year-end, interest rate risk had displaced credit spread risk as the main driver of non-traded VaR.
- NWB Group's structural hedge notional increased to £173 billion at 31 December 2022 from £152 billion at 31 December 2021.
- Overall, the sensitivity of net interest earnings fell year on year, mainly driven by lower deposit volumes and increased structural hedging.

Governance (audited)

Responsibility for identifying, measuring, monitoring and controlling market risk arising from non-trading activities lies with the relevant business. Oversight is provided by the independent Risk function.

Risk positions are reported regularly to the NatWest Holdings Executive Risk Committee and the NatWest Holdings Board Risk Committee, as well as to the NatWest Holdings Asset & Liability Management Committee. Market risk policy statements set out the governance and risk management framework.

Risk appetite

NWB Group's qualitative appetite is set out in the non-traded market risk appetite statement.

Its quantitative appetite is expressed in terms of exposure limits. NWB Group's limit framework comprises value-at-risk (VaR), stressed value-at-risk (SVaR), sensitivities and earnings-at-risk limits. The limits are reviewed to reflect changes in risk appetite, business plans, portfolio composition and the market and economic environments.

To ensure approved limits are not breached and that NWB Group remains within its risk appetite, triggers have been set such that if exposures exceed a specified level, action plans are developed and implemented.

For further information on risk appetite and risk controls, refer to pages 13 and 14.

Measurement (audited)

Non-traded internal VaR (1-day 99%)

The following table presents one-day internal banking book VaR at a 99% confidence level, split by risk type. VaR values for each year are calculated based on one-day values for each of the 12 month-end reporting dates.

VaR metrics are explained on page 70. Each of the key risk types are discussed in greater detail in their individual sub-sections following this table.

	2022				2021			
	Average £m	**Maximum £m**	**Minimum £m**	**Period end £m**	Average £m	Maximum £m	Minimum £m	Period end £m
Interest rate	**28.7**	**57.5**	**11.8**	**32.1**	11.2	16.6	4.1	11.9
Credit spread	**31.2**	**73.1**	**17.2**	**17.7**	80.6	89.4	74.2	79.5
Structural foreign exchange risk	**19.4**	**24.6**	**16.4**	**24.6**	25.7	26.4	24.4	24.4
Equity	**0.1**	**0.2**	**0.1**	**0.1**	0.9	1.0	0.4	1.0
Pipeline risk (1)	**1.5**	**4.8**	**0.5**	**2.6**	0.5	1.1	0.3	1.1
Diversification (2)	**(32.0)**			**(30.6)**	(35.6)			(38.3)
Total	**48.9**	**75.1**	**36.6**	**46.5**	83.3	93.8	75.5	79.6

(1) Pipeline risk is the risk of loss arising from personal customers owning an option to draw down a loan – typically a mortgage – at a committed rate, where interest rate changes may result in greater or fewer customers than anticipated taking up the committed offer.
(2) NWB Group benefits from diversification across various financial instrument types, currencies and markets. The extent of the diversification benefit depends on the correlation between the assets and risk factors in the portfolio at a particular time. The diversification factor is the sum of the VaR on individual risk types less the total portfolio VaR.

- Overall, non-traded VaR decreased over the year, driven by a decrease in credit spread VaR. This reflected reduced holdings of bonds in the liquidity portfolio.
- Interest rate VaR increased, reflecting higher interest rate volatility, particularly in sterling. By year-end, interest rate risk had displaced credit spread risk as the main driver of non-traded VaR.

Non-traded market risk continued

Interest rate risk

Non-traded interest rate risk (NTIRR) arises from the provision to customers of a range of banking products with differing interest rate characteristics. When aggregated, these products form portfolios of assets and liabilities with varying degrees of sensitivity to changes in market interest rates. Mismatches can give rise to volatility in net interest income as interest rates vary.

NTIRR comprises the following three primary risk types:

- Gap risk – arises from the timing of rate changes in non-trading book instruments. The extent of gap risk depends on whether changes to the term structure of interest rates occur consistently across the yield curve (parallel risk) or differentially by period (non-parallel risk).
- Basis risk – captures the impact of relative changes in interest rates for financial instruments that have similar tenors but are priced using different interest rate indices, or on the same interest rate indices but with different tenors.
- Option risk – arises from option derivative positions or from optional elements embedded in assets, liabilities and/or off-balance sheet items, where NWB Group or its customer can alter the level and timing of their cash flows. Option risk also includes pipeline risk.

To manage exposures within its risk appetite, NWB Group aggregates its interest rate positions and hedges its residual exposure, primarily with interest rate swaps.

Structural hedging aims to reduce gap risk and the sensitivity of earnings to interest rate shocks. It also provides some protection against prolonged periods of falling rates. Structural hedging is explained in greater detail below, followed by information on how NWB Group measures NTIRR from both an economic value-based and an earnings-based perspective.

Structural hedging

NWB Group has a significant pool of stable, non and low interest-bearing liabilities, principally comprising current accounts and savings, in addition to its equity and reserves. NatWest Group has a policy of hedging these balances, either by investing directly in longer-term fixed-rate assets (primarily fixed-rate mortgages) or by using interest rate swaps, in order to provide a consistent and predictable revenue stream from these balances.

At 31 December 2022, NWB Group's structural hedge had a notional of £173 billion (compared to £152 billion at 31 December 2021) with an average life of approximately three years.

Interest rate risk measurement

NTIRR can be measured from either an economic value-based or earnings-based perspective, or a combination of the two. Value-based approaches measure the change in value of the balance sheet assets and liabilities including all cash flows. Earnings-based approaches measure the potential impact on the income statement of changes in interest rates over a defined horizon, generally one to three years.

NWB Group uses VaR as its value-based approach and sensitivity of net interest earnings as its earnings-based approach.

These two approaches provide complementary views of the impact of interest rate risk on the balance sheet at a point in time. The scenarios employed in the net interest earnings sensitivity approach may incorporate assumptions about how NWB Group and its customers will respond to a change in the level of interest rates. In contrast, the VaR approach measures the sensitivity of the balance sheet at a point in time. Capturing all cash flows, VaR also highlights the impact of duration and repricing risks beyond the one-to-three-year period shown in earnings sensitivity calculations.

Value-at-risk

VaR is a statistical estimate of the potential change in the market value of a portfolio (and, thus, the impact on the income statement) over a specified time horizon at a given confidence level. NWB Group's standard VaR metrics – which assume a time horizon of one trading day and a confidence level of 99% – are based on interest rate repricing gaps at the reporting date. Daily rate moves are modelled using observations from the last 500 business days. These incorporate customer products plus associated funding and hedging transactions as well as non-financial assets and liabilities. Behavioural assumptions are applied as appropriate.

The non-traded interest rate risk VaR metrics for NWB Group's retail and commercial banking activities are included in the banking book VaR table above. The VaR captures the risk resulting from mismatches in the repricing dates of assets and liabilities.

It also includes any mismatch between the maturity profile of external hedges and NWB Group's target maturity profile for the hedge.

Sensitivity of net interest earnings

Net interest earnings are sensitive to changes in the level of interest rates, mainly because maturing structural hedges are replaced at higher or lower rates and changes to coupons on managed rate customer products do not match changes in market rates of interest or central bank policy rates.

Earnings sensitivity is derived from a market-implied forward rate curve, which will incorporate expected changes in central bank policy rates such as the Bank of England base rate. A simple scenario is shown that projects forward earnings over a 12-month period based on the 31 December 2022 balance sheet. An earnings projection is derived from the market-implied rate curve, which is then subject to interest rate shocks. The difference between the market-implied projection and the shock gives an indication of underlying sensitivity to interest rate movements.

Non-traded market risk continued

The sensitivity of net interest earnings table below shows the expected impact of an immediate upward or downward change of 25 basis points and an upward change of 100 basis points to all interest rates. The sensitivity to a downward 100-basis-point shift in the yield curve has been introduced for 2022. This shift was not presented for 2021, when yield curves were already close to zero (or were negative in euros).

Reported sensitivities should not be considered a forecast of future performance in these rate scenarios. Actions that could reduce interest earnings sensitivity include changes in pricing strategies on customer loans and deposits as well as hedging. Management action may also be taken to stabilise total income also taking into account non-interest income.

	2022				2021		
Shifts in yield curve	+25 basis points £m	-25 basis points with no floor £m	+100 basis points £m	-100 basis points £m	+25 basis points £m	-25 basis points with no floor £m	+100 basis points £m
12-month interest earnings sensitivity	145	(160)	580	(654)	207	(196)	767

(1) Earnings sensitivity in 2022 considers only the main drivers, namely structural hedging and margin management.

- The overall sensitivity to shifts in the yield curve decreased year on year, mainly driven by increased structural hedge volumes and lower managed margin deposit volumes.
- The sensitivity of the structural hedge increased because of the rise in hedged volumes, which increased the sensitivity to hedges maturing through the projection.
- The increased volume of hedges reduces managed margin sensitivity because a significant part of the managed margin component is the residual sensitivity of unhedged deposit volumes.
- Managed margin sensitivity further reduced due to lower deposit volumes at 31 December 2022 compared to 31 December 2021.

Sensitivity of fair value through other comprehensive income (FVOCI) to interest rate movements.

NWB Group holds most of the bonds in its liquidity portfolio at fair value. Valuation changes that are not hedged (or not in effective hedge accounting relationships) are recognised in FVOCI reserves.

Interest rate swaps are used to implement the structural hedging programme and to hedge some personal and commercial lending portfolios, primarily fixed-rate mortgages. Changes in the valuation of swaps that are in effective cash flow hedge accounting relationships are recognised in cash flow hedge reserves.

The table below shows the sensitivity of FVOCI reserves and cash flow hedge reserves to a parallel shift in all rates. In this analysis, interest rates have not been floored at zero. Cash flow hedges are assumed to be fully effective and interest rate hedges of bonds in the liquidity portfolio are also assumed to be subject to fully effective hedge accounting. Hedge accounting ineffectiveness would result in some deviation from the results below, with some gains or losses recognised in P&L instead of reserves. Hedge ineffectiveness P&L is monitored, and the effectiveness of cash flow and fair value hedge relationships is regularly tested in accordance with IFRS requirements. Note that a movement in the FVOCI reserve would have an impact on CET1 capital but a movement in the cash flow hedge reserve would not be expected to do so. Volatility in both reserves affects tangible net asset value.

	2022				2021			
Parallel shifts in yield curve	+25 basis points £m	-25 basis points £m	+100 basis points £m	-100 basis points £m	+25 basis points £m	-25 basis points £m	+100 basis points £m	-100 basis points £m
FVOCI reserves	3	(3)	9	(17)	(28)	27	(116)	102
Cash flow hedge reserves	(11)	11	(42)	46	(10)	11	(33)	53
Total	(8)	8	(33)	29	(38)	38	(149)	155

Non-traded market risk continued

Credit spread risk

Credit spread risk arises from the potential adverse economic impact of a change in the spread between bond yields and swap rates, where the bond portfolios are accounted at fair value through other comprehensive income.

NWB Group's bond portfolios primarily comprise high-quality securities maintained as a liquidity buffer to ensure it can continue to meet its obligations in the event that access to wholesale funding markets is restricted. Additionally, other high-quality bond portfolios are held for collateral purposes and to support payment systems.

Credit spread risk is monitored daily through sensitivities and VaR measures. The dealing authorities in place for the bond portfolios further mitigate the risk by imposing constraints by duration, asset class and credit rating. Exposures and limit utilisations are reported to senior management on a regular basis.

Foreign exchange risk

Non-traded foreign exchange risk arises from three main sources:

- Structural foreign exchange rate risk – arises from the capital deployed in foreign subsidiaries, branches and joint arrangements and related currency funding where it differs from sterling.
- Non-trading book foreign exchange rate risk – arises from customer transactions and profits and losses that are in a currency other than the functional currency.
- Forecast earnings or costs in foreign currencies – NWB Group hedges forward some foreign currency forecast expenses.

Structural foreign exchange exposures arise from investments in foreign subsidiaries, branches and associates and their related currency funding. These exposures are assessed and managed to predefined risk appetite levels under delegated authority agreed by the CFO with support from the Asset & Liability Management Committee. NatWest Group seeks to limit the potential volatility impact on its CET1 ratio from exchange rate movements by maintaining a structural open currency position. Gains or losses arising from the retranslation of net investments in overseas operations are recognised in equity reserves and reduce the sensitivity of capital ratios to foreign exchange rate movements primarily arising from the retranslation of non-sterling denominated RWAs. Sensitivity is minimised where, for a given currency, the ratio of the structural open position to RWAs equals the CET1 ratio.

The sensitivity of the NatWest Group ratio to exchange rates is monitored monthly and reported to the Asset & Liability Management Committee at least quarterly. NWB Plc also monitors the sensitivity of its CET1 ratio to exchange rate movements against a risk limit monthly.

Foreign exchange exposures arising from customer transactions are sold down by businesses on a regular basis in line with NatWest Group policy.

Foreign exchange risk (audited)

The table below shows structural foreign currency exposures.

	2022			2021		
	Net investments in foreign operations £m	**Net investment hedges £m**	**Structural foreign currency exposures £m**	Net investments in foreign operations £m	Net investment hedges £m	Structural foreign currency exposures £m
Euro	**738**	**(720)**	**18**	473	(470)	3
Other non-sterling	**456**	**(148)**	**308**	449	(159)	290
Total	**1,194**	**(868)**	**326**	922	(629)	293

- The increase in net investments in foreign operations was driven by increased investment in NWB Group's German branch.
- The increase in net investment hedges reflects increased hedging of the German branch.

Pension risk

Definition

Pension risk is defined in a consistent manner to the regulatory definition as the inability to meet contractual obligations and other liabilities to the established employee or related company pension scheme.

Sources of risk

NWB Group has exposure to pension risk through its defined benefit schemes worldwide. The Main section of The NatWest Group Pension Fund (the Main section) is the largest source of pension risk as NatWest Bank Plc is the principal employer to the Main section with £34.0 billion of assets and £24.7 billion of liabilities at 31 December 2022 (2021 – £52.0 billion of assets and £42.0 billion of liabilities). Refer to Note 5 to the financial statements, for further details on NWB Group's pension obligations, including sensitivities to the main risk factors.

Pension scheme liabilities vary with changes in long-term interest rates and inflation as well as with pensionable salaries, the longevity of scheme members and legislation. Pension scheme assets vary with changes in interest rates, inflation expectations, credit spreads, exchange rates, and equity and property prices. NWB Group is exposed to the risk that the schemes' assets, together with future returns and additional future contributions, are estimated to be insufficient to meet liabilities as they fall due. In such circumstances, NWB Group could be obliged (or might choose) to make additional contributions to the schemes or be required to hold additional capital to mitigate this risk.

Key developments in 2022

- There were no material changes to NWB Group's exposure to pension risk during the year. Despite market volatility, the Main section remained resilient, primarily due to its interest rate and inflation hedging strategy, as well as its limited exposure to equities. Furthermore, the Main section held sufficient collateral in relation to its liability hedging portfolio, without the need to sell assets to meet collateral requirements. One of NWB Group's smaller schemes faced more challenging dynamics, with a reduction in funding level, but continued to be able to raise collateral as required. The impact was not material at NWB Group level.
- In line with the Memorandum of Understanding signed with the Trustee of the Main section in April 2018, a £500 million lump sum contribution was paid into the Main section, following the share buyback in Q1 2022.
- Since 31 December 2022, it has been agreed with the Trustee of the Main section, that remaining contributions of £471 million previously due to the Main section under the Memorandum of Understanding signed in April 2018, will instead be paid into a new legal structure. For further details, refer to Note 5 to the financial statements.

Governance

Chaired by the Chief Financial Officer, the NatWest Group Asset & Liability Management Committee is a key component of NatWest Group's approach to managing pension risk. It considers the pension impact of the capital plan for NatWest Group and reviews the performance of NatWest Group's material pension funds (including those sponsored by NWB Group) and other issues material to NatWest Group's pension strategy. It also considers investment strategy proposals from the Trustee of the Main section.

For further information on governance, refer to page 11.

Risk appetite

NWB Group maintains an independent view of the risk inherent in its pension funds. NWB Group has an annually reviewed pension risk appetite statement incorporating defined metrics against which risk is measured.

Policies and standards are in place to provide formal controls for pension risk reporting, modelling, governance and stress testing. A pension risk policy, which sits within the NatWest Group enterprise-wide risk management framework, is also in place and is subject to associated framework controls.

Monitoring and measurement

Pension risk is monitored by the NWH Group Executive Risk Committee and the NatWest Group Board Risk Committee, whilst the NatWest Group Asset & Liability Management Committee receives updates on the performance of NatWest Group's material pension funds.

NatWest Group also undertakes stress tests on its material defined benefit pension schemes each year. These tests are also used to satisfy the requests of regulatory bodies such as the Bank of England.

The stress testing framework includes pension risk capital calculations for the purposes of the Internal Capital Adequacy Assessment Process as well as additional stress tests for a number of internal management purposes. The results of the stress tests and their consequential impact on NWB Group's balance sheet, income statement and capital position are incorporated into NWB Group's and overall NatWest Group stress test results.

NatWest Bank Plc is the principal employer of the Main section and could be required to fund any deficit that arises.

Mitigation

Following risk mitigation measures taken by the Trustee in recent years, the Main section is now well protected against interest rate and inflation risks and is being run on a low investment risk basis with relatively small equity risk exposure. The Main section also uses derivatives to manage the allocation of the portfolio to different asset classes and to manage risk within asset classes.

The potential impact of climate change is one of the factors considered in managing the assets of the Main section. The Trustee monitors the risk to its investments from changes in the global economy and invests, where return justifies the risk, in sectors that reduce the world's reliance on fossil fuels, or that may otherwise promote environmental benefits. Further details regarding the Main section Trustee's approach to managing climate change risk can be found in its Responsible Ownership Policy and its net zero commitment. During the year, the Trustee also produced its first climate disclosures as required by The Occupational Pension Schemes (Climate Change Governance and Reporting) Regulations 2021.

Compliance and conduct risk

Definition

Compliance risk is the risk that NWB Group fails to observe the letter and spirit of all relevant laws, codes, rules, regulations and standards of good market practice.

Conduct risk is the risk of inappropriate behaviour towards customers, or in the markets in which NWB Group operates, which leads to unfair or inappropriate customer outcomes.

The consequences of failing to meet compliance and/or conduct responsibilities can be significant and could result, for example, in legal action, regulatory enforcement, material financial loss and/or reputational damage.

Sources of risk

Compliance and conduct risks exist across all stages of NWB Group's relationships with its customers and arise from a variety of activities including product design, marketing and sales,

complaint handling, staff training, and handling of confidential inside information.

As set out in Note 26 to the financial statements, members of NatWest Group are party to legal proceedings and are subject to investigation and other regulatory action in the UK, the US and other jurisdictions.

Key developments in 2022

- Further progress was made on the compliance agenda during 2022. The first line of defence ring-fencing hub – established to provide an aggregated view of ring-fencing compliance and risk management continues to work across business segments, functions and legal entities.
- From a conduct risk perspective, the focus on consumer protection increased significantly during 2022, given the cost-of-living challenges and their impact on customers in vulnerable situations. The FCA's increased expectations under its Consumer Duty initiative was also a key development, and the establishment of the consumer duty 'One Bank' programme will ensure continued focus upon the required 'paradigm shift' in the levels of consumer protection.
- More generally, work is also ongoing to further enhance the conduct and compliance risk framework so that it is aligned to a wider programme of work on the overall risk management framework.

Governance

NWB Group defines appropriate standards of compliance and conduct and ensures adherence to those standards through its risk management framework. Relevant compliance and conduct matters are escalated through Executive Risk Committee and Board Risk Committee.

Risk appetite

Risk appetite for compliance and conduct risks is set at Board level. Risk appetite statements articulate the levels of risk that legal entities, businesses and functions work within when pursuing their strategic objectives and business plans.

A range of controls are operated to ensure the business delivers good customer outcomes and are conducted in accordance with legal and regulatory requirements. A suite of policies addressing compliance and conduct risks set appropriate standards across NWB Group. Examples include policies relating to customers in vulnerable situations, complaints management, cross-border activities and market abuse. Continuous monitoring and targeted assurance are carried out as appropriate.

Monitoring and measurement

Compliance and conduct risks are measured and managed through continuous assessment and reporting to NWB Group's senior risk committees and at Board level. The compliance and conduct risk framework facilitates the consistent monitoring and measurement of compliance with laws and regulations and the delivery of consistently good customer outcomes. The first line of defence is responsible for effective risk identification, reporting and monitoring, with oversight, challenge and review by the second line. Compliance and conduct risk management is also integrated into NWB Group's strategic planning cycle.

Mitigation

Activity to mitigate the most material compliance and conduct risks is carried out across NWB Group with specific areas of focus in the customer-facing businesses and legal entities. Examples of mitigation include consideration of customer needs in business and product planning, targeted training, conflicts of interest management, market conduct surveillance, complaints management, mapping of priority regulatory requirements and independent monitoring activity. Internal policies help support a strong customer focus across NatWest Group.

Financial crime risk

Definition

Financial crime risk is the risk that NWB Group's products and services are intentionally or unintentionally used to facilitate financial crime in the form of money laundering, terrorist financing, bribery and corruption, sanctions and tax evasion, as well as external or internal fraud.

Sources of risk

Financial crime risk may be present if NWB Group's customers, employees or third parties undertake or facilitate financial crime, or if NWB Group's products or services are used intentionally or unintentionally to facilitate such crime. Financial crime risk is an inherent risk across all lines of business.

Key developments in 2022

- Significant investment continued to be made to support delivery of the multi-year transformation plan across financial crime risk management.
- Enhancements were made to technology and data analytics to improve the effectiveness of systems used to monitor customers and transactions.
- A financial crime and fraud goal was rolled out to approximately 55,000 colleagues across NatWest Group.
- Financial crime roadshows were held throughout the year to further embed financial crime risk management culture and behaviours.
- Systematic Anti-Money Laundering Programme assessment. In January 2022, NatWest Group, of which NWB Group is a part of, received the Skilled Person's final report in connection with governance arrangements for two financial crime change programmes in respect of which the Skilled Person had been appointed under section 166 of the Financial Services and Markets Act 2000 to provide assurance. The FCA confirmed in March 2022 that the section 166 review had been concluded.

Financial crime risk continued

Governance

The Financial Crime Executive Steering Group, which is jointly chaired by the NatWest Group Chief Risk Officer and the Group Chief Information Officer (previously the Chief Administration Officer), is the core governance committee for financial crime risk (excluding fraud). It oversees financial crime risk management, operational performance, and transformation matters including decision-making and escalations to the Executive Risk Committee, Board Risk Committee and NatWest Group Executive Committee.

The Fraud Executive Steering Group, which is chaired by the Chief Information Officer, is the core governance committee for fraud. It oversees fraud risk management, operational performance, and investment matters including decision-making and escalations to relevant senior committees.

Risk appetite

There is no appetite to operate in an environment where systems and controls do not enable the effective identification, assessment, monitoring, management and mitigation of financial crime risk. NWB Group's systems and controls must be comprehensive and proportionate to the nature, scale and complexity of its businesses

NWB Group operates a framework with preventative and detective controls designed to mitigate the risk that it could facilitate financial crime. These controls are supported by a suite of policies, procedures and guidance to ensure they operate effectively.

Monitoring and measurement

Financial crime risks are identified and reported through continuous risk management and regular reporting to NWB Group's senior risk committees and the NWB Group Board. Quantitative and qualitative data is reviewed and assessed to measure whether financial crime risk is within risk appetite.

Mitigation

Through the financial crime framework, relevant policies, systems, processes and controls are used to mitigate and manage financial crime risk. This includes the use of dedicated screening and monitoring systems and controls to identify people, organisations, transactions and behaviours that may require further investigation or other actions. Centralised expertise is available to detect and disrupt threats to NWB Group and its customers.

Intelligence is shared with law enforcement, regulators and government bodies to strengthen national and international defences against those who would misuse the financial system for criminal motives.

Climate risk

Definition

Climate risk is the threat of financial loss or adverse non-financial impacts associated with climate change and the political, economic and environmental responses to it.

Sources of risk

Physical risks may arise from climate and weather-related events such as heatwaves, droughts, floods, storms and sea level rises. They can potentially result in financial losses, impairing asset values and the creditworthiness of borrowers. NWB Group could be exposed to physical risks directly by the effects on its property portfolio and, indirectly, by the impacts on the wider economy as well as on the property and business interests of its customers.

Transition risks may arise from the process of adjustment towards a low-carbon economy. Changes in policy, technology and sentiment could prompt reassessment of customers' financial risk and may lead to falls in the value of a large range of assets. NWB Group could be exposed to transition risks directly through the costs of adaptation within economic sectors and markets as well as supply chain disruption leading to financial impacts on it and its customers. Potential indirect effects include the erosion of NWB Group's competitiveness, profitability, reputational damage and liability risk.

Key developments in 2022

- The enhancement of scenario generation capability, building on our internal scenario analysis capability developed over 2021 that supported risk management and participation in the PRA Climate Biennial Exploratory Scenario (CBES).
- To support the management of credit risk, the application of first generation qualitative climate risk scorecards within customer conversations, and initiation of testing of enhanced scorecards including quantitative elements.
- Improved oversight of management of climate-related risk through regular reporting and review of climate risk appetite measures and key risk indicator trends informing monthly risk committee updates.
- The assessment of potential greenwashing risks driven by a hypothetical risk scenario where increased competition in the green finance market leads to less efficient product designs and diminished robustness of governance.
- The preparation of an initial iteration of the NatWest Group Climate Transition plan including identification and analysis of potential impacts associated with proposed actions.

Governance

The NatWest Group Board is responsible for monitoring and overseeing climate-related risk within NatWest Group's overall business strategy and risk appetite. The potential impact, likelihood and preparedness of climate-related risk are reported regularly to the NatWest Group Board Risk Committee and the NatWest Group Board.

The NatWest Group Chief Risk Officer shares accountability with the NatWest Group CEO under the Senior Managers and Certification Regime for identifying and managing the financial risks arising from climate change. This includes ensuring that the financial risks from climate change are adequately reflected in risk management frameworks, and that NatWest Group can identify, measure, monitor, manage and report on its exposure to these risks.

The Climate Change Executive Steering Group is responsible for overseeing the direction of and progress against NatWest Group's climate-related commitments. During 2022, the Executive Steering Group focused on overseeing the preparation of the initial iteration of NatWest Group's Climate Transition Plan, progression in establishing partnerships and opportunities including oversight of progress against the NatWest Group climate and sustainable funding and financing target, and ensuring the effective management of climate-related risks. The Executive Steering Group will continue to supervise strategic implementation and delivery, supported by the Climate Centre of Excellence.

Climate risk continued

Risk appetite

NatWest Group's ambition is to be a leading bank in the UK in helping to address climate change. This ambition is underpinned by activity to reduce the climate impact of financing activity by at least 50% by 2030 and to achieve net zero by 2050.

Work continued in 2022 to mature NatWest Group's climate-related risk capabilities in accordance with the risk management framework. In December 2022, the NatWest Group Board approved the adoption of enhanced climate risk appetite measures into the enterprise-wide risk management framework, which are designed to provide a heightened focus on balance sheet exposure to financed emissions.

Combined with segment-specific risk measures, this suite of metrics will enable reporting of climate risk appetite to senior risk management forums and links risk management to NatWest Group's strategic goals and priorities.

Monitoring and measurement

NatWest Group focused on developing the capabilities to use scenario analysis to identify the most material climate risks and opportunities for its customers, seeking to harness insights to inform risk management practices and maximise the opportunities arising from a transition to a low-carbon economy.

Scenario analysis allows NatWest Group to test a range of possible future climate pathways and understand the nature and magnitude of the risks they present. The purpose of scenario analysis is not to forecast the future but to understand and prepare to manage risks that could arise.

Key priorities in 2022 have included enhancing our climate scenario analysis capabilities to both address ongoing regulatory expectations and building on the infrastructure required by NatWest Group to meet current and future climate scenario analysis objectives. NatWest Group made significant investment in developing a variety of internal scenario analysis tools which support the development of commercial strategy, products and services and help manage risks, including managing exposures efficiently and removing unmitigated risks from future climate impacts.

NatWest Group recognises a number of key use cases for climate scenario analysis, including, but not restricted to, the following:

- Regulatory stress testing requirements.
- Heightened climate risk sector classifications.
- Sector/sub-sector risk appetite.
- Lending pricing.
- Portfolio management.
- Strategic decision-making.

NatWest Group made material progress in developing internal climate modelling capabilities, building on the learnings from our internal scenario analysis carried out in 2021 and participation in the CBES. NatWest Group has enhanced its scenario generation capabilities to support future integration of climate risk into strategic planning, Internal Capital Adequacy Assessment Processes (ICAAP) and IFRS 9. Modelling infrastructure to execute scenarios matured in 2022, giving increased flexibility for scenario analysis capability for short, medium and long-term scenarios. Incorporation into the NatWest Group strategic plan and ICAAP ensures that NatWest Group factors climate into strategic planning and appropriately capitalises for the most material source of climate risk over the capital planning horizon. Developing internal methodologies also enhances the capacity to integrate scenario analysis with customer journeys. This builds on NatWest Group's ability not only to effectively develop tools for risk management but also to develop products and processes that support NatWest Group's customers' transition.

NatWest Group also focused on developing an internal methodology for forecasting its counterparties' corporate transition risk via counterparty level modelling infrastructure and climate risk customer scorecards. NatWest Group is actively targeting the minimisation of reliance on third party models, whilst recognising there is likely to be some reliance on them over the medium-to-long term given the specialist and evolving nature of climate financial risk management. Enhancement of this infrastructure links very closely with the scenario analysis noted above. Further information on this can be found in NatWest Group's 2022 Climate-related Disclosures Report.

Internal scenario analysis, carried out to support participation in the CBES, focused on the application of three climate scenarios (early policy action, late policy action and no additional action and a counterfactual scenario) to quantify climate risk across NatWest Group's lending portfolio. This showed that NatWest Group was most exposed to a late transition scenario with a concentrated period of losses between 2030 and 2035, the point at which disruptive transition policy is implemented, resulting in an economic recession. The early action scenario resulted in more gradual losses through the stress horizon, with the earlier onset of transition curtailing impairments in comparison to the sharp onset in the late action scenario. A key conclusion for transition risk is that supporting customers' transition to net zero is critical to manage NatWest Group's exposures to transition risk.

The effects of physical risk were explored through the no additional action scenario which produced lower total cumulative impairments compared to the early action and late action scenarios. This comparatively lower level of impairments is reflective of NatWest Group's diversified book and geographic exposure. NatWest Group's results broadly aligned with the key findings and aggregate outcome for banks (across both physical and transition risk).

However, NatWest Group recognises the industry data and methodology limitations for physical risk and therefore recognises that the no additional action scenario does not capture the severe long-term effects of irreversible climate change. Further information on results, limitations and conclusions can be found in NatWest Group's 2022 Climate-related Disclosures Report.

There are a number of challenges with climate scenario analysis, for example in relation to climate data. NatWest Group continues to participate in a number of industry forums including the United Nations Principles for Responsible Banking, which provides a unique framework for banks to align strategy and practice with the Sustainable Development Goals and Paris Climate Agreement. In addition, NatWest Group is also represented on the Climate Financial Risk Forum established by the PRA and FCA to shape the financial services industry's response to the challenges posed by climate risk and continues to work with a number of UK and international bodies to develop climate scenario analysis best practices.

Climate risk continued

NatWest Group is continuing to make progress in embedding climate risk analytics as appropriate across customer journeys and in supporting decision-making at customer and strategic portfolio levels. Leveraging qualitative and quantitative outputs from scenario analysis, will enable NatWest Group to integrate outcomes into risk appetite measures and customer origination processes. Developing the ability to incorporate these outcomes enables NatWest Group to manage and mitigate both the risks but also the opportunities that are presented by climate risk.

Operational risk

Definition

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or external events. It arises from day-to-day operations and is relevant to every aspect of the business.

Sources of risk

Operational risk may arise from a failure to manage operations, systems, transactions and assets appropriately. This can take the form of human error, an inability to deliver change adequately or on time, the non-availability of technology services, or the loss of customer data. Systems failure, theft of NWB Group property, information loss and the impact of natural, or man-made, disasters – as well as the threat of cyber-attacks are sources of operational risk. Operational risk can also arise from a failure to account for changes in law or regulations or to take appropriate measures to protect assets.

Key developments in 2022

- A review of the NatWest Group Risk Directory was completed, allowing greater risk visibility and improved risk reporting.
- The NatWest Group Impact Classification Matrix was updated to align to industry materiality, ensuring focus on the most material risks.
- An Early Event Escalation Process was implemented to ensure material events are escalated in a timely manner.
- A Risk & Control Self Assessment approach was developed to identify risks across end-to-end processes, refocusing existing risk assessment, towards materiality.
- A payments review has been initiated by NatWest Group in late 2022 to assess control enhancements in response to manual payment risk.

Governance

The risk governance arrangements in place for operational risk are aligned to the requirements set out in the NatWest Board approved enterprise-wide risk management framework and are consistent with achieving safety, soundness and sustainable risk outcomes.

Aligned to this, a strong operational risk management function is vital to support NWB Group's ambitions to serve its customers better. Improved management of operational risk against defined appetite is vital for stability and reputational integrity.

Risk appetite

Operational risk appetite supports effective management of all operational risks. It expresses the level and types of operational risk NatWest Group is willing to accept to achieve its strategic objectives and business plans. NatWest Group's operational risk appetite statement encompasses the full range of operational risks faced by its legal entities, businesses and functions.

Mitigation

The Control Environment Certification (CEC) process is a half-yearly self-assessment by the CEOs of NatWest Group's customer-facing business areas, as well as the heads of the bank's support functions. It provides a consistent and comparable view on the adequacy and effectiveness of the internal control environment.

CEC covers material risks and the underlying key controls, including financial, operational and compliance controls, as well as supporting risk management frameworks. The CEC outcomes, including forward-looking assessments for the next two half-yearly cycles and progress on control environment improvements, are reported to the NatWest Group Audit Committee and Board Risk Committee. They are also shared with external auditors.

The CEC process helps to ensure compliance with the NatWest Group Policy Framework, Sarbanes-Oxley 404 requirements concerning internal control over financial reporting, and certain requirements of the UK Corporate Governance Code.

Risks are mitigated by applying key preventative and detective controls, an integral step in the risk self-assessment methodology which determines residual risk exposure. Control owners are accountable for the design, execution, performance and maintenance of key controls. Key controls are regularly assessed for adequacy and tested for effectiveness. The results are monitored and, where a material change in performance is identified, the associated risk is re-evaluated.

Monitoring and measurement

Risk and control self assessments are used across all business areas and support functions to identify and assess material operational risks, conduct risks and key controls. All risks and controls are mapped to NatWest Group's Risk Directory. Risk assessments are refreshed at least annually to ensure they remain relevant and capture any emerging risks and also ensure risks are reassessed.

The process is designed to confirm that risks are effectively managed in line with risk appetite. Controls are tested at the appropriate frequency to verify that they remain fit-for-purpose and operate effectively to reduce identified risks.

NWB Group uses the standardised approach to calculate its Pillar 1 operational risk capital requirement. This is based on multiplying three years' average historical gross income by coefficients set by the regulator based on business line.

As part of the wider Internal Capital Adequacy Assessment Process an operational risk economic capital model is used to assess Pillar 2A, which is a risk-sensitive add-on to Pillar 1. The model uses historical loss data (internal and external) and forward-looking scenario analysis to provide a risk-sensitive view of NWB Group's Pillar 2A capital requirement.

Scenario analysis is used to assess how severe but plausible operational risks will affect NWB Group. It provides a forward-looking basis for evaluating and managing operational risk exposures.

Refer to the Capital, liquidity and funding risk section for operational risk capital requirement figures.

Operational risk continued

Operational resilience

NWB Group manages and monitors operational resilience through its risk and control self-assessment methodology. This is underpinned by setting and monitoring of risk indicators and performance metrics for the operational resilience of key business services. Progress continues on embedding regulator expectations for operational resilience, with involvement in a number of industry-wide operational resilience forums. This enables a cross-sector view of the operational resilience risk profile and the pace of ongoing innovation and change, both internally and externally.

NatWest Group operates layered security controls and its network architecture is designed to provide inherent protection against threats. This approach avoids reliance on any one type or method of security control. Minimum security control requirements are set out in Key Risk policies, standards, processes and procedures. Through 2023 NatWest Group will monitor and manage the threat landscape focusing on:

- Attack Surface Vulnerabilities – such as the rising number of zero-days and code vulnerabilities impacting organisations
- Initial Access Brokers and Nation States – increasingly sophisticated attacks from ransomware gangs and ongoing challenges following Russia's invasion of Ukraine which has raised international tensions increasing the likelihood of disruptive cyber-attacks.

As cyberattacks evolve and become more sophisticated, NatWest Group continues to invest in additional capability designed to defend against emerging threats.

Event and loss data management

The operational risk event and loss data management process ensures NWB Group captures and records operational risk financial and non-financial events that meet defined criteria. Loss data is used for regulatory and industry reporting and is included in capital modelling when calculating economic capital for operational risk. The most serious events are escalated in a simple, standardised process to all senior management, by way of an Early Event Escalation Process.

All financial impacts associated with an operational risk event are reported against the date they were recorded in NWB Group's financial accounts.

A single event can result in multiple losses (or recoveries) that may take time to crystallise. Losses and recoveries with a financial accounting date in 2022 may relate to events that occurred, or were identified in, prior years.

Model risk

Definition

Model risk is the potential for adverse consequences from model errors and/or the inappropriate use of modelled outputs to inform business decisions. A model is defined as a quantitative method, system, or approach that applies statistical, economic, financial, accounting, mathematical or data science theories, techniques and assumptions to process input data into quantitative estimates.

Sources of risk

NWB Group uses a variety of models in the course of its business activities. Examples include the use of model outputs to support customer decisioning, measuring and assessing risk exposures (including credit, market, and climate risk), as well as calculating regulatory capital and liquidity requirements.

Model applications may give rise to different risks depending on the business segment in which they are used. Model risk is therefore assessed separately for each business segment in addition to the overall assessment made for NWB Group.

Key developments in 2022

- Model risk management practices continued to evolve, driven through a dedicated Model Management Programme. This delivered an enhanced model management committee structure, a new model risk governance team operating model and an improved model inventory.
- Aligned to the implementation of the enterprise-wide risk management framework, new model risk procedures were approved to support the identification, assessment and monitoring of model risk.
- NatWest Group provided a comprehensive response to the PRA's Consultation Paper on Model Risk Management (CP6/22). A self-assessment of NatWest Group's current Model Risk Policy compared to the PRA's draft Supervisory Statement was completed and gaps identified. A programme of work will be established in 2023 to continue to evolve the bank's model risk management framework in line with regulatory expectations and industry best practice.

Governance

A governance framework is in place to ensure policies and processes relating to models are appropriate and effective. Two roles are key to this – model risk owners and model risk officers. Model risk owners are responsible for model approval and ongoing performance monitoring. Model risk officers, in the second line, are responsible for oversight, including ensuring that models are independently validated prior to use and on an ongoing basis aligned to the model's risk rating.

A new NatWest Group Model Risk Oversight Committee will further enhance model risk governance by providing a direct escalation route to the NatWest Group Executive Risk Committee and, where applicable, onwards to the NatWest Group Board Risk Committee.

Risk appetite

Model risk appetite is set in order to limit the level of model risk that NWB Group is willing to accept in the course of its business activities. It is approved by the NatWest Holdings Group Board. Business areas are responsible for monitoring performance against appetite and remediating models outside appetite.

Monitoring and measurement

Policies and procedures related to the development, validation, approval, implementation and use and ongoing monitoring of models are in place to ensure adequate control across the lifecycle of an individual model.

Validation of material models is conducted by an independent risk function comprising of skilled, well-informed subject matter experts. This is completed for new models or amendments to existing models and as part of an ongoing periodic programme to assess model performance. The frequency of periodic validation is aligned to the risk rating of the model. The independent validation focuses on a variety of model features, including modelling approach, the nature of the assumptions used, the model's predictive ability and complexity, the data used in the model, its implementation and its compliance with regulation.

The level of risk relating to an individual model is assessed through a model risk rating. A quantitative approach is used to determine the risk rating of each model, based on the model's materiality and validation rating. This approach provides the basis for model risk appetite measures and enables model risk to be robustly monitored and managed across NWB Group.

Ongoing performance monitoring is conducted by model owners and overseen by the model validators to ensure parameter estimates and model constructs remain fit for purpose, model assumptions remain valid and that models are being used consistently with their intended purpose. This allows timely action to be taken to remediate poor model performance and/or any control gaps or weaknesses.

Model risk continued

If a model risk issue arises due to an operational control weakness (and the residual risk meets the operational risk thresholds, then an operational risk issue would be raised.

Mitigation

By their nature – as approximations of reality – model risk is inherent in the use of models. It is managed by refining or redeveloping models where appropriate – due to changes in market conditions, business assumptions or processes – and by applying adjustments to model outputs (either quantitative or based on expert opinion). Enhancements may also be made to the process within which the model output is used in order to further limit risk levels.

Reputational risk

Definition

Reputational risk is the risk of damage to stakeholder trust due to negative consequences arising from internal actions or external events.

Sources of risk

Reputational risks can originate from internal actions and external events. The three primary drivers of reputational risk have been identified as: failure in internal execution; a conflict between NWB Group's values and the public agenda; and contagion (when NWB Group's reputation is damaged by failures in the wider financial sector).

Key developments in 2022

- New reputational risk policy was implemented to manage reputational risk at an organisational level.
- Enhanced data-led reporting of reputational risk in the monthly Risk Report to the ERC and BRC.
- The NatWest Group Reputational Risk Register was further embedded into the organisation, the results of which are reported to the NatWest Group Reputational Risk Committee.

All Environmental, Social & Ethical (ESE) risk acceptance criteria have undergone review to align with our Purpose.

Governance

A reputational risk policy supports reputational risk management across NatWest Group. The NWB reputational risk committee reviews relevant issues at an individual business or entity level, while the NatWest Group Reputational Risk Committee – opines on issues, cases, sectors and themes that represent material reputational risks. The NatWest Board Risk Committee oversees the identification and reporting of reputational risk.

Risk appetite

NatWest Group manages and articulates its appetite for reputational risk through a qualitative reputational risk appetite statement and quantitative measures. NWB Group seeks to identify, measure and manage risk aligned to stakeholder trust. However, reputational risk is inherent in NatWest Group's operating environment and public trust is a specific factor in setting reputational risk appetite.

Monitoring and measurement

Relevant internal and external factors are monitored through regular reporting to the NWB Group reputational risk committee and escalated, where appropriate, to the NatWest Group Reputational Risk Committee or the NatWest Board Risk Committee.

Mitigation

Standards of conduct are in place across NatWest Group requiring strict adherence to policies, procedures and ways of working to ensure business is transacted in a way that meets – or exceeds – stakeholder expectations.

External events that could cause reputational damage are identified and mitigated through NWB Group's Top and Emerging Threats process (where sufficiently material) as well as through the NWB Group and business segment-level risk registers.

NatWest Group has in recent years been the subject of investigations and reviews by a number of regulators and governmental authorities, some of which have resulted in past fines, settlements and public censure. Refer to the Litigation and regulatory matters section Note 26 to the financial statements for details of material matters currently affecting NWB Group.

Report of the directors

The directors present their report together with the audited accounts for the year ended 31 December 2022.

Other information incorporated into this report by reference can be found at:

NWB Group structure

National Westminster Bank Plc ('NWB Plc') is a wholly-owned subsidiary of NatWest Holdings Limited ('NWH Ltd' or 'the intermediate holding company'). NatWest Bank Group ('NWB Group') comprises NWB Plc and its subsidiary and associated undertakings. NatWest Holdings Group ('NWH Group') comprises NWH Ltd and its subsidiary and associated undertakings. NatWest Group plc is 'the ultimate holding company'. The term 'NatWest Group' comprises NatWest Group plc and its subsidiary and associated undertakings. NatWest Group plc is incorporated in the United Kingdom and has its registered office at 36 St Andrew Square, Edinburgh, EH2 2YB.

Details of NWB Plc's principal subsidiary undertakings and their activities are shown in Note 14 on the accounts. A full list of NWB Plc's related undertakings is shown in Note 35 on the accounts.

The financial statements of NatWest Group plc can be obtained from Legal, Governance & Regulatory Affairs, Gogarburn, Edinburgh, EH12 1HQ, the Registrar of Companies or at natwestgroup.com.

Activities

NWB Group is engaged principally in providing a wide range of banking and other financial services.

Results and dividends

The profit attributable to the ordinary shareholders of NWB Plc for the year ended 31 December 2022 was £3,564 million compared with a profit of £2,793 million for the year ended 31 December 2021, as set out in the consolidated income statement on page 100.

No ordinary shares were issued during 2022 or 2021.

In 2022, NWB Plc paid an ordinary dividend of £3.3 billion to NWH Ltd (2021 – £1.6 billion).

Employees

At 31 December 2022, NWB Group employed 55,200 people (excluding temporary staff). Details of related costs are included in Note 3 on the consolidated accounts. NWB Plc employs the majority of NWB Group UK customer-facing staff, with costs recharged. NWB Plc also provides the majority of shared services (including technology) and operational processes under Intra-Group Agreements.

References to 'colleagues' in this report mean all members of the workforce (for example, contractors, agency workers).

Corporate governance statement

For the financial year ended 31 December 2022 NWB Plc has again chosen to report against the Wates Corporate Governance Principles for Large Private Companies (the Wates Principles), published by the Financial Reporting Council (FRC) in December 2018 and available on the FRC website. The disclosures below explain how NWB Plc has applied the Wates Principles in the context of its corporate governance arrangements.

1. Purpose and leadership

Purpose

NatWest Group's purpose is established by the NatWest Group plc Board, promoted across NatWest Group and cascaded to subsidiaries including NWB Plc. NatWest Group's strategy is also set and approved by the NatWest Group plc Board.

In February 2020 following an extensive period of stakeholder engagement, the NatWest Group plc Board approved NatWest Group's purpose and strategy.

NatWest Group's purpose is 'we champion potential, helping people, families and businesses to thrive'. The focus on purpose has strengthened the Board's consideration of the interests of all stakeholders and papers presented to the Board set out how it supports NatWest Group's purpose. An example of how purpose has guided Board decisions and discussions can be found in the section 172 statement on page 2.

In April 2022 the Board received an assessment of progress on embedding purpose and updates on each of the focus areas of enterprise, climate and financial capability/learning. Directors considered the outputs of a colleague opinion survey which had demonstrated good progress on embedding NatWest Group's purpose and values.

The Board received a further purpose update in December 2022. This included an overview of NatWest Group's evolution to becoming a purpose-led bank, an assessment of progress on embedding purpose, achievements to date, external perceptions of progress and future priorities. The directors received a further update on the three focus areas and considered a broader stakeholder overview aligned to the Blueprint for Better Business framework.

Strategy

The Board of directors of NWH Ltd reviews and sets the strategic direction of the NWH Group and, as appropriate, the strategies for each of its businesses, within the parameters set by the NatWest Group plc Board. The Board also oversees the execution of NWH Group strategy and holds executive management to account for its delivery.

Further information on NatWest Group's progress against its purpose and strategy can be found in the NatWest Group plc 2022 Annual Report and Accounts.

Values and culture

In December 2021 the Board approved NatWest Group's refreshed values (Inclusive, Curious, Robust, Sustainable and Ambitious), ahead of their launch in February 2022. The Board received regular updates on how the values were embedding within the organisation through One Bank Transformation spotlights, Our View colleague survey results and culture measurement reports.

Further information on NatWest Group's values can be found in the NatWest Group plc 2022 Annual Report and Accounts on page 47.

The Board assesses and monitors culture in several ways. During 2022 it received:

- Colleague Advisory Panel reports which provided feedback following the Panel's meetings. Topics included remuneration (executive pay and the wider workforce), NatWest Group's values, customers in vulnerable situations and future skills;
- One Bank Transformation spotlights on organisation, skills and culture which included updates on the transition towards a simpler organisational design and creating and embedding a One Bank culture;
- 2022 Our View colleague survey results. Key measures included culture, purpose, building capability, inclusion, engagement and leadership;
- Culture measurement reports which used an integrated suite of qualitative, quantitative, internal and external data sources to support NatWest Group in assessing the effectiveness and impact of its culture journey; and
- Board business insights packs which included metrics on culture, purpose and inclusion.

The activities described above have supported the Board in meeting the Wates Principle 1 requirement to ensure that purpose, values, strategy and culture are aligned, within the wider NatWest Group governance structure.

2. Board composition

The Board has 13 directors comprising the Chairman, two executive directors and 10 independent non-executive directors, one of whom is the Senior Independent Director.

The names of the current directors and secretary are shown on page 3. Their biographies are available at natwestgroup.com (NatWest Holdings Limited section).

Chairman

The role of the Chairman is to lead the Board and ensure its overall effectiveness. This is distinct and separate from that of the CEO who manages the business day-to-day.

The Board considers that the Chairman was independent on appointment and that all the non-executive directors are independent. Non-executive director independence and individual directors' continuing contribution to NWB Plc are considered at least annually.

Balance and diversity

The Board operates a boardroom inclusion policy which aims to promote diversity and inclusion in the composition of the Boards of directors of NatWest Group plc, NWH Ltd, NWB Plc and RBS plc and in the nominations and appointments process. This policy reflects NatWest Group's values its inclusion guidelines and relevant legal or voluntary code requirements.

The policy includes measurable objectives which exist to ensure that the Boards, and any Committees they delegate nominations responsibilities to, follow an inclusive process when making decisions on nominations and appointments. The policy includes targets which aspire to meet those set out in the UK Listing Rules along with the recommendations of the FTSE Women Leaders Review and the Parker Review. The policy also acknowledges NatWest Group's ambition to have gender balance in our global top three levels (CEO-3 and above) by 2030.

Throughout 2022 the Board met the recommendation of the Parker Review with at least one member of the Board being from an ethnic minority background and it intends to continue to meet that recommendation.

As at 31 December 2022:-

- the Board of NWB Plc exceeded the recommendation of the FTSE Women Leaders Review of 40% female representation on the board by 2025, with 46% of the Board being female; and
- with a female CEO and CFO, NWB Plc met the FTSE Women Leaders Review recommendation that companies should have at least one woman in the Chair or Senior Independent Director roles on the Board and/or one woman in the Chief Executive Officer or Finance Director role by the end of 2025.

A copy of the boardroom inclusion policy is available at natwestgroup.com.

Size and structure

NWH Ltd is the holding company for NatWest Group's ring-fenced operations, which include the Retail and Private Banking businesses and certain aspects of the Commercial & Institutional businesses. A common board structure is operated such that directors of NWH Ltd are also directors of RBS plc and NWB Plc. Known collectively as the NWH Sub Group, the boards of these three entities meet concurrently.

An integral part of NatWest Group's governance arrangements is the appointment of three double independent non-executive directors (DINEDs) to the Boards and Board Committees, of the NWH Sub Group. They are Francesca Barnes, Graham Beale and Ian Cormack.

The DINEDs are independent in two respects: (i) independent of management as non-executives; and (ii) independent of the rest of NatWest Group by virtue of their NWH Sub Group only directorships.

The DINEDs play a critical role in NatWest Group's ring-fencing governance structure, and are responsible for exercising appropriate oversight of the independence and effectiveness of the NWH Sub Group's governance arrangements, including the ability of each board to take decisions independently. When the Commercial & Institutional business was stood up during 2022, the DINEDs considered and provided input on the changes proposed specifically from a ring-fenced bank perspective, ahead of NatWest Group plc and NWH Ltd Board discussions.

The DINEDs also have an enhanced role in managing any conflicts which may arise between the interests of NWB Plc and other members of NatWest Group.

All NWH Sub Group directors who are not DINEDs are directors of NatWest Group plc. All DINEDs attend NatWest Group plc Board and relevant Board Committee meetings as observers.

The governance arrangements for the Boards and Board Committees of NatWest Group plc and the NWH Sub Group have been designed to enable NatWest Group plc to exercise appropriate oversight and to ensure that, as far as is reasonably practicable, the NWH Sub Group is able to take decisions independently of the wider Group.

The Board is structured to ensure that the directors provide NWB Plc with the appropriate balance of skills, experience, knowledge and diversity, as well as independence. Given the nature of NWH Group's businesses, experience of banking and financial services is clearly of benefit and the Board has a number of directors with substantial experience in those areas.

In December the Nominations Committee, in conjunction with the NWG Nominations & Governance Committee, reviewed, and the Boards approved, an updated version of the NatWest Group plc and NWH Sub Group Board skills matrix. A summary view of the NatWest Group plc Board skills matrix is available on page 93 of the NatWest Group plc 2022 Annual Report and Accounts.

The Board skills matrix reflects directors' self-assessment of the skills and experience they bring to Board discussions, in line with pre-determined criteria aligned to current and future strategic priorities.

Board Committees also comprise directors with a variety of skills and experience so that no undue reliance is placed on any one individual.

The Senior Independent Director acts as a sounding board for the Chairman and as an intermediary for other directors when necessary.

Along with the Chairman and executive directors, the non-executive directors are responsible for ensuring the Board fulfils its responsibilities under its terms of reference.

The independent non-executive directors combine broad business and commercial experience with independent and objective judgment. They provide constructive challenge, strategic guidance and specialist advice to the executive directors and the executive management team and hold management to account.

The balance between non-executive and executive directors enables the Board to provide clear and effective leadership across NWH Group's business activities and ensures no one individual or small group of individuals dominates the Board's decision-making.

The Board monitors the commitments of the Chairman and directors and is satisfied that they are able to allocate sufficient time to enable them to discharge their duties and responsibilities effectively. Any additional external appointments require prior Board approval.

Each new director receives a formal induction programme on joining the Board, which is co-ordinated by the Chief Governance Officer and Company Secretary and tailored to suit the requirements of the individual concerned. This includes visits to NatWest Group's major businesses and functions and meetings with directors and senior management. Meetings with external auditors, counsel and stakeholders are also arranged as appropriate.

Roisin Donnelly joined the Board on 1 October 2022 and the Chief Governance Officer and Company Secretary worked closely with Ms Donnelly to devise a comprehensive induction programme which was tailored to her needs and flexible to respond to areas of focus which emerged as the programme progressed. Priorities included early engagement with key stakeholders, upskilling on the financial services industry and regulation, and developing an understanding of NatWest Group's structure and business operations, and its strategic priorities.

All new directors receive a copy of the non-executive director handbook. The handbook operates as a consolidated governance support manual for directors of NatWest Group plc and the NWH Sub Group, providing both new and current directors with a single source of information relevant to their role. It covers a range of topics including NatWest Group's corporate structure; the Board and Board Committee operating model; Board policies and processes and a range of technical guidance on relevant matters including directors' duties, conflicts of interest, and the UK Senior Managers and Certification Regime. The handbook forms part of a wider library of reference materials available via an online resources portal.

The Board is supported in its succession planning activities, including the recruitment of non-executive directors, by the Nominations Committee, which is responsible for considering and making recommendations to the Board in respect of Board appointments.

The Nominations Committee reviews the structure, size and composition of the Board, and makes recommendations to the Board in relation to any necessary changes, having regard to the overall balance of skills, knowledge, experience and diversity on the Board, the length of service of the Board as a whole; and the requirement to keep membership regularly refreshed. The Nominations Committee considers Board composition and succession planning at least annually. The NatWest Group plc Group Nominations and Governance Committee also approves all appointments to the Board, reflecting NWB Plc's position as a subsidiary within NatWest Group.

Evaluation

A review of the effectiveness of the Board, including the Chairman, individual directors and Board Committees, is conducted annually.

Progress following the 2021 evaluation

A number of actions were progressed during 2022 in response to the findings of the 2021 external evaluation.

In December 2022 the directors noted the progress made against the 2021 evaluation actions, which were consistent across the NatWest Group plc and NWH Sub Group Boards and are described in more detail on page 104 of the NatWest Group plc 2022 Annual Report and Accounts.

2022 Performance evaluation

In 2022, the Board and Committee evaluation was internally facilitated by the Chief Governance Officer and Company Secretary.

Key findings, recommendations and actions were aligned across NatWest Group plc and the NWH Sub Group and a summary of the outcomes and actions arising from the 2022 evaluation can be found on page 104 to 105 of the NatWest Group plc 2022 Annual Report and Accounts.

In December 2022, the Board agreed an action plan in response to the evaluation recommendations and implementation of the actions will be overseen by the Nominations Committee during 2023.

The Chairman met each director individually to discuss their own performance and continuing professional development and establish whether each director continues to contribute effectively to the company's long-term sustainable success. The Chairman also shared peer feedback provided by directors as part of the evaluation process.

Separately, the Senior Independent Director, together with the NatWest Group plc Senior Independent Director, sought feedback on the Chairman's performance from the non-executive directors, executive directors and other key internal and external stakeholders and discussed it with the Chairman. This included peer feedback provided by directors as part of the evaluation process.

Directors' training and development is co-ordinated by the Chief Governance Officer and Company Secretary.

Directors have access to a wide range of briefing and training sessions and other professional development opportunities. Internal training relevant to the business of NatWest Group is also provided. Directors undertake the training they consider necessary to assist them in carrying out their duties and responsibilities. The non-executive directors discuss professional development with the Chairman at least annually.

During 2022 the Board training programme covered supply chain diversity, digital currencies, regulatory updates, the Takeover Code, capital, financial crime, inside information, climate, ring-fencing rules and a cyber risk 'war game'.

In addition, directors broadened their knowledge and understanding of the risks facing NatWest Group by participating in a Board dinner discussion with executive management on top and emerging risks. A number of directors also accepted an invitation to the full Board to join meetings of the Technology and Innovation Committee which covered areas of broader interest, including a session on data strategy.

3. Director responsibilities

Accountability

All directors receive guidance on their statutory duties under the Companies Act 2006 and are supported in the discharge of their duties by the Chief Governance Officer and Company Secretary.

Each director has a role profile which clearly articulates their responsibilities and accountabilities and any additional regulatory responsibilities and accountabilities are set out in their statement of responsibilities. In 2022 the Chairman's and non-executive directors' role profiles were refreshed and updated to ensure they continue to accurately reflect their role and responsibilities and are in line with best practice.

NatWest Group also produces and maintains a document called 'Our Governance' which sets out the governance, systems and controls applicable to NatWest Group plc and the NWH Sub Group. Our Governance is made available to all directors and is reviewed and approved by the Board at least annually.

The directors' conflicts of interest policy sets out procedures to ensure that the Board's management of conflicts of interest and its powers for authorising certain conflicts are operating effectively. This includes the management of conflicts that may arise during Board decisions where the interests of NWB Plc conflict with the interests of other members of NatWest Group.

Each director is required to notify the Board of any actual or potential situational or transactional conflict of interest and to update the Board with any changes to the facts and circumstances surrounding such conflicts.

Situational conflicts can be authorised by the Board in accordance with the Companies Act 2006 and the company's Articles of Association. The Board considers each request for authorisation on a case by case basis and has the power to impose conditions or limitations on any authorisation granted as part of the process.

NWB Plc maintains a register of directors' interests and appointments, which is reviewed annually by the Board, and there is discussion of directors' conflicts in Board meetings, as required.

The Board

The Board is the main decision-making forum for NWB Plc. The Board is collectively responsible for the long-term success of NWB Plc and the delivery of sustainable value to its shareholders. The Board's role is to provide leadership of NWB Plc. It monitors and maintains the consistency of NWB Plc's activities within the strategic direction of NatWest Group and, as appropriate, the strategies approved by NWH Ltd for each of the businesses within the NWH Group. It reviews and approves risk appetite for key risks in accordance with the NatWest Group risk appetite framework (being a component part of the NWH Ltd risk management framework); and it monitors performance against risk appetite for NWB Plc. It approves NWB Plc's key financial objectives and keeps the capital and liquidity positions of NWB Plc under review.

The Board's terms of reference include a formal schedule of matters specifically reserved for the Board's decision and are reviewed at least annually. An internal review confirmed the Board had fulfilled its remit as set out in its terms of reference during 2022.

The Board held eight scheduled meetings and three strategy sessions with executive management during 2022.

At each scheduled Board meeting the directors receive reports from the Chairman, Board Committee Chairs, CEO, CFO, Chief Risk Officer and other members of the executive management team, as appropriate. Business reviews from the CEOs of the Retail Banking, Private Banking and Commercial & Institutional businesses included updates on progress against strategy and spotlights on current topics including the cost of living, Ukraine, climate, unsecured lending growth in retail, and mortgages. In addition to the business CEOs, a number of other senior executives attended Board meetings throughout the year to present reports to the Board. This provided the Board with an opportunity to engage directly with management on key issues and supported succession planning. The Board also welcomed external presenters and advisers to Board meetings, who provided useful insights and perspectives.

Board Committees

The Board has established a number of Board Committees with particular responsibilities. The Audit, Risk, Performance & Remuneration, and Nominations Committees of NWH Ltd operate as committees of each of NWH Ltd, NWB Plc and RBS plc, with meetings running concurrently.

The Audit Committee comprises at least three independent non-executive directors, two of whom are DINEDs. The Committee assists the Board in discharging its responsibilities in relation to the disclosure of financial affairs. It also reviews accounting and financial reporting and regulatory compliance practices of NWB Plc, NWB Plc's system of standards of internal controls, and monitors NWB Plc's processes for internal audit and external audit.

The Board Risk Committee comprises at least four independent non-executive directors, one of whom is the Chairman of the Audit Committee and two of whom are DINEDs. It provides oversight and advice to the Board in relation to current and potential future risk exposures, future risk profile, and the approval and effectiveness of the risk management framework and (in conjunction with the Audit Committee) internal controls required to manage risk.

The Performance and Remuneration Committee (RemCo) comprises at least four independent non-executive directors, one of whom is a DINED. It assists the NatWest Group plc Performance and Remuneration Committee with the oversight and implementation of NatWest Group's remuneration policy and also considers and makes recommendations on remuneration arrangements for senior executives of NWB Plc.

The Nominations Committee comprises the Chairman, Senior Independent Director and at least three further independent non-executive directors. It is responsible for assisting the Board in the formal selection and appointment of directors. It reviews the structure, size and composition of the Board, and membership and chairmanship of Board Committees.

Executive Committee

The Executive Committee comprises NWB Plc's most senior executives and supports the CEO to discharge her individual accountabilities including matters relating to strategy, financials, risk, customer and operational issues, and culture and values.

Integrity of information

All directors receive accurate, timely and clear information on all relevant matters and have access to the advice and services of the Chief Governance Officer and Company Secretary. In addition, all directors are able, if necessary, to obtain independent professional advice at NWB Plc's expense.

The Board and Committee paper template includes a section for authors to explain how the proposal or update aligns with NatWest Group's purpose and a separate section for them to include an assessment of the relevant stakeholder impacts for the directors to consider. This aligns with the directors' duties under section 172(1) of the Companies Act 2006 and further details on how the directors have complied with their section 172(1) duties can be found on page 3 of the Strategic report.

Directors are mindful that it is not always possible to achieve an outcome which meets the expectations of all stakeholders who may be impacted. For decisions which are particularly challenging or complex, an optional page in the Board and Committee paper template provides directors with further information to support purposeful decision-making. This additional page uses the Blueprint for Better Business framework as a base and is aligned to NatWest Group's broader purpose framework.

4. Opportunity and risk

The role of the Board is to promote the long-term sustainable success of NWB Plc.

The Board held three strategy sessions with the executive management team in 2022. Within the context of a wider discussion at NatWest Group level, this provided an opportunity for the Board to assess opportunities and risks to the future success of the business, the sustainability of the business model and how its governance contributes to the delivery of its strategy.

The Board reviews the effectiveness of the risk management and internal control systems – including the nature and extent of the risks taken in pursuit of strategic objectives. The Board also reviews and approves risk appetite for NWB Plc's principal risks in accordance with the NatWest Group risk appetite framework; monitors performance against risk appetite for NWB Plc; and considers any material risks and approves, as appropriate, recommended actions escalated by the Board Risk Committee.

NWB Plc's risk strategy is informed and shaped by an understanding of the risk landscape including the principal risks it takes in carrying out business activities as well as the risks and uncertainties arising from the external economic, political and regulatory environments.

NWB Plc operates within NatWest Group's integrated enterprise-wide risk management framework. This is centred around the embedding of a strong risk culture and is designed to ensure the tools and capability are in place to facilitate sound risk management and decision-making. As part of the enterprise-wide framework, NWB Plc complies with NatWest Group's risk appetite framework, which is approved annually by the NatWest Group plc Board. NatWest Group's risk appetite is set in line with overall strategy. NWB Plc also complies with the NatWest Group policy framework. The purpose of the policy framework is to ensure that NatWest Group establishes and maintains policies that adequately address the risks inherent in its business activities.

Further information on NatWest Group's integrated enterprise-wide risk management framework including risk culture, risk appetite, risk identification, risk measurement and risk mitigation, as well as NWB Plc risk governance, can be found in the risk and capital management section of this report (pages 9 to 79).

5. Remuneration

The NatWest Group remuneration policy provides a consistent policy across all NatWest Group companies and ensures compliance with regulatory requirements. The remuneration policy is aligned with the business strategy, objectives, values and long-term interests of NWB Plc. The policy supports a culture where individuals are rewarded for delivering sustained performance in line with risk appetite and for demonstrating the right conduct and behaviours.

The RemCo reviews remuneration for executives of NWB Plc and considers reports on the wider workforce including annual pay outcomes and diversity information. The RemCo helps to ensure that the remuneration policies, procedures and practices being applied are appropriate for NWB Plc.

Executive remuneration structures incentivise individuals to deliver sustainable performance based on strategic objectives for NatWest Group and the relevant business area.

Performance is assessed against a balanced scorecard of financial and non-financial measures and variable pay is subject to deferral as well as malus and clawback provisions to ensure rewards are justified in the long-term.

The approach to performance management provides clarity for colleagues on how their contribution links to NatWest Group's purpose and colleagues are set goals across a balanced scorecard of measures. NatWest Group continues to pay colleagues fairly for the work they do, supported by simple and transparent pay structures in line with industry best practices. NatWest Group keeps policies and processes under review to ensure it does so.

This clarity and certainty on how pay is delivered helps to improve colleagues' financial wellbeing, which is a core priority in NatWest Group's wellbeing plans. In 2022 NatWest Group made a number of interventions to support colleagues in response to the cost of living crisis. In the UK, NatWest Group's rates of pay continue to exceed the Living Wage Foundation benchmarks and it takes a similar approach across the major hubs outside of the UK.

NatWest Group helps colleagues to have an awareness of the financial and economic factors affecting its performance through quarterly 'Results Explained' communications and Workplace Live events with the Group CEO and Group CFO.

Further information on the remuneration policy, pay ratios and employee share plans can be found in the Directors' remuneration report of the NatWest Group plc 2022 Annual Report and Accounts. Gender and Ethnicity Pay Gap information can be found in the Strategic report section of the NatWest Group plc 2022 Annual Report and Accounts and at natwestgroup.com, along with the steps being taken to build an inclusive and engaged workforce.

6. Stakeholder relationships and engagement

In February 2022 the Board approved its annual objectives and confirmed the Board's key stakeholder groups – customers, investors, regulators, colleagues, communities and suppliers. The Board's agenda and engagement plans were structured to enhance the Board's understanding of these stakeholders' views and interests. This in turn has informed Board discussions and decision-making.

For further information on stakeholder engagement activities undertaken within NatWest Group which impacted NWB Group, see page 2 and pages 36 to 39 of the NatWest Group plc 2022 Annual Report and Accounts, and below under Additional colleague-related disclosures (workforce engagement including the Colleague Advisory Panel).

Engagement with Colleagues, Suppliers, Customers and Others

For further details on the Board's engagement with colleagues, customers, suppliers and others, and how these stakeholders' interests have influenced Board discussions and principal decisions, see page 2 of the Strategic report which includes a section 172(1) statement and signposts to further information contained in the NatWest Group 2021 Annual Report and Accounts.

Additional colleague-related disclosures

Informing and consulting colleagues

NatWest Group listens to colleagues and uses this insight to attract, engage and retain the talent it needs for the future. The colleague listening strategy contributes to a deeper understanding of colleague sentiment and includes colleague opinion surveys; a Colleague Advisory Panel (CAP) that connects colleagues directly with the Board; the Colleague Experience Squad, a group of colleagues who volunteer to provide feedback on colleague products and services; and Workplace, NatWest Group's social media platform. NatWest Group also tracks metrics and key performance indicators which can be benchmarked with sector and high-performing comparisons.

Over 48,000 colleagues (82%) participated in the September 2022 Our View survey. The 82% response rate was one of the highest seen by NatWest Group in the last 10 years. In the face of an unprecedented external environment, the results remained strong and showed overall resilience. However lead measures in culture, wellbeing and purpose, fell marginally, with inclusion measures remaining stable and, despite the challenging backdrop, the measure on building capability improved. Across all categories, NatWest Group sits an average of six percentage points above the Global Financial Services Norm (GFSN) and two percentage points above the Global High Performance Norm (GHPN).

Regular interactions with employee representatives such as trade unions, elected employee bodies and works councils are a vital means of transparency and engagement for NatWest Group. These sessions are frequently used to discuss developments and updates on the progress of strategic priorities. NatWest Group is also committed to respecting employees' rights of freedom of association across all of its business.

In addition, through the CAP established in 2018, colleagues can engage directly with senior management and the Board on topics which are important to them, thereby strengthening the voice of colleagues in the Boardroom.

The CAP is made up of 28 colleagues who are self-nominated or part of an employee representative body. In September 2022 Mike Rogers succeeded Lena Wilson as CAP Chair, and the panel's membership was refreshed. New members received training on the role of the CAP and their responsibilities as members. Although members were randomly selected, the membership was cross-checked to ensure the panel was in the main reflective of the bank's population covering a variety of business areas, organisational levels and locations, working patterns and employee-led networks.

The CAP met with representatives from the Board twice in 2022 to discuss issues such as wellbeing, remuneration (including executives and the wider workforce), NatWest Group values, customers in vulnerable situations and future skills. The CAP continues to be highly regarded by those who attend and has proven to be an effective way of establishing two-way dialogue between colleagues and Board members. The Board discusses colleague feedback received from the CAP and the CAP Chair provides feedback on this discussion to the Panel to ensure a continuous feedback loop.

Disability Smart

NatWest Group makes workplace adjustments to support colleagues with disabilities to succeed. If a colleague becomes disabled NatWest Group will, wherever possible, make adjustments to support them in their existing role or re-deploy them to a more suitable alternative role.

The NatWest Group Careers site gives comprehensive insights into NatWest Group jobs, culture, locations and application processes. It also hosts a variety of blog content to portray stories of what it is like to work at NatWest Group. The company also makes sure that candidates can easily request adjustments or help to complete their application or assessment.

Internal control over financial reporting

The internal controls over financial reporting for NWB Group are consistent with those at NatWest Group level. NWB Group has designed and assessed the effectiveness of its internal control over financial reporting as of 31 December 2022 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in the 2013 publication of 'Internal Control – Integrated Framework'. Any deficiencies identified are reported to NWB Plc's Audit Committee along with management's remediation plans.

NatWest Group's auditors have audited the effectiveness of NatWest Group's internal control over financial reporting and have given an unqualified opinion.

Directors' interests

Where directors of NWB Plc are also directors of NatWest Group plc, their interests in the shares of the ultimate holding company at 31 December 2022 are shown in the Corporate governance, Annual report on remuneration section of the NatWest Group plc 2022 Annual Report and Accounts. None of the directors held an interest in the loan capital of the ultimate holding company or in the shares or loan capital of NWB Plc or any of its subsidiaries, during the period from 1 January 2021 to 17 February 2022.

Directors' indemnities

In terms of section 236 of the Companies Act 2006 (the 'Companies Act'), Qualifying Third Party Indemnity Provisions have been issued by the ultimate holding company to its directors, members of NWB Plc's Executive Committee, individuals authorised by the PRA/FCA and certain directors and/or officers of NatWest Group's subsidiaries and trustees of NatWest Group's pension scheme.

Going concern

NWB Group's business activities and financial position, the factors likely to affect its future development and performance and its objectives and policies in managing the financial risks to which it is exposed, and its capital are discussed in the Business review. NWB Group's regulatory capital resources and significant developments in 2022, and anticipated future developments are detailed in the Capital, liquidity and funding section on pages 61 to 68. This section also describes NWB Group's funding and liquidity profile, including changes in key metrics and the build up of liquidity reserves.

The directors have prepared the financial statements on a going concern basis after assessing the principal risks, forecasts, projections and other relevant evidence over the twelve months from the date the financial statements are approved.

Political donations

During 2022, no political donations were made in the UK or EU, nor any political expenditure incurred in the UK or EU.

Directors' disclosure to auditors

Each of the directors at the date of approval of this report confirms that:

(a) so far as the director is aware, there is no relevant audit information of which NWB Plc's auditors are unaware; and

(b) the director has taken all the steps that he/she ought to have taken as a director to make himself/herself aware of any relevant audit information and to establish that NWB Plc's auditors are aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act.

Auditors

Ernst & Young LLP (EY LLP) are NWB Plc's auditors and have indicated their willingness to continue in office. A resolution to re-appoint EY LLP as NWB Plc's auditors will be proposed at the forthcoming Annual General Meeting.

By order of the Board

Jan Cargill
Chief Governance Officer and Company Secretary
16 February 2023

National Westminster Bank Plc
Is registered in England No. 929027

Statement of directors' responsibilities

This statement should be read in conjunction with the responsibilities of the auditor set out in their report on pages 89 to 99.

The directors are responsible for the preparation of the Annual Report and Accounts. The directors are required to prepare Group financial statements, and as permitted by the Companies Act 2006 have elected to prepare company financial statements, for each financial year in accordance with UK adopted International Accounting Standards. They are responsible for preparing financial statements that present fairly the financial position, financial performance and cash flows of NWB Group and NWB Plc. In preparing those financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable, relevant and reliable; and
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements.
- prepare the financial statements on a going concern basis unless it is inappropriate to presume that the company and Group will continue in business.

The directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of NWB Group and to enable them to ensure that the Annual Report and Accounts complies with the Companies Act 2006. They are also responsible for safeguarding the assets of NWB Plc and NWB Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Under applicable law and regulations, the directors are also responsible for preparing a Strategic report and Directors' report, that comply with that law and those regulations. The directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website.

The directors confirm that to the best of their knowledge:

- the financial statements, prepared in accordance with UK adopted International Accounting Standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Bank and the undertakings included in the consolidation taken as a whole; and
- the Strategic report and Directors' report (incorporating the Financial review) includes a fair review of the development and performance of the business and the position of the Bank and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

By order of the Board

Howard Davies
Chairman

Alison Rose-Slade DBE
Chief Executive Officer

Katie Murray
Chief Financial Officer

16 February 2023

Board of directors

Chairman
Howard Davies

Executive directors
Alison Rose-Slade DBE
Katie Murray

Non-executive directors
Francesca Barnes
Graham Beale
Ian Cormack
Roisin Donnelly
Patrick Flynn
Morten Friis
Yasmin Jetha
Mike Rogers
Mark Seligman
Lena Wilson

Financial statements

Independent auditors' report to the members of National Westminster Bank Plc

Opinion

In our opinion:

- the financial statements of National Westminster Bank Plc's (the 'Bank') and its subsidiaries (together the 'Group') give a true and fair view of the state of the Group's and of the Bank'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;
- the Bank financial statements have been properly prepared in accordance with UK adopted international accounting standards 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 (see table below) of the Bank and the Group for the year ended 31 December 2022 which comprise:

Group	Bank
– Consolidated balance sheet as at 31 December 2022; – Consolidated income statement for the year then ended; – Consolidated statement of comprehensive income for the year then ended; – Consolidated statement of changes in equity for the year then ended; – Consolidated cash flow statement for the year then ended; – Accounting policies; – Related Notes 1 to 35 to the financial statements; and – Risk and capital management section of the Strategic report identified as 'audited'.	– Balance sheet as at 31 December 2022; – Statement of changes in equity for the year then ended; – Cash flow statement for the year then ended; and – Related Notes 1 to 11 to the financial statements including a summary of the significant accounting policies.

The financial reporting framework that has been applied in their preparation is applicable law and UK adopted international accounting standards, and as regards to the group financial statements, 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 Parent 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 Parent Company and we remain independent of the Group and the Parent 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 Bank's ability to continue to adopt the going concern basis of accounting included:

- In conjunction with our walkthrough of the Group's financial close process, we confirmed our understanding of management's Going Concern assessment process and also engaged with management early to ensure all key factors were considered in their assessment;
- We evaluated management's going concern assessment which included reviewing their evaluation of long-term business and strategic plans, capital adequacy, liquidity and funding positions. It also assessed these positions considering internal stress tests which included consideration of principal and emerging risks. The Group's risk profile and risk management practices were considered including credit risk, market risk, compliance and conduct risk, and operational risk;
- We evaluated management's assessment by considering the Group's ability to continue in operation and meets its liabilities in different scenarios including the impact of the Group's strategic plans, and the current uncertain geopolitical and economic outlook. We used economic specialists in assessing the macroeconomic assumptions in the forecast through benchmarking to institutional forecasts, HMT consensus and peer comparative economic forecasts;
- Considered the results of the Bank's stress testing and Bank of England 2022 solvency stress test; and
- We reviewed the Group's going concern disclosures included in the annual report in order to assess that the disclosures were appropriate and in conformity with the reporting standards.

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 Bank's ability to continue as a going concern over the twelve months from the date when the financial statements are authorised for issue.

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.

An overview of the scope of the Bank 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 company within the Group. Taken together, this enables us to form an opinion on the consolidated financial statements. We take into account the size and risk profile of the component and its activities, the organisation of the Group and effectiveness of group wide controls, changes in the business environment and other factors such as recent internal audit results when assessing the level of work to be performed at each component. The scoping below is consistent with the prior year.

In assessing the risk of material misstatement to the Group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, of the five reporting components of the Group, we selected four components based on size and risk, which represent the principal business units within the Group.

Component	Scope	Key locations
Retail Banking	Full	United Kingdom
Commercial Banking	Full	United Kingdom
Private Banking	Specific	United Kingdom
Central items and other*	Full	United Kingdom, India

**including Services, and Treasury*

The table below illustrates the coverage obtained from the work performed by our audit teams. We considered total assets, total equity and total income to verify we had appropriate overall coverage.

	Full scope (1)	Specific scope (2)	Other procedures (3)	Total
Total assets	87%	13%	0%	100%
Total equity	87%	13%	0%	100%
Total income	93%	7%	0%	100%

(1) Full scope: audit procedures on all significant accounts.
(2) Specific scope: audit procedures on selected accounts.
(3) Other procedures: considered in analytical procedures and specified procedures, as appropriate.

The audit scope of the specific scope component may not have included testing of all significant accounts within the component, however, the testing will have contributed to the total coverage of significant accounts tested for the overall Group.

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 primary audit engagement team, or by component auditors from other EY global network firms operating under our instruction.

The primary audit engagement team interacted regularly with the component audit teams where appropriate throughout the course of the audit, which included holding planning meetings, maintaining regular communications on the status of the audits, reviewing key working papers and taking responsibility for the scope and direction of the audit process. The primary audit team continued to follow a programme of oversight visits that has been designed to ensure that the Senior Statutory Auditor, or another Group audit partner, has ongoing interaction with all full scope and specific scope locations outside the United Kingdom. The primary team interacted regularly with the component teams and maintained a continuous and open dialogue with component teams, as well as holding formal closing meetings quarterly, to ensure that the primary team were fully aware of their progress and results of their procedures. The primary team also reviewed key working papers and were responsible for the scope and direction of the audit process. This, together with the additional procedures at Group level, gave us appropriate evidence for our opinion on the Group financial statements.

Climate change

Stakeholders are increasingly interested in how climate change will impact the Group. The Group has determined that the most significant future impacts from climate change on its operations will be from credit risk, operational risk, reputational risk, conduct risk and regulatory compliance risk. These are explained in the required Task Force for Climate related Financial Disclosures in the Strategic Report, and in the Climate Risk section within the Risk and capital management section. The Group has also explained their climate commitments in the Strategic Report. 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”.

The Group has explained in the Accounting Policy note how they have reflected the impact of climate change in their financial statements, and the significant judgements and estimates relating to climate change. These disclosures also explain the uncertainty regarding policy response, including the effect of wider geo-political uncertainty on governmental ambitions regarding climate transition and the effect of decarbonisation on wider economic growth and customer behaviours. Many of the impacts arising will be longer term in nature, with an inherent level of uncertainty, and have limited effect on accounting judgments and estimates for the current period under the requirements of UK adopted international accounting standards. The Group has also explained within the Accounting Policies, their approach to quantifying the impact of climate transition policy on macroeconomic factors in the future years, and the limitations on the ability to make a reliable estimate for 2022 reporting.

Our audit effort in considering the impact of climate change on the financial statements was focused on evaluating the Group’s assessment of the impact of climate risk, their climate commitments and the significant judgements and estimates disclosed in the Accounting Policies, and whether these have been appropriately reflected in the asset values where these are impacted by future cash flows, and in the timing and nature of liabilities recognised following the requirements of UK adopted international accounting standards. As part of this evaluation, we performed our own risk assessment, supported by our climate change specialists, to determine the risk of material misstatement in the financial statements from climate change which needed to be considered in our audit. We also evaluated the Directors’ considerations of climate change risks in their assessment of going concern and viability and 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 certain key audit matters. 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
Expected Credit Loss Provisions	
At 31 December 2022 the Group reported total gross loans of £311.9 billion (2021: £296 billion) and £2.6 billion of expected credit losses (ECL) (2021: £2.5 billion). Management's judgments and estimates are especially subjective due to significant uncertainty associated with the assumptions used. These include the current uncertain geopolitical and macroeconomic outlook and the impact of climate change which were both considered in our risk assessment. Aspects with increased complexity in respect of the timing and measurement of ECL include: – Staging - Allocation of assets to stage 1, 2, or 3 on a timely basis using criteria in accordance with IFRS 9; – Model estimations - Accounting interpretations, modelling assumptions and data used to build and run the Probability of Default ('PD'), Loss Given Default ('LGD') and Exposure at Default ('EAD') models that calculate the ECL; – Economic scenarios - Inputs, assumptions and weightings used to estimate the impact of multiple economic scenarios particularly those influenced by the current geopolitical and economic outlook including any changes to scenarios required through 31 December 2022; – Adjustments - Appropriateness, completeness and valuation of model adjustments which represent approximately 12% of total ECL including adjustments due to the ongoing geopolitical and economic uncertainty, and the identification of vulnerable customers which increases the risk of management override; and – Individual provisions - Measurement of individual provisions including the assessment of multiple scenarios considering the impact of the current geopolitical and economic outlook on exit strategies, collateral valuations and time to collect.	Controls testing - We evaluated the design and operating effectiveness of controls across the processes relevant to ECL, including the judgments and estimates noted. These controls, among others, included those over: – the allocation of assets into stages including management's monitoring of stage effectiveness; – model governance including monitoring and model validation; – data accuracy and completeness; – credit monitoring; – multiple economic scenarios; – the governance and review of post-model adjustments; – individual provisions; and – production of journal entries and disclosures. In evaluating the governance process, we observed the executive finance and risk committee meetings where the inputs, assumptions and adjustments to the ECL were discussed and approved, among other procedures. Overall assessment - We performed an overall assessment of the ECL provision levels by stage to determine if they were reasonable by considering the overall credit quality of the Group's portfolios, risk profile, impact of the current geopolitical and economic outlook, and climate change on the Group's customers We performed peer benchmarking where available to assess overall staging and provision coverage levels. We also performed sensitivity analysis to assess the impact of changing assumptions on the ECL provision. Based on our assessment of the key judgments we used EY specialists to support the audit team in the areas of economics, modelling and collateral and business valuations. Staging - We evaluated the criteria used to allocate a financial asset to stage 1, 2 or 3 in accordance with IFRS 9; this included peer benchmarking to assess staging levels. We recalculated the assets in stage 1, 2 and 3 to assess if they were allocated to the appropriate stage and performed sensitivity analysis to assess the impact of different criteria on the ECL and also considered the impact of performing collective staging downgrades to industries and geographic regions particularly impacted by climate change. To test credit monitoring which drives the probability of default estimates used in the staging calculation, we recalculated the risk ratings for a sample of performing loans and focused our testing on high risk industries, such as commercial real estate and leisure. We also assessed the timing of the annual review performed by management on each wholesale loan exposure in our sample to evaluate whether it appropriately considered risk factors by considering independent publicly available information. Model estimations - We performed a risk assessment on all models involved in the ECL calculation to select a sample of models to test, which included new models implemented in the year. We involved EY modelling specialists to assist us to test this sample of ECL models by testing the assumptions, inputs and formulae used. This included a combination of assessing the appropriateness of model design and formulae, alternative modelling techniques, recalculating the PD, LGD and EAD, and model implementation. We also considered the results of the Group's internal model validation results. We performed an assessment of the extent to which model methodologies developed using historic experience were able to respond to the current economic conditions, including Consumer Price Index and Bank of England base rates. Where we identified model limitations, we tested the extent to which these effects have been appropriately captured in Post Model Adjustments. To evaluate data quality, we agreed a sample of ECL calculation data points to source systems, including balance sheet date data used to run the models and historic loss data to monitor models. We also tested the ECL data points from the calculation engine through to the general ledger and disclosures.

Risk	Our response to the risk
Expected Credit Loss Provisions continued	
	Economic scenarios - We involved EY economic specialists to assist us in evaluating the base case and alternative economic scenarios, including evaluating probability weights and considering contrary evidence by comparing these to other scenarios from a variety of external sources. This assessment included the latest developments related to the current geopolitical and economic outlook at 31 December 2022. We assessed whether forecasted macroeconomic variables, such as GDP, unemployment rate, Consumer Price Index, Bank of England base rates and the House Price Index were complete and appropriate. With the support of our modelling specialists we evaluated the correlation and translation of the macroeconomic factors to the ECL. Post Model Adjustments (PMAs) - We evaluated and tested the appropriateness, adequacy and completeness of PMAs held at year end, including those applied in response to the current geopolitical and economic outlook and the impact of certain economic factors. This included challenging the identification of retail customers vulnerable to price and rate increases and the identification of commercial sub-sectors more susceptible to inflation and supply chain issues as well as the method by which those PMAs were measured. We have also challenged those PMAs which continued to be applied as a result of COVID-19 related to recovery periods and the associated debt issued to borrowers that obtained government supported loans during Covid-19. With our modelling specialists, we assessed the risk of bias and the completeness of these adjustments by considering the data, judgments, methodology, sensitivities, and governance of these adjustments as well as considering model shortcomings. Individual provisions - We recalculated and challenged the scenarios, assumptions and cash flows for a sample of individual provisions including the alternative scenarios and evaluating probability weights assigned, involving EY valuation specialists where appropriate. The sample was based on a number of factors, including higher risk sectors identified with reference to external sources, such as commercial real estate, agriculture, oil and gas, mining, retail, leisure, and materiality. We considered the impact of the current geopolitical and economic outlook and climate change had on collateral valuations and time to collect as well as whether planned exit strategies remained viable. Disclosure - We tested the data flows used to populate the disclosures and assessed the adequacy of disclosures for compliance with the accounting standards and regulatory considerations.

Key observations communicated to the NatWest Holdings (NWH) Group Audit Committee (1)

We are satisfied that provisions for the impairment of loans were reasonable and recognised in accordance with IFRS 9. We highlighted the following matters to the NWH Group Audit Committee:

- Overall provision levels were reasonable which also considered available peer information and our understanding of the credit environment;
- Control deficiencies were identified in the processes used to calculate the ECL for which compensating controls were identified to mitigate a risk of material misstatement;
- Our testing of models and model assumptions identified some instances of over and under estimation. We aggregated these differences and were satisfied that the overall estimate recorded was reasonable;
- The post-model adjustments recorded were within a reasonable range to reflect risk in the portfolios;
- We recalculated the staging of retail and wholesale exposures in material portfolios and noted no material differences. We also performed sensitivity analysis on the staging criteria and noted that substantial changes would be needed to the criteria to result in a material difference; and
- For individually assessed impairments, in a few instances we identified judgmental differences in respect of the extent of the impairment identified, however, none of these differences, individually or in aggregate, were considered material.

Relevant references in the Annual Report and Accounts

Credit Risk section of the Risk and capital management section
Accounting policies
Note 13 to the financial statements

(1) NWH Audit Committee covers the ring-fenced bank legal entities of NatWest Group, including the Group.

Risk	Our response to the risk
Impairment of investments in group undertakings and recognition of deferred tax assets in the Bank's financial statements	
At 31 December 2022, the Bank has reported deferred tax assets of £1.0 billion (2021: £1.1 billion) and investments in group undertakings of £2.0 billion (2021: £2.3 billion). The recognition and carrying value of investments in group undertakings in the Bank's financial statements are based on estimates of future profitability, which require significant management judgment and include the risk of management bias. The recognition of deferred tax also considers the future profit forecasts of the legal entities as well as interpretation of recent changes to tax rates and laws. The judgments and assumptions used are especially complex and subjective due to their forward-looking nature and inherent uncertainties. These include: – Revenue forecasts which are inherently challenging due to the current uncertain geopolitical and economic outlook including the impacts of climate change which are driven by delivery of the Group's Strategy; – Cost forecasts given the strategic ambitions of the bank and potential headwinds from inflation and supply chain issues; – Macroeconomic and model assumptions used in the forecasting and valuation assessments (discount rates, growth rates, macroeconomic assumptions, etc.) including the uncertain geopolitical and economic outlook and the impact of climate change over an extended period; and – Disclosure adequacy including key assumptions, the sensitivity of changes to these assumptions as well as an explanation of the impairment testing performed.	Controls testing: We evaluated the design and operating effectiveness of controls over the preparation and review of the forecasts, and the significant assumptions (such as discount rate and long-term growth rate) inputs, calculations, methodologies and judgments used in the value-in-use model. This included testing controls over the selection of macroeconomic assumptions in addition to controls over the preparation and review of the revenue and cost projections. In evaluating the governance processes we reviewed the Board meeting materials and minutes where forecasts were discussed and approved, and we observed the committee meetings where the value-in-use model and outcomes were discussed and approved. Macroeconomic and model assumptions: With the support of our internal economic specialists, we tested whether macroeconomic assumptions, used in the Group's forecasts were reasonable by comparing these to other scenarios from a variety of external sources. We evaluated how the discount rates and long-term growth rates used by management compared to our ranges which were developed using peer practice, external market data and calculations performed by our valuation specialists. We also assessed changes to valuation methodology and benchmarked this against industry practice with the assistance of our valuation specialists. Revenue forecasts: We evaluated the underlying business strategies, comparing to expected market trends and considering anticipated balance sheet growth. We obtained an understanding of the Group's strategy including their consideration of the impact of climate change, and considered its expected impact on the forecasts and the extent to which decisions had been factored into the forecasts, where appropriate, in accordance with the relevant accounting standards. We also inspected the findings from the review performed by management including their own sensitivity analysis of the forecasts. Cost forecasts: We tested how previous management forecasts, including the impact of cost reduction programmes, compared to actual results to evaluate the accuracy of the forecasting process. We also tested the reasonableness of key performance indicators against peers with the help of our valuation specialists to assess the reasonableness of the Group's cost forecast. Deferred Tax Model: With the support of our taxation specialists, we reviewed the deferred tax model including an assessment of the time horizon used for the recoverability of losses and other temporary differences. Sensitivity analysis: We evaluated how management considered alternative assumptions and performed our own sensitivity and scenario analyses on certain assumptions such as cost and revenue forecasts, discount rate, long-term growth rate and other key performance indicators on both the detailed forecasts and on an overall basis. Disclosure: We evaluated the adequacy of disclosures in the financial statements including the appropriateness of assumptions and sensitivities disclosed. We tested the data and calculations included in the disclosures.

Key observations communicated to the NWH Group Audit Committee

We are satisfied that management methodologies, judgments and assumptions supporting the carrying value of deferred tax assets and investments in group undertakings in the Bank's financial statements, were reasonable and in accordance with IFRS. We highlighted the following matters to the NWH Group Audit Committee:

- There is inherent uncertainty in predicting revenue and costs over the five-year forecast period, particularly with respect to the impact of the current macro-economic environment on the ability of the bank to achieve strategic objectives, the impact of regulatory and climate change developments, and the impact of competition and disruption in banking business models over an extended period.
- Control deficiencies were identified in the determination of the value in use for which compensating controls were identified to mitigate the risk of material misstatement;
- Management impaired the Bank's investment in Ulster Bank Limited. The sensitivity analyses we reviewed, and our independent procedures supported these assessments.
- We are satisfied that management has exercised appropriate judgement in assessing the extent to which it is probable that there will be future taxable profits to recover deferred tax assets.

Relevant references in the Annual Report and Accounts

Accounting policies

Note 7 and Note 8 to the financial statements and parent company financial statements.

Risk	Our response to the risk
Provisions for customer redress, litigation and other regulatory matters	
At 31 December 2022, the Group has reported £0.6 billion (2021: £0.6 billion) of provisions for liabilities and charges, including £0.3 billion (2021: £0.3 billion) for customer redress, litigation and other regulatory matters as detailed in Note 20 of the financial statements. Regulatory scrutiny and the continued litigious environment give rise to a high level of management judgment in determining appropriate provisions and disclosures for specific customer redress, litigation and other regulatory matters. Management judgment is needed to determine whether a present obligation exists and a provision should be recorded at 31 December 2022 in accordance with the accounting criteria set out under IAS 37. The most significant areas of judgment are: – Judgment and risk of management bias - Auditing the adequacy of these provisions is complex because judgment is involved in the selection and use of assumptions in the estimation of specific customer redress, litigation and other regulatory matters. There is also a risk of management bias in the determination of whether an outflow in respect of identified material customer redress, litigation and other regulatory matters is probable and can be estimated reliably; and – Disclosure - Judgment is required to assess the adequacy of disclosures of provision and contingent liabilities given the underlying estimation uncertainty in the provisions, and other uncertainties and assumptions.	Controls testing: We evaluated the design and operating effectiveness of controls over the identification, estimation, monitoring and disclosure of provisions and other uncertainties and assumptions related to customer redress, litigation and other regulatory matters considering the potential for management override of controls. The controls tested, among others, included those to identify and monitor claims, determine when a provision is required and to ensure the completeness and accuracy of data used to estimate provisions. Examination of regulatory correspondence: We examined the relevant regulatory and legal correspondence to assess developments in certain cases. We also considered regulatory developments to identify actual or possible non-compliance with laws and regulations that might have a material effect on the financial statements. For cases which were settled during the period, we compared the actual outflows with the provision that had been recorded, considered whether further risk existed, and evaluated the level of disclosures provided. Inquiry of legal counsel: For significant legal matters, we received confirmations from the Group's external legal counsel to evaluate the likelihood of the obligation and management's estimate of the outflow at year-end. We also conducted inquiries with internal legal counsel over the existence of the legal obligations and related provision. We performed a test for unrecorded provisions to assess if there were cases not considered in the provision estimate by assessing against external legal confirmations and discussing with internal counsel. Testing of assumptions: Where appropriate, we involved our conduct risk and forensics specialists to assist us in evaluating the provision for specific customer redress, litigation and other regulatory matters. We tested the underlying data and assumptions used in the determination of the provisions recorded, including expected claim rates, legal costs, and the timing of settlement. We evaluated the accuracy of management's historical estimates by comparing the actual settlement to the provision and considered peer bank settlement in similar cases. We assessed the reasonableness of the assumptions used by management by comparing to the results of our independently performed benchmarking and sensitivity analysis. We also developed our own range of reasonable alternative estimates and compared them to management's provision. We tested utilisations of remaining provisions during the year and assessed the sufficiency of the remaining provisions yet to be paid for specific customer redress, litigation and other regulatory matters. Disclosure: We evaluated the disclosures provided on customer redress, litigation and other regulatory matters to assess whether they complied with accounting standards.

Key observations communicated to the NWH Group Audit Committee

We are satisfied that provisions for customer redress, litigation and other regulatory matters are reasonable and recognised in accordance with IFRS. We concurred with the recognition, measurement and level of disclosures of provisions and contingent liabilities relating to customer redress, litigation and other regulatory matters. We did not identify any material unrecorded provisions. We highlighted the following matters to the NWH Group Audit Committee:

- The level of provisions by their nature incorporates significant judgments to be made and may change as a result of future developments; and
- Continued vigilance in assessing conduct risks from the impact of cost-of-living crisis and Consumer Duty Act, which may not manifest until after current economic conditions take effect or implementation deadline, respectively.

Relevant references in the Annual Report and Accounts

Accounting policies
Note 20 and 25 to the financial statements

Risk	Our response to the risk
Pension valuation and net pension balance	
The Group operates a number of defined benefit schemes which in aggregate are significant in the context of the overall balance sheet. At 31 December 2022, the Group reported a net pension liability of £28 million (2021: £41 million) comprising £7 million of schemes in surplus and £35 million of schemes in deficit (2021: £7 million and £48 million respectively). The net pension balance is sensitive to changes in the key judgments and estimates, including the effects of the current uncertain geopolitical and economic outlook and associated market volatility, which include: – Assumptions - Actuarial assumptions and inputs including discount rate, inflation, pension payment and longevity to determine the valuation of retirement benefit liabilities; – Valuations - Pricing inputs and calibrations for illiquid or complex model-dependent valuations of certain investments held by the schemes; – Funding – the pension schemes have adequate liquidity to cover for any shortfall in derivative asset prices as a result of current economic conditions; and – Augmentation cap - Quantification of trustee's rights to unilaterally augment benefits (Augmentation cap) to determine the recognition of surplus.	Controls testing - We evaluated the design and operating effectiveness of controls over the actuarial assumptions setting process, the data inputs used in the actuarial calculation and the measurement of the fair value of the schemes' assets. Assumptions - We involved our actuarial specialists to evaluate the actuarial assumptions by comparing them to independently obtained third party sources and market practice. We assessed the impact on pension liabilities due to changes in financial, demographic and longevity assumptions over the year and whether these were supported by objective external evidence and rationales, including the effects of current uncertain geopolitical and economic outlook, including market volatility. Valuations - We tested the fair value of scheme assets by independently calculating the fair value for a sample of the assets held. Our sample included cash, equity and debt instruments, derivative financial instruments and illiquid assets. We involved our valuation specialists to assess the appropriateness of management's valuation methodology including the judgments made in determining significant assumptions used in the valuation of complex and illiquid pension assets, including the effects of current uncertain geopolitical and economic outlook, including market volatility. We independently re-priced illiquid and complex assets that had been valued using unobservable market inputs, using alternative pricing sources where available, to evaluate management's valuations. Funding – in the performance of our procedures we consider whether the pension schemes have adequate funding to cover for any shortfall in derivative asset prices. Augmentation cap and equalisation adjustments - We involved our actuarial specialists to test the estimation of the augmentation cap including the inputs used in the calculation. We also assessed the methodology and judgments made in calculating these estimates and the associated accounting treatment in accordance with IAS 19 and IFRIC 14. Disclosure - We assessed the adequacy of the disclosures made in the financial statements, including the appropriateness of the assumptions, sensitivities and disclosures over investment strategy and risk management.

Key observations communicated to the NWH Group Audit Committee

We are satisfied that the valuation and disclosure of the net pension balance are reasonable and in accordance with IFRS. We highlighted the following matters to the NWH Group Audit Committee:

- Our benchmarking of key actuarial assumptions including the discount rate, inflation, longevity and pension payments concluded that assumptions were within a reasonable range;
- No material differences were identified through our independent valuation testing for a sample of pension assets; and
- Management's estimate of the impact of the augmentation cap was materially consistent with our independent estimate using our own model.

Relevant references in the Annual Report and Accounts

Accounting policies
Note 5 to the financial statements

Risk	Our response to the risk
IT access management	
The IT environment is complex and pervasive to the operations of the Group due to the large volume of transactions processed in numerous locations on a daily basis with extensive reliance on automated controls. Appropriate IT controls are required to ensure that applications process data as expected and that changes are made in an appropriate manner. This risk is also impacted by the greater dependency on third parties, increasing use of cloud platforms, decommissioning of legacy systems, and migration to new systems. Such controls contribute to mitigating the risk of potential fraud or errors as a result of changes to applications and data. The Group has implemented user access management controls across IT applications, databases and operating systems. We have identified user access-related deficiencies in the past and whilst the number of deficiencies has reduced year over year, the risk of inappropriate access remains.	We evaluated the design and operating effectiveness of IT general controls over the applications, operating systems and databases that are relevant to financial reporting. Controls testing We tested user access by assessing the controls in place for in-scope applications, in particular testing the addition and periodic recertification of users' access. We continue to focus on key controls enforced by the Group's user access management tools, including the completeness of user data, automated identification of movers and leavers and the adequacy of the overall control environment. During the current audit period, the Identity and Access Management tool used in NatWest Markets was decommissioned and replaced with the Group's strategic tool. We tested the governance process around the migration and onboarding of users to the Identity and Access Management tool and noted no deficiencies, with the suite of access management controls supported by the two tools remaining consistent throughout the year. A number of systems are outsourced to third party service providers. For these systems, we tested IT general controls through evaluating the relevant Service Organisation Controls ("SOC") reports (where available). This included assessing the timing of the reporting, the controls tested by the service auditor and whether they address relevant IT risks. We also tested required complementary user entity controls performed by management. Where a SOC report was not available we identified and reviewed compensating business controls to address risks to financial reporting. Several systems have been migrated to a cloud-hosted infrastructure model, however access management processes and controls remained in-house and they formed part of our testing. Where control deficiencies were identified, we tested remediation activities performed by management and compensating controls in place and assessed what additional testing procedures were necessary to mitigate any residual risk. We also performed a further analysis of access management deficiencies identified by EY, Management and Internal Audit to revalidate our overall approach to access management testing.

Key observations communicated to the NWH Group Audit Committee

We are satisfied that IT controls impacting financial reporting are designed and operating effectively. The following matters were reported to the NWH Group Audit Committee:

- We have seen an overall reduction in the number of discrete IT control deficiencies identified compared to prior year;
- Improvements were made to further standardise access management processes and controls across the Group, which was one of the drivers for the reduced number of deficiencies; and
- Particular attention should continue to be paid to controls over user access management including ensuring the completeness and accuracy of the data used to perform access controls. Where issues were noted in relation to access management, these were remediated by year end or mitigated by compensating controls. We performed additional testing in response to deficiencies identified, where required.

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 £267 million (2021: £136 million), which is 5% (2021: 5%) of profit before tax of the Group of £5,114 million (2021: £3,883 million) adjusted for non-recurring conduct and litigation costs. We believe removing these non-recurring charges reflects the most useful measure for users of the financial statements and is consistent with the prior year. The 5% basis used for Group materiality is consistent with the wider industry and is the standard for listed and regulated entities.

We determined materiality for the Bank to be £182 million (2021: £136 million) which is 1% (2021: 0.7%) of equity of the Bank. We believe this reflects the most useful measure for users of the financial statements as the Bank's primary purpose is to act as a holding company with investments in the Group's subsidiaries, not to generate operating profits and therefore a profit based measure is not relevant.

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 judgment was that performance materiality was 75% (2021: 75%) of our planning materiality, namely £200 million (2021: £102 million). 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 scale 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 £46million to £133 million (2021: £30 million to £91 million).

Reporting threshold

An amount below which identified misstatements are considered as being clearly trivial.

We agreed with the NWH Group Audit Committee that we would report to them all uncorrected audit differences in excess of £13 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.

We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

Other information

The other information comprises the information included in the Annual Report and Accounts, including the Strategic report, Report of the directors, Statement of directors' responsibilities, Risk Factors, and Forward-looking statements, 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 Report of the directors for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic report and Report of the directors 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 Bank and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic report or the Report of the directors.

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 Bank, or returns adequate for our audit have not been received from branches not visited by us; or
- the Bank 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 Statement of directors' responsibilities, 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 Bank'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 Bank 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 below, 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 the regulations, licence conditions and supervisory requirements of the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA); and Companies Act 2006.
- We understood how the Group is complying with those frameworks by making inquiries of management, internal audit and those responsible for legal and compliance matters. We also reviewed correspondence between the Group and regulatory bodies; reviewed minutes of the Board and Risk Committees; and gained an understanding of the Group's governance framework.
- Conducted a review of correspondence with and reports from the regulators, including the Prudential Regulation Authority ('PRA') and Financial Conduct Authority ('FCA').
- Carried out an assessment of matters reported on the group's whistleblowing programmes where these related to the financial statements.
- We assessed the susceptibility of the Group's financial statements to material misstatement, including how fraud might occur by considering the controls established to address risks identified to prevent or detect fraud. We also identified the risks of fraud in our key audit matters as described above and identified areas that we considered when performing our fraud procedures, such as cybersecurity, segregation of duties testing, user access testing and the appropriateness of sources used when performing confirmation testing on accounts such as cash, loans and securities. Our procedures over our key audit matters and other significant accounting estimates included challenging management on the assumptions and judgements made in determining these estimates.
- We designed our audit procedures to identify non-compliance with laws and regulations. Our procedures involved inquiries of legal counsel, executive management, and internal audit. We also tested controls and performed procedures to respond to the fraud risks as identified in our key audit matters. These procedures were performed by both the primary team and component teams with oversight from the primary team.
- Identified and tested journal entries, including those posted with certain descriptions or unusual characteristics, backdated journals or posted by infrequent and unexpected users.
- 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 engagement team to ensure that the team had the appropriate competence and capabilities, involving 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 NWH Group Audit Committee we were appointed by the Group at its annual general meeting on 4 May 2016 to audit the financial statements of the Group for the year ending 31 December 2016 and subsequent financial periods.
- The period of total uninterrupted engagement including previous renewals and reappointments is 7 years, covering periods from our appointment through 31 December 2022.
- The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Bank and we remain independent of the Group and the Bank in conducting the audit.
- The audit opinion is consistent with the additional report to the NWH Group 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.

Simon Michaelson (Senior statutory auditor)
for and on behalf of Ernst & Young LLP, Statutory Auditor
London, United Kingdom
16 February 2023

Consolidated income statement for the year ended 31 December 2022

	Note	2022 £m	2021 £m
Interest receivable		9,159	6,721
Interest payable		(1,627)	(719)
Net interest income	1	7,532	6,002
Fees and commissions receivable		2,119	1,862
Fees and commissions payable		(493)	(380)
Other operating income		2,585	1,785
Non-interest income	2	4,211	3,267
Total income		11,743	9,269
Staff costs		(2,896)	(2,815)
Premises and equipment		(994)	(948)
Other administrative expenses		(1,630)	(1,660)
Depreciation and amortisation		(768)	(776)
Operating expenses	3	(6,288)	(6,199)
Profit before impairment losses/releases		5,455	3,070
Impairment (losses)/releases	13	(341)	813
Operating profit before tax		5,114	3,883
Tax charge	7	(1,425)	(976)
Profit for the year		3,689	2,907
Attributable to:			
Ordinary shareholders		3,564	2,793
Paid-in equity holders		120	109
Non-controlling interests		5	5
		3,689	2,907

Consolidated statement of comprehensive income for the year ended 31 December 2022

	2022 £m	2021 £m
Profit for the year	3,689	2,907
Items that do not qualify for reclassification		
Remeasurement of retirement benefit schemes (1)	(556)	(531)
Tax	146	158
	(410)	(373)
Items that do qualify for reclassification		
FVOCI financial assets	(392)	(96)
Cash flow hedges (2)	(542)	180
Currency translation	(2)	(22)
Tax	276	(40)
	(660)	22
Other comprehensive loss after tax	(1,070)	(351)
Total comprehensive income for the year	2,619	2,556
Attributable to:		
Ordinary shareholders	2,494	2,442
Paid-in equity holders	120	109
Non-controlling interests	5	5
	2,619	2,556

(1) Following the purchase of ordinary shares from UKGI in Q1 2022, NatWest Group contributed £500 million to its main pension scheme in line with the memorandum of understanding announced on 17 April 2018. After tax relief, this contribution reduced total equity by £365 million. Other material movements came from asset underperformance relative to movements in the schemes' liabilities over the year. In line with our policy, the present value of defined benefit obligations and the fair value of plan assets at the end of the reporting period, are assessed to identify significant market fluctuations and one-off events since the end of the prior financial year.
(2) The unrealised losses on cash flow hedge reserves is mainly driven by deferment of losses on GBP net received fixed swaps as interest rates have increased.

The accompanying notes on pages 112 to 172, the accounting policies on pages 105 to 111 and the audited sections of the Financial review and Risk and capital management on pages 6 to 79 form an integral part of these financial statements.

Balance sheet as at 31 December 2022

		NWB Group		NWB Plc	
		2022	2021	2022	2021
	Note	£m	£m	£m	£m
Assets					
Cash and balances at central banks	9	**73,065**	101,213	**73,062**	101,210
Derivatives	12	**4,407**	2,460	**4,430**	2,547
Loans to banks - amortised cost	9	**3,197**	4,182	**2,870**	3,638
Loans to customers - amortised cost	9	**301,684**	286,971	**267,401**	255,443
Amounts due from holding companies and fellow subsidiaries	9	**4,903**	3,519	**32,133**	27,122
Securities subject to repurchase agreements		**2,140**	10,813	**2,140**	10,813
Other financial assets excluding securities subject to repurchase agreements		**12,406**	18,218	**12,040**	17,836
Other financial assets	15	**14,546**	29,031	**14,180**	28,649
Investment in group undertakings	14	**—**	—	**2,030**	2,319
Other assets	16	**7,667**	7,187	**5,641**	5,183
Total assets		**409,469**	434,563	**401,747**	426,111
Liabilities					
Bank deposits	9	**16,060**	22,831	**16,059**	22,829
Customer deposits	9	**322,614**	329,440	**281,558**	292,470
Amounts due to holding companies and fellow subsidiaries	9	**38,771**	45,136	**75,037**	76,722
Derivatives	12	**2,088**	4,119	**2,582**	4,336
Other financial liabilities	19	**5,384**	7,251	**4,525**	6,384
Subordinated liabilities	20	**197**	211	**191**	205
Notes in circulation		**809**	904	**809**	904
Other liabilities	21	**3,470**	3,934	**2,743**	3,095
Total liabilities		**389,393**	413,826	**383,504**	406,945
Owners' equity	22	**20,066**	20,727	**18,243**	19,166
Non-controlling interests		**10**	10	**—**	—
Total equity		**20,076**	20,737	**18,243**	19,166
Total liabilities and equity		**409,469**	434,563	**401,747**	426,111

Owners' equity of NWB Plc as at 31 December 2022 includes the profit for the year of £3,457 million (2021- £2,752 million).

The accompanying notes on pages 112 to 172, the accounting policies on pages 105 to 111 and the audited sections of the Financial review and Risk and capital management on pages 6 to 79 form an integral part of these financial statements.

The accounts were approved by the Board of directors on 16 February 2023 and signed on its behalf by:

Howard Davies Chairman	Alison Rose-Slade DBE Chief Executive Officer	Katie Murray Chief Financial Officer	National Westminster Bank Plc Registration No. 929027

Statement of changes in equity for the year ended 31 December 2022

	NWB Group		NWB Plc	
	2022	2021	2022	2021
	£m	£m	£m	£m
Called-up share capital - at 1 January and 31 December	**1,678**	1,678	**1,678**	1,678
Share premium - at 1 January and 31 December	**2,225**	2,225	**2,225**	2,225
Paid-in equity - at 1 January	**2,377**	2,370	**2,377**	2,370
Redeemed	**(359)**	(934)	**(359)**	(934)
Issued	**500**	941	**500**	941
At 31 December	**2,518**	2,377	**2,518**	2,377
Merger reserve - at 1 January	**14**	9	**(89)**	(140)
Additions	**24**	—	**—**	—
Amortisation	**39**	5	**87**	51
At 31 December	**77**	14	**(2)**	(89)
FVOCI reserve - at 1 January	**192**	280	**193**	279
Unrealised (losses)/gains (3)	**(485)**	26	**(486)**	28
Realised losses/(gains)	**93**	(122)	**93**	(122)
Tax	**124**	8	**124**	8
At 31 December	**(76)**	192	**(76)**	193
Cash flow hedging reserve - at 1 January	**(1)**	(133)	**(2)**	(133)
Amount recognised in equity (4)	**(283)**	102	**(288)**	100
Amount transferred from equity to earnings	**(259)**	78	**(255)**	79
Tax	**152**	(48)	**152**	(48)
At 31 December	**(391)**	(1)	**(393)**	(2)
Foreign exchange reserve - at 1 January	**(85)**	(63)	**(16)**	(13)
Retranslation of net assets	**29**	(44)	**31**	(18)
Foreign currency (losses)/gains on hedges of net assets	**(31)**	22	**(33)**	15
At 31 December	**(87)**	(85)	**(18)**	(16)
Capital redemption reserve - at 1 January	**820**	796	**820**	796
Redemption of preference shares	**—**	24	**—**	24
At 31 December	**820**	820	**820**	820
Retained earnings - at 1 January	**13,507**	12,720	**11,980**	11,402
Profit attributable to ordinary shareholders and other equity owners	**3,684**	2,902	**3,457**	2,752
Ordinary dividends paid	**(3,293)**	(1,600)	**(3,293)**	(1,600)
Paid-in equity dividends paid	**(120)**	(109)	**(120)**	(109)
Remeasurement of retirement benefit schemes (2)				
- gross	**(556)**	(531)	**(565)**	(545)
- tax	**146**	158	**146**	159
Amortisation of merger reserve	**(39)**	(5)	**(87)**	(51)
Redemption of preference shares	**—**	(24)	**—**	(24)
Redemption/reclassification of paid-in equity				
- gross	**(29)**	(23)	**(29)**	(23)
- tax	**(6)**	5	**(6)**	5
Share-based payments				
- gross	**—**	(3)	**—**	(3)
- tax	**2**	7	**2**	7
Employee share schemes	**6**	10	**6**	10
At 31 December	**13,302**	13,507	**11,491**	11,980
Owners' equity at 31 December	**20,066**	20,727	**18,243**	19,166

For the notes to this table refer to the following page.

Statement of changes in equity for the year ended 31 December 2022 continued

	NWB Group		NWB Plc	
	2022	2021	2022	2021
	£m	£m	£m	£m
Non-controlling interests - at 1 January	10	10	—	—
Profit attributable to non-controlling interests	5	5	—	—
Dividends paid	(5)	(5)	—	—
At 31 December	10	10	—	—
Total equity at 31 December	20,076	20,737	18,243	19,166
Attributable to:				
Ordinary shareholders	17,548	18,350	15,725	16,789
Paid-in equity holders	2,518	2,377	2,518	2,377
Non-controlling interests	10	10	—	—
	20,076	20,737	18,243	19,166

(1) The total distributable reserves for NWB Plc is £11,002 million (2021 – £11,873 million).
(2) Following the purchase of ordinary shares from UKGI in Q1 2022, NatWest Group contributed £500 million to its main pension scheme in line with the memorandum of understanding announced on 17 April 2018. After tax relief, this contribution reduced total equity by £365 million. Other material movements came from asset underperformance relative to movements in the schemes' liabilities over the year. In line with our policy, the present value of defined benefit obligations and the fair value of plan assets at the end of the reporting period, are assessed to identify significant market fluctuations and one-off events since the end of the prior financial year.
(3) Certain assets within this category have been hedged with derivatives which are not in an accounting hedge relationship. The effect of this creates a temporary difference between other comprehensive income and the income statement due to the difference in recognition criteria. This temporary difference is expected to reverse through the income statement over the duration of the hedge.
(4) The unrealised losses on cash flow hedge reserves is mainly driven by deferment of losses on GBP net received fixed swaps as interest rates have increased.

The accompanying notes on pages 112 to 172, the accounting policies on pages 105 to 111 and the audited sections of the Financial review and Risk and capital management on pages 6 to 79 form an integral part of these financial statements.

Cash flow statement for the year ended 31 December 2022

	Note	NWB Group 2022 £m	NWB Group 2021 £m	NWB Plc 2022 £m	NWB Plc 2021 £m
Cash flows from operating activities					
Operating profit before tax		**5,114**	3,883	**4,687**	3,542
Adjustments for:					
Impairment losses/(releases)		**341**	(813)	**389**	(732)
Amortisation of discounts and premiums of other financial assets		**—**	181	**—**	181
Depreciation and amortisation		**768**	776	**598**	594
Net impairment charges of investments in Group undertakings		**—**	—	**336**	61
Change in fair value taken to profit or loss on other financial assets		**1,177**	1,595	**1,177**	1,595
Change in fair value taken to profit or loss on other financial liabilities and subordinated liabilities		**(912)**	(420)	**(924)**	(418)
Elimination of foreign exchange differences		**(47)**	1,120	**(3)**	1,118
Other non-cash items		**(195)**	87	**(215)**	58
Income receivable on other financial assets		**(303)**	(412)	**(303)**	(412)
Loss/(profit) on sale of other financial assets		**93**	(120)	**93**	(120)
Dividends receivable from subsidiaries		**—**	—	**(1,010)**	(424)
Loss on sale of other assets and net assets/liabilities		**5**	34	**6**	34
Loss on redemption of own debt		**—**	117	**—**	117
Interest payable on MRELs and subordinated liabilities		**371**	315	**358**	310
Charges and releases on provisions		**122**	388	**122**	388
Defined benefit pension schemes		**154**	173	**132**	146
Net cash flows from trading activities		**6,688**	6,904	**5,443**	6,038
(Increase)/decrease in derivative assets		**(2,230)**	930	**(2,171)**	991
Increase in loans to banks		**(198)**	(89)	**(164)**	(155)
Increase in loans to customers		**(14,448)**	(14,511)	**(12,313)**	(12,741)
(Increase)/decrease in amounts due from holding companies and fellow subsidiaries		**(355)**	(443)	**(6,204)**	5,288
Decrease/(increase) in other financial assets		**239**	(116)	**239**	(116)
(Increase)/decrease in other assets		**(34)**	(19)	**14**	(16)
(Decrease)/increase in bank deposits		**(6,771)**	7,960	**(6,770)**	7,963
(Decrease)/increase in customer deposits		**(9,065)**	35,835	**(10,912)**	28,707
(Decrease)/increase in amounts due to holding companies and fellow subsidiaries		**(7,218)**	6,033	**(2,191)**	5,426
Decrease in derivative liabilities		**(2,031)**	(2,433)	**(1,754)**	(2,437)
Decrease in other financial liabilities		**(1,867)**	(5)	**(1,859)**	(100)
Decrease in notes in circulation		**(95)**	(108)	**(95)**	(362)
Decrease in other liabilities		**(1,197)**	(1,199)	**(1,194)**	(1,121)
Changes in operating assets and liabilities		**(45,270)**	31,835	**(45,374)**	31,327
Income taxes paid		**(1,161)**	(923)	**(998)**	(791)
Net cash flows from operating activities (1)		**(39,743)**	37,816	**(40,929)**	36,574
Cash flows from investing activities					
Sale and maturity of other financial assets		**25,721**	10,272	**25,339**	9,884
Purchase of other financial assets		**(13,388)**	(3,193)	**(13,022)**	(2,811)
Income received on other financial assets		**371**	412	**371**	412
Net movement in business interests and intangible assets	27	**(992)**	(3,701)	**(719)**	(3,093)
Dividends received from subsidiaries		**—**	—	**1,010**	424
Sale of property, plant and equipment		**138**	58	**82**	17
Purchase of property, plant and equipment		**(618)**	(876)	**(316)**	(617)
Net cash flows from investing activities		**11,232**	2,972	**12,745**	4,216
Cash flows from financing activities					
Movement in MRELs		**548**	1,762	**509**	1,515
Movement in subordinated liabilities		**(200)**	(1,267)	**(199)**	(1,267)
Dividends paid		**(3,418)**	(1,714)	**(3,413)**	(1,709)
Issue of paid-in equity		**500**	941	**500**	941
Redemption of paid-in equity		**(388)**	(934)	**(388)**	(934)
Net cash flows from financing activities	28	**(2,958)**	(1,212)	**(2,991)**	(1,454)
Effects of exchange rate changes on cash and cash equivalents		**1,142**	(979)	**1,101**	(984)
Net (decrease)/increase in cash and cash equivalents		**(30,327)**	38,597	**(30,074)**	38,352
Cash and cash equivalents at 1 January		**106,645**	68,048	**105,546**	67,194
Cash and cash equivalents at 31 December	29	**76,318**	106,645	**75,472**	105,546

(1) NWB Group includes interest received of £9,167 million (2021 - £6,623 million) and interest paid of £1,412 million (2021 - £693 million), and NWB Plc includes interest received of £8,421 million (2021 – £5,937 million) and interest paid of £1,623 million (2021 - £779 million).

(2) The total cash outflow for leases for NWB Group was £130 million (2021: £149 million) and for NWB Plc £119 million (2021: £138 million). This included payment of principal for NWB Group of £111 million (2021: £126 million) and NWB Plc of £99 million (2021: £114 million). These amounts are included in the operating activities in cash flow statement.

The accompanying notes on pages 112 to 172, the accounting policies on pages 105 to 111 and the audited sections of the Financial review and Risk and capital management on pages 6 to 79 form an integral part of these financial statements.

Accounting policies

1. Presentation of financial statements

National Westminster Bank Plc (NWB Plc) is incorporated in the UK and registered in England and Wales. The financial statements are presented in the functional currency, pounds sterling.

The audited financial statements include audited sections of the Risk and capital management section. The directors have prepared the financial statements on a going concern basis after assessing the principal risks, forecasts, projections and other relevant evidence over the twelve months from the date the financial statements are approved (see the Report of the directors) and in accordance with UK adopted International Accounting Standards (IAS). The critical and significant accounting policies and related judgments are set out below.

The financial statements are presented on a historical cost basis except for certain financial instruments and investment properties which are stated at fair value.

The effect of the amendments to IFRS effective from 1 January 2022 on our financial statements was immaterial.

Our consolidated financial statements incorporate the results of NWB Plc and the entities it controls. Control arises when we have the power to direct the activities of an entity so as to affect the return from the entity. Control is assessed by reference to our ability to enforce our will on the other entity, typically through voting rights. The consolidated financial statements are prepared under consistent accounting policies.

On the acquisition of a business from a NatWest Group company, the assets, liabilities and IFRS reserves, such as the cash flow hedging reserve, are recognised at their inherited values taken from the consolidated financial statements of NatWest Group plc and include the accounting history since initial recognition. The acquirer recognises, in merger reserve, any difference between the consideration paid and the net items recognised at inherited values.

We apply accounting for associates and joint arrangements (including joint ventures) to entities where we have significant influence, but not control, over the operating and financial policies. We assess significant influence by reference to a presumption of voting rights of more than 20%, but less than 50%, supplemented by a qualitative assessment of substantive rights which include representation at the Board of Directors, significant exchange of managerial personnel or technology amongst others. Joint ventures are arrangements where we have joint control and rights to the net assets of the entity.

Investments in associates and joint ventures are recorded upon initial recognition at cost, increased (or decreased) each period by the share of the subsequent levels of profit or loss, other changes in equity are consider in line with their nature.

Transactions and balances between Group companies are eliminated in the consolidated financial statements to show only those transactions and balances external to us.

How Climate risk affects our accounting judgments and estimates

We make use of reasonable and supportable information to make accounting judgments and estimates. This includes information about the observable effects of the physical and transition risks of climate change on the current creditworthiness of borrowers, asset values and market indicators. It also includes the effect on our competitiveness and profitability. Many of the effects arising from climate change will be longer term in nature, with an inherent level of uncertainty, and have limited effect on accounting judgments and estimates for the current period. Some physical and transition risks can manifest in the shorter term. The following items represent the most significant effects:

- The classification of financial instruments linked to climate, or other sustainability indicators: consideration is given to whether the effect of climate related terms prevent the instrument cashflows being solely payments of principal and interest.
- The measurement of expected credit loss considers the ability of borrowers to make payments as they fall due. Future cashflows are discounted, so long dated cashflows are less likely to affect current expectations on credit loss. Our assessment of sector specific risks, and whether additional adjustments are required, include expectations of the ability of those sectors to meet their financing needs in the market. Changes in credit stewardship and credit risk appetite that stem from climate considerations, such as oil and gas, will directly affect our positions.
- The assessment of asset impairment and deferred tax are based upon value in use. This represents the value of future cashflows and uses our five-year revenue and cost forecasts and the expectation of long term economic growth beyond this period. The five-year forecast takes account of management's current expectations on competitiveness and profitability. The long term growth rate reflects external indicators which will include market expectations of climate risk. We do not consider any additional adjustments to this indicator.
- The use of market indicators as inputs to fair value is assumed to include current information and knowledge regarding the effect of climate risk.

2. Critical accounting policies

The judgments and assumptions involved in our accounting policies that are considered by the Board to be the most important to the portrayal of our financial condition are noted below. The use of estimates, assumptions or models that differ from those adopted by us would affect our reported results. Management's consideration of uncertainty is outlined in the relevant sections of this document, including the ECL estimate in the Risk and capital management section.

Information used for significant estimate

Key financial estimates are based on management's latest five-year revenue and cost forecasts. Changes in judgments and assumptions could result in a material adjustment to those estimates in future reporting periods. Consideration of this source of estimate uncertainty has been set out in the notes below (as applicable).

Policy	Judgment	Estimate	Further information
Deferred tax	Determination of whether sufficient taxable profits will be generated in future years to recover DTA.	Our estimates are based on the five-year revenue and cost forecasts (which include inherent uncertainties).	Note 7
Fair value – financial instruments	Classification of a fair value instrument as level 3, where the valuation is driven by unobservable inputs.	Estimation of the fair value, where it is reasonably possible to have alternative assumptions in determining the FV.	Note 10
Loan impairment provisions	Definition of default against which to apply PD, LGD and EAD models. Criteria for a significant increase in credit risk. Identification of risks not captured by the models.	ECL estimates contain a number of measurement uncertainties (such as the selection of multiple economic scenarios) and disclosures include sensitivities to show impact on other reasonably possible scenarios.	Note 13
Provisions for liabilities and charges	Determination of whether a present obligation exists in respect of customer redress, litigation and other regulatory, property and other provisions. Legal proceedings often require a high degree of judgment and these are likely to change as the matter progresses.	Provisions remain sensitive to the assumptions used in the estimate. We consider a wide range of possible outcomes. It is often not practically to meaningfully quantify ranges of possible outcomes, given the uncertainties involved.	Note 21
Investment in Group undertakings (parent company only)		Our estimates are based on the five-year revenue and cost forecasts (which include inherent uncertainties). Long term growth rate and discount rate are subject to uncertain factors.	Note 14

2.1. Deferred tax

Deferred tax is the tax expected to be payable or recoverable in respect of temporary differences between the carrying amount of an asset or liability for accounting purposes and the carrying amount for tax purposes. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent their recovery is probable.

Deferred tax is not recognised on temporary differences that arise from initial recognition of an asset or a liability in a transaction (other than a business combination) that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax is calculated using tax rates expected to apply in the periods when the assets will be realised or the liabilities settled, based on tax rates and laws enacted, or substantively enacted, at the balance sheet date.

Deferred tax assets and liabilities are offset where we have a legally enforceable right to offset and where they relate to income taxes levied by the same taxation authority either on an individual NWB Group company or on NWB Group companies in the same tax group that intend, in future periods, to settle current tax liabilities and assets on a net basis or on a gross basis simultaneously.

Deferred tax asset recoverability is based on the level of supporting offsetable deferred tax liabilities we have and of our future taxable profits. These future taxable profits are based on our five-year revenue and cost forecasts and the expectation of long term economic growth beyond this period. The five-year forecast takes account of management's current expectations on competitiveness and profitability. The long term growth rate reflects external indicators which will include market expectations on climate risk. We do not consider any additional adjustments to this indicator.

2.2 Fair value – financial instruments

Financial instruments classified as mandatory fair value through profit or loss; held-for-trading; designated fair value through profit or loss and fair value through other comprehensive income are recognised in the financial statements at fair value. All derivatives are measured at fair value.

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. A fair value measurement considers the characteristics of the asset or liability and the assumptions that a market participant would consider when pricing the asset or liability.

We manage some portfolios of financial assets and financial liabilities based on our net exposure to either market or credit risk. In these cases, the fair value is derived from the net risk exposure of that portfolio with portfolio level adjustments applied to incorporate bid-offer spreads, counterparty credit risk, and funding costs (see 'Valuation Adjustments').

Where the market for a financial instrument is not active, fair value is established using a valuation technique. These valuation techniques involve a degree of estimation, the extent of which depends on the instrument's complexity and the availability of market-based data. The complexity and uncertainty in the financial instrument's fair value is categorised using the fair value hierarchy.

The use of market indicators as inputs to fair value is assumed to include current information and knowledge regarding the effect of climate risk.

2.3. Loan impairment provisions: expected credit losses (ECL)

At each balance sheet date each financial asset or portfolio of financial assets measured at amortised cost or at fair value through other comprehensive income, issued financial guarantee and loan commitment (other than those classified as held for trading) is assessed for impairment. Any change in impairment is reported in the income statement.

Loss allowances are forward-looking, based on 12-month ECL where there has not been a significant increase in credit risk rating, otherwise allowances are based on lifetime expected losses.

ECL are a probability-weighted estimate of credit losses. The probability is determined by the risk of default which is applied to the cash flow estimates. In the absence of a change in credit rating, allowances are recognised when there is a reduction in the net present value of expected cash flows. Following a significant increase in credit risk, ECL are adjusted from 12 months to lifetime. This will lead to a higher impairment charge.

The measurement of expected credit loss considers the ability of borrowers to make payments as they fall due. Future cashflows are discounted, so long dated cashflows are less likely to affect current expectations on credit loss. Our assessment of sector specific risks, and whether additional adjustments are required, include expectations of the ability of those sectors to meet their financing needs in the market. Changes in credit stewardship and credit risk appetite that stem from climate considerations, such as oil and gas, will directly affect our positions.

Judgment is exercised as follows:

- Models – in certain low default portfolios, Basel parameter estimates are also applied for IFRS 9.
- Non-modelled portfolios – use a standardised capital requirement under Basel II. Under IFRS 9, they have bespoke treatments for the identification of significant increase in credit risk. Benchmark PDs, EADs and LGDs are reviewed annually for appropriateness. The ECL calculation is based on expected future cash flows, which is typically applied at a portfolio level.
- Multiple economic scenarios (MES) – the central, or base, scenario is most critical to the ECL calculation, independent of the method used to generate a range of alternative outcomes and their probabilities.
- Significant increase in credit risk - IFRS 9 requires that at each reporting date, an entity shall assess whether the credit risk on an account has increased significantly since initial recognition. Part of this assessment requires a comparison to be made between the current lifetime PD (i.e. the current probability of default over the remaining lifetime) with the equivalent lifetime PD as determined at the date of initial recognition.

On restructuring where a financial asset is not derecognised, the revised cash flows are used in re-estimating the credit loss. Where restructuring causes derecognition of the original financial asset, the fair value of the replacement asset is used as the closing cash flow of the original asset.

Where, in the course of the orderly realisation of a loan, it is exchanged for equity shares or property, the exchange is accounted for as the sale of the loan and the acquisition of equity securities or investment property. Where our acquired interest is in equity shares, relevant polices for control, associates and joint ventures apply.

Impaired financial assets are written off and therefore derecognised from the balance sheet when we conclude that there is no longer any realistic prospect of recovery of part, or all, of the loan. For financial assets that are individually assessed for impairment, the timing of the write-off is determined on a case-by-case basis. Such financial assets are reviewed regularly and write-off will be prompted by bankruptcy, insolvency, re-negotiation, and similar events.

The typical time frames from initial impairment to write-off for our collectively assessed portfolios are:

- Retail mortgages: write-off usually occurs within five years, or earlier, when an account is closed, but can be longer where the customer engages constructively,
- Credit cards: the irrecoverable amount is typically written off after twelve arrears cycles or at four years post default any remaining amounts outstanding are written off,
- Overdrafts and other unsecured loans: write-off occurs within six years,
- Commercial loans: write-offs are determined in the light of individual circumstances; and Business loans are generally written off within five years.

2.4. Provisions and contingent liabilities

We recognise a provision for a present obligation resulting from a past event when it is more likely than not that we will be required to pay to settle the obligation and the amount of the obligation can be estimated reliably.

Provision is made for restructuring costs, including the costs of redundancy, when we have a constructive obligation. An obligation exists when we have a detailed formal plan for the restructuring and have raised a valid expectation in those affected either by starting to implement the plan or by announcing its main features.

We recognise any onerous cost of the present obligation under a contract as a provision. An onerous cost is the unavoidable cost of meeting our contractual obligations that exceed the expected economic benefits. When we intend to vacate a leasehold property or right of use asset, the asset would be tested for impairment and a provision may be recognised for the ancillary contractual occupancy costs.

Contingent liabilities are possible obligations arising from past events, whose existence will be confirmed only by uncertain future events, or present obligations arising from past events that are not recognised because either an outflow of economic benefits is not probable, or the amount of the obligation cannot be reliably measured. Contingent liabilities are not recognised but information about them is disclosed unless the possibility of any outflow of economic benefits in settlement is remote.

2.5. Investment in Group undertakings

Our investments in Group undertakings (subsidiaries) are stated at cost less any impairment.

3. Significant accounting polices

3.1. Revenue recognition

Interest receivable and payable are recognised in the income statement using the effective interest rate method: for all financial instruments measured at amortised cost, debt instruments measured as fair value through other comprehensive income and the effective part of any related accounting hedging instruments. Finance lease income is recognised at a constant periodic rate of return before tax on the net investment on the lease.

Other interest relating to financial instruments measured at fair value is recognised as part of the movement in fair value and is reported in other operating income. Fees in respect of services are recognised as the right to consideration accrues through the performance of each distinct service obligation to the customer. The arrangements are generally contractual and the cost of providing the service is incurred as the service is rendered. The price is usually fixed and always determinable.

3.2. Staff costs
Employee costs, such as salaries, paid absences, and other benefits are recognised over the period in which the employees provide the related services to us. Employees may receive variable compensation in cash, in deferred cash or debt instruments of NWB Group or in ordinary shares of NatWest Group plc subject to deferral, clawback and forfeiture criteria. We operate a number of share-based compensation schemes under which we grant awards of NatWest Group plc shares and share options to our employees. Such awards are subject to vesting conditions.

Variable compensation that is settled in cash or debt instruments is charged to the income statement on a straight-line basis over the period during which services are provided, taking account of forfeiture and clawback criteria. The value of employee services received in exchange for NatWest Group plc shares and share options is recognised as an expense over the vesting period, subject to deferral, clawback, cancelation and forfeiture criteria with a corresponding increase in equity.

The fair value of shares granted is the market price adjusted for the expected effect of dividends as employees are not entitled to dividends until shares are vested.

The fair value of options granted is determined using option pricing models to estimate the numbers of shares likely to vest. These consider the exercise price of the option, the current share price, the risk-free interest rate, the expected volatility of the share price over the life of the option and other relevant factors such as the dividend yield.

Defined contribution pension scheme
A scheme where we pay fixed contributions and; there is no legal or constructive obligation to pay further contributions or benefits. Contributions are recognised in the income statement as employee service costs accrue.

Defined benefit pension scheme
A scheme that defines the benefit an employee will receive on retirement and is dependent on one or more factors such as age, salary, and years of service. The net of the recognisable scheme assets and obligations is reported on the balance sheet in other assets or other liabilities. The defined benefit obligation is measured on an actuarial basis. The charge to the income statement for pension costs (mainly the service cost and the net interest on the net defined benefit asset or liability) is recognised in operating expenses.

Actuarial gains and losses (i.e. gains and/or losses on re-measuring the net defined benefit asset or liability) due to changes in actuarial measurement assumptions are recognised in other comprehensive income in full in the period in which they arise and not subject to recycling to the income statement.

The difference between scheme assets and scheme liabilities, the net defined benefit asset or liability, is recognised on the balance sheet if the criteria of the asset ceiling test are met. This requires the net defined benefit surplus to be limited to the present value of any economic benefits available to NatWest Group in the form of refunds from the plan or reduced contributions to it.

We will recognise a liability where a minimum funding requirement exists for any of our defined benefit pension schemes. This reflects agreed minimum funding and the availability of a net surplus as determined as described above. When estimating the liability for minimum funding requirements we only include contributions that are substantively or contractually agreed and do not include contingent and discretionary features, including dividend-linked contributions or contributions subject to contingent events requiring future verification.

We will recognise a net defined benefit asset when the net defined benefit surplus can generate a benefit in the form of a refund or reduction in future contributions to the plan. The net benefit pension asset is recognised at the present value of the benefits that will be available to us excluding interest and the effect of the asset ceiling (if any, excluding interest). Changes in the present value of the net benefit pension asset are recognised immediately in other comprehensive income.

In instances where Trustees have the ability to declare augmented benefits to participants, we do not recognise a defined benefit pension asset and write-off the surplus immediately in other comprehensive income.

3.3. Intangible assets
Intangible assets are identifiable non-monetary assets without physical substance acquired by us, and are stated at cost less accumulated amortisation and impairment losses. Amortisation is a method to spread the cost of such assets over time in the income statement. This is charged to the income statement over the assets' estimated useful economic lives using methods that best reflect the pattern of economic benefits. The estimated useful economic lives are:

Computer software	3 to 12 years
Other acquired intangibles	5 to 10 years

Expenditure on brands is charged to the income statement as incurred.

Direct costs relating to the development of internal-use computer software are reported on the balance sheet after technical feasibility and economic viability have been established. These direct costs include payroll, the costs of materials and services, and directly attributable overheads. Capitalisation of costs ceases when the software can operate as intended.

During and after development, accumulated costs are reviewed for impairment against the benefits that the software is expected to generate.

Costs incurred prior to the establishment of technical feasibility and economic viability are expensed to the income statement as incurred, as are all training costs and general overheads. The costs of licences to use computer software that are expected to generate economic benefits beyond one year are also reported on the balance sheet.

3.4. Impairment of non-financial assets
At each balance sheet date, we assess whether there is any indication that its intangible assets or property, plant and equipment are impaired. If any such indication exists, we estimate the recoverable amount of the asset and compares it to its balance sheet value to calculate if an impairment loss should be charged to the income statement. The balance sheet value of the asset is reduced by the amount of the impairment loss. A reversal of an impairment loss on intangible assets or property, plant and equipment is recognised in the income statement provided the increased carrying value is not greater than it would have been had no impairment loss been recognised.

The recoverable amount of an asset that does not generate cash flows that are independent from those of other assets or groups of assets, is determined as part of the cash-generating unit to which the asset belongs. A cash-generating unit is 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.

3.5. Property, plant and equipment & investment property

Items of property, plant and equipment except investment property are stated at cost less accumulated depreciation and impairment losses. Where an item of property, plant and equipment comprises major components having different useful lives, these are accounted for separately.

Depreciation is charged to profit or loss on a straight-line basis so as to write-off the depreciable amount of property, plant and equipment (including assets owned and let on operating leases) over their estimated useful lives. The depreciable amount is the cost of an asset less its residual value. Freehold land is not depreciated.

The estimated useful lives of our property, plant and equipment are:

Freehold buildings	50 years
Long leasehold property (leases with more than 50 years to run)	50 years
Short leaseholds	unexpired period of lease
Property adaptation costs	10 to 15 years
Computer equipment	up to 5 years
Other equipment	4 to 15 years

The residual value and useful life of property, plant and equipment are reviewed at each balance sheet date and updated for any changes to previous estimates.

Investment property comprises freehold and leasehold properties that are held to earn rentals or for capital appreciation or both. Investment property is not depreciated but is stated at fair value. Fair value is based on current prices for similar properties in the same location and condition. Any gain or loss arising from a change in fair value is recognised in profit or loss. Rental income from investment property is recognised on a straight-line basis over the term of the lease in Other operating income. Lease incentives granted are recognised as an integral part of the total rental income.

3.6. Foreign currencies

Foreign exchange differences arising on the settlement of foreign currency transactions and from the translation of monetary assets and liabilities are reported in income from trading activities except for differences arising on cash flow hedges and hedges of net investments in foreign operations.

Non-monetary items denominated in foreign currencies that are stated at fair value are translated into the functional currency at the foreign exchange rates ruling at the dates the values are determined. Translation differences are recognised in the income statement except for differences arising on non-monetary financial assets classified as fair value through other comprehensive income.

Income and expenses of foreign subsidiaries and branches are translated into sterling at average exchange rates unless these do not approximate the foreign exchange rates ruling at the dates of the transactions. Foreign exchange differences arising on the translation of a foreign operation are recognised in other comprehensive income. The amount accumulated in equity is reclassified from equity to the income statement on disposal of a foreign operation.

3.7. Tax

Tax encompassing current tax and deferred tax is recognised the income statement except when taxable items are recognised in other comprehensive income or equity . Tax consequences arising from servicing financial instruments classified as equity are recognised in the income statement.

Current tax is tax payable or recoverable in respect of the taxable profit or loss for the year arising in the income statement, other comprehensive income or equity. Provision is made for current tax at rates enacted, or substantively enacted, at the balance sheet date.

Accounting for taxes is judgmental and carries a degree of uncertainty because tax law is subject to interpretation, which might be questioned by the relevant tax authority. We recognise the most likely current and deferred tax liability or asset, assessed for uncertainty using consistent judgments and estimates. Current and deferred tax assets are only recognised where their recovery is deemed probable, and current and deferred tax liabilities are recognised at the amount that represents the best estimate of the probable outcome having regard to their acceptance by the tax authorities.

3.8. Financial instruments

Financial instruments are measured at fair value on initial recognition on the balance sheet. Monetary financial assets are classified into one of the following subsequent measurement categories (subject to business model assessment and review of contractual cash flow for the purposes of sole payments of principal and interest where applicable):

– amortised cost measured at cost using the effective interest rate method, less any impairment allowance;
– fair value through other comprehensive income (FVOCI) measured at fair value, using the effective interest rate method and changes in fair value through other comprehensive income;
– mandatory fair value through profit or loss (MFVTPL) measured at fair value and changes in fair value reported in the income statement; or
– designated at fair value through profit or loss (DFV) measured at fair value and changes in fair value reported in the income statement.

Classification by business model reflects how we manage our financial assets to generate cash flows. A business model assessment helps to ascertain the measurement approach depending on whether cash flows result from holding financial assets to collect the contractual cash flows, from selling those financial assets, or both

Business model assessment of assets is made at portfolio level, being the level at which they are managed to achieve a predefined business objective. This is expected to result in the most consistent classification of assets because it aligns with the stated objectives for the portfolio, its risk management, manager's remuneration and the ability to monitor sales of assets from a portfolio. When a significant change to our business is communicated to external parties, we reassess our business model for managing those financial assets. We reclassify financial assets if we have a significant change to the business model. A reclassification is applied prospectively from the reclassification date.

The contractual terms of a financial asset; any leverage features; prepayment and extension terms; and discounts or penalties to interest rates that are part of meeting environmental, social and governance targets as well as other contingent and leverage features, non-recourse arrangements and features that could modify the timing and/or amount of the contractual cash flows that might reset the effective rate of interest; are considered in determining whether cash flows are solely payments of principal and interest.

Certain financial assets may be designated at fair value through profit or loss (DFV) upon initial recognition if such designation eliminates, or significantly reduces, accounting mismatch.

Equity shares are measured at fair value through profit or loss unless specifically elected as at fair value through other comprehensive income (FVOCI).

Upon disposal, the cumulative gains or losses in fair value through other comprehensive income reserve are recycled to the income statement for monetary assets and for non-monetary assets (equity shares) the cumulative gains or losses are transferred directly to retained earnings.

Regular way purchases and sales of financial assets classified as amortised cost are recognised on the settlement date; all other regular way transactions in financial assets are recognised on the trade date.

Financial liabilities are classified into one of following measurement categories:

- amortised cost measured at cost using the effective interest rate method;
- held for trading (HFT) measured at fair value and changes in fair value reported in income statement; or
- designated at fair value through profit or loss (DFV) measured at fair value and changes in fair value reported in the income statement except changes in fair value attributable to the credit risk component recognised in other comprehensive income when no accounting mismatch occurs. These are not subject to recycling in the income statement.

3.9. Derecognition

A financial asset is derecognised (removed from the balance sheet) when the contractual right to receive cash flows from the asset has expired or when it has been transferred and the transfer qualifies for derecognition. Conversely, an asset is not derecognised in a contract under which we retain substantially all the risks and rewards of ownership.

A financial liability is removed from the balance sheet when the obligation is paid, or is cancelled, or expires. Cancellation includes the issuance of a substitute instrument on substantially different terms.

3.10. Netting

Financial assets and financial liabilities are offset, and the net amount presented on the balance sheet when, and only when, we currently have a legally enforceable right to set off the recognised amounts and we intend either to settle on a net basis or to realise the asset and settle the liability simultaneously. We are party to a number of arrangements, including master netting agreements, that give us the right to offset financial assets and financial liabilities, but where we do not intend to settle the amounts net or simultaneously, the assets and liabilities concerned are presented separately on the balance sheet.

3.11. Capital instruments

We classify a financial instrument that it issues as a liability if it is a contractual obligation to deliver cash or another financial asset, or to exchange financial assets or financial liabilities on potentially unfavourable terms and as equity if we evidence a residual interest in our assets after the deduction of liabilities. Incremental costs and related tax that are directly attributable to an equity transaction are deducted from equity.

3.12. Derivatives and hedging

Derivatives are reported on the balance sheet at fair value. We use derivatives to manage its own risk such as interest rate, foreign exchange, or credit risk or in certain customer transactions. Not all derivatives used to manage risk are in hedge accounting relationships (an IFRS method to reduce accounting mismatch from changes in fair value of the derivatives reported in the income statement).

Gains and losses arising from changes in the fair value of derivatives that are not in hedge relationships and derivatives that are managed together with financial instruments designated at fair value are included in Other operating income.

Hedge accounting

We enter into three types of hedge accounting relationships (see later). Hedge accounting relationships are designated and documented at inception in line with the requirements of IAS 39 Financial instruments – Recognition and Measurement. The documentation identifies the hedged item, the hedging instrument and details of the risk that is being hedged and the way in which effectiveness will be assessed at inception and during the period of the hedge. When designating a hedging relationship, we consider: the economic relationship between the hedged item (including the risk being hedged) and the hedging instrument; the nature of the risk; the risk management objective and strategy for undertaking the hedge; and the appropriateness of the method that will be used to assess hedge effectiveness.

Designated hedging relationships must be expected to be highly effective both on a prospective and retrospective basis. Effectiveness is assessed by reference to the degree of offsetting between the changes in fair value or cash flows attributable to the hedged risk and the changes in fair value of the designated hedging derivatives.

Fair value hedge - the gain or loss on the hedging instrument and the hedged item attributable to the hedged risk is recognised in the income statement. Where the hedged item is measured at amortised cost, the balance sheet amount of the hedged item is also adjusted.

Cash flow hedge - the effective portion of the designated hedge relationship is recognised in other comprehensive income and the ineffective portion in the income statement. When the hedged item (forecasted cash flows) results in the recognition of a financial asset or financial liability, the cumulative gain or loss is reclassified from equity to the income statement in the same periods in which the hedged forecasted cash flows affect the income statement.

Hedge of net investment in a foreign operation - in the hedge of a net investment in a foreign operation, the effective portion of the designated hedge relationship is recognised in other comprehensive income. Any ineffective portion is recognised in profit or loss. Non-derivative financial liabilities as well as derivatives may be designated as a hedging instrument in a net investment hedge.

Discontinuation of hedge accounting

Hedge accounting is discontinued if the hedge no longer meets the criteria for hedge accounting i.e. the hedge is not highly effective in offsetting changes in fair value or cash flows attributable to the hedged risk, consistent with the documented risk management strategy; the hedging instrument expires or is sold, terminated or exercised; or if hedge designation is revoked.

For fair value hedging any cumulative adjustment is amortised to the income statement over the life of the hedged item. Where the hedge item is no longer on the balance sheet the adjustment to the hedged item is reported in the income statement.

For cash flow hedging the cumulative unrealised gain or loss is reclassified from equity to the income statement when the hedged cash flows occur or, if the forecast transaction results in the recognition of a financial asset or financial liability, when the hedged forecast cash flows affect the income statement. Where a forecast transaction is no longer expected to occur, the cumulative unrealised gain or loss is reclassified from equity to the income statement immediately.

For net investment hedging on disposal or partial disposal of a foreign operation, the amount accumulated in equity is reclassified from equity to the income statement.

4. Future accounting developments

International Financial Reporting Standards

Effective 1 January 2023

- IFRS 17 Insurance Contracts (Amendments to IFRS 17 Insurance Contracts);
- Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12);
- Definition of Accounting Estimates (Amendments to IAS 8); and
- Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2).

Effective 1 January 2024

- Classification of Liabilities as Current or Non-current (Amendments to IAS 1);
- Non-current Liabilities with Covenants (Amendments to IAS 1)
- Lease Liability in a sale and Leaseback (Amendments to IFRS 16).

We are assessing the effect of adopting these standards and amendments on our financial statements but do not expect the effect to be material.

Notes to the financial statements

1 Net interest income

	2022 £m	2021 £m
Balances at central banks and loans to banks - amortised cost	981	119
Loans to customers - amortised cost	7,883	6,448
Amounts due from holding companies and fellow subsidiaries	41	33
Other financial assets	254	121
Interest receivable	9,159	6,721
Bank deposits	267	82
Customer deposits	335	247
Amounts due to holding companies and fellow subsidiaries	777	220
Other financial liabilities	189	137
Subordinated liabilities	59	33
Interest payable	1,627	719
Net interest income	7,532	6,002

Interest income on financial instruments measured at amortised cost and debt instruments classified as FVOCI is measured using the effective interest rate which allocates the interest income or interest expense over the expected life of the asset or liability at the rate that exactly discounts all estimated future cash flows to equal the instrument's initial carrying amount. Calculation of the effective interest rate takes into account fees payable or receivable that are an integral part of the instrument's yield, premiums or discounts on acquisition or issue, early redemption fees and transaction costs. All contractual terms of a financial instrument are considered when estimating future cash flows. Included in interest receivable is finance lease income which is recognised at a constant periodic rate of return before tax on the net investment.

For accounting policy information see Accounting policies note 3.1.

2 Non-interest income

	2022 £m	2021 £m
Net fees and commissions (1)	1,626	1,482
Other operating income		
Loss on redemption of own debt	—	(117)
Operating leases and other rental income	233	230
Changes in fair value of other financial assets held at mandatory fair value through profit or loss (2)	(12)	5
Hedge ineffectiveness	20	45
Net income from economic hedging (3)	777	76
Loss on disposal of amortised cost assets	(17)	(27)
(Loss)/profit on disposal of fair value through other comprehensive income assets	(92)	120
Loss on sale of property, plant and equipment (4)	(5)	(36)
Share of loss on associated entities	(6)	(6)
Legal entity recharges (5)	1,616	1,463
Other income	71	32
	2,585	1,785
	4,211	3,267

(1) Refer to Note 4 for further analysis.
(2) Includes instruments that have failed solely payment of principal and interest testing under IFRS 9.
(3) Includes fair value changes on derivatives which have not been designated in a hedge accounting relationship and gains and losses from the management of the NWB Group's funding requirements involving the use of derivatives including FX. These are aimed at managing the interest rate and foreign exchange risk that NWB Group is exposed to.
(4) 2021 includes £44 million loss on the purchase of freeholds for properties where the Group was the primary leaseholder.
(5) Relates to income from recharging shared services to other NatWest Group subsidiaries.

For accounting policy information see Accounting policies note 3.1 and 3.6.

3 Operating expenses

	2022 £m	2021 £m
Wages, salaries and other staff costs	**2,138**	2,079
Temporary and contract costs	**207**	206
Social security costs	**263**	241
Pension costs	**288**	289
- defined benefit schemes (see Note 5)	**154**	173
- defined contribution schemes	**134**	116
Staff costs	**2,896**	2,815
Premises and equipment	**994**	948
Depreciation and amortisation	**768**	776
Other administrative expenses (1)	**1,630**	1,660
Administrative expenses	**3,392**	3,384
	6,288	6,199

(1) Includes redress and litigation costs. Further details are provided in Note 21.

NWB Group provides shared services to NatWest Group. Direct costs incurred are recovered through legal entity recharging and recorded in Other operating income.

For accounting policy information see Accounting policies note 3.2, 3.3, 3.4 and 3.5.

The average number of persons employed, rounded to the nearest hundred, during the year, excluding temporary staff, was 53,600 (2021 – 52,000). The number of persons employed at 31 December 2022, excluding temporary staff was as follows:

	2022	2021
Retail Banking	**13,800**	15,100
Commercial & Institutional	**8,800**	8,100
Private Banking	**2,100**	1,600
Central items & other	**30,500**	27,100
Total	**55,200**	51,900
UK	**37,600**	36,700
India	**15,700**	13,500
Poland	**1,500**	1,400
Rest of the World	**400**	300
Total	**55,200**	51,900

3 Operating expenses continued
Share-based payments

NWB Group grants share-based awards to employees principally on the following bases:

Award plan	Eligible employees	Nature of award	Vesting conditions (1)	Settlement
Sharesave	UK, Channel Islands, Gibraltar, Isle of Man, Poland and India.	Option to buy shares under employee savings plan	Continuing employment or leavers in certain circumstances	2023 to 2027
Deferred performance awards	All	Awards of ordinary shares and conditional shares	Continuing employment or leavers in certain circumstances	2023 to 2030
Long-term incentives (2) (3)	Senior employees	Awards of ordinary shares and conditional shares	Continuing employment or leavers in certain circumstances and/or satisfaction of the pre-vest assessment and underpins	2023 to 2029

(1) All awards have vesting conditions which may not be met.
(2) Long-term incentives include buy-out awards offered to compensate certain new hires for the loss of forfeited awards from their previous employment. All awards are granted under the Employee Share Plan.
(3) Existing Long-term incentive scheme has been closed to new awards and members as at 31 December 2022. The scheme will be replaced by a new Restricted share plan scheme with similar granting and vesting conditions. No awards have been granted at the end of the reporting period.

The fair value of Sharesave options granted in 2022 was determined using a pricing model that included: expected volatility of shares determined at the grant date based on historical volatility over a period of up to five years; expected option lives that equal the vesting period; estimated dividend yield on equity shares; and risk-free interest rates determined from UK gilts with terms matching the expected lives of the options.

The exercise price of options and the fair value on granting awards of fully paid shares is the average market price over the five trading days (three trading days for Sharesave) preceding grant date. When estimating the fair value of the award, the number of shares granted, and the prevailing share price (as defined in the NatWest Group ARA on page 149) are used. The fair value of the award is recognised as services are provided over the vesting period.

Bonus awards
The following tables analyse NWB Group's bonus awards.

	2022 £m	2021 £m	Change %
Non-deferred cash awards (1)	36	32	13%
Deferred cash awards	182	150	21%
Deferred share awards	30	24	25%
Total deferred bonus awards	212	174	22%
Total bonus rewards (2)	248	206	20%

Reconciliation of bonus awards to income statement charge

	2022 £m	2021 £m
Bonus awarded	248	206
Less: deferral of charge for amounts awarded for current year	(80)	(63)
Income statement charge for amounts awarded in current year	168	143
Add: current year charge for amounts deferred from prior years	56	40
Less: forfeiture of amounts deferred from prior years	—	(4)
Income statement charge for amounts deferred from prior years	56	36
Income statement charge for bonus awards (2)	224	179

(1) Non-deferred cash awards are limited to £2,000 for all employees.
(2) Excludes other performance- related compensation.

4 Segmental analysis

Reportable operating segments

On 27 January 2022, NatWest Group announced that a new business segment, Commercial & Institutional, would be created, bringing together the Commercial, NatWest Markets and RBSI businesses to form a single business segment, with common management and objectives, to best support our customers across the full non-personal customer lifecycle. Comparatives have been re-presented. The re-presentation of operating segments does not change the consolidated financial results of NatWest Group.

NWB Plc is organised into the following reportable segments: Retail Banking, Private Banking, Commercial & Institutional and Central items & other.

Retail Banking serves personal customers in the UK and includes Ulster Bank customers.

Private Banking serves UK-connected high-net-worth individuals and their business interests.

Commercial & Institutional offers SME's and Corporate and Institutional clients comprehensive banking and financing solutions throughout the UK and internationally.

Central items & other includes corporate functions, such as NatWest Group treasury, finance, risk management, compliance, legal, communications and human resources. NWB Plc is the main provider of shared services and treasury activities for NatWest Group. The services are mainly provided to NWH Group, however, in certain instances, where permitted, services are also provided to the wider NatWest Group including the non-ring fenced business.

2022	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
Net interest income	**4,494**	**754**	**2,740**	**(456)**	**7,532**
Net fees and commissions	**334**	**243**	**1,038**	**11**	**1,626**
Other operating income	**65**	**28**	**248**	**2,244**	**2,585**
Total income	**4,893**	**1,025**	**4,026**	**1,799**	**11,743**
Depreciation and amortisation	**—**	**—**	**(135)**	**(633)**	**(768)**
Other operating expenses	**(2,115)**	**(596)**	**(1,804)**	**(1,005)**	**(5,520)**
Impairment (losses)/releases	**(218)**	**2**	**(126)**	**1**	**(341)**
Operating profit	**2,560**	**431**	**1,961**	**162**	**5,114**
2021					
Net interest income	3,541	461	2,171	(171)	6,002
Net fees and commissions	303	239	947	(7)	1,482
Other operating income	42	24	93	1,626	1,785
Total income	3,886	724	3,211	1,448	9,269
Depreciation and amortisation	—	—	(146)	(630)	(776)
Other operating expenses	(1,917)	(513)	(1,746)	(1,247)	(5,423)
Impairment releases	23	53	737	—	813
Operating profit/(loss)	1,992	264	2,056	(429)	3,883

Total revenue (1)

2022	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
External	**5,039**	**856**	**3,660**	**4,308**	**13,863**
Intersegment	**29**	**416**	**118**	**(563)**	**—**
Total	**5,068**	**1,272**	**3,778**	**3,745**	**13,863**
2021					
External	4,660	703	3,030	1,975	10,368
Intersegment	97	161	147	(405)	—
Total	4,757	864	3,177	1,570	10,368

(1) Total revenue comprises interest receivable, fees and commissions receivable and other operating income.

Total income

2022	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
External	**4,865**	**721**	**4,112**	**2,045**	**11,743**
Intersegment	**28**	**304**	**(86)**	**(246)**	**—**
Total	**4,893**	**1,025**	**4,026**	**1,799**	**11,743**
2021					
External	3,791	668	3,191	1,619	9,269
Intersegment	95	56	20	(171)	—
Total	3,886	724	3,211	1,448	9,269

4 Segmental analysis continued

Analysis of net fees and commissions

2022	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
Fees and commissions receivable					
- Payment services	**254**	**25**	**489**	**—**	**768**
- Credit and debit card fees	**323**	**14**	**170**	**—**	**507**
- Lending and financing	**15**	**8**	**446**	**—**	**469**
- Brokerage	**34**	**6**	**—**	**—**	**40**
- Investment management, trustee and fiduciary services	**4**	**213**	**—**	**—**	**217**
- Underwriting fees	**—**	**—**	**3**	**—**	**3**
- Other	**—**	**3**	**113**	**(1)**	**115**
Total	**630**	**269**	**1,221**	**(1)**	**2,119**
Fees and commissions payable	**(296)**	**(26)**	**(183)**	**12**	**(493)**
Net fees and commissions	**334**	**243**	**1,038**	**11**	**1,626**
2021					
Fees and commissions receivable					
- Payment services	248	33	415	—	696
- Credit and debit card fees	276	10	111	—	397
- Lending and financing	11	10	416	—	437
- Brokerage	38	5	—	—	43
- Investment management, trustee and fiduciary services	3	214	—	—	217
- Underwriting fees	—	—	—	—	—
- Other	—	35	128	(91)	72
Total	576	307	1,070	(91)	1,862
Fees and commissions payable	(273)	(68)	(123)	84	(380)
Net fees and commissions	303	239	947	(7)	1,482

2022	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
Assets	**184,140**	**19,734**	**86,406**	**119,189**	**409,469**
Liabilities	**153,304**	**41,489**	**127,301**	**67,299**	**389,393**
2021					
Assets	168,228	18,509	83,347	164,479	434,563
Liabilities	153,653	37,219	133,156	89,798	413,826

4 Segmental analysis continued

Geographical segments

The geographical analysis in the tables below has been compiled on the basis of location of office where the transactions are recorded.

2022	UK £m	RoW £m	Total £m
Total revenue	**13,134**	**729**	**13,863**
Interest receivable	**9,104**	**55**	**9,159**
Interest payable	**(1,567)**	**(60)**	**(1,627)**
Net fees and commissions	**1,610**	**16**	**1,626**
Other operating income	**1,955**	**630**	**2,585**
Total income	**11,102**	**641**	**11,743**
Operating profit before tax	**5,017**	**97**	**5,114**
Total assets	**394,504**	**14,965**	**409,469**
Total liabilities	**388,996**	**397**	**389,393**
Contingent liabilities and commitments	**89,931**	**215**	**90,146**
Cost to acquire property, plant and equipment and intangible assets	**1,254**	**158**	**1,412**
2021			
Total revenue	10,250	118	10,368
Interest receivable	6,650	71	6,721
Interest payable	(642)	(77)	(719)
Net fees and commissions	1,482	—	1,482
Other operating income	1,738	47	1,785
Total income	9,228	41	9,269
Operating profit before tax	3,825	58	3,883
Total assets	419,978	14,585	434,563
Total liabilities	413,527	299	413,826
Contingent liabilities and commitments	81,721	94	81,815
Cost to acquire property, plant and equipment and intangible assets	1,308	166	1,474

5 Pensions

Defined contribution schemes

NWB Group sponsors a number of defined contribution pension schemes in different territories, which new employees are offered the opportunity to join.

Defined benefit schemes

NWB Group sponsors a number of pension schemes in the UK and overseas, including the Main section of the NatWest Group Pension Fund (the "Main section") which operates under UK trust law and is managed and administered on behalf of its members in accordance with the terms of the trust deed, the scheme rules and UK legislation.

Pension fund trustees are appointed to operate each fund and ensure benefits are paid in accordance with the scheme rules and national law. The trustees are the legal owner of a scheme's assets, and have a duty to act in the best interests of all scheme members.

The schemes generally provide a pension of one-sixtieth of final pensionable salary for each year of service prior to retirement up to a maximum of 40 years and are contributory for current members. These have been closed to new entrants for over ten years, although active members continue to build up additional pension benefits, currently subject to 2% maximum annual salary inflation, while they remain employed by NWB Group.

The Main section corporate trustee is NatWest Pension Trustee Limited (the Trustee), a wholly owned subsidiary of NWB Plc, Principal Employer of the Main section. The Board of the Trustee comprises four member trustee directors selected from eligible active staff, deferred and pensioner members who apply and six appointed by NatWest Group. Under UK legislation, a defined benefit pension scheme is required to meet the statutory funding objective of having sufficient and appropriate assets to cover its liabilities (the pensions that have been promised to members). Similar governance principles apply to NWB Group's other pension schemes.

For accounting policy information see Accounting policies note 3.3.

Investment strategy

The assets of the Main section, which is typical of other group schemes, represent 97% of all plan assets at 31 December 2022 (2021 - 97%) and are invested as shown below.

The Main section employs physical, derivative and non-derivatives instruments to achieve a desired asset class exposure and to reduce the section's interest rate, inflation and currency risk. This means that the net funding position is considerably less sensitive to changes in market conditions than the value of the assets or liabilities in isolation. In particular, movements in interest rates and inflation are substantially hedged by the Trustee.

Over the year, increases in bond yields resulted in many pension schemes in the UK having to raise additional collateral to support Liability-driven investment positions held as part of their hedging strategies. Liability-driven investments (LDI) refer to assets that are expected to move broadly in line with liabilities on a specific basis. All the Group's schemes affected by this were able to raise the collateral needed from existing assets, with no additional support from the Group. The Trustee of the Group Pension Fund takes a prudent approach to liquidity and collateral and holds sufficient collateral to withstand substantial rises in gilt yields. The level of collateral held by some of the Group's smaller schemes was increased over the year, so as to ensure they could withstand further large rises in gilt yields if required.

	2022			2021		
Major classes of plan assets as a percentage of total plan assets of the Main section	Quoted %	Unquoted %	Total %	Quoted %	Unquoted %	Total %
Equities	**0.1**	**7.7**	**7.8**	3.7	4.7	8.4
Index linked bonds	**37.7**	**—**	**37.7**	46.7	—	46.7
Government bonds	**18.4**	**—**	**18.4**	9.8	—	9.8
Corporate and other bonds	**15.3**	**6.7**	**22.0**	10.7	4.4	15.1
Real estate	**—**	**6.0**	**6.0**	—	4.4	4.4
Derivatives	**—**	**8.2**	**8.2**	—	8.8	8.8
Cash and other assets	**—**	**(0.1)**	**(0.1)**	—	6.8	6.8
	71.5	**28.5**	**100.0**	70.9	29.1	100.0

The Main section's holdings of derivative instruments are summarised in the table below:

	2022			2021		
	Notional	Fair value		Notional	Fair value	
	amounts £bn	Assets £m	Liabilities £m	amounts £bn	Assets £m	Liabilities £m
Inflation rate swaps	**21**	**1,873**	**990**	20	1,408	796
Interest rate swaps	**103**	**14,317**	**12,546**	172	8,385	4,421
Currency forwards	**12**	**310**	**113**	12	61	98
Equity and bond call options	**—**	**—**	**—**	—	1	—
Equity and bond put options	**—**	**2**	**70**	—	1	3
Other	**1**	**14**	**19**	1	9	10

5 Pensions continued

Swaps have been executed at prevailing market rates and within standard market bid/offer spreads with a number of counterparties, including NWB Plc.

At 31 December 2022, the gross notional value of the swaps was £124 billion (2021 - £192 billion) and had a net positive fair value of £2,642 million (2021 - £4,573 million) against which the counterparties had posted approximately 112% collateral.

The schemes do not invest directly in NWB Group but may have exposure to NWB Group through indirect holdings. The trustees of the respective UK schemes are responsible for ensuring that indirect investments in NWB Group do not exceed the regulatory limit of 5% of plan assets.

	NWB Group				NWB Plc			
Changes in value of net pension asset/(liability)	Fair value of plan assets £m	Present value of defined benefit obligation (1) £m	Asset ceiling/ minimum funding (2) £m	Net pension asset/ (liability) £m	Fair value of plan assets £m	Present value of defined benefit obligation (1) £m	Asset ceiling/ minimum funding (2) £m	Net pension asset/ (liability) £m
At 1 January 2021	52,819	(45,214)	(7,660)	(55)	51,323	(43,883)	(7,453)	(13)
Currency translation and other adjustments	2	1	(1)	2	—	1	(1)	—
Income statement - operating expenses	735	(801)	(107)	(173)	727	(766)	(107)	(146)
Other comprehensive income	857	1,090	(2,478)	(531)	852	1,081	(2,478)	(545)
Contributions by employer	716	—	—	716	696	—	—	696
Contributions by plan participants and other scheme members	20	(20)	—	—	28	(28)	—	—
Benefits paid	(1,618)	1,618	—	—	(1,611)	1,611	—	—
Transfer to/from fellow subsidiaries	—	—	—	—	1,366	(1,163)	(207)	(4)
At 1 January 2022	53,531	(43,326)	(10,246)	(41)	53,381	(43,147)	(10,246)	(12)
Currency translation and other adjustments	**8**	**(8)**	**—**	**—**	**—**	**—**	**—**	**—**
Income statement - other expenses								
Net interest expense	**960**	**(769)**	**(184)**	**7**	**956**	**(764)**	**(184)**	**8**
Current service cost	**—**	**(164)**	**—**	**(164)**	**—**	**(153)**	**—**	**(153)**
Less, direct contributions from other scheme members	**—**	**8**	**—**	**8**	**—**	**18**	**—**	**18**
Past service cost	**—**	**(5)**	**—**	**(5)**	**—**	**(5)**	**—**	**(5)**
	960	**(930)**	**(184)**	**(154)**	**956**	**(904)**	**(184)**	**(132)**
Other comprehensive income								
Return on plan assets excluding recognised interest income(3)	**(18,757)**	**—**	**—**	**(18,757)**	**(18,736)**	**—**	**—**	**(18,736)**
Experience gains and losses	**—**	**(2,042)**	**—**	**(2,042)**	**—**	**(2,041)**	**—**	**(2,041)**
Effect of changes in actuarial financial assumptions(3)	**—**	**19,257**	**—**	**19,257**	**—**	**19,226**	**—**	**19,226**
Effect of changes in actuarial demographic assumptions	**—**	**23**	**—**	**23**	**—**	**23**	**—**	**23**
Asset ceiling adjustments	**—**	**—**	**963**	**963**	**—**	**—**	**963**	**963**
	(18,757)	**17,238**	**963**	**(556)**	**(18,736)**	**17,208**	**963**	**(565)**
Contributions by employer	**723**	**—**	**—**	**723**	**700**	**—**	**—**	**700**
Contributions by plan participants and other scheme members	**19**	**(19)**	**—**	**—**	**26**	**(26)**	**—**	**—**
Benefits paid	**(1,527)**	**1,527**	**—**	**—**	**(1,512)**	**1,512**	**—**	**—**
At 31 December 2022	**34,957**	**(25,518)**	**(9,467)**	**(28)**	**34,815**	**(25,357)**	**(9,467)**	**(9)**

(1) Defined benefit obligations are subject to annual valuation by independent actuaries.
(2) NWB Group recognises the net pension scheme surplus or deficit as a net asset or liability. In doing so, the funded status is adjusted to reflect any schemes with a surplus that NWB Group may not be able to access, as well as any minimum funding requirement to pay in additional contributions. This is most relevant to the Main section, where the current surplus is not recognised as the trustees may have control over the use of the surplus. Other NWB Group schemes that this applies to include the Ulster Bank Pension Scheme (NI).
(3) Changes in market conditions during 2022 resulted in a particularly large increase in discount rate, which is the key driver of the effect of changes in actuarial financial assumptions. Given the level of hedging in place, there was a corresponding reduction in the value of plan assets over the period. The experience losses shown are mainly as a result of inflation over the year being higher than expected.
(4) NWB Group expects to make contributions to the Main section of £196m million in 2023. In 2022 NWB Group made contributions of £722m, including a £500m contribution paid in two instalments in January and March 2022 as required by the ring fencing agreement with the Trustee.

5 Pensions continued

	All schemes	
	2022	2021
Amounts recognised on the balance sheet	**£m**	£m
Fund asset at fair value	**34,957**	53,531
Present value of fund liabilities	**(25,518)**	(43,326)
Funded status	**9,439**	10,205
Assets ceiling/minimum funding	**(9,467)**	(10,246)
	(28)	(41)

	NWB Group		NWB Plc	
	2022	2021	**2022**	2021
Net pension asset/(liability) comprises	**£m**	£m	**£m**	£m
Net assets of schemes in surplus (included in Other assets, Note 16)	**7**	7	**—**	—
Net liabilities of schemes in deficit (included in Other liabilities, Note 21)	**(35)**	(48)	**(9)**	(12)
	(28)	(41)	**(9)**	(12)

Funding and contributions by NWB Group

In the UK, the trustees of defined benefit pension schemes are required to perform funding valuations every three years. The trustees and the sponsor, with the support of the Scheme Actuary, agree the assumptions used to value the liabilities and to determine future contribution requirements. The funding assumptions incorporate a margin for prudence over and above the expected cost of providing the benefits promised to members, taking into account the sponsor's covenant and the investment strategy of the scheme. Similar arrangements apply in the other territories where NWB Group sponsors defined benefit pension schemes.

A full triennial funding valuation of the Main section, effective 31 December 2020, was completed during financial year 2021.

This triennial funding valuation determined the funding level to be 104%, pension liabilities to be £49 billion and the surplus to be £2 billion, all assessed on the agreed funding basis. The average cost of the future service of current members is 49% of salary before contributions from those members. In addition, the sponsor has agreed to meet administrative expenses. Following the ring-fencing agreement with the Trustee reached in 2018, additional contributions of up to £500 million p.a. are payable to the Main section should the Group make distributions to shareholders of an equal amount.

These contributions are capped at £1.5 billion in total; £500 million was paid in 2022 (2021 – £500 million). The remaining distribution linked contribution to the Main section would have fallen due in 2023, but NatWest Bank has agreed with the Trustee that assets to the value of the contributions falling due will instead be paid to a new legal structure. These assets will be restricted and are reserved to ensure they are available should they be needed by the Trustee according to agreed criteria in the future. The assets under this arrangement would be available to the Group to the extent that they are not needed under the defined trigger events.

The key assumptions used to determine the funding liabilities were the discount rate, which is determined based on fixed interest swap and gilt yields plus 0.64% per annum, and mortality assumptions, which result in life expectancies of 27.7/29.4 years for males/females who are currently age 60 and 28.9/30.7 years from age 60 for males/females who are currently aged 40.

The 2020 triennial valuation of the Group Pension Fund included an allowance for the estimated impact of guaranteed minimum pension equalisation, which is reflected in the IAS 19 valuation at 31 December 2022.

Accounting Assumptions

Placing a value on NWB Group's defined benefit pension schemes' liabilities requires NWB Group's management to make a number of assumptions, with the support of independent actuaries. The ultimate cost of the defined benefit obligations depends upon actual future events and the assumptions made are unlikely to be exactly borne out in practice, meaning the final cost may be higher or lower than expected.

5 Pensions continued

The most significant assumptions used for the Main section are shown below:

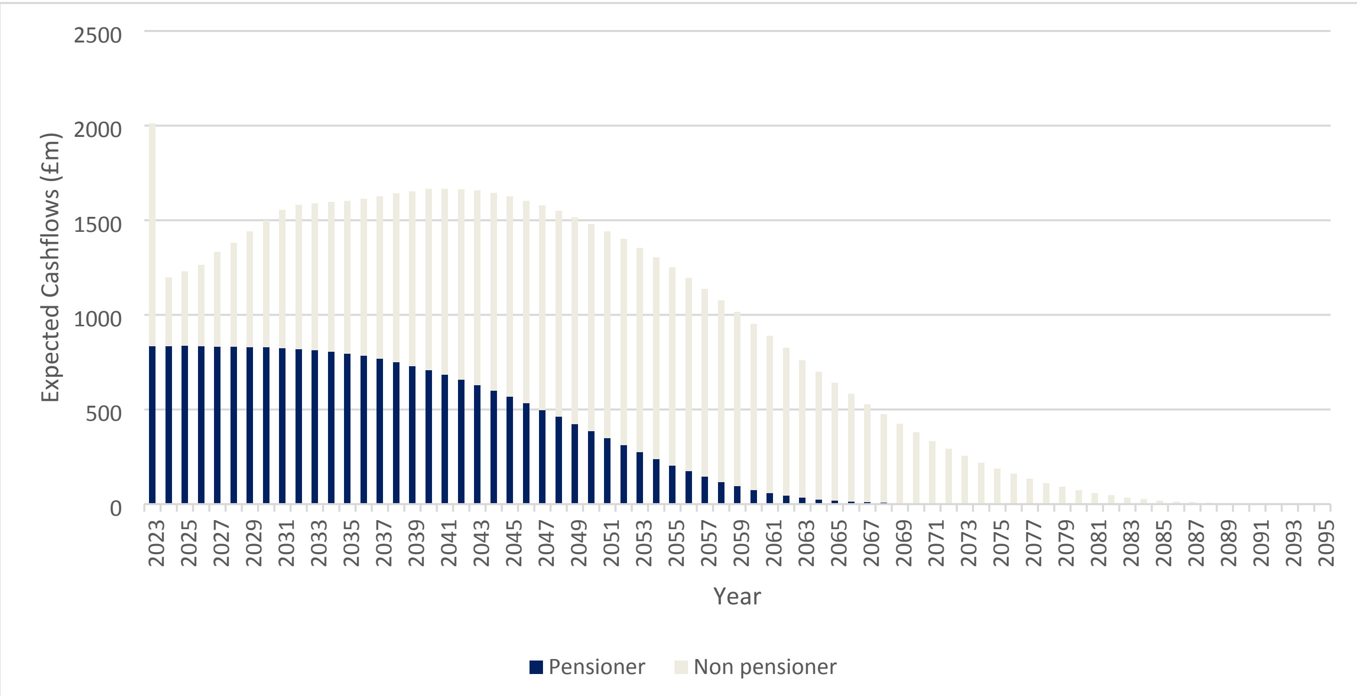
	Principal IAS 19 actuarial assumptions	
	2022	2021
	%	%
Discount rate	**5.0**	1.8
Inflation assumption (RPI)	**3.2**	3.3
Rate of increase in salaries	**1.8**	1.8
Rate of increase in deferred pensions	**3.2**	3.7
Rate of increase in pensions in payment	**2.5**	2.5
Lump sum conversion rate at retirement	**18**	18
Longevity at age 60:		
Current pensioners	**years**	years
Males	**27.3**	27.3
Females	**29.1**	29.0
Future pensioners, currently aged 40		
Males	**28.3**	28.2
Females	**30.1**	30.1

The above financial assumptions are long term assumptions set with reference to the period over which the obligations are expected to be settled.

Discount rate

The IAS 19 valuation uses a single discount rate set by reference to the yield on a basket of 'high quality' sterling corporate bonds. Significant judgment is required when setting the criteria for bonds to be included in the basket of bonds that is used to determine the discount rate used in the IAS 19 valuations. The criteria include issue size, quality of pricing and the exclusion of outliers. Judgment is also required in determining the shape of the yield curve at long durations: a constant credit spread relative to gilts is assumed. Sensitivity to the main assumptions is presented below.

The weighted average duration of the Main section's defined benefit obligation at 31 December 2022 is 15.3 years (2021 - 20 years). The chart below shows the projected benefit payment pattern for the Main section in nominal terms. These cashflows are based on the most recent formal actuarial valuation, effective 31 December 2020.



The larger outflow in 2023 represents an assumption in the actuarial valuation of the level of transfers out to 31 December 2023.

5 Pensions continued

The table below shows how the net pension asset of the Main section would change if the key assumptions used were changed independently. In practice the variables have a degree of correlation and do not move completely in isolation.

2022	(Decrease)/ increase in value of assets £m	(Decrease)/ increase in value of liabilities £m	Increase in net pension (obligations)/ assets £m
0.25% increase in interest rates/discount rate (2)	**(1,389)**	**(907)**	**(482)**
0.25% increase in inflation	**963**	**632**	**331**
0.25% increase in credit spreads	**(3)**	**(907)**	**904**
Longevity increase of one year	**—**	**767**	**(767)**
0.25% additional rate of increase in pensions in payment	**—**	**679**	**(679)**
Increase in equity values of 10% (1)	**267**	**—**	**267**

2021			
0.25% increase in interest rates/discount rate	(2,917)	(1,926)	(991)
0.25% increase in inflation	1,883	1,329	554
0.25% increase in credit spreads	(3)	(1,926)	1,923
Longevity increase of one year	—	1,790	(1,790)
0.25% additional rate of increase in pensions in payment	—	1,485	(1,485)
Increase in equity values of 10% (1)	442	—	442

(1) Includes both quoted and private equity.
(2) A 0.5% increase in the interest rates/discount rate would lead to a decrease of £2,689m in the value of assets and a £1,766m decrease in the value of liabilities at 31 December 2022.

The funded status is most sensitive to movements in credit spreads and longevity. Note the longevity sensitivities quoted above reflect the impact of a one year increase to single life annuities. The table below shows the combined change in the funded status of the Main section as a result of larger movements in these assumptions, assuming no changes in other assumptions.

		Change in life expectancies				
2022		- 2 years £bn	- 1 years £bn	No change £bn	+ 1 year £bn	+ 2 years £bn
Change in credit spreads	+50 bps	**3.2**	**2.5**	**1.8**	**1.1**	**0.4**
	No change	**1.6**	**0.8**	**—**	**(0.8)**	**(1.5)**
	-50 bps	**(0.3)**	**(1.2)**	**(2.0)**	**(2.8)**	**(3.6)**

		Change in life expectancies				
2021		- 2 years £bn	- 1 years £bn	No change £bn	+ 1 year £bn	+ 2 years £bn
Change in credit spreads	+50 bps	6.9	5.3	3.8	2.3	0.8
	No change	3.6	1.8	—	(1.8)	(3.6)
	-50 bps	(0.3)	(2.4)	(4.5)	(6.6)	(8.7)

The defined benefit obligation of the Main section is attributable to the different classes of scheme members in the following proportions:

Membership category	2022 %	2021 %
Active members	**8.4**	10.7
Deferred members	**41.0**	47.6
Pensioners and dependants	**50.6**	41.7
	100.0	100.0

The experience history of NWB Group schemes is shown below:

	NWB Group					NWB Plc				
History of defined benefit schemes	2022 £m	2021 £m	2020 £m	2019 £m	2018 £m	2022 £m	2021 £m	2020 £m	2019 £m	2018 £m
Fair value of plan assets	**34,957**	53,531	52,819	47,953	45,061	**34,815**	53,381	51,323	46,555	43,807
Present value of defined benefit obligations	**(25,518)**	(43,326)	(45,214)	(40,822)	(36,435)	**(25,357)**	(43,147)	(43,883)	(39,683)	(35,466)
Net surplus/(deficit)	**9,439**	10,205	7,605	7,131	8,626	**9,458**	10,234	7,440	6,872	8,341
Experience gains/(losses) on plan liabilities	**(2,042)**	244	431	264	(124)	**(2,041)**	245	427	275	(122)
Experience gains/(losses) on plan assets	**(18,757)**	857	5,586	3,156	(1,937)	**(18,736)**	852	5,486	3,021	(1,892)
Actual return on plan assets	**(17,797)**	1,592	6,549	4,437	(782)	**(17,780)**	1,579	6,422	4,266	(769)
Actual return on plan assets %	**(33.2%)**	3.0%	13.7%	9.8%	(1.7%)	**(33.3%)**	3.1%	13.8%	9.7%	(1.7%)

6 Auditor's remuneration

Amounts payable to NWB Group's auditors for statutory audit and other services are set out below:

	2022 £m	2021 £m
Fees payable for:		
- the audit of NWB Group's annual accounts	12.4	11.6
- the audit of NWB Plc's subsidiaries	3.1	2.1
Total audit and audit-related assurance service fees	15.5	13.7

Fees payable to the auditor for non-audit services are disclosed in the consolidated financial statements of NatWest Group plc.

7 Tax

	2022 £m	2021 £m
Current tax		
Charge for the year	(1,187)	(998)
Over provision in respect of prior years	63	38
	(1,124)	(960)
Deferred tax		
Charge for the year	(151)	(195)
UK tax rate change impact (1)	(82)	161
(Decrease)/increase in the carrying value of deferred tax assets in respect of UK losses	(6)	14
(Under)/over provision in respect of prior years (2)	(62)	4
Tax charge for the year	(1,425)	(976)

(1) It was announced in the UK Government's budget on 27 October 2021 that the main UK banking surcharge will decrease from 8% to 3% from 1 April 2023. This legislative change was enacted on 24 February 2022.
(2) Prior year tax adjustments incorporate refinements to tax computations made on submission and agreement with the tax authorities and adjustments to provisions in respect of uncertain tax positions.

The actual tax charge differs from the expected tax charge, computed by applying the standard rate of UK corporation tax of 19% (2021 – 19%), as follows:

	2022 £m	2021 £m
Expected tax charge	(972)	(738)
Losses and temporary differences in period where no deferred tax asset recognised	—	1
Foreign profits taxed at other rates	(8)	(6)
Items not allowed for tax:		
- losses on disposals and write-downs	(8)	(50)
- UK bank levy	(12)	(12)
- regulatory and legal actions	6	(73)
- other disallowable items	(13)	(15)
Non-taxable items	18	9
Taxable foreign exchange movements	2	1
Unrecognised losses brought forward and utilised	—	2
(Decrease)/increase in the carrying value of deferred tax assets in respect of:		
- UK losses	(6)	14
Banking surcharge	(373)	(328)
Tax on paid in equity dividends	22	16
UK tax rate change impact	(82)	161
Adjustments in respect of prior years	1	42
Actual tax charge	(1,425)	(976)

Judgment: Tax contingencies

NWB Group's corporate income tax charge and its provisions for corporate income taxes necessarily involve a significant degree of estimation and judgment. The tax treatment of some transactions is uncertain and tax computations are yet to be agreed with the tax authorities in a number of jurisdictions. NWB Group recognises anticipated tax liabilities based on all available evidence and, where appropriate, in the light of external advice. Any difference between the final outcome and the amounts provided will affect current and deferred income tax assets and charges in the period when the matter is resolved.

For accounting policy information see Accounting policies note 3.7.

7 Tax continued

Deferred tax

	NWB Group 2022 £m	NWB Group 2021 £m	NWB Plc 2022 £m	NWB Plc 2021 £m
Deferred tax liability	**130**	209	**—**	—
Deferred tax asset	**(1,117)**	(1,268)	**(1,104)**	(1,244)
Net deferred tax asset	**(987)**	(1,059)	**(1,104)**	(1,244)

Net deferred tax asset comprised:

NWB Group	Pension £m	Accelerated capital allowances £m	Expense provisions £m	Financial instruments (1) £m	Tax losses carried forward £m	Other £m	Total £m
At 1 January 2021	(136)	(282)	(60)	(16)	(600)	(29)	(1,123)
Charge/(credit) to income statement	15	12	2	1	(8)	(6)	16
Charge/(credit) to other comprehensive income	14	—	(3)	40	—	(3)	48
Currency translation and other adjustments	1	(2)	—	—	—	1	—
At 31 December 2021	(106)	(272)	(61)	25	(608)	(37)	(1,059)
Charge to income statement	**—**	**100**	**4**	**23**	**163**	**11**	**301**
Charge/(credit) to other comprehensive income	**39**	**—**	**1**	**(275)**	**—**	**(3)**	**(238)**
Currency translation and other adjustments	**—**	**10**	**—**	**—**	**—**	**(1)**	**9**
At 31 December 2022	**(67)**	**(162)**	**(56)**	**(227)**	**(445)**	**(30)**	**(987)**

NWB Plc	Pension £m	Accelerated capital allowances £m	Expense provisions £m	Financial instruments (1) £m	Tax losses carried forward £m	Other £m	Total £m
At 1 January 2021	(130)	(438)	(48)	(13)	(592)	(27)	(1,248)
Charge/(credit) to income statement	13	(29)	—	—	(9)	(7)	(32)
Charge/(credit) to other comprehensive income	14	—	(3)	40	—	(3)	48
Amounts transferred from Ulster Bank Limited	—	(2)	(2)	—	(7)	(1)	(12)
At 31 December 2021	(103)	(469)	(53)	27	(608)	(38)	(1,244)
Charge to income statement	**—**	**186**	**2**	**18**	**163**	**11**	**380**
Charge/(credit) to other comprehensive income	**38**	**—**	**1**	**(276)**	**—**	**(3)**	**(240)**
At 31 December 2022	**(65)**	**(283)**	**(50)**	**(231)**	**(445)**	**(30)**	**(1,104)**

(1) The in-year movement predominantly relates to cash flow hedges.

Deferred tax assets in respect of unused tax losses are recognised if the losses can be used to offset probable future taxable profits after taking into account the expected reversal of other temporary differences. Recognised deferred tax assets in respect of tax losses are analysed further below.

	2022 £m	2021 £m
UK tax losses carried forward		
- NWB Plc	**445**	608
	445	608

7 Tax continued

Critical accounting policy: Deferred tax

The deferred tax assets of £1,117 million as at 31 December 2022 (2021 - £1,268 million) principally comprises losses which arose in the UK, and temporary differences. These deferred tax assets are recognised to the extent that it is probable that there will be future taxable profits to recover them.

It was announced in the UK Government's budget on 27 October 2021 that the UK banking surcharge will decrease from 8% to 3% from 1 April 2023. This legislative change was enacted on 24 February 2022. NWB Group's closing deferred tax assets and liabilities have therefore been recalculated taking into account this change of rate and the applicable period the deferred tax assets and liabilities are expected to crystallise.

Judgment - NWB Group has considered the carrying value of deferred tax assets and concluded that, based on management's estimates, sufficient taxable profits will be generated in future years to recover recognised deferred tax assets.

Estimate - These estimates are based on forecast performance for management's detailed plans. They have regard to inherent uncertainties, such as climate change.

UK tax losses - Under UK tax rules, tax losses can be carried forward indefinitely. As the recognised tax losses in the Group arose prior to 1 April 2015, credit in future periods is given against 25% of profits at the main rate of UK corporation tax, excluding the Banking Surcharge rate introduced by The Finance (No. 2) Act 2015.

National Westminster Bank Plc – A deferred tax asset of £445 million (2021 - £608 million) has been recognised in respect of losses of £1,847 million of total losses of £2,718 million carried forward at 31 December 2022. The losses arose principally as a result of significant impairment and conduct charges between 2009 and 2012 during challenging economic conditions in the UK banking sector. NWB Plc expects the deferred tax asset to be utilised against future taxable profits by the end of 2027.

Unrecognised deferred tax

Deferred tax assets of £223 million (2021 - £237 million) have not been recognised in respect of tax losses and other deductible temporary differences carried forward of £892 million (2021 - £949 million) in jurisdictions where doubt exists over the availability of future taxable profits. The tax losses and other deductible temporary differences carried forward have no expiry date.

Deferred tax liabilities of £105 million (2021 - £123 million) on aggregate underlying temporary differences of £468 million (2021 - £490 million) have not been recognised in respect of retained earnings of overseas subsidiaries and held-over gains on the incorporation of certain overseas branches. Retained earnings of overseas subsidiaries are expected to be reinvested indefinitely or remitted to the UK free from further taxation. No taxation is expected to arise in the foreseeable future in respect of held-over gains on which deferred tax is not recognised. Changes to UK tax legislation largely exempts from UK tax overseas dividends received on or after 1 July 2009.

8 Profit/(loss) dealt with in the accounts of the NWB Plc

As permitted by section 408(3) of the Companies Act 2006, no income statement for the Bank has been presented as a primary financial statement.

9 Financial instruments – classification

Judgment: classification of financial assets

Classification of financial assets between amortised cost and fair value through other comprehensive income requires a degree of judgment in respect of business models and contractual cashflows.

- The business model criteria is assessed at a portfolio level to determine whether assets are classified as held to collect or held to collect and sell. Information that is considered in determining the applicable business model includes the portfolio's policies and objectives; how the performance and risks of the portfolio are managed, evaluated and reported to management; and the frequency, volume and timing of sales in prior periods, sales expectation for future periods, and the reasons for sales.
- The contractual cash flow characteristics of financial assets are assessed with reference to whether the cash flows represent solely payments of principal and interest. A level of judgment is made in assessing terms that could change the contractual cash flows so that it would not meet the condition for solely payments of principal and interest, including contingent and leverage features, non-recourse arrangements and features that could modify the time value of money.

We originate loans that include features that change the contractual cash flows based on the borrower meeting certain contractually specified environmental, social and governance (ESG) targets. These are known as ESG-linked (or sustainability-linked) loans. As part of the terms of these loans, the contractual interest rate is reduced or increased if the borrower meets (fails to meet) specific targets linked to the activity of the borrower for example reducing carbon emissions, increase the level of diversity at Board level, sustainable supply chain, etc. ESG features are first assessed to ascertain whether the adjustment to the contractual cash flows results in a de minimis exposure to risks or volatility in those contractual cash flows. If this is the case the classification of the loan is not affected. If the effect of the ESG feature is assessed as being more than de minimis, we apply judgement to ensure that the ESG features do not generate compensation for risks that are not in line with a basic lending arrangement. This includes amongst other aspects a review of the consistency of the ESG targets with the asset or activity of the borrower, consideration of the targets within our risk appetite etc. Some of these loans are an integral part of NatWest Group's climate and sustainable funding and financing target.

For accounting policy information see Accounting policies notes 3.8, 3.9, 3.10 and 3.12.

The following tables analyse NWB Group's financial assets and liabilities in accordance with the categories of financial instruments in IFRS 9.

	NWB Group				
	MFVTPL	FVOCI	Amortised cost	Other assets	Total
Assets	£m	£m	£m	£m	£m
Cash and balances at central banks			73,065		73,065
Derivatives (1)	4,407				4,407
Loans to banks - amortised cost (2)			3,197		3,197
Loans to customers - amortised cost (3)			301,684		301,684
Amounts due from holding companies and fellow subsidiaries	5	—	4,173	725	4,903
Other financial assets	417	9,713	4,416		14,546
Other assets				7,667	7,667
31 December 2022	4,829	9,713	386,535	8,392	409,469
Cash and balances at central banks			101,213		101,213
Derivatives (1)	2,460				2,460
Loans to banks - amortised cost (2)			4,182		4,182
Loans to customers - amortised cost (3)			286,971		286,971
Amounts due from holding companies and fellow subsidiaries	348	—	2,554	617	3,519
Other financial assets	226	26,148	2,657		29,031
Other assets				7,187	7,187
31 December 2021	3,034	26,148	397,577	7,804	434,563

9 Financial instruments – classification continued

Liabilities	Held-for-trading £m	Amortised cost £m	Other liabilities £m	Total £m
Bank deposits (4)		16,060		16,060
Customer deposits		322,614		322,614
Amounts due to holding companies and fellow subsidiaries	104	38,511	156	38,771
Derivatives (1)	2,088			2,088
Other financial liabilities	17	5,367		5,384
Subordinated liabilities		197		197
Notes in circulation		809		809
Other liabilities (5)		960	2,510	3,470
31 December 2022	2,209	384,518	2,666	389,393
Bank deposits (4)		22,831		22,831
Customer deposits		329,440		329,440
Amounts due to holding companies and fellow subsidiaries	—	45,034	102	45,136
Derivatives (1)	4,119			4,119
Other financial liabilities	99	7,152		7,251
Subordinated liabilities		211		211
Notes in circulation		904		904
Other liabilities (5)		1,071	2,863	3,934
31 December 2021	4,218	406,643	2,965	413,826

(1) Includes net hedging derivative assets of £743 million (2021 – £113 million) and net hedging derivative liabilities of £258 million (2021 - £71 million).
(2) Includes items in the course of collection from other third party banks of £2 million (2021 - £3 million).
(3) Includes finance lease receivables of £8,324 million (2021 - £8,434 million).
(4) Includes items in the course of transmission to other banks is nil (2021 - £19 million).
(5) Includes lease liabilities of £901 million (2021 - £1,008 million), held at amortised cost.

Additional information on finance lease receivables

The following table shows the reconciliation of undiscounted finance lease receivables to net investment in finance leases:

	NWB Group		NWB Plc	
Amount receivable under finance leases	2022 £m	2021 £m	2022 £m	2021 £m
Within 1 year	3,212	3,252	137	271
1 to 2 years	2,247	2,019	55	138
2 to 3 years	1,381	1,433	21	55
3 to 4 years	825	748	20	21
4 to 5 years	404	420	15	20
After 5 years	1,089	1,356	38	54
Lease payments total	9,158	9,228	286	559
Unguaranteed residual values	171	225	—	—
Future drawdowns	(13)	(21)	—	—
Unearned income	(879)	(856)	(8)	(15)
Present value of lease payments	8,437	8,576	278	544
Impairments	(113)	(142)	(11)	(13)
Net investment in finance leases	8,324	8,434	267	531

9 Financial instruments - classification continued

The following tables analyse NWB Plc's financial assets and liabilities in accordance with the categories of financial instruments in IFRS 9.

	NWB Plc				
	MFVTPL £m	FVOCI £m	Amortised cost £m	Other assets £m	Total £m
Assets					
Cash and balances at central banks			73,062		73,062
Derivatives (1)	4,430				4,430
Loans to banks - amortised cost (2)			2,870		2,870
Loans to customers - amortised cost (3)			267,401		267,401
Amounts due from holding companies and fellow subsidiaries	608	—	30,585	940	32,133
Other financial assets	417	9,713	4,050		14,180
Investment in group undertakings				2,030	2,030
Other assets				5,641	5,641
31 December 2022	5,455	9,713	377,968	8,611	401,747
Cash and balances at central banks			101,210		101,210
Derivatives (1)	2,547				2,547
Loans to banks - amortised cost (2)			3,638		3,638
Loans to customers - amortised cost (3)			255,443		255,443
Amounts due from holding companies and fellow subsidiaries	1,012	—	25,354	756	27,122
Other financial assets	226	26,148	2,275		28,649
Investment in group undertakings				2,319	2,319
Other assets				5,183	5,183
31 December 2021	3,785	26,148	387,920	8,258	426,111

	NWB Plc				
	Held-for-trading £m	DFV £m	Amortised cost £m	Other liabilities £m	Total £m
Liabilities					
Bank deposits (4)			16,059		16,059
Customer deposits			281,558		281,558
Amounts due to holding companies and fellow subsidiaries	104	248	74,502	183	75,037
Derivatives (1)	2,582				2,582
Other financial liabilities	17	—	4,508		4,525
Subordinated liabilities			191		191
Notes in circulation			809		809
Other liabilities (5)			858	1,885	2,743
31 December 2022	2,703	248	378,485	2,068	383,504
Bank deposits (4)			22,829		22,829
Customer deposits			292,470		292,470
Amounts due to holding companies and fellow subsidiaries	—	242	76,344	136	76,722
Derivatives (1)	4,336				4,336
Other financial liabilities	99	—	6,285		6,384
Subordinated liabilities			205		205
Notes in circulation			904		904
Other liabilities (5)			958	2,137	3,095
31 December 2021	4,435	242	399,995	2,273	406,945

(1) Includes net hedging derivative assets of £738 million (2021 - £108 million) and net hedging derivative liabilities of £251 million (2021 - £55 million).
(2) Includes items in the course of collection from other banks of £2 million (2021 - £3 million).
(3) Includes finance lease receivables of £267 million (2021 - £531 million).
(4) Includes items in the course of transmission to other banks of nil (2021 - £19 million).
(5) Includes lease liabilities of £802 million (2021 - £898 million), held at amortised cost.

9 Financial instruments - classification continued

The following tables include amounts due from/to holding companies and fellow subsidiaries:

	NWB Group					
	2022			2021		
	Holding companies £m	Fellow subsidiaries £m	Total £m	Holding companies £m	Fellow subsidiaries £m	Total £m
Assets						
Loans to banks - amortised cost	—	4,100	4,100	—	2,542	2,542
Loans to customers - amortised cost	—	73	73	—	12	12
Other financial assets	—	5	5	—	348	348
Other assets	15	710	725	14	603	617
Amounts due from holding companies and fellow subsidiaries	15	4,888	4,903	14	3,505	3,519
Derivatives (1)	405	2,977	3,382	47	910	957
Liabilities						
Bank deposits	—	22,919	22,919	—	25,216	25,216
Customer deposits	6,264	46	6,310	11,029	28	11,057
Subordinated liabilities	2,941	—	2,941	3,074	—	3,074
MREL instruments issued to NatWest Holdings Ltd	6,339	—	6,339	5,687	—	5,687
Other financial liabilities	—	106	106	—	—	—
Other liabilities	33	123	156	—	102	102
Amounts due to holding companies and fellow subsidiaries	15,577	23,194	38,771	19,790	25,346	45,136
Derivatives (1)	403	667	1,070	127	695	822

	NWB Plc							
	2022				2021			
	Holding companies £m	Fellow subsidiaries £m	Subsidiaries £m	Total £m	Holding companies £m	Fellow subsidiaries £m	Subsidiaries £m	Total £m
Assets								
Loans to banks - amortised cost	—	3,585	10,547	14,132	—	2,042	7,595	9,637
Loans to customers - amortised cost	—	85	16,368	16,453	—	11	15,706	15,717
Other financial assets	—	4	604	608	—	352	660	1,012
Other assets	16	678	246	940	14	529	213	756
Amounts due from holding companies and fellow subsidiaries	16	4,352	27,765	32,133	14	2,934	24,174	27,122
Derivatives (1)	405	2,977	25	3,407	47	910	97	1,054
Liabilities								
Bank deposits	—	19,816	34,549	54,365	—	22,746	28,840	51,586
Customer deposits	6,263	75	4,776	11,114	11,029	10	5,200	16,239
Subordinated liabilities	2,941	—	—	2,941	3,074	—	—	3,074
MREL instruments issued to NatWest Holdings Ltd	6,328	—	—	6,328	5,687	—	—	5,687
Other financial liabilities	—	106	—	106	—	—	—	—
Other liabilities	33	94	56	183	—	99	37	136
Amounts due to holding companies and fellow subsidiaries	15,565	20,091	39,381	75,037	19,790	22,855	34,077	76,722
Derivatives (1)	403	666	527	1,596	127	695	222	1,044

(1) Intercompany derivatives are included within derivative classification on the balance sheet.

9 Financial instruments - classification continued

Interest rate benchmark reform

NWB Group continues to work on the transition of USD IBOR exposures to risk free rates in advance of the cessation date of 30 June 2023. Derivatives are expected to transition during April and May 2023 and other exposures in line with fallback provisions or deferred switches using widely accepted methodologies. The instruments yet to transition reflect an insignificant element of NWB Group's exposures. Instruments with exposures to other rates transitioned at the end of 2021, or at the first contractual reset date, or at a date agreed with the counterparty.

The level of exposures without explicit or agreed conversion provisions as of the preceding year were as follows:

	NWB Group			
	Rates subject to IBOR reform			
	GBP LIBOR	USD IBOR	Other IBOR	Total
2021	£m	£m	£m	£m
Loans to customers - amortised cost	2,129	2,659	4	4,792
Other financial assets	744	37	—	781
Other financial liabilities	1,070	—	—	1,070
Amounts due to holding company and fellow subsidiaries	—	3,058	—	3,058
Loan commitments (1)	790	3,785	55	4,630
Derivatives notional (£bn)	0.1	27.4	—	27.5

	NWB Plc			
	Rates subject to IBOR reform			
	GBP LIBOR	USD IBOR	Other IBOR	Total
2021	£m	£m	£m	£m
Loans to customers - amortised cost	1,946	2,113	—	4,059
Other financial assets	744	37	—	781
Other financial liabilities	1,070	—	—	1,070
Amounts due to holding company and fellow subsidiaries	—	3,058	—	3,058
Loan commitments (1)	754	3,785	55	4,594
Derivatives notional (£bn)	0.1	27.4	—	27.5

1) Certain loan commitments are multi-currency facilities. Where these are fully undrawn, they are allocated to the principal currency of the facility. Where the facilities are partly drawn, the remaining loan commitment is allocated to the currency with the largest drawn amount.

At 31 December 2021 NWB Group held certain currency swaps with both legs subject to IBOR reform, for which only the GBP LIBOR leg has an explicit or agreed conversion provisions as of 31 December 2021, but not the entire contract. These include currency swaps of GBP LIBOR of £0.4 billion with USD IBOR; and currency swaps of USD IBOR of £0.4 billion with GBP LIBOR.

AT1 issuances

NWB Plc has issued certain capital instruments (AT1), under which reset clauses are linked to IBOR rates subject to reform. Where under the contractual terms of the instrument the coupon resets to a rate which has IBOR as a specified component of its pricing structure these are subject to IBOR reform and are shown in Note 22. As part of its capital management activities the NWB Plc has acquired certain equity instruments issued by its subsidiaries which contain coupons or reset clauses linked to IBOR rates subject to reform.

	31 December 2021 £m
£167 million 6%	167
£35 million 6.09%	35
£60 million 7.335%	60

9 Financial instruments - classification continued

Financial instruments – financial assets and liabilities that can be offset

The tables below present information on financial assets and liabilities that are offset on the balance sheet under IFRS or subject to enforceable master netting agreements together with financial collateral received or given.

	NWB Group								
	Instruments which can be offset			Potential for offset not recognised by IFRS					
2022	Gross £m	IFRS offset £m	Balance sheet £m	Effect of master netting and similar agreements £m	Cash collateral £m	Securities collateral £m	Net amount after the effect of netting agreements and and related collateral £m	Instruments outside netting agreements £m	Balance sheet total £m
Derivative assets	**20,617**	**(16,221)**	**4,396**	**(1,523)**	**(116)**	**(361)**	**2,396**	**11**	**4,407**
Derivative liabilities	**21,652**	**(19,602)**	**2,050**	**(1,523)**	**(280)**	**—**	**247**	**38**	**2,088**
Net position (1)	**(1,035)**	**3,381**	**2,346**	**—**	**164**	**(361)**	**2,149**	**(27)**	**2,319**
Non trading reverse repos	**23,255**	**(4,090)**	**19,165**	**—**	**—**	**(19,165)**	**—**	**—**	**19,165**
Non trading repos	**14,260**	**(4,090)**	**10,170**	**—**	**—**	**(10,170)**	**—**	**—**	**10,170**
Net position	**8,995**	**—**	**8,995**	**—**	**—**	**(8,995)**	**—**	**—**	**8,995**
2021									
Derivative assets	10,399	(7,961)	2,438	(1,644)	(96)	—	698	22	2,460
Derivative liabilities	12,676	(8,568)	4,108	(1,644)	(355)	(1,842)	267	11	4,119
Net position (1)	(2,277)	607	(1,670)	—	259	1,842	431	11	(1,659)
Non trading reverse repos	33,397	(7,594)	25,803	—	—	(25,803)	—	—	25,803
Non trading repos	29,267	(7,594)	21,673	—	—	(21,673)	—	—	21,673
Net position	4,130	—	4,130	—	—	(4,130)	—	—	4,130

	NWB Plc								
	Instruments which can be offset			Potential for offset not recognised by IFRS					
2022	Gross £m	IFRS offset £m	Balance sheet £m	Effect of master netting and similar agreements £m	Cash collateral £m	Securities collateral £m	Net amount after the effect of netting agreements and and related collateral £m	Instruments outside netting agreements £m	Balance sheet total £m
Derivatives assets	**20,632**	**(16,221)**	**4,411**	**(1,526)**	**(116)**	**(361)**	**2,408**	**19**	**4,430**
Derivative liabilities	**21,688**	**(19,602)**	**2,086**	**(1,526)**	**(280)**	**—**	**280**	**496**	**2,582**
Net position (1)	**(1,056)**	**3,381**	**2,325**	**—**	**164**	**(361)**	**2,128**	**(477)**	**1,848**
Non trading reverse repos	**23,255**	**(4,090)**	**19,165**	**—**	**—**	**(19,165)**	**—**	**—**	**19,165**
Non trading repos	**14,260**	**(4,090)**	**10,170**	**—**	**—**	**(10,170)**	**—**	**—**	**10,170**
Net position (1)	**8,995**	**—**	**8,995**	**—**	**—**	**(8,995)**	**—**	**—**	**8,995**
2021									
Derivatives assets	10,476	(7,961)	2,515	(1,649)	(96)	—	770	32	2,547
Derivative liabilities	12,682	(8,568)	4,114	(1,649)	(355)	(1,842)	268	222	4,336
Net position (1)	(2,206)	607	(1,599)	—	259	1,842	502	(190)	(1,789)
Non trading reverse repos	33,397	(7,594)	25,803	—	—	(25,803)	—	—	25,803
Non trading repos	29,267	(7,594)	21,673	—	—	(21,673)	—	—	21,673
Net position	4,130	—	4,130	—	—	(4,130)	—	—	4,130

(1) Within NWB Group and NWB Plc, the net IFRS offset balance of £3,381 million (2021 - £607 million) relates to variation margin netting reflected on other balance sheet lines.

10 Financial instruments – valuation

Critical accounting policy: Fair value - financial instruments

Financial instruments classified as mandatory fair value through profit or loss; held-for-trading; designated fair value through profit or loss and fair value through other comprehensive income are recognised in the financial statements at fair value. All derivatives are measured at fair value.

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. A fair value measurement considers the characteristics of the asset or liability and the assumptions that a market participant would consider when pricing the asset or liability.

NWB Group manages some portfolios of financial assets and financial liabilities based on its net exposure to either market or credit risk. In these cases, the fair value is derived from the net risk exposure of that portfolio with portfolio level adjustments applied to incorporate bid-offer spreads, counterparty credit risk, and funding costs (see 'Valuation Adjustments').

Where the market for a financial instrument is not active, fair value is established using a valuation technique. These valuation techniques involve a degree of estimation, the extent of which depends on the instrument's complexity and the availability of market-based data. The complexity and uncertainty in the financial instrument's fair value is categorised using the fair value hierarchy.

For accounting policy information see Accounting policies notes 3.8 and 3.12.

Valuation

Fair value hierarchy

Financial instruments carried at fair value have been classified under the fair value hierarchy. The classification ranges from level 1 to level 3, with more expert judgment and price uncertainty for those classified at level 3.

The determination of an instrument's level cannot be made at a global product level as a single product type can be in more than one level. For example, a single name corporate credit default swap could be in level 2 or level 3 depending on the level of market activity for the referenced entity.

Level 1 – instruments valued using unadjusted quoted prices in active and liquid markets, for identical financial instruments. Examples include government bonds, listed equity shares and certain exchange-traded derivatives.

Level 2 - instruments valued using valuation techniques that have observable inputs. Observable inputs are those that are readily available with limited adjustments required. Examples include most government agency securities, investment-grade corporate bonds, certain mortgage products - including CLOs, most bank loans, repos and reverse repos, state and municipal obligations, most notes issued, certain money market securities, loan commitments and most OTC derivatives.

Level 3 - instruments valued using a valuation technique where at least one input which could have a significant effect on the instrument's valuation, is not based on observable market data. Examples include non-derivative instruments which trade infrequently, certain syndicated and commercial mortgage loans, private equity, and derivatives with unobservable model inputs.

10 Financial instruments – valuation continued

Valuation techniques

NWB Group derives the fair value of its instruments differently depending on whether the instrument is a non-modelled or a modelled product.

Non-modelled products are valued directly from a price input, typically on a position-by-position basis. Examples include equities and most debt securities.

Non-modelled products can fall into any fair value levelling hierarchy depending on the observable market activity, liquidity, and assessment of valuation uncertainty of the instruments. The assessment of fair value and the classification of the instrument to a fair value level is subject to the valuation controls discussed in the "Valuation control" section.

Modelled products valued using a pricing model range in complexity from comparatively vanilla products such as interest rate swaps and options (e.g., interest rate caps and floors) through to more complex derivatives (e.g., balance guarantee swaps).

For modelled products, the fair value is derived using the model and the appropriate model inputs or parameters, as opposed to from a cash price equivalent. Model inputs are taken either directly or indirectly from available data, where some inputs are also modelled.

Fair value classification of modelled instruments is either level 2 or level 3, depending on the product/model combination, the observability and quality of input parameters and other factors. All these must be assessed to classify a position. The modelled product is assigned to the lowest fair value hierarchy level of any significant input used in that valuation.

Most derivative instruments, for example vanilla interest rate swaps, foreign exchange swaps and liquid single name credit derivatives, are classified as level 2. This is because they are vanilla products valued using standard market models and with observable inputs. Level 2 products range from vanilla to more complex products, where more complex products remain classified as Level 2 due to the materiality of any unobservable inputs.

Inputs to valuation models

When using valuation techniques, the fair value can be significantly affected by the choice of valuation model and underlying assumptions. Factors considered include the cashflow amounts and timing of those cash flows, and application of appropriate discount rates, incorporating both funding and credit risk. Values between and beyond available data points are obtained by interpolation and extrapolation. The principal inputs to these valuation techniques are as follows:

Bond prices - quoted prices are generally available for government bonds, certain corporate securities, and some mortgage-related products.

Credit spreads - these express the return required over a benchmark rate or index to compensate for the referenced credit risk. Where available, these are derived from the price of credit default swaps or other credit-based instruments, such as debt securities. When direct prices are not available, credit spreads are determined with reference to available prices of entities with similar characteristics.

Interest rates - these are principally based on interest rate swap prices referencing benchmark interest rates. Benchmark rates include Interbank Offered Rates (IBOR) and the Overnight Index Swap (OIS) rate, including SONIA (Sterling Overnight Interbank Average Rate). Other quoted interest rates may also be used from both the bond and futures markets.

Foreign currency exchange rates - there are observable prices both for spot and forward contracts and futures in the world's major currencies.

Equity and equity index prices - quoted prices are generally readily available for equity shares listed on the world's major stock exchanges and for major indices on such shares.

Price volatilities and correlations - volatility is a measure of the tendency of a price to change with time. Correlation measures the degree which two or more prices or variables are observed to move together. Variables that move in the same direction show positive correlation; those that move in opposite directions are negatively correlated.

Prepayment rates - rates used to reflect how fast a pool of assets prepay. The fair value of a financial instrument that can be prepaid by the issuer or borrower differs from that of an instrument that cannot be prepaid. When valuing prepayable instruments, the value of this prepayment option is considered.

Recovery rates/loss given default - these are used as an input to valuation models and reserves for asset-backed securities and other credit products as an indicator of severity of losses on default. Recovery rates are primarily sourced from market data providers, the value of the underlying collateral, or inferred from observable credit spreads.

Valuation control

NWB Group's control environment for the determination of the fair value of financial instruments includes formalised procedures for the review and validation of fair values. This review is performed by an independent price verification (IPV) team.

IPV is a key element of the control environment. Valuations are first performed by the business which entered into the transaction. These valuations are then reviewed by the IPV team, independent of those trading the financial instruments, in light of available pricing evidence.

Independent pricing data is collated from a range of sources. Each source is reviewed for quality and the independent data applied in the IPV processes using a formalised input quality hierarchy. Consensus services are one source of independent data and encompass interest rate, currency, credit, and bond markets, providing comprehensive coverage of vanilla products and a wide selection of exotic products.

Where measurement differences are identified through the IPV process these are grouped by the quality hierarchy of the independent data. If the size of the difference exceeds defined thresholds, an adjustment is made to bring the valuation to within the independently calculated fair value range.

10 Financial instruments – valuation continued

IPV takes place at least monthly, for all fair value financial instruments. The IPV control includes formalised reporting and escalation of any valuation differences in breach of established thresholds.

The quality and completeness of the information gathered in the IPV process gives an indication as to the liquidity and valuation uncertainty of an instrument and forms part of the information considered when determining fair value hierarchy classifications.

Initial fair value level classification of a financial instrument is carried out by the IPV team. These initial classifications are subject to senior management review. Particular attention is paid to instruments transferring from one level to another, new instrument classes or products, instruments where the transaction price is significantly different from the fair value and instruments where valuation uncertainty is high.

Valuation Committees are made up of valuation specialists and senior business representatives from various functions and oversee pricing, reserving and valuations issues. These committees meet monthly to review and ratify any methodology changes. The Executive Valuation Committee meets quarterly to address key material and subjective valuation issues, to review items escalated by Valuation Committees and to discuss other relevant industry matters.

The Group model risk policy sets the policy for model documentation, testing and review. Governance of the model risk policy is carried out by the Group model risk oversight committee, which comprises model risk owners and independent model experts. All models are required to be independently validated in accordance with the Model Risk Policy.

Key areas of judgment

Over the years the business has simplified, with most products classified as level 1 or 2 of the fair value hierarchy. However, the diverse range of products historically traded by NWB Group means some products remain classified as level 3. Level 3 indicates a significant level of pricing uncertainty, where expert judgment is used. As such, extra disclosures are required in respect of level 3 instruments.

In general, the degree of expert judgment used and hence valuation uncertainty depends on the degree of liquidity of an instrument or input.

Where markets are liquid, little judgment is required. However, when the information regarding the liquidity in a particular market is not clear, a judgment may need to be made. For example, for an equity traded on an exchange, daily volumes of trading can be seen, but for an over the counter (OTC) derivative, assessing the liquidity of the market with no central exchange is more challenging.

A key related matter is where a market moves from liquid to illiquid or vice versa. Where this movement is considered temporary, the fair value level is not changed. For example, if there is little market trading in a product on a reporting date but at the previous reporting date and during the intervening period the market has been liquid. In this case, the instrument will continue to be classified at the same level in the hierarchy. This is to provide consistency so that transfers between levels are driven by genuine changes in market liquidity and do not reflect short term or seasonal effects. Material movements between levels are reviewed quarterly by the Business and IPV.

The breadth and depth of the IPV data allows for a rules-based quality assessment to be made of market activity, liquidity, and pricing uncertainty, which assists with the process of allocation to an appropriate level. Where suitable independent pricing information is not readily available, the quality assessment will result in the instrument being assessed as level 3.

The table below shows the assets and liabilities held by NWB Group split by fair value hierarchy level. Level 1 are considered the most liquid instruments, and level 3 the most illiquid, valued using expert judgment and hence carrying the most significant price uncertainty.

	2022				2021			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Assets								
Derivatives	—	4,387	20	4,407	—	2,459	1	2,460
Amounts due from holding companies and fellow subsidiaries	—	5	—	5	—	348	—	348
Other financial assets								
Securities	5,105	4,606	2	9,713	20,229	5,718	2	25,949
Loans - MFVTPL	—	369	48	417	—	165	50	215
Loans - FVOCI	—	—	—	—	—	210	—	210
Total financial assets held at fair value	5,105	9,367	70	14,542	20,229	8,900	53	29,182
As % of total fair value assets	35%	65%	0%		69%	31%	0%	
Liabilities								
Derivatives	—	2,081	7	2,088	—	3,980	139	4,119
Amounts due to holding companies and fellow subsidiaries	—	104	—	104	—	—	—	—
Other financial liabilities								
Deposits - HFT	—	17	—	17	—	99	—	99
Total financial liabilities held at fair value	—	2,202	7	2,209	—	4,079	139	4,218
As % of total fair value liabilities	—	100%	0%		—	97%	3%	

(1) Transfers between levels are deemed to have occurred at the beginning of the quarter in which the instrument was transferred.

10 Financial instruments – valuation continued

Valuation adjustments

When valuing financial instruments in the trading book, adjustments are made to mid-market valuations to cover bid-offer spread, funding and credit risk. These adjustments are presented in the table below:

Adjustment	2022 £m	2021 £m
Funding – FVA	**166**	31
Credit – CVA	**—**	1
Bid – Offer	**22**	27
	188	59

Funding valuation adjustments on the group defined benefit pension plan increased during the year, primarily driven by increases in GBP interest rates.

Funding valuation adjustments (FVA)

FVA represents an estimate of the adjustment that a market participant would make to incorporate funding costs and benefits that arise in relation to derivative exposures. FVA is calculated as a portfolio level adjustment and can result in either a funding charge (positive) or funding benefit (negative).

Funding levels are applied to estimated potential future exposures. For uncollateralised derivatives, the exposure reflects the future valuation of the derivative. For collateralised derivatives, the exposure reflects the difference between the future valuation of the derivative and the level of collateral posted.

Credit valuation adjustments (CVA)

CVA represents an estimate of the adjustment to fair value that is made to incorporate the counterparty credit risk inherent in derivative exposures. CVA is actively managed by a credit and market risk hedging process, and therefore movements in CVA are partially offset by trading revenue on the hedges.

The CVA is calculated on a portfolio basis reflecting an estimate of the amount a third party would charge to assume the credit risk.

Collateral held under a credit support agreement is factored into the CVA calculation. In such cases where NWB Group holds collateral against counterparty exposures, CVA is held to the extent that residual risk remains.

Bid-offer

Fair value positions are required to be marked to exit, represented by bid (long positions) or offer (short positions) levels. Non-derivative positions are typically marked directly to bid or offer prices. However derivative exposures are adjusted to exit levels by taking bid-offer reserves calculated on a portfolio basis. The bid-offer approach is based on current market spreads and standard market bucketing of risk.

Bid-offer spreads vary by maturity and risk type to reflect different spreads in the market. For positions where there is no observable quote, the bid-offer spreads are widened in comparison to proxies to reflect reduced liquidity or observability.

Netting is applied on a portfolio basis to reflect the value at which NWB Group believes it could exit the net risk of the portfolio, rather than the sum of exit costs for each of the portfolio's individual trades. This is applied where the asset and liability positions are managed as a portfolio for risk and reporting purposes.

Product and deal specific

On initial recognition of financial assets and liabilities valued using valuation techniques which have a significant dependence on information other than observable market data, any difference between the transaction price and that derived from the valuation technique is deferred. Such amounts are recognised in the income statement over the life of the transaction, when market data becomes observable, or when the transaction matures or is closed out as appropriate.

Where system generated valuations do not accurately reflect market prices, manual valuation adjustments are applied either at a position or portfolio level. Manual adjustments are subject to the scrutiny of independent control teams and are subject to monthly review by senior management.

L3 additional information

For illiquid assets and liabilities, classified as level 3, additional information is provided on the valuation techniques used and price sensitivity of the products to those inputs. This is to enable the reader to gauge the level of uncertainty that arises from positions with significant unobservable inputs or modelling parameters.

Level 3 ranges of unobservable inputs

The table below provides additional information on level 3 instruments and inputs. This shows the valuation technique used for the fair value calculation, the unobservable input or inputs and input range.

Financial instrument	Valuation technique	Unobservable inputs	Units	2022 Low	2022 High	2021 Low	2021 High
Other financial assets							
Loans	Discount cash flow	Discount margin	bps	**174**	**222**	113	169
Derivative assets and liabilities							
Interest rate & FX derivatives	Discount cash flow	Conditional prepayment risk	%	**2**	**4**	4	6

(1) NWB Group does not have any material liabilities measured at fair value that are issued with an inseparable third party credit enhancement.

10 Financial instruments: valuation continued

The level 3 sensitivities presented below are calculated at a trade or low-level portfolio basis rather than an overall portfolio basis. As individual sensitivities are aggregated with no reflection of the correlated nature between instruments, the overall portfolio sensitivity may not be accurately reflected. For example, some portfolios may be negatively correlated to others, where a downwards movement in one asset would produce an upwards movement in another. However, due to the additive presentation of the above figures this correlation impact cannot be displayed. As such, the actual potential downside sensitivity of the total portfolio may be less than the non-correlated sum of the additive figures as shown in the below table.

Alternative assumptions

Reasonably plausible alternative assumptions of unobservable inputs are determined based on a specified target level of certainty of 90%.

Alternative assumptions are determined with reference to all available evidence including consideration of the following: quality of independent pricing information considering consistency between different sources, variation over time, perceived tradability or otherwise of available quotes; consensus service dispersion ranges; volume of trading activity and market bias (e.g. one-way inventory); day 1 profit or loss arising on new trades; number and nature of market participants; market conditions; modelling consistency in the market; size and nature of risk; length of holding of position; and market intelligence.

Other considerations

Whilst certain inputs used to calculate CVA and FVA are not based on observable market data, the uncertainty of these inputs is not considered to have a significant effect on the net valuation of the related derivative portfolios.

As such, the fair value levelling of the derivative portfolios is not determined by CVA or FVA inputs. In addition, any fair value sensitivity driven by these inputs is not included in the level 3 sensitivities presented.

The table below shows the high and low range of fair value of the level 3 assets and liabilities. This range incorporates the range of fair value inputs as described in the previous table.

	2022			2021		
	Level 3	Favourable	Unfavourable	Level 3	Favourable	Unfavourable
	£m	£m	£m	£m	£m	£m
Assets						
Derivatives	20	—	—	1	—	—
Other financial assets						
Loans - MFVTPL	48	—	—	50	—	—
Securities	2	—	—	2	—	—
	70	—	—	53	—	—
Liabilities						
Derivatives	7	—	—	139	10	(10)
	7	—	—	139	10	(10)

Movement in level 3 assets and liabilities over the reporting period

The following table shows the movement in level 3 assets and liabilities in the year.

	2022				2021			
	Trading assets (2)	Other financial assets (3)	Total assets	Total liabilities	Trading assets (2)	Other financial assets (3)	Total assets	Total liabilities
	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January	1	52	53	139	5	50	55	228
Amounts recorded in the income statement (1)	19	(2)	17	(127)	(1)	3	2	(70)
Level 3 transfers out	—	—	—	—	—	(3)	(3)	—
Purchases/originations	—	—	—	—	—	2	2	—
Settlements/other decreases	—	—	—	(5)	(3)	—	(3)	(19)
At 31 December	20	50	70	7	1	52	53	139
Amounts recorded in the income statement in respect of balances held at year end:								
- unrealised	19	(4)	15	(132)	(3)	—	(3)	(89)
- realised	—	—	—	5	3	—	3	19

(1) Net gains on trading assets and liabilities of £146 million (2021 – net gains £69 million) were recorded in income from trading activities.
(2) Trading assets comprise assets held at fair value in trading portfolios.
(3) Other financial assets comprise fair value through other comprehensive income, designated as at fair value through profit or loss and other fair value through profit or loss.

10 Financial instruments: valuation continued

Fair value of financial instruments measured at amortised cost on the balance sheet

The following table shows the carrying value and fair value of financial instruments measured at amortised cost on the balance sheet.

	NWB Group						NWB Plc					
	Items where fair value approximates carrying value	Carrying value	Fair value	Fair value hierarchy level			Items where fair value approximates carrying value	Carrying value	Fair value	Fair value hierarchy level		
				Level 1	Level 2	Level 3				Level 1	Level 2	Level 3
2022	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn
Financial assets												
Cash and balances at central banks	**73.1**						**73.1**					
Loans to banks		**3.2**	**3.2**	**—**	**2.7**	**0.5**		**2.9**	**2.9**	**—**	**2.8**	**0.1**
Loans to customers		**301.7**	**290.8**	**—**	**19.4**	**271.4**		**267.4**	**257.2**	**—**	**19.3**	**237.9**
Amounts due from holding companies and fellow subsidiaries		**4.2**	**4.1**	**—**	**—**	**4.1**		**30.6**	**29.4**	**—**	**19.0**	**10.4**
Other financial assets - securities		**4.4**	**4.3**	**0.8**	**3.1**	**0.4**		**4.1**	**3.9**	**0.8**	**3.1**	**—**
2021												
Financial assets												
Cash and balances at central banks	101.2						101.2					
Loans to banks		4.1	4.0	—	3.5	0.5		3.6	3.6	—	3.5	0.1
Loans to customers		287.0	283.0	—	27.6	255.4		255.4	251.3	—	27.5	223.8
Amounts due from holding companies and fellow subsidiaries		2.5	2.5	—	0.3	2.2		25.3	25.5	—	17.6	7.9
Other financial assets - securities		2.7	2.7	1.6	0.7	0.4		2.3	2.3	1.6	0.7	—
2022												
Financial liabilities												
Bank deposits	**3.4**	**12.7**	**12.3**	**—**	**12.3**	**—**	**3.4**	**12.7**	**12.3**	**—**	**12.3**	**—**
Customer deposits	**294.9**	**27.7**	**27.7**	**—**	**11.9**	**15.8**	**261.7**	**19.9**	**19.9**	**—**	**11.9**	**8.0**
Amounts due to holding companies and fellow subsidiaries	**0.8**	**37.7**	**37.2**	**—**	**8.9**	**28.3**	**1.9**	**72.6**	**71.1**	**—**	**25.8**	**45.3**
Other financial liabilities												
Debt securities in issue		**5.4**	**5.4**	**—**	**2.9**	**2.5**		**4.5**	**4.5**	**—**	**2.9**	**1.6**
Subordinated liabilities		**0.2**	**0.2**	**—**	**0.2**	**—**		**0.2**	**0.2**	**—**	**0.2**	**—**
Notes in circulation	**0.8**						**0.8**					
2021												
Financial liabilities												
Bank deposits	3.7	19.1	18.8	—	18.8	—	3.7	19.1	18.8	—	18.8	—
Customer deposits	305.4	24.1	24.3	—	17.5	6.9	270.4	22.1	22.4	—	17.5	4.9
Amounts due to holding companies and fellow subsidiaries	2.8	42.2	42.3	—	9.8	32.5	1.8	74.6	74.6	—	22.5	52.1
Other financial liabilities												
Debt securities in issue		7.2	7.2	—	3.0	4.2		6.3	6.4	—	3.0	3.4
Subordinated liabilities		0.2	0.3	—	0.3	—		0.2	0.3	—	0.3	—
Notes in circulation	0.9						0.9					

10 Financial instruments: fair value of financial instruments measured at amortised cost continued

The assumptions and methodologies underlying the calculation of fair values of financial instruments at the balance sheet date are as follows:

Short-term financial instruments
For certain short-term financial instruments: cash and balances at central banks, items in the course of collection from other banks, settlement balances, items in the course of transmission to other banks, customer demand deposits and notes in circulation, carrying value is deemed a reasonable approximation of fair value.

Loans to banks and customers
In estimating the fair value of net loans to customers and banks measured at amortised cost, NWB Group's loans are segregated into appropriate portfolios reflecting the characteristics of the constituent loans. Two principal methods are used to estimate fair value:

(a) Contractual cash flows are discounted using a market discount rate that incorporates the current spread for the borrower or where this is not observable, the spread for borrowers of a similar credit standing. This method is used for portfolios where counterparties have external ratings.

(b) Expected cash flows (unadjusted for credit losses) are discounted at the current offer rate for the same or similar products. The current methodology caps all loan values at par rather than modelling clients' option to repay loans early. This approach is adopted for lending portfolios in Retail Banking, Commercial & Institutional (SME loans) and Private Banking in order to reflect the homogeneous nature of these portfolios.

Debt securities and subordinated liabilities
Most debt securities are valued using quoted prices in active markets or from quoted prices of similar financial instruments in active markets. Fair values of the remaining population are determined using market standard valuation techniques, such as discounted cash flows, adjusting for own credit spreads where appropriate.

Bank and customer deposits
Fair values of deposits are estimated using discounted cash flow valuation techniques. Where required, methodologies can be revised as additional information and valuation inputs become available.

11 Financial instruments - maturity analysis

Remaining maturity

The following table shows the residual maturity of financial instruments, based on contractual date of maturity.

	NWB Group					
	2022			2021		
	Less than 12 months £m	More than 12 months £m	Total £m	Less than 12 months £m	More than 12 months £m	Total £m
Assets						
Cash and balances at central banks	73,065	—	73,065	101,213	—	101,213
Derivatives	307	4,100	4,407	159	2,301	2,460
Loans to banks - amortised cost	2,947	250	3,197	4,173	9	4,182
Loans to customers - amortised cost	60,712	240,972	301,684	78,287	208,684	286,971
Amounts due from holding companies and fellow subsidiaries (1)	4,159	19	4,178	2,635	267	2,902
Other financial assets	1,161	13,385	14,546	4,642	24,389	29,031
Liabilities						
Bank deposits	4,060	12,000	16,060	10,831	12,000	22,831
Customer deposits	321,584	1,030	322,614	328,748	692	329,440
Derivatives	521	1,567	2,088	123	3,996	4,119
Amounts due to holding companies and fellow subsidiaries (2)	30,271	8,344	38,615	35,795	9,239	45,034
Other financial liabilities	2,486	2,898	5,384	3,551	3,700	7,251
Subordinated liabilities	74	123	197	88	123	211
Notes in circulation	809	—	809	904	—	904
Lease liabilities	112	789	901	203	805	1,008

	NWB Plc					
	2022			2021		
	Less than 12 months £m	More than 12 months £m	Total £m	Less than 12 months £m	More than 12 months £m	Total £m
Assets						
Cash and balances at central banks	73,062	—	73,062	101,210	—	101,210
Derivatives	308	4,122	4,430	156	2,391	2,547
Loans to banks - amortised cost	2,620	250	2,870	3,638	—	3,638
Loans to customers - amortised cost	48,498	218,903	267,401	67,008	188,435	255,443
Amounts due from holding companies and fellow subsidiaries (1)	14,046	17,147	31,193	10,633	15,733	26,366
Other financial assets	1,161	13,019	14,180	4,260	24,389	28,649
Liabilities						
Bank deposits	4,059	12,000	16,059	10,829	12,000	22,829
Customer deposits	280,778	780	281,558	291,780	690	292,470
Amounts due to holding companies and fellow subsidiaries (2)	48,016	26,838	74,854	52,883	23,703	76,586
Derivatives	521	2,061	2,582	120	4,216	4,336
Other financial liabilities	2,486	2,039	4,525	3,551	2,833	6,384
Subordinated liabilities	74	117	191	88	117	205
Notes in circulation	809	—	809	904	—	904
Lease liabilities	100	702	802	194	704	898

(1) Amounts due from holding companies and fellow subsidiaries relating to non-financial instruments of £725 million (2021 - £617 million) for NWB Group and £940 million (2021 – £756 million) for NWB Plc have been excluded from the tables.

(2) Amounts due to holding companies and fellow subsidiaries relating to non-financial instruments of £156 million (2021 - £102 million) for NWB Group and £183 million (2021 – £136 million) for NWB Plc have been excluded from the tables.

11 Financial instruments - maturity analysis continued

Liabilities by contractual cash flows up to 20 years

The tables below show the timing of cash outflows to settle financial liabilities, prepared on the following basis:

Financial liabilities are included at the earliest date on which the counterparty can require repayment regardless of whether or not such early repayment results in a penalty. If repayment is triggered by, or is subject to, specific criteria such as market price hurdles being reached, the liability is included at the earliest possible date that conditions could be fulfilled without considering the probability of the conditions being met. For example, if a structured note automatically prepays hen an equity index exceeds a certain level, the cash outflow will be included in the less than three months period whatever the level of the index at year end.

The settlement date of debt securities issued by certain securitisation vehicles consolidated by the Group depends on when cash flows are received from the securitised assets. Where these assets are prepayable, the timing of cash outflow relating to securities assumes that each asset will be prepaid at the earliest possible date.

The principal amounts of financial liabilities that are repayable after 20 years or where the counterparty has no right to repayment of the principal are excluded from the table along with interest payments after 20 years.

The maturity of guarantees and commitments is based on the earliest possible date they would be drawn in order to evaluate NWB Group's liquidity position.

Held-for-trading liabilities amounting to £2.0 billion (2021 - £4.1 billion) for the NWB Group and £2.5 billion (2021 - £4.4 billion) for the bank have been excluded from the tables.

	NWB Group					
	0-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years
2022	£m	£m	£m	£m	£m	£m
Liabilities by contractual maturity up to 20 years						
Bank deposits	4,165	311	5,019	8,503	—	—
Customer deposits	314,550	7,106	1,028	1	12	—
Amounts due to holding companies and fellow subsidiaries (1)	26,150	4,328	2,855	3,778	3,526	—
Derivatives held for hedging	36	131	357	96	79	11
Other financial liabilities	2,312	175	2,461	375	109	79
Subordinated liabilities	76	10	21	21	59	104
Notes in circulation	809	—	—	—	—	—
Lease liabilities	34	91	211	167	254	206
	348,132	12,152	11,952	12,941	4,039	400
Guarantees and commitments notional amount						
Guarantees (2)	1,728	—	—	—	—	—
Commitments (3)	86,022	—	—	—	—	—
	87,750	—	—	—	—	—
2021						
Liabilities by contractual maturity up to 20 years						
Bank deposits	10,828	—	—	12,003	—	—
Customer deposits	325,645	2,864	913	4	—	—
Amounts due to holding companies and fellow subsidiaries (1)	24,079	10,096	4,117	3,149	4,112	110
Derivatives held for hedging	5	5	53	32	24	13
Other financial liabilities	2,285	1,177	2,915	289	499	79
Subordinated liabilities	—	103	21	21	58	200
Notes in circulation	904	—	—	—	—	—
Lease liabilities	64	136	170	129	219	205
	363,810	14,381	8,189	15,627	4,912	607
Guarantees and commitments notional amount						
Guarantees (2)	796	—	—	—	—	—
Commitments (3)	78,742	—	—	—	—	—
	79,538	—	—	—	—	—

11 Financial instruments - maturity analysis continued

	NWB Plc					
2022	0-3 months £m	3-12 months £m	1-3 years £m	3-5 years £m	5-10 years £m	10-20 years £m
Liabilities by contractual maturity up to 20 years						
Bank deposits	**4,165**	**311**	**5,019**	**8,503**	**—**	**—**
Customer deposits	**276,773**	**4,035**	**770**	**1**	**12**	**—**
Amounts due to holding companies and fellow subsidiaries (1)	**39,068**	**9,478**	**14,078**	**11,004**	**4,139**	**—**
Derivatives held for hedging	**33**	**130**	**355**	**94**	**76**	**11**
Other financial liabilities	**2,312**	**175**	**2,165**	**—**	**—**	**—**
Subordinated liabilities	**76**	**10**	**21**	**21**	**52**	**104**
Notes in circulation	**809**					
Lease liabilities	**29**	**84**	**196**	**160**	**245**	**188**
	323,265	**14,223**	**22,604**	**19,783**	**4,524**	**303**
Guarantees and commitments notional amount						
Guarantees (2)	**1,664**	**—**	**—**	**—**	**—**	**—**
Commitments (3)	**82,135**	**—**	**—**	**—**	**—**	**—**
	83,799	**—**	**—**	**—**	**—**	**—**
2021						
Liabilities by contractual maturity up to 20 years						
Bank deposits	10,826	—	—	12,003	—	—
Customer deposits	289,509	2,033	911	4	—	—
Amounts due to holding companies and fellow subsidiaries (1)	31,445	17,388	6,134	9,988	11,883	377
Derivatives held for hedging	3	3	49	29	19	13
Other financial liabilities	2,285	1,177	2,915	—	—	—
Subordinated liabilities	—	103	21	21	52	200
Notes in circulation	904	—	—	—	—	—
Lease liabilities	62	129	153	123	216	199
	335,034	20,833	10,183	22,168	12,170	789
Guarantees and commitments notional amount						
Guarantees (2)	742	—	—	—	—	—
Commitments (3)	74,875	—	—	—	—	—
	75,617	—	—	—	—	—

(1) Amounts due to holding companies and fellow subsidiaries relating to non-financial instruments have been excluded from the tables.
(2) NWB Group is only called upon to satisfy a guarantee when the guaranteed party fails to meet its obligations. NWB Group expects most guarantees it provides to expire unused.
(3) NWB Group has given commitments to provide funds to customers under undrawn formal facilities, credit lines and other commitments to lend subject to certain conditions being met by the counterparty. NWB does not expect all facilities to be drawn, and some may lapse before drawdown.

12 Derivatives

NWB Group uses derivatives to manage its own risk such as interest rate, foreign exchange, or credit risk or in certain customer transactions.

	NWB Group					
	2022			2021		
	Notional £bn	Assets £m	Liabilities £m	Notional £bn	Assets £m	Liabilities £m
Exchange rate contracts	34	158	416	26	180	218
Interest rate contracts	490	4,249	1,672	428	2,280	3,901
		4,407	2,088		2,460	4,119

	NWB Plc					
	2022			2021		
	Notional £bn	Assets £m	Liabilities £m	Notional £bn	Assets £m	Liabilities £m
Exchange rate contracts	35	159	434	27	184	231
Interest rate contracts	498	4,271	2,148	437	2,363	4,105
		4,430	2,582		2,547	4,336

For accounting policy information see Accounting policies notes 3.8 and 3.12.

Refer to Note 9 for amounts due from/to fellow NatWest Group subsidiaries.

NWB Group applies hedge accounting to reduce the accounting mismatch caused in the income statement by using derivatives to hedge the following risks: interest rate, foreign exchange and the foreign exchange risk associated with net investment in foreign operations.

NWB Group's interest rate hedging relates to the management of NWB Group's non-trading structural interest rate risk, caused by the mismatch between fixed interest rates and floating interest rates on its financial instruments. NWB Group manages this risk within approved limits. Residual risk positions are hedged with derivatives, principally interest rate swaps.

Suitable larger fixed rate financial instruments are subject to fair value hedging in line with documented risk management strategies.

Cash flow hedges of interest rate risk relate to exposures to the variability in future interest payments and receipts due to the movement of benchmark interest rates on forecast transactions and on financial assets and financial liabilities. This variability in cash flows is hedged by interest rate swaps, which convert variable cash flows into fixed. For these cash flow hedge relationships, the hedged items are actual and forecast variable interest rate cash flows arising from financial assets and financial liabilities with interest rates linked to the relevant benchmark rates, most notably USD LIBOR, SOFR, EURIBOR, SONIA and the Bank of England Official Bank Rate. The variability in cash flows due to movements in the relevant benchmark rate is hedged; this risk component is identified using the risk management systems of NWB Group and encompasses the majority of cash flow variability risk.

Fair value hedges of interest rate risk involve interest rate swaps transforming the fixed interest rate risk in financial assets and financial liabilities to floating. The hedged risk is the risk of changes in the hedged item's fair value attributable to changes in the benchmark interest rate risk component of the hedged item. The significant benchmarks identified as risk components are USD LIBOR, SOFR, EURIBOR and SONIA. These risk components are identified using the risk management systems of NWB Group and encompass the majority of the hedged item's fair value risk.

NWB Group hedges the exchange rate risk of its net investment in foreign currency denominated operations with currency borrowings and forward foreign exchange contracts. NWB Group reviews the value of the investments' net assets, executing hedges where appropriate to reduce the sensitivity of capital ratios to foreign exchange rate movement. Hedge accounting relationships will be designated where required.

Exchange rate risk also arises in NWB Group where payments are denominated in currencies other than the functional currency. Residual risk positions are hedged with forward foreign exchange contracts, fixing the exchange rate the payments will be settled in. The derivatives are documented as cash flow hedges.

For all cash flow hedging and fair value hedge relationships NWB Group determines that there is an adequate level of offsetting between the hedged item and hedging instrument at inception and on an ongoing basis. This is achieved by comparing movements in the fair value of the expected highly probable forecast cash flows/fair value of the hedged item attributable to the hedged risk with movements in the fair value of the expected changes in cash flows from the hedging instruments. and the determination of effectiveness is in line with the requirements of IAS39.

NWB Group uses either the actual ratio between the hedged item and hedging instrument(s) or one that minimises hedge ineffectiveness to establish the hedge ratio for hedge accounting. Hedge ineffectiveness is measured in line with the requirements of IAS39 and recognised in the income statement as it arises.

12 Derivatives continued

Included in the tables above are derivatives held for hedging purposes as follows:

	NWB Group							
	2022				2021			
	Notional £bn	Assets £m	Liabilities £m	Change in fair value used for hedge ineffectiveness (1) £m	Notional £bn	Assets £m	Liabilities £m	Change in fair value used for hedge ineffectiveness (1) £m
Fair value hedging - interest rate contracts	23.7	981	1,022	1,563	32.7	462	1,273	1,200
Cash flow hedging - interest rate contracts	117.9	3,045	3,491	(552)	86.5	538	550	183
Cash flow hedging - exchange rate contracts	0.2	4	3	(5)	0.2	6	—	26
Net investment hedging - exchange rate contracts	0.1	—	4	1	0.2	4	1	7
	141.9	4,030	4,520	1,007	119.6	1,010	1,824	1,416
IFRS netting		(3,289)	(4,262)			(897)	(1,753)	
		741	258			113	71	

	NWB Plc							
	2022				2021			
	Notional £bn	Assets £m	Liabilities £m	Change in fair value used for hedge ineffectiveness (1) £m	Notional £bn	Assets £m	Liabilities £m	Change in fair value used for hedge ineffectiveness (1) £m
Fair value hedging - interest rate contracts	23.4	980	968	1,595	32.4	462	1,255	1,198
Cash flow hedging - interest rate contracts	117.9	3,045	3,491	(552)	86.5	538	550	183
Cash flow hedging - exchange rate contracts	0.1	2	3	(5)	0.1	5	—	25
	141.4	4,027	4,462	1,038	119.0	1,005	1,805	1,406
IFRS netting		(3,289)	(4,211)			(897)	(1,750)	
		738	251			108	55	

(1) The change in fair value used for hedge ineffectiveness includes instruments that were derecognised in the year.

12 Derivatives continued

The following table shows the period in which the notional of hedging contract ends:

	NWB Group							
	0-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years	20+ years	Total
2022	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn
Fair value hedging								
Hedging assets - interest rate risk	0.2	0.2	3.0	3.5	3.2	1.6	0.5	12.2
Hedging liabilities - interest rate risk	—	0.2	4.5	3.4	3.4	—	—	11.5
Cash flow hedging								
Hedging assets - interest rate risk	4.7	6.7	24.8	11.7	5.0	—	—	52.9
Average fixed interest rate (%)	*1.47*	*1.39*	*1.51*	*2.64*	*0.69*	—	—	*1.67*
Hedging liabilities - interest rate risk	8.5	21.5	19.1	8.0	7.9	—	—	65.0
Average fixed interest rate (%)	*0.10*	*0.70*	*2.47*	*1.63*	*2.54*	—	—	*1.48*
Hedging liabilities - exchange rate risk	—	0.2	—	—	—	—	—	0.2
Net investment hedging								
Exchange rate risk	0.1	—	—	—	—	—	—	0.1

	NWB Group							
	0-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years	20+ years	Total
2021	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn
Fair value hedging								
Hedging assets - interest rate risk	0.7	1.6	3.0	4.8	5.3	3.6	3.2	22.2
Hedging liabilities - interest rate risk	0.5	—	3.9	2.6	3.5	—	—	10.5
Cash flow hedging								
Hedging assets - interest rate risk	0.3	—	5.5	16.0	4.5	—	—	26.3
Average fixed interest rate (%)	*2.09*	—	*0.53*	*0.48*	*0.53*	—	—	*0.52*
Hedging liabilities - interest rate risk	8.3	15.2	30.0	4.4	2.3	—	—	60.2
Average fixed interest rate (%)	*0.45*	*0.21*	*0.30*	*0.40*	*0.74*	—	—	*0.32*
Hedging liabilities - exchange rate risk	0.1	0.1	—	—	—	—	—	0.2
Net investment hedging								
Exchange rate risk	0.2	—	—	—	—	—	—	0.2

12 Derivatives continued

The table below analyses assets and liabilities, including intercompany, subject to hedging derivatives:

	NWB Group			
2022	Carrying value of hedged assets and liabilities £m	Impact on hedged items included in carrying value £m	Change in fair value used as a basis to determine ineffectiveness (1) £m	Impact of hedged items ceased to be adjusted for hedging gains or losses £m
Fair value hedging - interest rate				
Loans to customers – amortised cost	2,347	(490)	(592)	26
Other financial assets - securities	8,600	(666)	(2,008)	(2)
Total	10,947	(1,156)	(2,600)	24
Other financial liabilities - debt securities in issue	8,430	(696)	835	—
Subordinated liabilities	2,241	(261)	217	—
Total	10,671	(957)	1,052	—
Cash flow hedge - interest rate				
Loans to banks and customers – amortised cost (2)	52,540		2,593	
Other financial assets - securities	261		12	
Total	52,801		2,605	
Customer deposits	65,034		(2,046)	
Other financial liabilities - debt securities in issue	80		(2)	
Total	65,114		(2,048)	
Cash flow hedge - exchange rate				
Other	204		5	
Total	204		5	

2021	£m	£m	£m	£m
Fair value hedging - interest rate				
Loans to customers – amortised cost	2,270	58	(186)	27
Other financial assets - securities	25,936	506	(1,396)	—
Total	28,206	564	(1,582)	27
Other financial liabilities - debt securities in issue	7,828	144	288	—
Subordinated liabilities	2,374	(41)	107	—
Total	10,202	103	395	—
Cash flow hedging - interest rate				
Loans to banks and customers – amortised cost	26,329		623	
Other financial assets - securities	28		1	
Total	26,357		624	
Customer deposits	59,605		(770)	
Other financial liabilities - debt securities in issue	560		(6)	
Total	60,165		(776)	
Cash flow hedge - exchange rate				
Subordinated liabilities	—		(15)	
Other	200		(10)	
Total	200		(25)	

For the note to this table refer to the following page.

12 Derivatives continued

	NWB Plc			
2022	Carrying value of hedged assets and liabilities £m	Impact on hedged items included in carrying value £m	Change in fair value used as a basis to determine ineffectiveness (1) £m	Impact of hedged items ceased to be adjusted for hedging gains or losses £m
Fair value hedging - interest rate				
Loans to customers – amortised cost	**2,274**	**(491)**	**(579)**	**—**
Other financial assets - securities	**8,600**	**(666)**	**(2,008)**	**(2)**
Total	**10,874**	**(1,157)**	**(2,587)**	**(2)**
Other financial liabilities - debt securities in issue	**8,172**	**(644)**	**790**	**—**
Subordinated liabilities	**2,241**	**(261)**	**217**	**—**
Total	**10,413**	**(905)**	**1,007**	**—**
Cash flow hedge - interest rate				
Loans to banks and customers – amortised cost (2)	**52,540**		**2,593**	
Other financial assets - securities	**261**		**12**	
Total	**52,801**		**2,605**	
Customer deposits	**65,034**		**(2,046)**	
Other financial liabilities - debt securities in issue	**80**		**(2)**	
Total	**65,114**		**(2,048)**	
Cash flow hedge - exchange rate				
Other	**149**		**6**	
Total	**149**		**6**	
2021				
Fair value hedging - interest rate				
Loans to customers – amortised cost	2,178	42	(179)	—
Other financial assets - securities	25,936	506	(1,397)	—
Total	28,114	548	(1,576)	—
Other financial liabilities - debt securities in issue	7,588	148	283	—
Subordinated liabilities	2,374	(41)	107	—
Total	9,962	107	390	—
Cash flow hedge - interest rate				
Loans to banks and customers – amortised cost	26,329		623	
Other financial assets - securities	28		1	
Total	26,357		624	
Customer deposits	59,605		(770)	
Other financial liabilities - debt securities in issue	560		(6)	
Total	60,165		(776)	
Cash flow hedge - exchange rate				
Subordinated liabilities	—		(15)	
Other	150		(9)	
Total	150		(24)	

(1) The change in fair value used for ineffectiveness includes instruments that were derecognised in the year.
(2) Includes cash and balances at central banks.

12 Derivatives continued

The following shows analysis of the pre-tax cash flow hedge reserve and foreign exchange hedge reserve:

	NWB Group			
	2022		2021	
	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m
Continuing				
Interest rate risk	**(544)**	**—**	(2)	—
Foreign exchange risk	**2**	**(16)**	6	20
De-designated				
Interest rate	**(1)**	**—**	(6)	—
Foreign exchange risk	**—**	**13**	—	7
Total	**(543)**	**(3)**	(2)	27

	NWB Plc			
	2022		2021	
	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m
Continuing				
Interest rate risk	**(544)**	**—**	(2)	—
Foreign exchange risk	**(1)**	**(15)**	5	17
De-designated				
Interest rate	**(1)**	**—**	(6)	—
Total	**(546)**	**(15)**	(3)	17

For the note to these tables refer to the following page.

12 Derivatives continued

	NWB Group			
	2022		2021	
	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m
Amount recognised in equity				
Interest rate risk	**(288)**	**—**	99	—
Foreign exchange risk	**5**	**(31)**	3	22
Total	**(283)**	**(31)**	102	22
Amount transferred from equity to earnings				
Interest rate risk to net interest income	**(258)**	**—**	57	—
Interest rate risk to non-interest income (1)	**16**	**—**	(2)	—
Interest rate risk to operating expenses	**(14)**	**—**	—	—
Foreign exchange risk to net interest income	**—**	**—**	3	—
Foreign exchange risk to non-interest income	**—**	**—**	17	—
Foreign exchange risk to operating expenses	**(3)**	**—**	3	—
Total	**(259)**	**—**	78	—

	NWB Plc			
	2022		2021	
	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m
Amount recognised in equity				
Interest rate risk	**(288)**	**—**	99	—
Foreign exchange risk	**—**	**(33)**	1	15
Total	**(288)**	**(33)**	100	15
Amount transferred from equity to earnings				
Interest rate risk to net interest income	**(257)**	**—**	58	—
Interest rate risk to non-interest income (1)	**16**	**—**	(2)	—
Foreign exchange risk to net interest income	**(14)**	**—**	3	—
Foreign exchange risk to non-interest income	**—**	**—**	17	—
Foreign exchange risk to operating expenses	**—**	**—**	3	—
Total	**(255)**	**—**	79	—

(1) There was £16 million (2021 - £2 million) reclassified with the cash flow reserve to earnings due to forecasted cash flows that are no longer expected to occur.

Hedge ineffectiveness recognised in other operating income comprised:

	NWB Group	
	2022 £m	2021 £m
Fair value hedging		
Loss on the hedged items attributable to the hedged risk	**(1,548)**	(1,187)
Gain on the hedging instruments	**1,563**	1,200
Fair value hedging ineffectiveness	**15**	13
Cash flow hedging		
- Interest rate risk	**5**	32
Cash flow hedging ineffectiveness	**5**	32
Total	**20**	45

The main sources of ineffectiveness for interest rate risk hedge accounting relationships are:

- the effect of the counterparty credit risk on the fair value of the interest rate swap, which is not reflected in the fair value of the hedged item attributable to the change in interest rate; and
- upfront present values on the hedging derivatives where hedge accounting relationships have been designated after the trade date.

13 Loan impairment provisions

Loan exposure and impairment metrics

The table below summarises loans and related credit impairment measures within the scope of ECL framework.

	NWB Group		NWB Plc	
	31 December 2022 £m	31 December 2021 £m	31 December 2022 £m	31 December 2021 £m
Loans - amortised cost				
Stage 1	266,722	264,656	236,809	236,255
Stage 2	37,216	26,003	32,765	22,492
Stage 3	3,783	2,985	3,383	2,548
Inter-Group (1)	4,220	2,555	30,633	25,362
Total	311,941	296,199	303,590	286,657
ECL provisions (2)				
Stage 1	506	231	459	207
Stage 2	813	1,105	765	1,026
Stage 3	1,262	1,167	1,170	1,037
Inter-Group	4	1	48	8
	2,585	2,504	2,442	2,278
ECL provision coverage (3)				
Stage 1 (%)	0.19	0.09	0.19	0.09
Stage 2 (%)	2.18	4.25	2.33	4.56
Stage 3 (%)	33.36	39.10	34.58	40.70
Inter-Group (%)	0.09	0.04	0.16	0.03
	0.84	0.85	0.88	0.87
Impairment (releases)/losses				
ECL (release)/charge (4)				
Stage 1	(243)	(995)	(256)	(945)
Stage 2	348	(30)	373	48
Stage 3	233	213	234	183
Third party	338	(812)	351	(714)
Inter-Group	3	(1)	40	(18)
	341	(813)	391	(732)
Amounts written-off	321	388	272	352

(1) NWB Group's intercompany assets are classified in Stage 1.
(2) Includes £2 million (2021 – £3 million) related to assets classified as FVOCI.
(3) ECL provisions coverage is calculated as total ECL provisions divided by third party loans – amortised cost and FVOCI.
(4) Includes a £0 million charge (2021 – £1 million charge) related to other financial assets, of which a £1 million release (2021 – £2 million charge) related to assets classified as FVOCI; and a £0 million release (2021 – £13 million charge) related to contingent liabilities.
(5) The table shows gross loans only and excludes amounts that are outside the scope of the ECL framework. Refer to Financial instruments within the scope of the IFRS 9 ECL framework for further details. Other financial assets within the scope of the IFRS 9 ECL framework were cash and balances at central banks totaling £72.5 billion (2021 – £100.6 billion) and debt securities of £14.1 billion (2021 – £28.2 billion).

Credit risk enhancement and mitigation

For information on credit risk enhancement and mitigation held as security, refer to Risk and capital management – credit risk enhancement and mitigation section.

Critical accounting policy: Loan impairment provisions

Accounting policies note 2.3 sets out how the expected loss approach is applied. At 31 December 2022, customer loan impairment provisions amounted to £2,585 million (2021 - £2,504 million). A loan is impaired when there is objective evidence that the cash flows will not occur in the manner expected when the loan was advanced. Such evidence includes changes in the credit rating of a borrower, the failure to make payments in accordance with the loan agreement, significant reduction in the value of any security, breach of limits or covenants, and observable data about relevant macroeconomic measures.

The impairment loss is the difference between the carrying value of the loan and the present value of estimated future cash flows at the loan's original effective interest rate.

The measurement of credit impairment under the IFRS expected loss model depends on management's assessment of any potential deterioration in the creditworthiness of the borrower, its modelling of expected performance and the application of economic forecasts. All three elements require judgments that are potentially significant to the estimate of impairment losses. For further information and sensitivity analysis, refer to Risk and capital management – measurement uncertainty and ECL sensitivity analysis section.

IFRS 9 ECL model design principles

Refer to Credit risk – IFRS 9 ECL model design principles section for further details.

Approach for multiple economic scenarios (MES)

The base scenario plays a greater part in the calculation of ECL than the approach to MES. Refer to Credit risk – economic loss drivers – probability weightings of scenarios section for further details.

14 Investments in Group undertakings

Investments in Group undertakings are carried at cost less impairment losses. Movements during the year were as follows:

	NWB Plc	
	2022 £m	2021 £m
At 1 January	**2,319**	2,374
Currency translation and other adjustments	**(2)**	(7)
Additional investments in Group undertakings	**276**	13
Disposals of investments in Group undertakings	**(227)**	—
Impairment of investments	**(336)**	(61)
At 31 December	**2,030**	2,319

The recoverable amount of investments in Group undertakings is the higher of net asset value as a proxy for fair value less cost to sell or value in use. Where recoverable value is based on net asset value, the fair value measurement is categorised as Level 3 of the fair value hierarchy. The carrying value of Investments in Group undertakings at 31 December 2022 is supported by the respective recoverable values of the entities.

In 2022, additions and disposals relate primarily to the September 2022 AT1 issuance of £240 million by Coutts & Company and the simultaneous redemption of £167 million of AT1 notes also issued by Coutts & Company. 2021 additions were related to the investments in World Learning Limited and Silvermere Holdings Limited.

In 2022, Impairment of investments includes a £310 million impairment of the company's investment in Ulster Bank Limited due to a decline in its net asset value mainly driven by dividends paid during the year and losses incurred by the business. The impairment in 2021 was also related to Ulster Bank Limited.

The value in use review as at 31 December 2022 did not indicate the need for a further impairment in the investment in Coutts & Company. Future value in use is primarily affected by changes in profitability, and changes in discount rate. Adverse changes would lead to value in use falling below carrying value. The most likely cause for this would be a failure to meet budgeted targets, including cost targets, or external downgrades in the UK economy. If the carrying value is also not supported by the net asset value, an impairment will be recorded. Beneficial changes would lead to a reversal of historic impairment.

The principal subsidiary undertakings[2] of the company are shown below and are wholly-owned directly or indirectly through intermediate holding companies. Their capital consists of ordinary shares and additional Tier 1 notes which are unlisted. All those subsidiary undertakings are included in NWB Group's consolidated financial statements and have an accounting reference date of 31 December.

	Nature of business	Country of incorporation and principal area of operations
Coutts & Company (1)	Private banking	Great Britain
Lombard North Central PLC	Leasing	Great Britain

(1) Coutts & Company is incorporated with unlimited liability.
(2) The business of Ulster Bank Limited, which was included in the principal subsidiary undertakings in 2021, was transferred to NatWest Bank Plc on 3 May 2022. Ulster Bank Limited's banking license was removed on 29 December 2022.

For accounting policy information see Accounting policies note 2.5.

For full information on all related undertakings refer to Note 35.

15 Other financial assets

2022	NWB Group								
	Debt securities								
	Central and local government			Other		Equity		Settlement	
	UK £m	US £m	Other £m	debt £m	Total £m	shares £m	Loans £m	balances £m	Total £m
Mandatory fair value through profit or loss	—	—	—	—	—	—	**417**	—	**417**
Fair value through other comprehensive income	**681**	**3,171**	**431**	**5,428**	**9,711**	**2**	—	—	**9,713**
Amortised cost	**888**	—	—	**3,522**	**4,410**	—	—	**6**	**4,416**
Total	**1,569**	**3,171**	**431**	**8,950**	**14,121**	**2**	**417**	**6**	**14,546**
2021									
Mandatory fair value through profit or loss	—	—	—	—	—	11	215	—	226
Fair value through other comprehensive income	10,118	6,088	2,845	6,885	25,936	2	210	—	26,148
Amortised cost	1,582	—	—	1,075	2,657	—	—	—	2,657
Total	11,700	6,088	2,845	7,960	28,593	13	425	—	29,031

2022	NWB Plc								
	Debt securities								
	Central and local government			Other		Equity		Settlement	
	UK £m	US £m	Other £m	debt £m	Total £m	shares £m	Loans £m	balances £m	Total £m
Mandatory fair value through profit or loss	—	—	—	—	—	—	**417**	—	**417**
Fair value through other comprehensive income	**681**	**3,171**	**431**	**5,428**	**9,711**	**2**	—	—	**9,713**
Amortised cost	**888**	—	—	**3,156**	**4,044**	—	—	**6**	**4,050**
Total	**1,569**	**3,171**	**431**	**8,584**	**13,755**	**2**	**417**	**6**	**14,180**
2021									
Mandatory fair value through profit or loss	—	—	—	—	—	11	215	—	226
Fair value through other comprehensive income	10,118	6,088	2,845	6,885	25,936	2	210	—	26,148
Amortised cost	1,582	—	—	693	2,275	—	—	—	2,275
Total	11,700	6,088	2,845	7,578	28,211	13	425	—	28,649

For accounting policy information see Accounting policies note 3.8.

16 Other assets

	NWB Group		NWB Plc	
	2022 £m	2021 £m	2022 £m	2021 £m
Intangible assets (Note 17)	**1,607**	1,232	**1,458**	1,100
Property, plant and equipment (Note 18)	**3,704**	3,644	**1,969**	1,989
Pension schemes in net surplus (Note 5)	**7**	7	—	—
Assets of disposal groups	**6**	37	**3**	34
Prepayments	**321**	342	**286**	310
Accrued income	**151**	150	**82**	76
Tax recoverable	**229**	30	**331**	5
Deferred tax (Note 7)	**1,117**	1,268	**1,104**	1,244
Acceptances	**128**	58	**119**	55
Other assets	**397**	419	**289**	370
	7,667	7,187	**5,641**	5,183

17 Intangible assets

	NWB Group					
	2022			2021		
	Goodwill £m	Other (1) £m	Total £m	Goodwill £m	Other (1) £m	Total £m
Cost						
At 1 January	623	3,014	3,637	623	2,570	3,193
Currency translation and other adjustments	—	(3)	(3)	—	29	29
Additions	—	722	722	—	465	465
Disposals and write-off of fully amortised assets	—	(27)	(27)	—	(50)	(50)
At 31 December	623	3,706	4,329	623	3,014	3,637
Accumulated amortisation and impairment						
At 1 January	564	1,841	2,405	564	1,537	2,101
Currency translation and other adjustments	—	(3)	(3)	—	31	31
Disposals and impairment of fully amortised assets	—	(18)	(18)	—	(28)	(28)
Amortisation charge for the year	—	338	338	—	299	299
Impairment of intangible assets	—	—	—	—	2	2
At 31 December	564	2,158	2,722	564	1,841	2,405
Net book value at 31 December	59	1,548	1,607	59	1,173	1,232

	NWB Plc	
	2022 (1) £m	2021 (1) £m
Cost		
At 1 January	2,889	2,478
Currency translation and other adjustments	—	24
Additions	690	433
Disposals and write-off of fully amortised assets	(11)	(46)
At 31 December	3,568	2,889
Accumulated amortisation		
At 1 January	1,789	1,502
Currency translation and other adjustments	—	24
Disposals and write-off of fully amortised assets	(1)	(26)
Charge for the year	322	289
At 31 December	2,110	1,789
Net book value at 31 December	1,458	1,100

(1) Principally internally generated software.

Intangible assets and goodwill are reviewed for indicators of impairment. Impairment testing involves the comparison of the carrying value of each cash-generating unit (CGU) with its recoverable amount. The carrying values of the segments reflect the equity allocations made by management which are consistent with NatWest Group's capital targets.

Recoverable amount is the higher of fair value less costs of disposal and value in use. Fair value is the price that would be received to sell an asset in an orderly transaction between market participants. Value in use is the present value of expected future cash flows from the CGU.

The recoverable amounts for all CGUs at 31 December 2022 were based on value in use, using management's latest five-year revenue and cost forecasts. These are discounted cash flow projections over five years. The forecast is then extrapolated in perpetuity using a long-term growth rate to compute a terminal value, which comprises the majority of the value in use. The long-term growth rates have been based on expected growth of the CGUs. The pre-tax risk discount rates are based on those observed to be applied to businesses regarded as peers of the CGUs.

For accounting policy information see Accounting policies notes 3.3 and 3.4.

18 Property, plant and equipment

	NWB Group			
2022	Investment properties £m	Property, plant and equipment £m	Operating leases £m	Total £m
Cost or valuation				
At 1 January	**840**	**6,970**	**1,095**	**8,905**
Transfers to disposal groups	**—**	**(7)**	**—**	**(7)**
Transfers to fellow subsidiaries	**—**	**(10)**	**—**	**(10)**
Currency translation and other adjustments	**(17)**	**(9)**	**—**	**(26)**
Additions	**145**	**399**	**146**	**690**
Disposals and write-off of fully depreciated assets	**(27)**	**(301)**	**(112)**	**(440)**
At 31 December	**941**	**7,042**	**1,129**	**9,112**
Accumulated impairment, depreciation and amortisation				
At 1 January	**—**	**4,692**	**569**	**5,261**
Transfers to disposal groups	**—**	**(4)**	**—**	**(4)**
Transfers to fellow subsidiaries	**—**	**4**	**—**	**4**
Currency translation and other adjustments (1)	**—**	**28**	**—**	**28**
Disposals and write-off of fully depreciated assets	**—**	**(224)**	**(85)**	**(309)**
Charge for the year	**—**	**264**	**128**	**392**
Impairment of property, plant and equipment	**—**	**36**	**—**	**36**
At 31 December	**—**	**4,796**	**612**	**5,408**
Net book value at 31 December	**941**	**2,246**	**517**	**3,704**

2021	Investment properties £m	Property, plant and equipment £m	Operating leases £m	Total £m
Cost or valuation				
At 1 January	760	6,954	1,129	8,843
Transfers to disposal groups	—	(71)	—	(71)
Transfers from fellow subsidiaries	—	3	—	3
Currency translation and other adjustments	(64)	13	—	(51)
Additions	144	767	98	1,009
Change in fair value of investment properties	—	—	—	—
Disposals and write-off of fully depreciated assets	—	(696)	(132)	(828)
At 31 December	840	6,970	1,095	8,905
Accumulated impairment, depreciation and amortisation				
At 1 January	—	4,643	529	5,172
Transfers to disposal groups	—	(39)	—	(39)
Currency translation and other adjustments (1)	—	260	—	260
Disposals and write-off of fully depreciated assets	—	(507)	(100)	(607)
Charge for the year	—	312	140	452
Impairment of property, plant and equipment	—	23	—	23
At 31 December	—	4,692	569	5,261
Net book value at 31 December	840	2,278	526	3,644

(1) Other adjustments include the effect of the purchase of freeholds for properties where the Group was the primary leaseholder.

Investment property valuations principally employ present value techniques that discount expected cash flows. Expected cash flows reflect rental income, occupancy and residual market values; valuations are sensitive to changes in these factors. The investment property fair value measurements are categorised as level 3. A 5% change in the most sensitive assumption, residual values, is £33 million (2021: £27 million) on the value of Investment property.

Valuations were carried out by qualified surveyors who are members of the Royal Institution of Chartered Surveyors, or an equivalent overseas body; property with a fair value of £135 million (2021 - £236 million) was valued by independent valuers for the purposes of year end valuations.

For accounting policy information see Accounting policies notes 3.4 and 3.5.

18 Property, plant and equipment continued

	NWB Plc		
2022	Investment properties £m	Property, plant and equipment £m	Total £m
Cost or valuation			
At 1 January	**6**	**6,479**	**6,485**
Transfers to disposal groups	**—**	**(7)**	**(7)**
Transfers to subsidiaries and fellow subsidiaries	**—**	**(10)**	**(10)**
Currency translation and other adjustments	**(6)**	**(9)**	**(15)**
Additions	**—**	**381**	**381**
Disposals and write-off of fully depreciated assets	**—**	**(262)**	**(262)**
At 31 December	**—**	**6,572**	**6,572**
Accumulated impairment, depreciation and amortisation			
At 1 January	**—**	**4,496**	**4,496**
Transfers to disposal groups	**—**	**(4)**	**(4)**
Transfers to subsidiaries and fellow subsidiaries	**—**	**4**	**4**
Currency translation and other adjustments (1)	**—**	**26**	**26**
Disposals and write-off of fully depreciated assets	**—**	**(194)**	**(194)**
Charge for the year	**—**	**240**	**240**
Impairment of property, plant and equipment	**—**	**35**	**35**
At 31 December	**—**	**4,603**	**4,603**
Net book value at 31 December	**—**	**1,969**	**1,969**
2021			
Cost or valuation			
At 1 January	6	6,346	6,352
Transfers to disposal groups	—	(71)	(71)
Transfers from subsidiaries and fellow subsidiaries	—	132	132
Currency translation and other adjustments	—	(5)	(5)
Additions	—	735	735
Disposals and write-off of fully depreciated assets	—	(658)	(658)
At 31 December	6	6,479	6,485
Accumulated impairment, depreciation and amortisation			
At 1 January	—	4,384	4,384
Transfers to disposal groups	—	(39)	(39)
Transfers from subsidiaries and fellow subsidiaries	—	83	83
Currency translation and other adjustments (1)	—	239	239
Disposals and write-off of fully depreciated assets	—	(476)	(476)
Charge for the year	—	282	282
Impairment of property, plant and equipment	—	23	23
At 31 December	—	4,496	4,496
Net book value at 31 December	6	1,983	1,989

(1) Other adjustments include the effect of the purchase of freeholds for properties where the Group was the primary leaseholder.

19 Other financial liabilities

	NWB Group		NWB Plc	
	2022	2021	**2022**	2021
	£m	£m	**£m**	£m
Bank deposits - held-for-trading	**7**	66	**7**	66
Customer deposits - held-for-trading	**10**	33	**10**	33
Settlement balances (1)	**2**	—	**2**	—
Debt securities in issue				
- Commercial paper and certificates of deposit	**1,664**	3,399	**1,664**	3,399
- Covered bonds	**2,842**	2,886	**2,842**	2,886
- Securitisation	**859**	867	**—**	—
Total	**5,384**	7,251	**4,525**	6,384

For accounting policy information see Accounting policies notes 3.8 and 3.11 .

20 Subordinated liabilities

	NWB Group		NWB Plc	
	2022	2021	2022	2021
	£m	£m	£m	£m
Undated loan capital	78	93	72	87
Preference shares	119	118	119	118
	197	211	191	205

(1) The table above excludes amounts due to holding company and fellow subsidiaries of £2,941 million (2021 - £3,074 million) for NWB Group and £2,941 million (2021 - £3,074 million) for NWB Plc. Refer to intercompany balances in Note 9.
(2) The preference shares issued by NWB Plc are classified as liabilities; these securities remain subject to the capital maintenance rules of the Companies Act 2006.

For accounting policy information see Accounting policies notes 3.8 and 3.11.

Undated loan capital		First call date	Maturity date	Capital treatment	2022 £m	2021 £m
NWB Plc						
£53 million	7.125% notes	Oct-2022	—	Tier 2	—	56
£35 million	11.5% notes	Dec-2022	—	Tier 2	72	31
					72	87
Preference shares						
NWB Plc						
£140 million	Non-cumulative preference shares of £1	—	—	Not applicable	119	118
					119	118
					191	205
Undated loan capital other subsidiaries					6	6
					197	211

The following tables analyse these intercompany subordinated liabilities:

	NWB Group and Bank	
	2022	2021
Other subsidiaries	£m	£m
Dated loan capital	2,241	2,374
Undated loan capital	700	700
Preference shares		
	2,941	3,074

Dated loan capital					2022 £m	2021 £m
NWB Plc						
€411.4 million	1.043% notes	Jun-27	Sep-32	Tier 2	311	341
$750 million	3.754% notes	Nov-24	Nov-29	Tier 2	594	567
£500 million	3.622% notes	Aug-25	Aug-30	Tier 2	458	491
£1000 million	2.105% notes	May-26	Nov-31	Tier 2	878	975
					2,241	2,374
Undated loan capital						
NWB Plc						
£700 million	Floating rate notes	—	—	Tier 2	700	700
					700	700

(1) Further details of the contractual terms of the preference shares are given in note 22 on the consolidated accounts.

21 Other liabilities

	NWB Group 2022 £m	NWB Group 2021 £m	NWB Plc 2022 £m	NWB Plc 2021 £m
Lease liabilities	**901**	1,008	**802**	898
Provisions for liabilities and charges	**550**	640	**519**	604
Retirement benefit liabilities (Note 5)	**35**	48	**9**	12
Accruals	**1,009**	1,185	**878**	1,051
Deferred income	**232**	204	**212**	186
Current tax	**2**	21	**2**	1
Deferred tax (Note 7)	**130**	209	**—**	—
Acceptances	**128**	58	**119**	55
Other liabilities	**483**	561	**202**	288
	3,470	3,934	**2,743**	3,095

Provisions for liabilities and charges (NWB Group)	Redress and other litigation(1) £m	Property £m	Financial commitments and guarantees £m	Other (2) £m	Total £m
At 1 January 2022	**302**	**166**	**63**	**109**	**640**
Expected credit losses impairment charge	**—**	**—**	**(4)**	**—**	**(4)**
Currency translation and other movements	**—**	**—**	**—**	**1**	**1**
Charge to income statement	**134**	**20**	**—**	**96**	**250**
Release to income statement	**(30)**	**(53)**	**—**	**(45)**	**(128)**
Provisions utilised	**(114)**	**(28)**	**—**	**(67)**	**(209)**
At 31 December 2022	**292**	**105**	**59**	**94**	**550**

Provisions for liabilities and charges (NWB Plc)	Redress and other litigation (1) £m	Property £m	Financial commitments and guarantees £m	Other (2) £m	Total £m
At 1 January 2022	**294**	**163**	**60**	**87**	**604**
Expected credit losses impairment release	**—**		**(3)**	**—**	**(3)**
Charge to income statement	**134**	**18**	**—**	**94**	**246**
Release to income statement	**(30)**	**(52)**	**—**	**(42)**	**(124)**
Provisions utilised	**(112)**	**(26)**	**—**	**(66)**	**(204)**
At 31 December 2022	**286**	**103**	**57**	**73**	**519**

(1) Includes payment protection insurance provision which reflects the estimated cost of PPI redress attributable to claims prior to the Financial Conduct Authority (FCA) complaint deadline of 29 August 2019. All pre-deadline complaints have been processed which removes complaint volume estimation uncertainty from the provision estimate. NatWest Group continues to conclude remaining bank-identified closure work and conclude cases with the Financial Ombudsmen Service.
(2) Other materially comprises provisions relating to restructuring costs.

Provisions are liabilities of uncertain timing or amount and are recognised when there is a present obligation as a result of a past event, the outflow of economic benefit is probable and the outflow can be estimated reliably. Any difference between the final outcome and the amounts provided will affect the reported results in the period when the matter is resolved.

For accounting policy information see Accounting policies note 2.4.

Critical accounting policy: Provisions for liabilities

The key judgment is involved in determining whether a present obligation exists. There is often a high degree of uncertainty and judgment is based on the specific facts and circumstances relating to individual events in determining whether there is a present obligation. Judgment is also involved in estimation of the probability, timing and amount of any outflows. Where NWB Group can look to another party such as an insurer to pay some or all of the expenditure required to settle a provision, any reimbursement is recognised when, and only when, it is virtually certain that it will be received.

Estimates - Provisions are liabilities of uncertain timing or amount and are recognised when there is a present obligation as a result of a past event, the outflow of economic benefit is probable and the outflow can be estimated reliably. Any difference between the final outcome and the amounts provided will affect the reported results in the period when the matter is resolved.

- Customer redress: Provisions reflect the estimated cost of redress attributable to claims where it is determined that a present obligation exists.
- Litigation and other regulatory: NWB Group is engaged in various legal proceedings, both in the UK and in overseas jurisdictions, including the US. For further information in relation to legal proceedings and discussion of the associated uncertainties, refer to Note 26.
- Property: This includes provision for contractual costs associated with vacant properties.
- Other provisions: These materially comprise provisions for onerous contracts and restructuring costs. Onerous contract provisions comprise an estimate of the costs involved in fulfilling the terms and conditions of contracts net of any expected benefits to be received. This includes provision for contractual costs associated with vacant properties. Redundancy and restructuring provisions comprise the estimated cost of restructuring, including redundancy costs where an obligation exists.

Background information on all material provisions is given in Note 26.

22 Share capital and reserves

Allotted, called up and fully paid	2022 £m	2021 £m	Number of shares - 000s 2022	Number of shares - 000s 2021
Ordinary shares of £1	**1,678**	1,678	**1,678,177**	1,678,177
Non-cumulative preference shares of £1	**116**	116	**116,349**	116,349

Ordinary shares

No ordinary shares were issued during 2022 or 2021.

In 2022, NWB Plc paid an ordinary dividend of £3.3 billion to NWH Ltd (2021 – 1.6 billion).

Preference shares

The 9% non-cumulative preference shares Series A of £1 each are non-redeemable.

The holders of sterling preference shares are entitled, on the winding-up of NWB Plc, to priority over the ordinary shareholders as regards payment of capital. Otherwise the holders of preference shares are not entitled to any further participation in the profits or assets of NWB Plc and accordingly these shares are classified as non-equity shares.

The holders of sterling preference shares are not entitled to receive notice of, attend, or vote at any general meeting unless the business of the meeting includes the consideration of a resolution for the winding-up of NWB Plc or the sale of the whole of the business of NWB Plc or any resolution directly affecting any of the special rights or privileges attached to any of the classes of preference shares.

Under IFRS, NWB Plc preference shares are classified as debt and are included in subordinated liabilities on the balance sheet (Note 20).

Paid-in equity

Comprises equity instruments issued by NWB Plc other than those legally constituted as shares.

Additional Tier 1 Instruments issued by NWB Plc having the legal form of debt are classified as equity under IFRS. The coupons on these Instruments are non-cumulative and payable at NWB Plc's discretion.

Capital recognised for regulatory purposes cannot be redeemed without Prudential Regulation Authority consent. This includes ordinary shares, preference shares and additional Tier 1 Instruments.

	2022 £m	2021 £m
Additional Tier 1 instruments		
US$2,000 million 3.8495% instruments callable August 2023 (1)	**1,077**	1,436
US$750 million 4.3517% instruments callable June 2031	**541**	541
GBP£400 million 3.9438% instruments callable March 2028	**400**	400
GBP£500 million 6.8543% instruments callable May 2027	**500**	-
	2,518	2,377

(1) Instrument was partially redeemed in June 2022.

Reserves

Under UK companies legislation, when shares are redeemed or purchased wholly or partly out of NWB Plc's profits, the amount by which NWB Plc's issued share capital is diminished must be transferred to the capital redemption reserve. The capital maintenance provisions of UK companies legislation apply to the capital redemption reserve as if it were part of NWB Plc's paid up share capital.

UK law prescribes that only reserves of NWB Plc are taken into account for the purpose of making distributions and the permissible applications of the share premium account and capital redemption reserve of £631 million (2021 - £631 million) included within other reserves.

NWB Plc optimises capital efficiency by maintaining reserves in subsidiaries, including regulated entities. Certain preference shares and subordinated debt are also included within regulatory capital. The remittance of reserves to the parent company or the redemption of shares or subordinated capital by regulated entities may be subject to maintaining the capital resources required by the relevant regulator.

For accounting policy information see Accounting policies note 3.11.

23 Structured entities

A structured entity (SE) is an entity that has been designed such that voting or similar rights are not the dominant factor in deciding who controls the entity, for example when any voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements. SEs are usually established for a specific, limited purpose, they do not carry out a business or trade and typically have no employees.

Securitisations

In a securitisation, assets, or interests in a pool of assets, are transferred, or the credit risk is transferred via a derivative or financial guarantee to a SE which then issues liabilities to third party investors.

NWB Group's involvement in client securitisations takes a number of forms. It may provide secured finance to, or purchase asset-backed notes from, client sponsored SEs secured on assets transferred by the client entity; or purchase asset backed securities issued by client sponsored SEs in the primary or secondary markets. In addition, NWB Group undertakes own-asset securitisations to transfer the credit risk on portfolios of financial assets.

Other credit risk transfers securitisations

NWB Group transfers credit risk on originated loans and mortgages without the transfer of the assets to a SE. As part of this, NWB Group enters into credit derivative and financial guarantee contracts with consolidated SEs. At 31 December 2022, debt securities in issue by such SEs (and held by third parties) were £859 million (2021 - £867 million). The associated loans and mortgages at 31 December 2022 were £4,361 million (2021 - £7,137 million). At 31 December, ECL in relation to non-defaulted assets was reduced by £20 million (2021 - £28 million) as a result of financial guarantee contracts with consolidated SEs.

Covered bond programme

Certain loans to customers have been assigned to bankruptcy remote limited liability partnerships to provide security for issues of debt securities by NWB Group. NWB Group retains all of the risks and rewards of these loans. The partnerships are consolidated by NWB Group, the loans retained on NWB Group's balance sheet and the related covered bonds included within debt securities in issue of the NWB Group. At 31 December 2022, £6,992 million of loans to customers have been assigned to bankruptcy remote limited liability partnerships to provide security for issues of debt securities by the NWB Group of £2,842 million (2021 - loans to customers - £8,267 million, debt securities in issue – £2,886 million).

Unconsolidated structured entities

NWB Group's interest in unconsolidated structured entities is analysed below.

	2022			2021		
	Asset backed securitisation vehicles £m	Investment funds and other £m	Total £m	Asset backed securitisation vehicles £m	Investment funds and other £m	Total £m
Non trading assets						
Loans to customers	30	254	284	5	208	213
Other financial assets	1,403	—	1,403	964	—	964
Total	1,433	254	1,687	969	208	1,177
Liquidity facilities/loan commitments	250	38	288	1	55	56
Guarantees	—	14	14	—	—	—
Maximum exposure	1,683	306	1,989	970	263	1,233

24 Asset transfers

Transfers that do not qualify for derecognition

NWB Group enters into securities repurchase agreements and securities lending transactions under which it transfers securities in accordance with normal market practice. Generally, the agreements require additional collateral to be provided if the value of the securities falls below a predetermined level.

Under standard terms for repurchase transactions in the UK and US markets, the recipient of collateral has an unrestricted right to sell or re-pledge it, subject to returning equivalent securities on settlement of the transaction.

Securities sold under repurchase transactions are not derecognised if NWB Group retains substantially all the risks and rewards of ownership. The fair value (and carrying value) of securities transferred under such repurchase transactions included on the balance sheet, are set out below. All of these securities could be sold or re-pledged by the holder.

For accounting policy information see Accounting policies note 3.9.

	NWB Group		NWB Plc	
	2022	2021	**2022**	2021
The following assets have failed derecognition (1)	**£m**	£m	**£m**	£m
Loans to bank - amortised cost	**16**	38	16	38
Loans to customers - amortised cost	**398**	1,837	398	1,837
Other financial assets	**2,140**	10,813	2,140	10,813
Total	**2,554**	12,688	2,554	12,688

(1) Associated liabilities were £2,137 million for both NWB Group and NWB Plc (2021- £10,783 million).

Assets pledged as collateral

NWB Group pledges collateral with its counterparties in respect of derivative liabilities and bank and stock borrowings.

	NWB Group		NWB Plc	
	2022	2021	**2022**	2021
Assets pledged against liabilities	**£m**	£m	**£m**	£m
Loans to banks - amortised cost	**66**	62	**-**	—
Loans to customers - amortised cost	**17,493**	20,108	**17,493**	20,108
Other financial assets	**697**	2,429	**697**	2,429
Total	**18,256**	22,599	**18,190**	22,537

(1) Includes amount pledged for pension derivatives.

The following table analyses assets that have been transferred but have failed the derecognition rules under IFRS 9 and therefore continue to be recognised on NWB Plc's balance sheet.

	2022	2021
Asset type (1)	**£m**	£m
UK mortgages - covered bond programme	**6,992**	8,267

(1) The associated liabilities are £6,888 million (2021 - £8,166 million).

25 Capital resources

Regulatory capital is assessed against minimum requirements that are set out under the Capital Requirements Regulation on a legal entity and consolidated basis. Transitional arrangements on the phasing in of end-point capital resources are set by the relevant regulatory authority.

The capital resources under the PRA transitional basis for NWB Plc are set out below.

	2022 £m	2021 £m
Shareholders' equity (excluding non-controlling interests)		
Shareholders' equity	**18,243**	19,166
Other equity instruments	**(2,518)**	(2,377)
	15,725	16,789
Regulatory adjustments and deductions		
Cash flow hedging reserve	**393**	2
Deferred tax assets	**(421)**	(541)
Prudential valuation adjustments	**(20)**	(12)
Goodwill and other intangible assets	**(1,458)**	(703)
Excess of expected losses over impairment provisions	**(86)**	—
Instruments of financial sector entities where the institution has a significant investment	**(430)**	(607)
Significant investments in excess of secondary capital	**—**	(73)
Foreseeable dividends	**(900)**	(993)
Foreseeable pension contributions	**—**	(365)
Adjustment for trust assets (1)	**(365)**	—
Adjustment under IFRS 9 transition arrangements	**281**	429
Insufficient coverage for non-performing exposures	**(6)**	(2)
	(3,012)	(2,865)
CET1 capital	**12,713**	13,924
Additional Tier 1 (AT1) capital		
Qualifying instruments and related share premium	**2,518**	2,377
Qualifying instruments and related share premium subject to phase out	**—**	—
	2,518	2,377
Tier 1 capital		
Instruments of financial sector entities where the institution has a significant investment	**(275)**	(262)
Tier 1 capital	**14,956**	16,039
Qualifying Tier 2 capital		
Qualifying instruments and related share premium	**3,188**	3,156
Tier 2 deductions		
Instruments of financial sector entities where the institution has a significant investment	**(266)**	(367)
Other regulatory adjustments	**(1)**	117
	(267)	(250)
Tier 2 capital	**2,921**	2,906
Total regulatory capital	**17,877**	18,945

(1) Prudent deduction in respect of agreement with the pension fund to establish new legal structure. See Notes 5 and 33 in the NatWest Group 2022 Annual Report and Accounts.

In the management of capital resources, NWB Plc is governed by NatWest Group's policy to maintain a strong capital base, to expand it as appropriate and to utilise it efficiently throughout its activities to optimise the return to shareholders while maintaining a prudent relationship between the capital base and the underlying risks of the business. In carrying out this policy, NatWest Group has regard to the supervisory requirements of the PRA. The PRA uses capital ratios as a measure of capital adequacy in the UK banking sector, comparing a bank's capital resources with its risk-weighted assets (the assets and off-balance sheet exposures are weighted to reflect the inherent credit and other risks); by international agreement, the Pillar 1 capital ratios, excluding capital buffers should be not less than 8% with a Common equity Tier 1 component of not less than 4.5%. NWB Plc has complied with the PRA's capital requirements throughout the year.

A number of subsidiaries and sub-groups within NWB Group, principally banking entities, are subject to various individual regulatory capital requirements in the UK and overseas. Furthermore, the payment of dividends by subsidiaries and the ability of members of NatWest Group to lend money to other members of NatWest Group may be subject to restrictions such as local regulatory or legal requirements, the availability of reserves and financial and operating performance.

26 Memorandum items

Contingent liabilities and commitments

The amounts shown in the table below are intended only to provide an indication of the volume of business outstanding at 31 December 2022. Although NWB Group is exposed to credit risk in the event of non-performance of the obligations undertaken by customers, the amounts shown do not, and are not intended to, provide any indication of NWB Group's expectation of future losses.

For accounting policy information see Accounting policies note 2.4.

	NWB Group		NWB Plc	
	2022 £m	2021 £m	2022 £m	2021 £m
Contingent liabilities and commitments				
Guarantees	**1,728**	796	**1,664**	742
Other contingent liabilities	**1,197**	1,193	**1,190**	1,187
Standby facilities, credit lines and other commitments	**87,221**	79,826	**83,321**	75,936
	90,146	81,815	**86,175**	77,865

(1) In the normal course of business, NWB Plc guarantees specified third party liabilities of certain subsidiaries; it also gives undertakings that individual subsidiaries will fulfil their obligations to third parties under contractual or other arrangements which are excluded from the table above.

Banking commitments and contingent obligations, which have been entered into on behalf of customers and for which there are corresponding obligations from customers, are not included in assets and liabilities. NWB Group's maximum exposure to credit loss, in the event of its obligation crystallising and all counterclaims, collateral or security proving valueless, is represented by the contractual nominal amount of these instruments included in the table above. These commitments and contingent obligations are subject to NWB Group's normal credit approval processes.

Guarantees - NWB Group gives guarantees on behalf of customers. A financial guarantee represents an irrevocable undertaking that NWB Group will meet a customer's specified obligations to a third party if the customer fails to do so. The maximum amount that NWB Group could be required to pay under a guarantee is its principal amount as disclosed in the table above. NWB Group expects most guarantees it provides to expire unused.

Other contingent liabilities - these include standby letters of credit, supporting customer debt issues and contingent liabilities relating to customer trading activities such as those arising from performance and customs bonds, warranties and indemnities.

Standby facilities and credit lines - under a loan commitment NWB Group agrees to make funds available to a customer in the future. Loan commitments, which are usually for a specified term, may be unconditionally cancellable or may persist, provided all conditions in the loan facility are satisfied or waived.

Commitments to lend include commercial standby facilities and credit lines, liquidity facilities to commercial paper conduits and unutilised overdraft facilities.

Other commitments - these include documentary credits, which are commercial letters of credit providing for payment by NWB Group to a named beneficiary against presentation of specified documents, forward asset purchases, forward deposits placed and undrawn note issuance and revolving underwriting facilities, and other short-term trade related transactions.

Indemnity deed

In April 2019, NWM Plc and NWB Plc entered into a cross indemnity agreement for losses incurred within the entities in relation to business transferred to or from the ring-fenced bank under the NatWest Group's structural re-organisation. Under the agreement, NWM Plc is indemnified by NWB Plc against losses relating to the NWB Plc transferring businesses and ring-fenced bank obligations and NWB Plc is indemnified by NWM Plc against losses relating to NWM Plc transferring businesses and non ring-fenced bank obligations with effect from the relevant transfer date.

Capital Support Deed

NWB Plc, together with certain other subsidiaries of NatWest Holdings Limited, is party to a Capital Support Deed (CSD). Under the terms of the CSD, the Bank may be required, if compatible with its legal obligations, to make distributions on, or repurchase or redeem, its ordinary shares. The amount of this obligation is limited to the NWB Plc's capital resources in excess of the capital and financial resources needed to meet its regulatory requirements. NWB Plc may also be obliged to make onward distribution to its ordinary shareholders of dividends or other capital distributions received from subsidiaries that are party to the CSD. The CSD also provides that, in certain circumstances, funding received by NWB Plc from other parties to the CSD becomes immediately repayable, such repayment being limited to the NWB Plc's available resources.

Contractual obligations for future expenditure not provided for in the accounts

The following table shows contractual obligations for future expenditure not provided for in the accounts at the year end.

	NWB Group		NWB Plc	
	2022 £m	2021 £m	2022 £m	2021 £m
Capital expenditure on other property, plant and equipment	**4**	14	**4**	13
Contracts to purchase goods or services (1)	**671**	677	**549**	568
	675	691	**553**	581

(1) Of which due within 1 year: £318 million (2021 - £298 million) for NWB Group and £290 million (2021 - £273 million) for NWB Plc.

26 Memorandum items continued

Trustee and other fiduciary activities

In its capacity as trustee or other fiduciary role, NWB Group may hold or place assets on behalf of individuals, trusts, companies, pension schemes and others. The assets and their income are not included in NWB Group's financial statements. NWB Group earned fee income of £215 million (2021 - £216 million) from these activities.

The Financial Services Compensation Scheme

The Financial Services Compensation Scheme (FSCS), the UK's statutory fund of last resort for customers of authorised financial services firms, pays compensation if a firm is unable to meet its obligations. The FSCS funds compensation for customers by raising management expenses levies and compensation levies on the industry. In relation to protected deposits, each deposit-taking institution contributes towards these levies in proportion to their share of total protected deposits on 31 December of the year preceding the scheme year (which runs from 1 April to 31 March), subject to annual maxima set by the Prudential Regulation Authority. In addition, the FSCS has the power to raise levies on a firm that has ceased to participate in the scheme and is in the process of ceasing to be authorised for the costs that it would have been liable to pay had the FSCS made a levy in the financial year it ceased to be a participant in the scheme.

Litigation and regulatory matters

NWB Plc and its subsidiary and associated undertakings ('NWB Group') are party to legal proceedings and involved in regulatory matters, including as the subject of investigations and other regulatory and governmental action (Matters) in the United Kingdom (UK), the United States (US), the European Union (EU) and other jurisdictions.

NWB Group recognises a provision for a liability in relation to these Matters when it is probable that an outflow of economic benefits will be required to settle an obligation resulting from past events, and a reliable estimate can be made of the amount of the obligation.

In many of these Matters, it is not possible to determine whether any loss is probable, or to estimate reliably the amount of any loss, either as a direct consequence of the relevant proceedings and regulatory matters or as a result of adverse impacts or restrictions on NWB Group's reputation, businesses and operations. Numerous legal and factual issues may need to be resolved, including through potentially lengthy discovery and document production exercises and determination of important factual matters, and by addressing novel or unsettled legal questions relevant to the proceedings in question, before a liability can reasonably be estimated for any claim. NWB Group cannot predict if, how, or when such claims will be resolved or what the eventual settlement, damages, fine, penalty or other relief, if any, may be, particularly for claims that are at an early stage in their development or where claimants seek substantial or indeterminate damages.

There are situations where NWB Group may pursue an approach that in some instances leads to a settlement agreement. This may occur in order to avoid the expense, management distraction or reputational implications of continuing to contest liability, or in order to take account of the risks inherent in defending claims or regulatory matters, even for those Matters for which NWB Group believes it has credible defences and should prevail on the merits. The uncertainties inherent in all such Matters affect the amount and timing of any potential outflows for both Matters with respect to which provisions have been established and other contingent liabilities in respect of any such Matter.

It is not practicable to provide an aggregate estimate of potential liability for our legal proceedings and regulatory matters as a class of contingent liabilities.

The future outflow of resources in respect of any Matter may ultimately prove to be substantially greater than or less than the aggregate provision that NWB Group has recognised. Where (and as far as) liability cannot be reasonably estimated, no provision has been recognised. NWB Group expects that in future periods, additional provisions, settlement amounts and customer redress payments will be necessary, in amounts that are expected to be substantial in some instances. Please refer to Note 21 for information on material provisions.

Matters which are, or could be material, having regard to NWB Group, considered as a whole, in which NWB Group is currently involved are set out below. We have provided information on the procedural history of certain Matters, where we believe appropriate, to aid the understanding of the Matter.

For a discussion of certain risks associated with NWB Group's litigation and regulatory matters, see the Risk Factors relating to legal, regulatory and governmental actions and investigations set out on pages 190-192.

Litigation

London Interbank Offered Rate (LIBOR) and other rates litigation

In August 2020, a complaint was filed in the United States District Court for the Northern District of California by several United States retail borrowers against the USD ICE LIBOR panel banks and their affiliates (including NatWest Group plc, NatWest Markets Plc, NatWest Markets Securities Inc. and NWB Plc), alleging (i) that the very process of setting USD ICE LIBOR amounts to illegal price-fixing; and (ii) that banks in the United States have illegally agreed to use LIBOR as a component of price in variable retail loans. In September 2022, the district court dismissed the complaint, subject to re-pleading by the plaintiffs. The plaintiffs filed an amended complaint in October 2022, which the defendants are again seeking to have dismissed.

Offshoring VAT assessments

HMRC issued protective tax assessments in 2018 against NatWest Group plc totalling £143 million relating to unpaid VAT in respect of the UK branches of two NatWest Group companies registered in India. NatWest Group formally requested reconsideration by HMRC of their assessments, and this process was completed in November 2020. HMRC upheld their original decision and, as a result, NatWest Group plc lodged an appeal with the Tax Tribunal and an application for judicial review with the High Court of Justice of England and Wales, both in December 2020. In order to lodge the appeal with the Tax Tribunal, NatWest Group plc was required to pay £143 million to HMRC, and payment was made in December 2020. The appeal and the application for judicial review have both been stayed pending resolution of a separate case involving another bank.

26 Memorandum items continued

Regulatory matters

NWB Group's financial condition can be affected by the actions of various governmental and regulatory authorities in the UK, the US, the EU and elsewhere. NWB Group and/or NatWest Group have engaged, and will continue to engage, in discussions with relevant governmental and regulatory authorities, including in the UK, the US, the EU and elsewhere, on an ongoing and regular basis, and in response to informal and formal inquiries or investigations, regarding operational, systems and control evaluations and issues including those related to compliance with applicable laws and regulations, including consumer protection, investment advice, business conduct, competition/anti-trust, VAT recovery, anti-bribery, anti-money laundering and sanctions regimes. NWB Group expects government and regulatory intervention in financial services to be high for the foreseeable future, including increased scrutiny from competition and other regulators in the retail and SME business sectors.

Any matters discussed or identified during such discussions and inquiries may result in, among other things, further inquiry or investigation, other action being taken by governmental and regulatory authorities, increased costs being incurred by NWB Group, remediation of systems and controls, public or private censure, restriction of NWB Group's business activities and/or fines. Any of the events or circumstances mentioned in this paragraph or below could have a material adverse effect on NWB Group, its business, authorisations and licences, reputation, results of operations or the price of securities issued by it, or lead to material additional provisions being taken. NWB Group is co-operating fully with the matters described below.

Investment advice review

In October 2019, the FCA notified NatWest Group of its intention to appoint a Skilled Person under section 166 of the Financial Services and Markets Act 2000 to conduct a review of whether NatWest Group's past business review of investment advice provided during 2010 to 2015 was subject to appropriate governance and accountability and led to appropriate customer outcomes. The Skilled Person's review has concluded and, after discussion with the FCA, NatWest Group has now commenced additional review / remediation work.

27 Analysis of the net investment in business interests and intangible assets

	NWB Group		NWB Plc	
	2022 £m	2021 £m	2022 £m	2021 £m
Additional investments in associates	—	(11)	—	(10)
Additional investments in Group undertakings	—	—	(256)	(13)
Disposal of investments in Group undertakings	—	—	227	—
Purchase of net assets and liabilities (1)	(270)	(3,256)	—	(2,666)
Net outflow of cash in respect of purchases	(270)	(3,267)	(29)	(2,689)
Disposal of net assets and liabilities	—	29	—	27
Profit on disposal of net assets and liabilities	—	2	—	2
Net inflow of cash in respect of disposals	—	31	—	29
Net cash expenditure on intangible assets	(722)	(465)	(690)	(433)
Net outflow of cash	(992)	(3,701)	(719)	(3,093)

(1) In 2021 NWB Group net assets and liabilities purchased is the settlement of the 2020 purchase of Loans and advances to customers from Metro Bank plc of £3.2 billion. NWB Plc Net assets and liabilities purchased includes the Metro Bank plc transaction as for NWB Group, and the transfer of Ulster Bank Limited business including cash and cash equivalents of £266m, Loans and advances to customers of £3.5 billion, and Customer deposits of £8.5 billion.

28 Analysis of changes in financing during the year

	NWB Group						NWB Plc					
	Called up share capital, share premium, and paid-in equity		Subordinated liabilities(1)		MRELs(2)		Called up share capital, share premium, and paid-in equity		Subordinated liabilities(1)		MRELs(2)	
	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m	2022 £m	2021 £m
At 1 January	6,280	6,273	3,285	4,539	5,687	3,908	6,280	6,273	3,279	4,539	5,133	3,597
Issue of paid-in equity	500	941					500	941				
Redemption of paid-in equity	(388)	(934)					(388)	(934)				
Issue of subordinated liabilities			—	1,351					—	1,351		
Redemption of subordinated liabilities			(55)	(2,468)					(55)	(2,468)		
Interest on subordinated liabilities			(145)	(150)					(144)	(150)		
Issue of MRELs					750	1,931					700	1,679
Interest on MRELs					(202)	(169)					(191)	(164)
Net cash inflow/(outflow) from financing	112	7	(200)	(1,267)	548	1,762	112	7	(199)	(1,267)	509	1,515
Effects of foreign exchange			86	(53)	612	66			86	(54)	599	73
Changes in fair value of subordinated liabilities and MRELs			(178)	(195)	(734)	(225)			(178)	(195)	(746)	(223)
Interest on subordinated liabilities and MRELs			145	139	226	176			144	139	214	171
Loss on redemption of own debt			—	117					—	117		
Other	29	—	—	5	—	—	29	—	—	—	—	—
At 31 December	6,421	6,280	3,138	3,285	6,339	5,687	6,421	6,280	3,132	3,279	5,709	5,133

(1) Subordinated liabilities include intercompany subordinated liabilities.
(2) NWB Group MRELs balances are included in amounts due to holding companies and fellow subsidiaries. NWB Plc MRELs balances are shown net of the effect of down streaming funding to subsidiary companies.

29 Analysis of cash and cash equivalents

In the cash flow statement, cash and cash equivalents comprises cash and loans to banks with an original maturity of less than three months that are readily convertible to known amounts of cash and subject to insignificant risk of change in value.

	NWB Group		NWB Plc	
	2022 £m	2021 £m	2022 £m	2021 £m
At 1 January	106,645	68,048	105,546	67,194
Net (decrease)/increase in cash and cash equivalents	(30,327)	38,597	(30,074)	38,352
At 31 December	76,318	106,645	75,472	105,546
Comprising:				
Cash and balances at central banks	73,065	101,213	73,062	101,210
Other financial assets	234	7	234	7
Loans to banks including intragroup balances (1)	3,019	5,425	2,176	4,329
Cash and cash equivalents	76,318	106,645	75,472	105,546

(1) Includes cash collateral posted with bank counterparties in respect of derivative liabilities of £234 million (2021 - £7 million).

30 Directors' and key management remuneration

The composition of NWB Plc's board of directors is aligned to its intermediate holding company NatWest Holdings Ltd. The directors are remunerated for their services to NatWest Group as a whole, and their remuneration cannot be apportioned in respect of their services to NWB Plc.

The directors' emoluments in the table below represent the NWH Group emoluments of the directors.

Directors' remuneration	2022 £000	2021 £000
Non-executive directors emoluments	1,950	1,955
Chairman and executive directors emoluments	5,804	4,688
	7,754	6,643
Amounts receivable under long-term incentive plans and share option plans	542	549
	8,296	7,192

The total emoluments and amounts receivable under long-term incentive plans and share option plans of the highest paid director were £3,497,000 (2021 - £2,808,000).

The executive directors may participate in the NatWest Group's long-term incentive plans, executive share option and sharesave schemes. Where directors of NWB Plc are also directors of NatWest Group plc, details of their share interests can be found in the 2022 Annual Report and Accounts of NatWest Group plc, in line with regulations applying to NatWest Group plc as a premium listed company.

Compensation of key management

The aggregate remuneration of directors and other members of key management(1) during the year was as follows:

	2022 £000	2021 £000
Short-term benefits	18,390	14,921
Post-employment benefits	594	683
Share-based payments	1,823	1,967
	20,807	17,571

(1) Key management comprises members of the NWH Ltd Executive Committee.

Short term benefits include benefits expected to be settled wholly within twelve months of Balance Sheet date. Post-employment benefits include defined benefit contributions for active members and pension funding to support contributions to the defined contribution schemes. Share-based payments include awards vesting under rewards schemes.

31 Transactions with directors and key management

At 31 December 2022, amounts outstanding in relation to transactions, arrangements and agreements entered into by authorised institutions in NWB Group, as defined in UK legislation, were £9,636,586 in respect of loans to 8 persons who were directors of NWB Plc at any time during the financial period.

For the purposes of IAS 24 'Related Party Disclosures', key management comprises directors of NWB Plc and members of the NWB Plc Executive Committee. Amounts in the table below are attributed to each person at their highest level of NatWest Group key management.

	2022 £000	2021 £000
Loans to customers - amortised cost	11,172	8,632
Customer deposits	42,932	45,719

Key management have banking relationships with NatWest Group entities which are entered into in the normal course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with other persons of a similar standing or, where applicable, with other employees. These transactions did not involve more than the normal risk of repayment or present other unfavourable features. Key management had no reportable transactions or balances with the holding companies.

32 Related parties

UK Government

The UK Government through HM Treasury is the ultimate controlling party of NatWest Group plc. The UK Government's shareholding is managed by UK Government Investments Limited, a company wholly owned by the UK Government. As a result the UK Government and UK Government controlled bodies are related parties of the Group.

At 31 December 2022, HM Treasury's holding in NatWest Group's ordinary shares was 45.97%.

NWB Group enters into transactions with many of these bodies. Transactions include the payment of: taxes, principally UK corporation tax (Note 7) and value added tax; national insurance contributions; local authority rates; and regulatory fees and levies; together with banking transactions such as loans and levy sits undertaken in the normal course of banker-customer relationships.

Bank of England facilities

NWB Group may participate in a number of schemes operated by the Bank of England in the normal course of business.

Members of NWB Group that are UK authorised institutions are required to maintain non-interest bearing (cash ratio) deposits with the Bank of England amounting to 0.403% of their average eligible liabilities in excess of £600 million. They also have access to Bank of England reserve accounts: sterling current accounts that earn interest at the Bank of England base rate.

NWB Plc guarantees certain liabilities of NWH Group to the Bank of England.

Other related parties

(a) In their roles as providers of finance, NWB Group companies provide development and other types of capital support to businesses. These investments are made in the normal course of business.
(b) To further strategic partnerships, NWB Group may seek to invest in third parties or allow third parties to hold a minority interest in a subsidiary of NatWest Group. We disclose as related parties where stakes of 10 per cent or more are held. Ongoing business transactions with these entities are on normal commercial terms.
(c) NWB Group recharges NatWest Group Pension Fund with the cost of administration services incurred by it. The amounts involved are not material to NWB Group.
(d) In accordance with IAS 24, transactions or balances between NWB Group entities that have been eliminated on consolidation are not reported.
(e) The primary financial statements include transactions and balances with its subsidiaries which have been further disclosed in the relevant parent company notes.

Holding companies and fellow subsidiaries

Transactions NWB Group enters with its holding companies and fellow subsidiaries also meet the definition of related party transactions. The table below discloses transactions between NWB Group and subsidiaries of NatWest Group.

	2022 £m	2021 £m
Interest receivable	**41**	33
Interest payable	**(777)**	(220)
Fees and commissions receivable	**97**	31
Fees and commissions payable	**(70)**	(6)
Other operating income (1)	**1,641**	1,497
	932	1,335

(1) Includes internal service recharges of £1,616 million.

Amounts due from/to holding companies and fellow subsidiaries are shown in Note 9. During the year Coutts & Company, a subsidiary of National Westminster Bank Plc, acquired the Adam & Company business from The Royal Bank of Scotland plc, another subsidiary of NatWest Group plc for a net consideration value of £270m. This was acquired as a business under common control. The transfer was carried out at the fair value of those assets and liabilities on the day of transfer as would take place with a third party on an arm's length basis.

33 Ultimate holding company

NWB Group's ultimate holding company is NatWest Group plc and its intermediate parent company is NatWest Holdings Limited ('NWH Ltd' or 'the intermediate holding company').

NatWest Group plc is incorporated in the United Kingdom and registered in Scotland and NWH Ltd is registered in England. As at 31 December 2022, NatWest Group plc heads the largest group in which NWB Group is consolidated. Copies of the consolidated accounts of both companies may be obtained from Legal, Governance & Regulatory Affairs, NatWest Group plc, Gogarburn, PO Box 1000, Edinburgh EH12 1HQ, the Registrar of Companies or at natwestgroup.com.

Following placing and open offers by NatWest Group plc in December 2008 and April 2009, the UK Government, through HM Treasury, held 45.97% (at 31 December 2022) of the issued ordinary share capital of NatWest Group plc and is therefore NWB Group's ultimate controlling party.

34 Post balance sheet events

On 6 February 2023, NWB reached agreement with the trustees of the Main Section of the Group pension scheme to recognise that the final distribution linked contribution to the Main Scheme, of up to £471 million, in 2023 is not expected to be required. In its place, agreement was reached to establish a new legal structure to hold assets with a value equivalent to £471 million. These assets would become transferrable to the Main section in the event that future triggers, reflecting a funding requirement, were met. The assets are not de-recognised from NWB balance sheet, but are recorded as encumbered. The Group believes likelihood of triggers being met are remote given the current funding position of the Main section.

There have been no other significant events between 31 December 2022 and the date of approval of these accounts which would require a change to or additional disclosure in the accounts.

35 Related undertakings

Legal entities and activities at 31 December 2022

In accordance with the Companies Act 2006, NWB Plc's related undertakings and the accounting treatment for each are listed below. All undertakings are wholly-owned by NWB Plc or subsidiaries of NWB Plc and are consolidated by reason of contractual control (Section 1162(2) CA 2006), unless otherwise indicated. NWB Group interest refers to ordinary shares of equal values and voting rights unless further analysis is provided in the notes. Activities are classified in accordance with Annex I to the Capital Requirements Directive ("CRD V") and the definitions in Article 4 of the UK Capital Requirements Regulation.

The following table details active related undertakings incorporated in the UK which are 100% owned by NWB Group and fully consolidated for accounting purposes.

Entity name	Activity	Regulatory treatment	Notes
AD Aggregator Platform Ltd	OTH	FC	(31)
Caledonian Sleepers Rail Leasing Ltd	BF	FC	(1)
Coutts & Company	CI	FC	(13)
Coutts Finance Company	BF	FC	(13)
East Grove Holding Ltd	INV	DE	(32)
Esme Loans Ltd	BF	FC	(1)
FreeAgent Central Ltd	SC	FC	(21)
FreeAgent Holdings Ltd	SC	FC	(21)
G L Trains Ltd	BF	FC	(16)
Gatehouse Way Developments Ltd	INV	DE	(1)
German Biogas Holdco Ltd	INV	DE	(31)
KUC Properties Ltd	BF	DE	(3)
Land Options (West) Ltd	INV	DE	(3)
Lombard & Ulster Ltd	BF	FC	(12)
Lombard Business Leasing Ltd	BF	FC	(1)
Lombard Corporate Finance (December 1) Ltd	BF	FC	(1)
Lombard Corporate Finance (December 3) Ltd	BF	FC	(1)
Lombard Corporate Finance (June 2) Ltd	BF	FC	(1)
Lombard Discount Ltd	BF	FC	(1)
Lombard Finance Ltd	BF	FC	(1)
Lombard Industrial Leasing Ltd	BF	FC	(1)
Lombard Lease Finance Ltd	BF	FC	(1)
Lombard Leasing Company Ltd	BF	FC	(1)
Lombard Leasing Contracts Ltd	BF	FC	(1)
Lombard Lessors Ltd	BF	FC	(1)
Lombard Maritime Ltd	BF	FC	(1)
Lombard North Central Leasing Ltd	BF	FC	(1)
Lombard North Central Plc	BF	FC	(1)
Lombard Property Facilities Ltd	BF	FC	(1)
Lombard Technology Services Ltd	BF	FC	(1)
Mettle Ventures Ltd	OTH	FC	(1)
National Westminster Home Loans Ltd	BF	FC	(1)
NatWest Property Investments Ltd	INV	DE	(1)
Pittville Leasing Ltd	BF	FC	(1)
Premier Audit Company Ltd	BF	FC	(1)
R.B. Capital Leasing Ltd	BF	FC	(1)
R.B. Leasing (September) Ltd	BF	FC	(1)
R.B. Quadrangle Leasing Ltd	BF	FC	(1)
RBS Asset Management Holdings	BF	FC	(13)
RBS Collective Investment Funds Ltd	BF	FC	(10)
RBS Invoice Finance Ltd	BF	FC	(1)
RBSG Collective Investments Holdings Ltd	BF	FC	(10)
RBSSAF (2) Ltd	BF	FC	(1)
RBSSAF (25) Ltd	BF	FC	(1)
Royal Bank Leasing Ltd	BF	FC	(3)
Royal Bank of Scotland (Industrial Leasing) Ltd	BF	FC	(3)
Royal Scot Leasing Ltd	BF	FC	(3)
RoyScot Trust Plc	BF	FC	(1)
Silvermere Holdings Ltd	BF	FC	(3)
The Royal Bank of Scotland Group Independent Financial Services Ltd	BF	FC	(3)
Ulster Bank Ltd	BF	FC	(12)
Ulster Bank Pension Trustees Ltd	TR	DE	(12)
Walton Lake Developments Ltd	INV	DE	(1)
World Learning Ltd	BF	FC	(19)

35 Related undertakings continued

The following table details active related undertakings incorporated outside the UK which are 100% owned by NWB Group and fully consolidated for accounting purposes

Entity name	Activity	Regulatory treatment	Notes
Airside Properties AB	BF	FC	(2)
Airside Properties ASP Denmark AS	BF	FC	(11)
Airside Properties Denmark AS	BF	FC	(11)
Arkivborgen KB	BF	FC	(2)
Artul Koy	BF	FC	(4)
BD Lagerhus AS	BF	FC	(5)
Bilfastighet i Akalla AB	BF	FC	(2)
Bilfastighet i Avesta AB	BF	FC	(2)
Bilfastighet i Bollnas AB	BF	FC	(2)
Bilfastighet i Hemlingby AB	BF	FC	(2)
Bilfastighet i Hudiksvall AB	BF	FC	(2)
Bilfastighet i Ludvika AB	BF	FC	(2)
Bilfastighet i Märsta AB	BF	FC	(14)
Bilfastighet i Mora AB	BF	FC	(2)
Bilfastighet i Uppsala KB	BF	FC	(14)
Bilfastighet Kista AB	BF	FC	(14)
Brödmagasinet KB	BF	FC	(2)
Eiendomsselskapet Apteno La AS	BF	FC	(5)
Espeland Naering AS	BF	FC	(5)
Eurohill 4 KB	BF	FC	(2)
Fab Ekenäs Formanshagen 4	BF	FC	(4)
Fastighets AB Flöjten I Norrköping	BF	FC	(10)
Fastighets Aktiebolaget Sambiblioteket	BF	FC	(2)
Fastighetsbolaget Holma I Höör AB	BF	FC	(10)
Forskningshöjden KB	BF	FC	(2)

Entity name	Activity	Regulatory treatment	Notes
Förvaltningsbolaget Dalkyrkan KB	BF	FC	(10)
Förvaltningsbolaget Klöverbacken Skola KB	BF	FC	(10)
Fyrs!te Fastighets AB	BF	FC	(2)
Grinnhagen KB	BF	FC	(2)
Hatros 1 AS	BF	FC	(5)
Horrsta 4:38 KB	BF	FC	(2)
IR Fastighets AB	BF	FC	(2)
IR IndustriRenting AB	BF	FC	(2)
Kallebäck Institutfastigheter AB	BF	FC	(10)
Kastrup Commuter K/S	BF	FC	(11)
Kastrup Hangar 5 K/S	BF	FC	(11)
Kastrup V & L Building K/S	BF	FC	(11)
KB Eurohill	BF	FC	(2)
KB Lagermannen	BF	FC	(2)
KB Likriktaren	BF	FC	(2)
Koy Lohjan Ojamonharjuntie 61	BF	FC	(4)
Koy Vantaan Rasti IV	BF	FC	(4)
Koy Harkokuja 2	BF	FC	(17)
Koy Pennalan Johtotie 2	BF	FC	(4)
Koy Porkkanakatu 2	BF	FC	(4)
Koy Espoon Entresse II	BF	FC	(4)
Koy Helsingin Mechelininkatu 1	BF	FC	(4)

Entity name	Activity	Regulatory treatment	Notes
Koy Helsingin Osmontie 34	BF	FC	(4)
Koy Helsingin Panuntie 6	BF	FC	(4)
Koy Helsingin Panuntie 11	BF	FC	(4)
Koy Iisalmen Kihlavirta	BF	FC	(4)
Koy Jämsän Keskushovi	BF	FC	(4)
Koy Jasperintie 6	BF	FC	(17)
Koy Kokkolan Kaarlenportti Fab	BF	FC	(4)
Koy Kouvolan Oikeus ja Poliisitalo	BF	FC	(4)
Koy Millennium	BF	FC	(4)
Koy Nummelan Portti	BF	FC	(4)
Koy Nuolialan päiväkoti	BF	FC	(4)
Koy Peltolantie 27	BF	FC	(17)
Koy Porkkanakatu 2	BF	FC	(17)
Koy Puotikuja 2 Vaasa	BF	FC	(4)
Koy Raision Kihlakulma	BF	FC	(4)
Koy Ravattulan Kauppakeskus	BF	FC	(4)
Koy Tapiolan Louhi	BF	FC	(4)
Koy Vapaalan Service-Center	BF	FC	(4)
Kvam Eiendom AS	BF	FC	(5)
Läkten 1 KB	BF	FC	(2)
Leiv Sand Eiendom AS	BF	FC	(5)
LerumsKrysset KB	BF	FC	(2)
Limstagården KB	BF	FC	(2)
Lundbyfilen 5 AB	BF	FC	(14)
Narmovegen 455 AS	BF	FC	(5)
National Westminster International Holdings B.V.	BF	FC	(3)
NatWest Services (Switzerland) Ltd	SC	FC	(28)

Entity name	Activity	Regulatory treatment	Notes
Nordisk Renting AB	BF	FC	(2)
Nordisk Renting AS	BF	FC	(26)
Nordisk Renting Facilities Management AB	BF	FC	(14)
Nordisk Renting OY	BF	FC	(4)
Nordisk Specialinvest AB	BF	FC	(2)
Nordiska Strategifastigheter Holding AB	BF	FC	(2)
Nybergflata 5 AS	BF	FC	(5)
OFH Eiendom AS	BF	FC	(33)
Optimus KB	BF	FC	(2)
RBS Asset Management (Dublin) Ltd	BF	FC	(30)
RBS Deutschland Holdings GmbH	BF	FC	(22)
RBS Polish Financial Advisory Services Sp. Z o.o.	BF	FC	(27)
RBS Services India Private Ltd	SC	FC	(24)
Rigedalen 44 Eiendom AS	BF	FC	(5)
Ringdalveien 20 AS	BF	FC	(5)
Sandmoen Naeringsbygg AS	BF	FC	(5)
SFK Kommunfastigheter AB	BF	FC	(2)
Sjöklockan KB	BF	FC	(2)
Skinnarängen KB	BF	FC	(2)
Sletta Eiendom II AS	BF	FC	(5)
Snipetjernveien 1 AS	BF	FC	(5)
Solbänken KB	BF	FC	(2)
Solnorvika AS	BF	FC	(5)
Strand European Holdings AB	BF	FC	(14)
Svenskt Fastighetskapital AB	BF	FC	(2)
Svenskt Energikapital AB	BF	FC	(2)
Svenskt Fastighetskapital Holding AB	BF	FC	(2)
Tygverkstaden 1 KB	BF	FC	(2)

35 Related undertakings continued

The following table details active related undertakings which are 100% owned by NWB Group but are not consolidated for accounting purposes

Entity name	Activity	Regulatory treatment	Notes
Bioenergie Dargun Immobilien GmbH	OTH	DE	(29)
Bioenergie Jessen Immobilien GmbH	OTH	DE	(29)
Bioenergie Wiesenburg GmbH & Co. KG	INV	DE	(29)
Bioenergie Wiesenburg Verwaltungs GmbH	OTH	DE	(29)
Bioenergie Zittau GmbH	OTH	DE	(29)
Bioenergie Zittau Immobilien GmbH	OTH	DE	(29)
Capulet Homes Florida LLC	OTH	DE	(6)
Crook Hill Properties Ltd	OTH	DE	(34)
DBV Deutsche Bioenergie Verbinder GmbH	OTH	DE	(29)
European Investments (Crook Hill) Ltd	OTH	DE	(35)
Montague Homes Florida LLC	OTH	DE	(6)
Reaps Moss Ltd	OTH	DE	(34)
Reppinichen Dritte Biogas Betriebs GmbH	OTH	DE	(29)
Reppinichen Erste Biogas Betriebs GmbH	OTH	DE	(29)
Reppinichen Zweite Biogas Betriebs GmbH	OTH	DE	(29)
Romeo Homes Florida LLC	OTH	DE	(6)
Romeo Homes Georgia LLC	OTH	DE	(6)
Romeo Homes Indiana LLC	OTH	DE	(6)
Romeo Homes Kansas LLC	OTH	DE	(6)
Romeo Homes Nevada LLC	OTH	DE	(6)
Romeo Homes North Carolina LLC	OTH	DE	(6)
Romeo Homes Oklahoma LLC	OTH	DE	(6)
Romeo Homes Tennessee LLC	OTH	DE	(6)
Romeo Homes Texas LLC	OTH	DE	(6)
Ventus Investments Ltd	OTH	DE	(35)
WGH Development LLC	OTH	DE	(6)
WGH Florida LLC	OTH	DE	(6)
WGH Georgia LLC	OTH	DE	(6)
WGH Indiana LLC	OTH	DE	(6)
WGH Kansas LLC	OTH	DE	(6)
WGH Nevada LLC	OTH	DE	(6)
WGH North Carolina LLC	OTH	DE	(6)
WGH Oklahoma LLC	OTH	DE	(6)
WGH Texas LLC	OTH	DE	(6)
Wiesenburg Dritte Biogas Betriebs GmbH	OTH	DE	(29)
Wiesenburg Erste Biogas Betriebs GmbH	OTH	DE	(29)
Wiesenburg Zweite Biogas Betriebs GmbH	OTH	DE	(29)
Wiesenburger Marktfrucht GmbH	OTH	DE	(29)

The following table details active related undertakings incorporated in the UK where NWB Group ownership is less than 100%

Entity name	Activity	Accounting treatment	Regulatory treatment	Group %	Notes
Falcon Wharf Ltd	OTH	EAJV	PC	50	(20)
GWNW City Developments Ltd	BF	EAJV	DE	50	(20)
Jaguar Cars Finance Ltd	BF	FC	FC	50	(1)
JCB Finance Ltd	BF	FC	FC	75	(18)
London Rail Leasing Ltd	BF	EAJV	PC	50	(25)
Natwest Covered Bonds (LM) Ltd	BF	IA	PC	20	(15)
Natwest Covered Bonds LLP	BF	FC	FC	73	(16)
Pollinate International Ltd	OTH	EAA	DE	30	(36)

The following table details active related undertakings incorporated outside the UK where NWB Group ownership is less than 100%

Entity name	Activity	Accounting treatment	Regulatory treatment	Group %	Notes
Nightingale CRE 2018-1 Ltd	BF	FC	DE	0	(9)
Nightingale LF 2021-1 Ltd	BF	FC	DE	0	(9)
Nightingale Project Finance 2019 1 Ltd	BF	FC	DE	0	(9)
Nightingale Securities 2017-1 Ltd	BF	FC	DE	0	(9)
Nightingale UK Corp 2020 2 Ltd	BF	FC	DE	0	(9)
Pharos Estates Ltd	OTH	AHC	DE	49	(23)
Wiśniowy Management sp. Z.o.o.	SC	AHC	DE	25	(27)

The following table details related undertakings that are not active (actively being dissolved)

Entity name	Accounting treatment	Regulatory treatment	Group %	Notes
Belfast Bankers' Clearing Company Ltd	OTH	NC	25	(37)
Lombard Ireland Group Holdings Unlimited	FC	FC	100	(38)
Lombard Ireland Ltd	FC	FC	100	(38)
NatWest Nominees Ltd	FC	FC	100	(1)

The following table details related undertakings that are dormant

Entity name	Accounting treatment	Regulatory treatment	Group %	Notes
Coutts Scotland Nominees Ltd	FC	FC	100	(10)
Dunfly Trustee Ltd	FC	FC	100	(1)
JCB Finance Pension Ltd	FC	DE	88	(12)
NatWest FIS Nominees Ltd	FC	FC	100	(1)
NatWest Group Retirement Savings Trustee Ltd	FC	FC	100	(1)
NatWest Group Secretarial Services Ltd	FC	FC	100	(3)
NatWest Invoice Finance Ltd	FC	FC	100	(1)
NatWest Pension Trustee Ltd	NC	DE	100	(1)
NatWest PEP Nominees Ltd	FC	FC	100	(1)
Nordisk Renting A/S	FC	FC	100	(5)
Nordisk Renting HB	FC	FC	100	(2)
NWB Nominee 1 Ltd	FC	FC	100	(1)
R.B. Leasing (March) Ltd	FC	FC	100	(1)
RBS Investment Executive Ltd	NC	DE	100	(3)
RBSG Collective Investments Nominees Ltd	FC	FC	100	(10)
RoosterMoney UK Ltd	FC	FC	100	(19)
Strand Nominees Ltd	FC	FC	100	(13)
Syndicate Nominees Ltd	FC	FC	100	(1)
The Royal Bank of Scotland Group Ltd	FC	FC	100	(1)
Voyager Leasing Ltd	FC	FC	100	(1)

35 Related undertakings continued

The following table details the overseas branches of NWB Group

Subsidiary	Geographic location
National Westminster Bank Plc	Germany

Key:

BF	Banking and financial institution
CI	Credit institution
INV	Investment (shares or property) holding company
SC	Service company
TR	Trustee
OTH	Other
DE	Deconsolidated
FC	Full consolidation
PC	Pro-rata consolidation
AHC	Associate held at cost
EAJV	Equity accounting – Joint venture
IA	Investment accounting
NC	Not consolidated

Notes	Registered addresses	Country of incorporation
(1)	250 Bishopsgate, London, EC2M 4AA	UK
(2)	Care of Nordisk Renting AB, Jakobsbergsgatan 13, 8th Floor, Box 14044, Stockholm, SE-111 44	Sweden
(3)	RBS Gogarburn, 175 Glasgow Road, Edinburgh, EH12 1HQ	UK
(4)	c/o Epicenter, Mikonkatu 9, 6th Floor, Helsinki, 00100	Finland
(5)	c/o Advokatfirmaet Wiersholm AS, Postboks 1400, 0115 Oslo	Norway
(6)	251, Little Falls Drive, Wilmington, DE, 19808	USA
(7)	Ulster Bank Head Office, Block B Central Park, Leopardstown, Dublin 18, D18 N153	RoI
(8)	Grand Pavilion Commercial Centre, 802 West Bay Road, P.O. Box 31119	Cayman Islands
(9)	44 Esplanade, St Helier, JE4 9WG	Jersey
(10)	6-8 George Street, Edinburgh, EH2 2PF	UK
(11)	C/O Visma Services Danmark A/S, Lyskaer 3C-3D, 2730 Herlev	Denmark
(12)	11-16 Donegall Square East, Belfast, Co Antrim, BT1 5UB	UK
(13)	440, Strand, London, WC2R OQS	UK
(14)	C/O Nordisk Renting AB, Box 14044, SE-104 40 Stockholm	Sweden
(15)	1 Bartholomew Lane London EC2N 2AX	UK
(16)	1 Princes Street, London, EC2R 8BP	UK
(17)	c/o Nordisk Renting Oy, Mikonkatu 9, 00100, Helsinki	Finland
(18)	The Mill, High Street, Rocester, Staffordshire, ST14 5JW	UK
(19)	64 New Cavendish Street, London, W1G 8TB	UK
(20)	Gate House, Turnpike Road, High Wycombe, Buckinghamshire, HP12 3NR	UK
(21)	One Edinburgh Quay, 133 Fountainbridge, Edinburgh, EH3 9QG	UK
(22)	Roßmarkt 10, Frankfurt am Main, 60311	Germany
(23)	24 Demostheni Severi, 1st Floor, Nicosia, 1080	Cyprus
(24)	6th Floor, Building 2, Tower A, GIL IT/ITES SEZ, Candor TechSpace, Sector 21, Gurugram, Haryana, 122016	India
(25)	99 Queen Victoria Street, London, EC4V 4EH	UK
(26)	H. Heyerdahlsgate 1, Postboks 2020 Vika, Oslo, 0125	Norway
(27)	ul. Ilzecka 26, building E, 02-135, Warsaw	Poland
(28)	Lerchenstrasse 18, Zurich, CH 8022	Switzerland
(29)	Liszt Straße 10, Regensburg, D-93053	Germany
(30)	One Dockland Central, Guild Street, IFSC, Dublin 1	RoI
(31)	Greencoat Capital, 5 The Peak, Wilton Road, London, Greater London, SW1V 1AN, England	UK
(32)	8 Sackville Street, London, W1S 3DG, England	UK
(33)	Rakkestadsveien 15, 1814 Askim	Norway
(34)	2nd floor, Palm Grove House, Road Town, Tortola	British Virgin Islands
(35)	18 Riversway Business Village, Navigation Way, Ashton-on Ribble, Preston, PR2 2YP	UK
(36)	2nd Floor 120 Old Broad Street, London, EC2N 1AR	UK
(37)	Scottish Provident Building, 7 Donegall Square West, Belfast, BT1 6JH	UK
(38)	13-18 City Quay, Dublin 2	RoI

Risk factors

Principal Risks and Uncertainties

Set out below are certain risk factors that could adversely affect NWB Group's future results, its financial condition and/or prospects and cause them to be materially different from what is forecast or expected, and directly or indirectly impact the value of its securities. These risk factors are broadly categorised and should be read in conjunction with other sections of this annual report, including the forward-looking statements section, the strategic report and the risk and capital management section. They should not be regarded as a complete and comprehensive statement of all potential risks and uncertainties facing NWB Group.

Economic and political risk

NWB Group, its customers and its counterparties face continued economic and political risks and uncertainties in the UK and global markets, including as a result of high inflation and rising interest rates, supply chain disruption and the Russian invasion of Ukraine.

NWB Group is affected by global economic and market conditions. Uncertain and volatile economic conditions can create a challenging operating environment for financial services companies such as NWB Group. The outlook for the global economy has many uncertainties including: falling economic activity, high inflation, rising interest rates, elevated energy prices and higher cost-of-living, supply chain disruption, changes to monetary and fiscal policy, and the impact of armed conflict (in particular the Russian invasion of Ukraine).

These conditions, including the current cost of living crisis, could be worsened by a number of factors including: instability in the global financial system, market volatility and change, fluctuations in the value of the pound sterling, new or extended economic sanctions, the ongoing effects of the COVID-19 pandemic, economic volatility in emerging markets, volatility in commodity prices or concerns regarding sovereign debt or sovereign credit ratings. Economic conditions may also be affected by the changing demographics in the markets that NWB Group serves, increasing social and other inequalities, or rapid changes to the economic environment due to the adoption of technology, automation and artificial intelligence, or due to climate change, environmental degradation, biodiversity loss and/or other sustainability risks.

NWB Group is also exposed to risks arising out of geopolitical events or political developments, such as exchange controls and other measures taken by sovereign governments that may hinder economic or financial activity levels. Unfavourable political, military or diplomatic events, increasing geopolitical tensions leading to armed conflict, protectionist policies or trade barriers, secession movements or the exit of other member states from the EU, changes to monetary and fiscal policy, new and widespread public health crises (including any epidemics or pandemics), state and privately sponsored cyber and terrorist acts or threats, and the responses to each of the above economic, political or other scenarios by various governments and markets, could negatively affect the business and performance of NWB Group, including as a result of the indirect impact on regional or global trade and/or NWB Group's customers and counterparties.

The UK experienced significant political uncertainty in 2022 that may persist into the foreseeable future. This could lead to a loss of confidence in the UK, that could in turn, negatively impact companies operating in the UK. NWB Group also faces political uncertainty in Scotland as a result of a possible second Scottish independence referendum. Independence may adversely affect NWB Group both in relation to entities incorporated in Scotland and in other jurisdictions. Any changes to Scotland's relationship with the UK or the EU may adversely affect the the environment in which NatWest Group and its subsidiaries operate and may require further changes to NatWest Group's (including NWB Group's) structure, independently or in conjunction with other mandatory or strategic structural and organisational changes, any of which could adversely affect NWB Group.

The COVID-19 pandemic prompted many changes that may prove to be permanent shifts in customer behaviour and economic activity, such as changes in spending patterns and significantly more people working in a more flexible manner. These changes may affect asset prices, the economic environment, and NWB Group's customers' and counterparties' financial performance and needs. In response to the COVID-19 pandemic, central banks, governments, regulators, and legislatures in the UK and elsewhere offered unprecedented levels of support and various schemes to assist businesses and individuals, many of which have since been curtailed or withdrawn. However, risks remain as to whether these loans will be repaid.

The value of NWB Group's own and other securities may be materially affected by market risk, including as a result of market fluctuations. Market volatility, illiquid market conditions and disruptions in the credit markets may make it extremely difficult to value certain of NWB Group's own and other securities, particularly during periods of market displacement. This could cause a decline in the value of NWB Group's own and other securities, which may have an adverse effect on NWB Group's results of operations in future periods, or inaccurate carrying values for certain financial instruments.

In addition, financial markets are susceptible to severe events evidenced by rapid depreciation in asset values, which may be accompanied by a reduction in asset liquidity. Under these conditions, hedging and other risk management strategies may not be as effective at mitigating losses as they would be under more normal market conditions. Moreover, under these conditions, market participants are particularly exposed to trading strategies employed by many market participants simultaneously and on a large scale, increasing NWB Group's counterparty risk. NWB Group's risk management and monitoring processes seek to quantify and mitigate NWB Group's exposure to more extreme market moves. However, market events have historically been difficult to predict, and NWB Group, its customers and its counterparties could realise significant losses if extreme market events were to occur.

Any of the above may adversely affect NWB Group.

Changes in interest rates have significantly affected, and will continue to affect, NWB Group's business and results.

NWB Group's performance is affected by changes in interest rates. Benchmark overnight interest rates, such as the UK base rate, increased in 2022 and are expected to continue to rise in the short-term accompanied by quantitative tightening. However, forward rates at 31 December 2022 suggested interest rates may fall again in the medium-term.

Stable interest rates support predictable income flow and less volatility in asset and liability valuations, although persistently low and negative interest rates, such as those experienced during the COVID-19 pandemic, are generally expected to be less favourable for banks. For NWB Group, persistently low interest rates may reduce the yield on its lower interest income.

Volatility in interest rates may also result in unexpected outcomes both for interest income and asset and liability valuations which may adversely affect NWB Group. For example, unexpected movements in spreads between key benchmark rates such as sovereign and swap rates in turn affect liquidity portfolio valuations. Finally, sharp unexpected rises in rates may also have negative impacts on some asset and derivative valuations, for example. Any of the above may have an adverse effect on NWB Group's future results, financial condition and/or prospects.

Movements in interest rates also influence and reflect the macro-economic situation more broadly, affecting factors such as business and consumer confidence, property prices, default rates on loans and other indicators that may indirectly affect NWB Group's and may adversely affect its future results, financial condition and/or prospects.

Fluctuations in currency exchange rates may adversely affect NWB Group's results and financial condition.

Decisions of central banks (including the Bank of England, the European Central Bank and the US Federal Reserve) and political or market events which are outside NWB Group's control, may lead to sharp and sudden fluctuations in currency exchange rates.

Although NWB Group is principally a UK focused banking group, it is subject to structural foreign exchange risk from capital deployed in NatWest Group's foreign subsidiaries and branches. NWB Group also issues instruments in non-sterling currencies that assist in meeting NWB Group's MREL. NWB Group conducts banking activities in non-sterling currencies (for example loans and deposits) which affects its revenue and also uses service providers based outside of the United Kingdom for certain services and as a result certain operating results are subject to fluctuations in currency exchange rates.

NWB Group maintains policies and procedures designed to manage the impact of exposures to fluctuations in currency exchange rates. Nevertheless, changes in currency exchange rates, particularly in the sterling-US dollar and euro-sterling rates, may adversely affect, various factors including, the value of assets, liabilities (including the total amount of MREL-eligible instruments), income and expenses, RWAs and hence the reported earnings and financial condition of NWB Plc.

Continuing uncertainty regarding the effects and extent of the UK's post Brexit divergence from EU laws and regulation, and NWB Group's post Brexit EU operating model may adversely affect NWB Group and its operating environment.

The UK ceased to be a member of the EU and the European Economic Area ('EEA') on 31 January 2020 ('Brexit') and the 2020 EU-UK Trade and Cooperation Agreement ('TCA') ended the transition period on 31 December 2020. The TCA was accompanied by a Joint Declaration on financial services which sets out an intention for the EU and UK to cooperate on matters of financial regulation and to agree a Memorandum of Understanding ('MoU'), which remains unsigned. Certain aspects of the services provided by NWB Group are therefore subject to obtaining local licences or are subject to individual equivalence decisions (temporary or otherwise) by relevant regulators. The EU's equivalence regime does not cover most lending and deposit taking, and determinations in respect of non-EU countries have not, to date, covered the provision of most financial investment services. In addition, equivalence determinations do not guarantee permanent access rights and can be withdrawn with short notice. In late 2021 the European Commission proposed legislation that would require non-EU firms to establish a branch or subsidiary in the EU before providing 'banking services' in the EU. If these proposals become law all 'banking services' will be licensable activities in each EU member state and member states will not be permitted to offer bilateral permissions to financial institutions outside the EU allowing them to provide 'banking services' in the EU. Uncertainty remains as to whether 'banking services' will also include investment products.

NatWest Group continues to evaluate its post Brexit EU operating model, making adaptations as necessary. NatWest Group also continues to assess where NatWest Group companies can obtain bilateral regulatory permissions to facilitate intragroup transactions and/or to permit business to continue from its UK entities, transferring what cannot be continued to be rendered from the UK to an EEA subsidiary or branch where permitted or commercially reasonable to do so. Where these regulatory permissions are temporary or are withdrawn, a different approach may need to be taken or may result in a change in operating model or some business being ceased. Not all NatWest Group entities have applied for bilateral regulatory permissions and instead conduct EEA business through an EEA licensed subsidiary or branch. Certain permissions are required in order to maintain the ability to clear euro payments. Other permissions, including the ability to have two intermediate EU parent undertakings, may need to be obtained, and structural changes may need to be made, to allow NWB Group to continue to serve EEA customers from both the ring-fenced and non-ring-fenced banking entities. Any failure to obtain such permissions or make such structural changes in a timely manner, or at all, could adversely affect NWB Group and the EEA customers it serves. Furthermore, transferring business to an EEA based subsidiary is a complex exercise and involves legal, regulatory and execution risks, and could result in a loss of business and/or customers or higher than anticipated costs. The changes to NatWest Group's operating model have been costly and failure to receive the requested regulatory permissions and/or further changes to its business operations, product offering and customer engagement could result in further costs and/or regulatory sanction.

The long-term effects of Brexit and the uncertainty regarding NWB Group's EU operating model may adversely affect NWB Group and its customers and counterparties who are themselves dependent on trading with the EU or personnel from the EU. The long-term effects of Brexit may also be exacerbated by wider UK and global macro-economic trends and events.

Uncertainties remain as to the extent to which EU/EEA laws will diverge from UK law. For example, bank regulation in the UK may diverge from European bank regulation if the Financial Services and Markets Bill ('FSM') is enacted into law. The UK government has also proposed legislation to introduce automatic 'sunset' clauses for retained EU law by the end of 2023 (the Retained EU Law (Revocation and Reform) Bill 2022), which if enacted could potentially cause market disruption and require additional resources to manage the legal and regulatory consequences. NatWest Group (including NWB Group) may not be able to respond to these changes effectively, in a timely manner, or at all. The actions taken by regulators in response to any new or revised bank regulation and other rules affecting financial services, may adversely affect NWB Group, including its business, non-UK operations, group structure, compliance costs, intragroup arrangements and capital requirements.

HM Treasury (or UKGI on its behalf) could exercise a significant degree of influence over NatWest Group and NWB Group is controlled by NatWest Group.
In its March 2021 Budget, the UK Government announced its intention to carry out a programme of sales of NatWest Group plc ordinary shares with the objective of selling all of its remaining shares in NatWest Group plc by 2026. NatWest Group plc has: (i) carried out directed buybacks of NatWest Group plc ordinary shares from UK Government Investments Limited ('UKGI') in March 2021 and in March 2022, (ii) carried out sales of NatWest Group plc shares by UKGI by accelerated bookbuild in May 2021 and (iii) made purchases under NatWest Group plc's directed and on-market buyback programmes announced in July 2021 and in March 2022. As at 17 January 2023, the UK Government held 44.98% of the ordinary share capital with voting rights of NatWest Group plc. NatWest Group may participate in similar directed or on-market buybacks in the near- and medium-term future. The precise timing and extent of further UKGI's sell-downs is uncertain, which could result in a prolonged period of price volatility for NatWest Group plc's ordinary shares and other securities.

Any offers or sales of a substantial number of ordinary shares in NatWest Group plc by UKGI, market expectations about these sales and any associated directed, on or off market buyback activity by NatWest Group, could affect the prevailing market price for the outstanding ordinary shares of NatWest Group plc which may have an adverse effect on NWB Group.

HM Treasury has indicated that it intends to respect the commercial decisions of NatWest Group and that NatWest Group entities (including NWB Group) will continue to have their own independent board of directors and management team determining their own strategy. However, for as long as HM Treasury remains NatWest Group plc's largest single shareholder, HM Treasury and UKGI (as manager of HM Treasury's shareholding) could exercise a significant degree of influence over NatWest Group (including NWB Group) including: the election of directors and appointment of senior management, NatWest Group's (including NWB Group's) capital strategy, dividend policy, remuneration policy or the conduct of NatWest Group's (including NWB Group's) operations.

HM Treasury or UKGI's approach depends on government policy, which could change. The manner in which HM Treasury or UKGI exercises HM Treasury's rights as the largest single shareholder of NatWest Group could give rise to conflicts between the interests of HM Treasury and the interests of other shareholders, including as a result of a change in government policy. The exertion of such influence over NatWest Group may in turn adversely affect the governance, business strategy, future results, financial condition and/or prospects of NWB Group.

In addition, NWB Plc is a wholly owned subsidiary of NatWest Group plc, and NatWest Group plc therefore controls NWB Group's board of directors, corporate policies and strategic direction. The interests of NatWest Group plc as an equity holder and as NWB Group's parent may differ from the interests of NWB Group or of potential investors in NWB Group's securities.

Strategic risk

NatWest Group (NWB Plc's parent company) continues to implement its purpose-led strategy, which carries significant execution and operational risks and may not achieve its stated aims and targeted outcomes.
NatWest Group (NWB Plc's parent company) continues to implement its purpose-led strategy, which is designed to champion potential and to help individuals, families and businesses to thrive. NatWest Group's strategy is intended to reflect the rapidly shifting environment and backdrop of unprecedented disruption in society driven by technology and changing customer expectations, as accelerated by the COVID-19 pandemic. Further, shifting trends include digitalisation, decarbonisation, automation, e-commerce and hybrid working, each of which has resulted in significant market volatility and change. There is also increased investor, employee, stakeholder, regulatory and customer scrutiny regarding how businesses address these changes and related climate change, biodiversity and other sustainability issues, including tackling inequality, working conditions, workplace health, safety and wellbeing, diversity and inclusion, data protection and management, workforce management, human rights and supply chain management.

In recent years, as part of its purpose-led strategy, NatWest Group has refocused its NatWest Markets business, and has also created the Commercial & Institutional business segment. The Commercial & Institutional business segment combined the pre-existing Commercial, NatWest Markets and RBS International businesses to form a single business segment, which focuses on serving Commercial & Institutional customers. The Commercial & Institutional business segment is intended to allow closer operational and strategic alignment to support growth, with increased levels of services being provided between NatWest Group entities, with the potential increased risk of breach of the UK ring-fencing regime requiring effective conflicts of interest policies.

Many factors may adversely impact the successful implementation of NatWest Group's purpose-led strategy, including:

- Macro-economic challenges including rising inflation and interest rates and falling economic activity which may adversely affect economic growth and which could in turn impact certain strategic initiatives and new venture opportunities for NWB Group;
- an internal culture shift across NWB Group as to how NWB Group conducts its business to strive towards NatWest Group's One Bank strategy;
- maintaining effective governance, procedures, systems and controls giving effect to NatWest Group's purpose-led strategy whilst also managing emerging climate, ESG and other sustainability-related risks and opportunities;
- achieving a number of financial, capital and operational targets and expectations, both for the short term and throughout the implementation period;
- cost-controlling measures, which may result in material one-off provisions to lower NatWest Group's (and NWB Group) cost base, may divert investment from other areas, and may vary considerably from year to year;
- lower customer confidence and confidence from the wider market, which may result in a decrease of customer activity and related income levels;
- changes in the economic, political and regulatory environment in which NWB Group, its customers and counterparties operate, regulatory uncertainty and changes, strong market competition and industry disruption and economic volatility; and
- any economic downturn which may adversely affect the strategy as certain initiatives depend on achieving growth in new ventures and opportunities for NatWest Group, which in turn would impact NWB Group.

In pursuing NatWest Group's purpose-led strategy, NWB Group may not be able to successfully: (i) implement some or all aspects of its strategy; (ii) meet any or all of the related targets or expectations of its strategy; or (iii) realise the intended strategic objectives of any other future strategic or growth initiative. The scale and scope of NatWest Group's (and NWB Group's) strategy and the intended changes continue to present material business, operational and regulatory (including compliance with the UK ring-fencing regime), conflicts, legal, execution, IT system, internal culture, conduct and people risks. Implementing many changes and strategic actions concurrently, including in respect of any growth initiatives, will require application of robust governance and controls frameworks and robust IT systems; there is a risk that NatWest Group (and NWB Group) may not be successful in these respects. The implementation of NatWest Group's purpose-led strategy and any other strategic initiatives could result in materially higher costs than initially contemplated (including due to material uncertainties and factors outside of NatWest Group's control) and may not be completed as planned, or at all, or could be phased or could progress in a manner other than currently expected. This could lead to additional management actions by NatWest Group (or NWB Group).

Each of these risks, and others identified in these Risk Factors, individually or collectively could jeopardise the implementation and delivery of NatWest Group's purpose-led strategy and other strategic initiatives, result in higher than expected costs, impact NWB Group's products and services offering, its reputation with customers or business model and adversely affect NWB Group's ability to deliver its strategy and meet its targets and guidance, each of which could adversely affect NWB Group's future results, financial condition and/or prospects.

Future acquisitions or divestments by NatWest Group (and/or NWB Group) may not be successful, and consolidation or fragmentation of the financial services industry may adversely affect NatWest Group.

The financial services industry is experiencing continued competitive pressure with technological advancement disrupting traditional business models. In order to compete effectively, NatWest Group (of which NWB Group forms part), as part of its purpose-led strategy, may decide to undertake divestments, restructurings or reorganisations. Conversely, NatWest Group (or NWB Group) may decide to grow its business through acquisitions, joint ventures, investments and/or strategic partnerships as well as other transactions and initiatives to: (i) enhance capabilities that may lead to better productivity or cost efficiencies; (ii) acquire talent; (iii) pursue new products or expand existing products; and/or (iv) enter new markets or enhance its presence in existing markets.

There are risks that NWB Group may not fully realise the expected benefits and value from these transactions and initiatives in the time, or to the degree anticipated, or at all. In particular, NatWest Group (and NWB Group) may: (i) fail to realise the business rationale for the transaction or initiative, or assumptions underlying the business plans supporting the valuation of a target business may prove inaccurate, for example, regarding synergies and expected commercial demand; (ii) fail to successfully integrate any acquired businesses (including in respect of technologies, existing strategies, products and human capital) or to successfully divest or restructure a business; (iii) fail to retain key employees, customers and suppliers of any acquired business; (iv) be required or wish to terminate pre-existing contractual relationships, which could prove costly and/or be executed at unfavourable terms and conditions; (v) fail to discover certain contingent or undisclosed liabilities in businesses that it acquires, or its due diligence to discover any such liabilities may be inadequate; and (vi) not obtain necessary regulatory and other approvals or onerous conditions may be attached to such approvals. Accordingly, NatWest Group (or NWB Group) may not be successful in growing its business through divestments, restructurings, reorganisations or acquisitions, and initiatives and any particular transaction may not succeed, may be limited in scope or scale (including due to NatWest Group's current ownership structure) and may not conclude on the terms contemplated, or at all. Any of the above may adversely affect NWB Group's future results, financial condition and/or prospects.

Continued competitive pressure in the financial services industry, including from technology companies, may have a negative impact on NWB Group's business. If NatWest Group Commercial & Institutional customers merge or are acquired by other entities that are not NatWest Group customers, this may also lead to losses for NatWest Group (and NWB Group). Existing larger banks or financial institutions (and those that emerge from mergers and consolidations) may have more bargaining power in negotiations than NatWest Group (and NWB Group). Each of these developments may adversely affect NWB Group.

The transfer of NatWest Group's Western European corporate portfolio involves certain risks.

To improve efficiencies and best serve customers following Brexit, NWB Group expects that certain of NatWest Group's assets, liabilities, transactions and activities (including NatWest Group's Western European corporate portfolio, principally consisting of term funding and revolving credit facilities), may be: (i) transferred from the ring-fenced subgroup of NatWest Group, to NWM Group and/or (ii) transferred to the ring-fenced subgroup of NatWest Group from NWM Group, subject to regulatory and customer requirements. The timing, success and quantum of any of these transfers remain uncertain as is the impact of these transactions on its results of operations. As a result, NatWest Group's (including NWB Group's) future results, financial condition and/or prospects may be adversely affected.

Financial resilience risk

NWB Group may not meet the targets it communicates or generate sustainable returns.

As part of NatWest Group's strategy, it has set a number of financial, capital and operational targets for NWB Group including in respect of: MREL targets, funding plans and requirements, employee engagement, diversity and inclusion as well as ESG (including climate and sustainable funding and financing targets) and customer satisfaction targets.

NWB Group's ability to meet NatWest Group and NWB Group's respective targets and to successfully fulfil its strategy are subject to various internal and external factors and risks. These include, but are not limited to: market, regulatory, macro-economic and political uncertainties, developments relating to litigation, governmental actions, investigations and regulatory matters, and operational risks and risks relating to NWB Group's business model and strategy (including risks associated with climate, ESG and other sustainability-related issues). A number of factors, may impact NWB Group's ability to maintain its current CET1 ratio, including: impairments, limited organic capital generation or unanticipated increases in RWAs. In addition, the run-down of RWAs may be accompanied by the recognition of disposal losses which may be higher than anticipated. See also '*NatWest Group (NWB Plc's parent company) continues to implement its purpose-led strategy, which carries significant execution and operational risks and may not achieve its stated aims and targeted outcomes.*'

NWB Group has significant exposure to counterparty and borrower risk.

NWB Group has exposure to many different industries, customers and counterparties, and risks arising from actual or perceived changes in credit quality and the recoverability of monies due from borrowers and other counterparties are inherent in a wide range of NWB Group's businesses. NWB Group's lending strategy and associated processes/systems may fail to identify, anticipate or quickly react to weaknesses or risks in a particular sector, market or borrower, or NatWest Group's credit risk appetite relative to competitors, or fail to adequately value physical or financial collateral. This may result in increased default rates or a higher loss given default for loans, which may, in turn, impact NWB Group's profitability. See also '*Risk and capital management — Credit Risk*'.

The credit quality of NWB Group's borrowers and other counterparties may be affected by the recent UK and global macro-economic and political uncertainties and a further deterioration in prevailing economic and market conditions (including a resurgence of the COVID-19 pandemic or other new health crises) and by the legal and regulatory landscape in the UK and countries where NWB Group is exposed to credit risk. Any further deterioration in these conditions or changes to legal or regulatory landscapes could worsen borrower and counterparty credit quality or impact the enforcement of contractual rights over security, increasing credit risk.

An increase in drawings upon committed credit facilities may also increase NWB Group's RWAs. In addition, the level of household indebtedness in the UK remains high. The ability of households to service their debts could be worsened by a period of high unemployment, increasing interest rates and higher inflation, particularly if prolonged.

NWB Group may be affected by volatility in property prices (including as a result of the general UK political or economic climate) given that NWB Group's mortgage loan and wholesale property loan portfolios as at 31 December 2022, amounted to £208.3 billion, representing 68% of NWB Group's total customer loan exposure. If property prices were to weaken this could lead to higher impairment charges, particularly if default rates also increase. In addition, NWB Group's credit risk may be exacerbated if the collateral that it holds cannot be realised as a result of market conditions or regulatory intervention or if it is liquidated at prices not sufficient to recover the net amount after accounting for any IFRS 9 provisions already made. This is most likely to occur during periods of illiquidity or depressed asset valuations.

Concerns about, or a default by, a financial institution could lead to significant liquidity problems and losses or defaults by other financial institutions, since the commercial and financial soundness of many financial institutions is closely related and interdependent as a result of credit, trading, clearing and other relationships. Any perceived lack of creditworthiness of a counterparty or borrower may lead to market-wide liquidity problems and losses for NWB Group. This systemic risk may also adversely affect financial intermediaries, such as clearing agencies, clearing houses, banks, securities firms and exchanges with which NWB Group interacts on a daily basis. See also, '*NWB Group may not be able to adequately access sources of liquidity and funding*'.

As a result, adverse changes in borrower and counterparty credit risk may cause accelerated impairment charges under IFRS 9, increased repurchase demands, higher costs, additional write-downs and losses for NWB Group and an inability to engage in routine funding transactions.

NWB Group has applied an internal analysis of multiple economic scenarios (MES) together with the determination of specific overlay adjustments to inform its IFRS 9 ECL (Expected Credit Loss). The recognition and measurement of ECL is complex and involves the use of significant judgment and estimation. This includes the formulation and incorporation of multiple forward-looking economic scenarios into ECL to meet the measurement objective of IFRS 9. The ECL provision is sensitive to the model inputs and economic assumptions underlying the estimate. Going forward, NWB Group anticipates observable credit deterioration of a proportion of assets resulting in a systematic uplift in defaults, which is mitigated by those economic assumption scenarios being reflected in the Stage 2 ECL across portfolios, along with a combination of post model overlays in both wholesale and retail portfolios reflecting the uncertainty of credit outcomes. See also, '*Risk and capital management — Credit Risk*'. A credit deterioration would also lead to RWA increases. Furthermore, the assumptions and judgments used in the MES and ECL assessment at 31 December 2022 may not prove to be adequate resulting in incremental ECL provisions for NWB Group.

In line with certain mandated COVID-19 pandemic support schemes, NWB Group assisted affected customers with a number of initiatives including NWB Group's participation in BBLS, CBILS and CLBILS products. NWB Group has sought to manage the risks of fraud and money laundering against the need for the fast and efficient release of funds to customers and businesses. NWB Group may be exposed to fraud, conduct and litigation risks arising from inappropriate approval (or denial) of BBLS,CBILS or CLBILS or the enforcing or pursuing repayment of BBLS, CBILS and CLBILS (or a failure to exercise forbearance), which may have an adverse effect on NWB Group's reputation and results of operations. The implementation of the initiatives and efforts mentioned above may result in litigation, regulatory and government actions and proceedings. These actions may result in judgments, settlements, penalties or fines.

If NWB Group experiences losses and a reduction in future profitability, this is likely to affect the recoverable value of fixed assets, including goodwill and deferred taxes, which may lead to write-downs.

NWB Group operates in markets that are highly competitive, with increasing competitive pressures and technology disruption.

The market for UK financial services is highly competitive. NWB Group expects such competition to continue and intensify in response to various changes. These include: evolving customer behaviour, technological changes (including digital currencies and other instruments, stablecoins and the growth of digital banking, such as from fintech entrants), competitor behaviour, new entrants to the market (including non-traditional financial services providers such as retail or technology conglomerates, who may have competitive advantages in scale, technology and customer engagement), competitive foreign-exchange offerings, industry trends resulting in increased disaggregation or unbundling of financial services or conversely the re-intermediation of traditional banking services, and the impact of regulatory actions and other factors. In particular, developments in the financial sector resulting from new banking, lending and payment solutions offered by rapidly evolving incumbents, challengers and new entrants, notably with respect to payment services and products, and the introduction of disruptive technology may impede NWB Group's ability to grow or retain its share and impact its revenues and profitability, particularly in its key UK retail and commercial banking segments. Moreover, innovations such as biometrics, artificial intelligence, automation, the cloud, blockchain, cryptocurrencies and quantum computing may rapidly facilitate industry transformation.

These trends have been catalysed by various regulatory and competition policy interventions, including the UK initiative on Open Banking (PSD2), 'Open Finance' and other remedies imposed by the Competition and Markets Authority ('CMA') which are designed to further promote competition within retail banking. The competition enhancing measures under NatWest Group's independently administered Alternative Remedies Package ('ARP') benefits grant recipients and eligible competitors. The ARP may be more costly than anticipated and may adversely affect customer service for NWB Group's own customers, its competitive position and reputation. Failure to comply with the terms of the scheme could result in the imposition of additional measures or limitations on NWB Group's operations, additional supervision by NWB Group's regulators, and loss of investor confidence.

Increasingly, many of the products and services offered by NWB Group are, and will become, more technology intensive, including through digitalisation and the use of artificial intelligence. For example, NWB Group has invested in a number of fintech ventures, including Mettle, FreeAgent, Tyl, Rapid Cash, Rooster Money and Vodeno. NWB Group's ability to develop or acquire such digital solutions (which also need to comply with applicable and evolving regulations) has become increasingly important to retaining and growing NWB Group's customer business in the UK. There can be no certainty that NWB Group's innovation strategy (which includes investment in its IT capability intended to address the material increase in customer use of online and mobile technology for banking as well as selective acquisitions, which carry associated risks) will be successful or that it will allow NWB Group to continue to maintain or grow such services in the future. Certain of NWB Group's current or future competitors may be more successful in implementing innovative technologies for delivering products or services to their customers. NWB Group may also fail to identify future opportunities or derive benefits from disruptive technologies in the context of rapid technological innovation, changing customer behaviour and growing regulatory demands resulting in increased competition from traditional banking businesses as well as new providers of financial services, including technology companies with strong brand recognition, that may be able to develop financial services at a lower cost base.

NWB Group's competitors may also be better able to attract and retain customers and key employees, may have more advanced IT systems, and may have access to lower cost funding and/or be able to attract deposits on more favourable terms than NWB Group. Although NWB Group invests in new technologies and participates in industry and research led initiatives aimed at developing new technologies, such investments may be insufficient or ineffective, especially given NWB Group's focus on cost efficiencies. This may limit additional investment in areas such as innovation and could affect NWB Group's offering of innovative products or technologies for delivering products or services to customers and its competitive position. Furthermore, the development of innovative products depends on NWB Group's ability to produce underlying high-quality data, failing which its ability to offer innovative products may be compromised.

If NWB Group is unable to offer competitive, attractive and innovative products that are also profitable and timely, it will lose share, incur losses on some or all of its initiatives and lose opportunities for growth. In this context, NWB Group is investing in the automation of certain solutions and interactions within its customer-facing businesses, including through automation and artificial intelligence. Such initiatives may result in operational, reputational and conduct risks if the technology used is defective, inadequate or is not fully integrated into NWB Group's current solutions. There can be no certainty that such initiatives will deliver the expected cost savings and investment in automated processes will likely also result in increased short-term costs for NWB Group.

In addition, the implementation of NatWest Group's purpose-led strategy (including in relation to acquisitions, reorganisations and/or partnerships), delivery on its climate ambition, cost-controlling measures, as well as employee remuneration constraints, may also have an impact on NWB Group's ability to compete effectively and intensified competition from incumbents, challengers and new entrants could affect NWB Group's ability to maintain satisfactory returns. Moreover, activist investors have increasingly become engaged and interventionist in recent years, which may pose a threat to NatWest Group's (including NWB Group's) strategic initiatives. Furthermore, continued consolidation or technological or other developments in certain sectors of the financial services industry could result in NWB Group's remaining competitors gaining greater capital and other resources, including the ability to offer a broader range of products and services and geographic diversity, or the emergence of new competitors. Any of the above may adversely affect NWB Group's future results, financial condition and/or prospects.

NWB Group may not meet the prudential regulatory requirements for regulatory capital and MREL, or manage its capital effectively, which could trigger the execution of certain management actions or recovery options.

NatWest Group and NWB Plc (on a standalone basis) are required by regulators in the UK, the EU and other jurisdictions in which they undertake regulated activities to maintain adequate financial resources. Adequate capital provides NatWest Group (including NWB Group) with financial flexibility specifically in its core UK operations in the face of turbulence and uncertainty in the UK and the global economy.

As at 31 December 2022, NWB Plc's CET1 ratio was 11.3%. A number of subsidiaries and sub-groups within NWB Group, principally banking entities, are subject to various individual regulatory capital requirements in the UK and overseas. NatWest Group plc currently targets a CET1 ratio of 13-14% by the end of 2023. NatWest Group plc's target CET1 ratio is based on a combination of its expected regulatory requirements and internal modelling, including stress scenarios and management's and/or the Prudential Regulation Authority's ('PRA') views on appropriate buffers above minimum operating levels.

NatWest Group's current capital strategy for NWB Plc is based on: the expected accumulation of additional capital through the accrual of profits over time; the receipt of assets and resultant RWAs from other NatWest Group entities; RWA growth in the form of regulatory uplifts and lending growth and other capital management initiatives which focus on improving capital efficiency through improved data and upstreaming of dividends from NWB Plc to NatWest Group plc and ensuring NatWest Group meets its medium to long term targets.

A number of factors may impact NWB Group's ability to maintain its current CET1 ratio target and achieve its capital strategy. These include:

– a depletion of its capital resources through increased costs or liabilities or reduced profits;
– an increase in the quantum of RWAs/Leverage Exposure in excess of that expected, including due to regulatory changes or a failure in internal controls or procedures to accurately measure and report RWAs/Leverage Exposure; and
– changes in prudential regulatory

requirements/ Leverage Requirement including NWB Plc's Total Capital Requirement set by the PRA, as applicable, including Pillar 2 requirements, as applicable, and regulatory buffers as well as any applicable scalars.

In addition to regulatory capital, NWB Plc is required to maintain a set quantum of internal MREL set as the higher of its RWAs or leverage requirement. The Bank of England has identified single point-of-entry at NatWest Group plc, as the preferred resolution strategy for NatWest Group. As a result, NatWest Group plc is the only entity that can externally issue securities that count towards its MREL, the proceeds of which can then be downstreamed to meet the internal MREL of its operating entities, including NWB Plc. NWB Plc is therefore dependent not only on NatWest Group plc to fund NWB Plc's internal MREL targets over time, but also on NatWest Group plc's ability to issue and maintain sufficient amounts of external MREL liabilities to support this. In turn, NWB Plc is required to fund the internal capital requirements and MREL of its subsidiaries. See also, '*NWB Group is reliant on NatWest Group for capital and funding support, and is substantially reliant on NatWest Group plc's ability to issue sufficient amounts of capital and external MREL securities and downstream the proceeds to NWB Group. The inability to do so may adversely affect NWB Group*.'

If, under a stress scenario, the level of regulatory capital or MREL falls outside of risk appetite, there are a range of recovery management actions (focused on risk reduction and mitigation) that NWB Group could take to manage its capital levels, but any such actions may not be sufficient to restore adequate capital levels. Under the EU Bank Recovery and Resolution Directives I and II ('BRRD'), as implemented in the UK, NatWest Group must maintain a recovery plan acceptable to its regulator, such that a breach of NWB Group's applicable capital or leverage requirements may trigger the application of NatWest Group's recovery plan to remediate a deficient capital position. NatWest Group's regulator may request that NWB Group carry out certain capital management actions or, if NatWest Group plc's CET1 ratio falls below 7%, certain regulatory capital instruments issued by NatWest Group plc will be written-down or converted into equity and there may be an issue of additional equity by NatWest Group plc, which could result in the reduction in value of the holdings of NatWest Group plc's existing shareholders. The success of such issuances will also be dependent on favourable market conditions and NatWest Group may not be able to raise the amount of capital required on acceptable terms or at all. Separately, NatWest Group may address a shortage of capital by taking action to reduce leverage exposure and/or RWAs via asset or business disposals. These actions may, in turn, affect: NWB Group's product offering, credit ratings, ability to operate its businesses, pursue its current strategies and pursue strategic opportunities, any of which may adversely affect NWB Group's future results, financial condition and/or prospects. See also, '*NatWest Group (including NWB Group) may become subject to the application of UK statutory stabilisation or resolution powers which may result in, for example, the write-down or conversion of NWB Group's eligible liabilities.*'

NWB Group may not be able to adequately access sources of liquidity and funding.

NWB Group is required to access sources of liquidity and funding through retail and wholesale deposits, as well as through the debt capital markets. As at 31 December 2022, NWB Plc held £322.6 billion in deposits. The level of deposits may fluctuate due to factors outside NWB Group's control, such as a loss of customers and/or investor confidence (including in individual NatWest Group entities), changes in interest rates, government support, increasing competitive pressures for retail and corporate customer deposits or the reduction or cessation of deposits by wholesale depositors, which could result in a significant outflow of deposits within a short period of time. An inability to grow, or any material decrease in NWB Group's deposits could, particularly if accompanied by one of the other factors described above, may adversely affect NWB Group's ability to satisfy its liquidity or funding needs. In turn, this could require NWB Group to adapt its funding plans or change its operations.

Current economic uncertainties and any significant market volatility could affect NWB Group's ability to access sources of liquidity and funding, which may result in higher funding costs and failure to comply with regulatory capital, funding and leverage requirements. As a result, NWB Group could be required to adapt its funding plans. This could exacerbate funding and liquidity risk, which may adversely affect NWB Group.

As at 31 December 2022, NWB Plc's liquidity coverage ratio was 131%. If NWB Plc's liquidity position were to come under stress, and if NWB Plc were unable to raise funds through deposits or in the debt capital markets on acceptable terms or at all, its liquidity position could be adversely affected and it might be unable to meet deposit withdrawals on demand or at their contractual maturity, to repay borrowings as they mature, to meet its obligations under committed financing facilities, to comply with regulatory funding requirements, to undertake certain capital and/or debt management activities, or to fund new loans, investments and businesses. NWB Group may need to liquidate assets to meet its liabilities, including disposals of assets not previously identified for disposal to reduce its funding commitments or trigger the execution of certain management actions or recovery options. In a time of reduced liquidity, NWB Group may be unable to sell some of its assets, or may need to sell assets at depressed prices, which in either case may adversely affect NWB Group's future results, financial condition and/or prospects.

NWB Group is reliant on NatWest Group for capital and funding support, and is substantially reliant on NatWest Group plc's ability to issue sufficient amounts of capital and external MREL securities and downstream the proceeds to NWB Group. The inability to do so may adversely affect NWB Group.

NWB Plc receives capital and funding from NatWest Group. NWB Plc has set target levels for different tiers of capital and for the internal MREL, as percentages of its RWAs. The level of capital and funding required for NWB Plc to meet its internal targets is therefore a function of the level of RWAs and its leverage exposure in NWB Plc and this may vary over time.

NWB Plc's internal MREL comprises the capital value of regulatory capital instruments and loss-absorbing senior funding issued by NWB Plc to its ultimate parent, NatWest Group plc. The Bank of England has identified that the preferred resolution strategy for NatWest Group is as a single point of entry at NatWest Group plc. As a result, only NatWest Group plc is able to issue Group MREL eligible liabilities to third-party investors, using the proceeds to fund the internal MREL targets and/or requirements of its operating entities, including NWB Plc.

NWB Plc is therefore dependent on NatWest Group plc to fund its internal capital targets and its ability to source appropriate funding at NatWest Group plc level to support this. NWB Plc is also dependent on NatWest Group plc to fund its internal MREL target over time and its ability to raise and maintain sufficient amounts of external MREL liabilities to support this.

If NatWest Group plc is unable to issue adequate levels of MREL securities such that it is unable to downstream sufficient amounts to NWB Plc, this could lead to a failure of NWB Group to meet its own individual internal MREL as well as the internal MREL of subsidiaries within NWB Group. See also, '*NWB Group may not meet the prudential regulatory requirements for capital and MREL, or manage its capital effectively, which could trigger the execution of certain management actions or recovery options*'.

Any reduction in the credit rating and/or outlooks assigned to NatWest Group plc, any of its subsidiaries (including NWB Plc or other NWB Group subsidiaries) or any of their respective debt securities could adversely affect the availability of funding for NWB Group, reduce its liquidity position and increase the cost of funding.
Rating agencies regularly review NatWest Group plc, NWB Plc and other NatWest Group entity credit ratings and outlooks. In October 2022, Moody's changed the outlook from stable to negative for NWB Plc's issuer rating. NWB Group entity credit ratings and outlooks could be negatively affected (directly or indirectly) by a number of factors that can change over time, including: credit rating agencies' assessment of NWB Group's strategy and management's capability; its financial condition including in respect of profitability, asset quality, capital, funding and liquidity; the level of political support for the industries and regions in which NWB Group operates; the implementation of structural reform; the legal and regulatory frameworks applicable to NWB Group's legal structure; business activities and the rights of its creditors; changes in rating methodologies; changes in the relative size of the loss-absorbing buffers protecting bondholders and depositors; the competitive environment, political and economic conditions in NWB Group's key markets (including higher interest rates and inflation, supply chain disruptions and the outcome of any further Scottish independence referendum); any reduction of the UK's sovereign credit rating (currently on negative outlook by Moody's, S&P and Fitch) and market uncertainty. In addition, credit ratings agencies are increasingly taking into account sustainability-related factors, including climate, environmental, social and governance related risk, as part of the credit ratings analysis, as are investors in their investment decisions. See also *'A reduction in the ESG ratings of NWB Group could have a negative impact on NWB Group's reputation and on investors' risk appetite and customers' willingness to deal with NWB Group.*'

Any reductions in the credit ratings of NatWest Group plc, NWB Plc or of certain other NatWest Group entities, including, in particular, downgrades below investment grade, or a deterioration in the capital markets' perception of NWB Group's financial resilience could significantly affect NWB Group's access to capital markets, reduce the size of its deposit base and trigger additional collateral or other requirements in its funding arrangements or the need to amend such arrangements, which could adversely affect NWB Group's (and, in particular, NWB Plc's) cost of funding and its access to capital markets and could limit the range of counterparties willing to enter into transactions with NWB Group (and, in particular, with NWB Plc). This may in turn adversely affect NWB Group's competitive position and threaten its prospects in the short to medium-term.

NWB Group may be adversely affected if NatWest Group fails to meet the requirements of regulatory stress tests.
NatWest Group is subject to annual stress tests by its regulator in the UK. Stress tests are designed to assess the resilience of banks to potential adverse economic or financial developments and ensure that they have robust, forward-looking capital planning processes that account for the risks associated with their business profile. If the stress tests reveal that a bank's existing regulatory capital buffers are not sufficient to absorb the impact of the stress, then it is possible that the NWB Group will need to take action to strengthen its capital position.

Failure by NatWest Group to meet the quantitative and qualitative requirements of the stress tests as set forth by its UK regulator may result in: NatWest Group's regulators requiring NatWest Group to generate additional capital, reputational damage, increased supervision and/or regulatory sanctions, restrictions on capital distributions and loss of investor confidence, all of which may adversely affect its future results, financial condition and/or prospects of NatWest Group and in turn NWB Group.

NWB Group could incur losses or be required to maintain higher levels of capital as a result of limitations or failure of various models.
Given the complexity of NWB Group's business, strategy and capital requirements, NWB Group relies on analytical and other models for a wide range of purposes, including to manage its business, assess the value of its assets and its risk exposure, as well as to anticipate capital and funding requirements (including to facilitate NatWest Group's mandated stress testing). Uncertainties relating to the COVID-19 pandemic has made reliance on analytical models and planning and forecasting for NWB Group more complex, and may result in uncertainty impacting the risk profile of NatWest Group and/or that of the wider banking industry. In addition, NWB Group utilises models for valuations, credit approvals, calculation of loan impairment charges on an IFRS 9 basis, financial reporting and for financial crime (criminal activities in the form of money laundering, terrorist financing, bribery and corruption, tax evasion and sanctions as well as fraud risk management (collectively, 'financial crime'). NWB Group's models, and the parameters and assumptions on which they are based, are periodically reviewed.

As models analyse scenarios based on assumed inputs and a conceptual approach, model outputs therefore remain uncertain. Failure of models (including due to errors in model design) or new data inputs (including non-representative data sets), for example, to accurately reflect changes in the micro and macro-economic environment in which NWB Group operates (for example to account for high inflation) to capture risks and exposures at the subsidiary level and to update for changes to NatWest Group's or NWB Group's current business model or operations, or for findings of deficiencies by NatWest Group's (and in particular, NWB Group's) regulators (including as part of NatWest Group's mandated stress testing), may render some business lines uneconomic, result in increased capital requirements, may require management action or may subject NWB Group to regulatory sanction. NWB Group may also face adverse consequences as a result of actions based on models that are poorly developed, implemented or used, models that are based on inaccurate or compromised data or as a result of the modelled outcome being misunderstood, or by such information being used for purposes for which it was not designed.

NWB Group's financial statements are sensitive to underlying accounting policies, judgments, estimates and assumptions.
The preparation of financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, income, expenses, exposures and RWAs. While estimates, judgments and assumptions take into account historical experience and other factors, (including market practice and expectations of future events that are believed to be reasonable under the circumstances), actual results may differ due to the inherent uncertainty in making estimates, judgments and assumptions (particularly those involving

the use of complex models). Further, accounting policy and financial statement reporting requirements are likely to increasingly require management to adjust existing judgments, estimates and assumptions for the effects of climate-related, sustainability and other matters that are inherently uncertain and for which there is little historical experience which may affect the comparability of NWB Group's future financial results with its historical results. Actual results may differ due to the inherent uncertainty in making climate-related and sustainability estimates, judgments and assumptions.

Accounting policies deemed critical to NWB Group's results and financial position, based upon materiality and significant judgments and estimates, involve a high degree of uncertainty and may have a material impact on its results. For 2022, these include loan impairments, fair value, deferred tax and conduct and litigation provisions. These are set out in '*Critical accounting policies and sources of estimation uncertainty*'.

Changes in accounting standards may materially impact NWB Group's financial results.
NWB Group prepares its consolidated financial statements in conformity with the requirements of the Companies Act 2006 and in accordance with IFRS as issued by the International Accounting Standards Board. Changes in accounting standards or guidance by accounting bodies or in the timing of their implementation, whether immediate or foreseeable, could result in NWB Group having to recognise additional liabilities on its balance sheet, or in further write-downs or impairments to its assets and could also significantly impact the financial results, condition and prospects of NWB Group.

From time to time, the International Accounting Standards Board may issue new accounting standards or interpretations that could materially impact how NWB Group calculates, reports and discloses its financial results and financial condition, and which may affect NWB Group capital ratios, including the CET1 ratio. New accounting standards and interpretations that have been issued by the International Accounting Standards Board but which have not yet been adopted by NWB Group are discussed in '*Future accounting developments*'.

NatWest Group (including NWB Group) may become subject to the application of UK statutory stabilisation or resolution powers which may result in, for example, the write-down or conversion of NWB Group's eligible liabilities.
HM Treasury, the Bank of England and the PRA and FCA (together, the 'Authorities') are granted substantial powers to resolve and stabilise UK-incorporated financial institutions. Five stabilisation options exist: (i) transfer of all of the business of a relevant entity or the shares of the relevant entity to a private sector purchaser; (ii) transfer of all or part of the business of the relevant entity to a 'bridge bank' wholly-owned by the Bank of England; (iii) transfer of part of the assets, rights or liabilities of the relevant entity to one or more asset management vehicles for management of the transferor's assets, rights or liabilities; (iv) the write-down, conversion, transfer, modification, or suspension of the relevant entity's equity, capital instruments and liabilities; and (v) temporary public ownership of the relevant entity. These tools may be applied to NatWest Group plc as the parent company or to NWB Group, as an affiliate, where certain conditions are met (such as, whether the firm is failing or likely to fail, or whether it is reasonably likely that action will be taken (outside of resolution) that will result in the firm no longer failing or being likely to fail). Moreover, there are modified insolvency and administration procedures for relevant entities, and the Authorities have the power to modify or override certain contractual arrangements in certain circumstances and amend the law for the purpose of enabling their powers to be used effectively and may promulgate provisions with retrospective applicability.

Under the UK Banking Act, the Authorities are generally required to have regard to specified objectives in exercising the powers provided for by the Banking Act. One of the objectives (which is required to be balanced as appropriate with the other specified objectives) refers to the protection and enhancement of the stability of the financial system of the UK. Moreover, the 'no creditor worse off' safeguard contained in the Banking Act may not apply in relation to an application of the separate write-down and conversion power relating to capital instruments under the Banking Act, in circumstances where a stabilisation power is not also used. Holders of debt instruments which are subject to the power may, however, have ordinary shares transferred to or issued to them by way of compensation.

Uncertainty exists as to how the Authorities may exercise their powers including the determination of actions undertaken in relation to the ordinary shares and other securities issued by NatWest Group (including NWB Group), which may depend on factors outside of NWB Group's control. Moreover, the Banking Act provisions remain largely untested in practice, particularly in respect of resolutions of large financial institutions and groups.

If NatWest Group is at or is approaching the point of non-viability such that regulatory intervention is required, there may be a corresponding adverse effect on the future results, financial conditions and/or prospects of NWB Group.

NatWest Group is subject to Bank of England and PRA oversight in respect of resolution, and NWB Group could be adversely affected should the Bank of England in the future deem NatWest Group's preparations to be inadequate.
NatWest Group is subject to regulatory oversight by the Bank of England and the PRA and is required (under the PRA rulebook) to carry out an assessment of its preparations for resolution, submit a report of the assessment to the PRA, and disclose a summary of this report. NatWest Group has dedicated significant resources towards the preparation of NatWest Group for a potential resolution scenario. In June 2022 the Bank of England communicated its assessment of NatWest Group's preparations and did not identify any shortcomings, deficiencies or substantive impediments although two areas were highlighted as requiring further enhancements. NatWest Group, and in turn NWB, could be adversely affected should future Bank of England assessments deem NatWest Group's preparations to be inadequate.

If future Bank of England assessments identify a significant gap in NatWest Group's ability to achieve the resolvability outcomes, or reveals that NatWest Group is not adequately prepared to be resolved, or did not have adequate plans in place to meet resolvability requirements, NatWest Group may be required to take action to enhance its preparations to be resolvable, resulting in additional costs and the dedication of additional resources. Such a scenario may have an impact on NatWest Group (and NWB Group) as, depending on the Bank of England's assessment, potential action may include, but is not limited to, restrictions on maximum individual and aggregate exposures, a requirement to dispose of specified assets, a requirement to change legal or operational structure, a requirement to cease carrying out certain activities and/or maintaining a specified amount of MREL. This may also impact NatWest Group's (and NWB Group's) strategic plans and may adversely affect its financial condition and/or reputation or lead to a loss of investor confidence.

Climate and sustainability-related risks
NWB Group and its customers, suppliers and counterparties face significant climate and sustainability-related risks, which may adversely affect NWB Group.
Climate-related risks represent a source of systemic risk in the global financial system. The financial impacts of climate-related risks are expected to be widespread, exacerbating already existing financial vulnerabilities and may disrupt the proper functioning of financial markets and institutions, including NWB Group.

Financial and non-financial risks from climate change and sustainability-related risks can arise through physical and transition risks. In addition, physical and transition risks can trigger further losses, stemming directly or indirectly from legal claims, litigation and conduct liability (referred to as 'liability risk'). See also, *'NWB Group may be subject to potential climate, environmental, human rights and other sustainability-related litigation, enforcement proceedings, investigations and conduct risk.'*

There are significant uncertainties as to the location, extent and timing of the manifestation of the physical risks of climate change, such as more severe and frequent extreme weather events (storms, flooding, subsidence, heat waves, droughts and wildfires), rising sea levels, nature and biodiversity loss, declining food yields, destruction of critical infrastructure, supply chain disruption and resource scarcity. Damage to NWB Group customers', suppliers' and counterparties' properties and operations could disrupt business, impair asset values and negatively impact the creditworthiness of customers leading to increased default rates, delinquencies, write-offs and impairment charges in NWB Group's portfolios. In addition, NWB Group premises and operations, or those of its critical outsourced functions may experience damage or disruption leading to increased costs and adversely affect NWB Group's reputation, future results, financial condition and/or prospects.

In October 2021, the UK Government published its Net Zero Strategy which sets out how the UK will deliver on its commitment to reach net-zero emissions by 2050 (defined as the point at which greenhouse gas emissions from sources are equal to removals by sinks as set out in Article 4 of the 2015 Paris Agreement). An independent review of the government's approach to delivering its net zero target to ensure it is pro-business and pro-growth was published in January 2023. The timing, content and implementation of the specific policies and proposals remain uncertain and are subject to continuous changes and developments. The transition to a net-zero economy across all sectors of the economy and markets in which NWB Group operates will be required to meet the goals of the UN Framework Convention on Climate Change (1994), the 2015 Paris Agreement, the UK's Net Zero Strategy and the European Green Deal initiatives. The impacts of the extensive social, commercial, technological, policy and regulatory changes required to achieve transition remain uncertain but are expected to be significant, subject to continuous changes and developments and may be disruptive across the global economy and markets, especially if these changes do not occur in an orderly or timely manner or are not effective in reducing emissions sufficiently. Some sectors such as property, energy (including the oil and gas industry), mobility (including land transport, aviation, and shipping industries and the related manufacturing and infrastructure industry) and food (including the agriculture industry) are expected to be particularly impacted. The timing and pace of the transition to a net-zero economy is also uncertain, will depend on many factors and uncertainties and may be near term, gradual and orderly or delayed, rapid and disorderly, or a combination of these. There is also growing attention on the need for a *'just transition'* and *'energy justice'* – in recognition that the transition to net zero should not disproportionally affect the most disadvantaged members of society.

In addition, NWB Group and its customers, suppliers and counterparties may face economic, financial and non-financial risks arising from broader sustainability issues such as: (i) risks relating to degradation of the environment, such as air, water and land pollution, water stress, nature and biodiversity loss and deforestation which may include for instance loss and/or decline of the state of nature (including the state of biodiversity); (ii) social matter-related risks (including violent conflicts, geopolitical implications, impacts on indigenous people, migration, human rights, diversity, equality and inclusion, the living wage, fair taxation and value chains); and (iii) governance-related risks (including board diversity, ethics, executive compensation and management structure).

Financial institutions, including NWB Group, are directly and indirectly exposed to multiple types of environmental risks (including nature and biodiversity related risks) through their activities, including through the risk of default by clients. In addition to safeguards and interventions that focus on reducing negative impacts on the environment (including nature and biodiversity), there is also a growing need to implement solutions that focus on increasing positive impacts on environment (including nature and biodiversity) through nature-based solutions. In 2021, NatWest Group (including NWB Group) classified '*Biodiversity and Nature Loss*' as an emerging risk for NatWest Group (including NWB Group) within its Risk Management Framework.

The Taskforce on Nature-Related Financial Disclosures (TNFD) is a global, market-led initiative with the mission to develop and deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related risks and opportunities, with the ultimate aim of supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes. NatWest Group (including NWB Group) is a member of the Informal Working Group 2020 of TNFD and is a Forum Member since 2021.

Measuring the environmental related financial impacts (including impacts on nature and biodiversity related financial impacts) as a result of funding and financing activities as well as reporting on these is an evolving and complex area for the financial services industry which requires collaborative approaches with partners, stakeholders, peers and public sector bodies to help measure and mitigate the negative impacts of the activities which NatWest Group (including NWB Group) finances on the environment (including nature and biodiversity), as well as supporting the growing sector of nature-based solutions and habitat restoration and biodiversity markets. NatWest Group (including NWB Group) is in the early stages of developing its approach to assess, manage and mitigate environmental risks and by using emerging industry guidance such as the TNFD beta framework, NatWest Group (including NWB Group) is seeking to further its understanding of how NatWest Group's (including NWB Group's) business activities impact nature, the dependencies NatWest Group (including NWB Group) and its customers have on nature, and the risks and opportunities nature can generate.

There is also increased scrutiny from NWB Group's employees, investors, customers, counterparties (including its suppliers), communities, regulators and other stakeholders regarding how businesses address social issues, including tackling inequality, working conditions, workplace health, safety and wellbeing, diversity and inclusion, data protection and management, workforce management, human rights and supply chain management which may impact NWB Group's employees, suppliers, customers, and their business activities or the communities in which they operate.

These climate and sustainability-related risks may:

- adversely affect economic activity, asset pricing and valuations of financial instruments and, in turn, the wider financial system;
- impact economic activities directly (for example through lower corporate profitability or the devaluation of assets) or indirectly (for example through macro-financial changes);
- also affect the viability or resilience of business models over the medium to longer term, particularly those business models most vulnerable to climate and sustainability-related risks;
- trigger further losses stemming directly or indirectly from legal claims (liability risks) and reputational damage as a result of the public, customers, counterparties, suppliers and/or investors associating NWB Group or its customers with adverse climate and sustainability-related issues;
- intersect with and add further complexity and challenge to contributing to achieving NatWest Group's purpose-led strategy including climate ambitions and targets;
- be drivers of several different risk categories simultaneously and may exacerbate existing risks, including credit risk, operational risk (including business continuity), market risk (both traded and non-traded), liquidity and funding risk (for example, net cash outflows or depletion of liquidity buffers), pension risk and conduct risk; and
- if combined, may have a greater adverse effect on NWB Group's reputation, future results, financial condition and/or prospects.

If NWB Group fails in a timely manner to identify and address climate and sustainability-related risks and opportunities and changing regulatory and market expectations, or to appropriately identify, measure, manage and mitigate climate and sustainability-related physical, transition and liability risks and opportunities that NWB Group, its customers, counterparties and suppliers face, this may adversely affect NWB Group's reputation, future results, financial condition and/or prospects.

NatWest Group's climate change related strategy, ambitions, targets and transition plan entail significant execution and reputational risk and are unlikely to be achieved without significant and timely government policy, technology and customer behavioural changes.

In February 2020, NatWest Group announced its ambition to become a leading bank in the UK helping to address the climate challenge. As part of the implementation of its climate ambitions, at NatWest Group's Annual General Meeting in April 2022, ordinary shareholders passed an advisory 'Say on Climate' resolution endorsing NatWest Group's previously announced strategy to address climate change, including its ambitions to at least halve the climate impact of its financing activity by 2030, achieve alignment with the 2015 Paris Agreement and reach net zero by 2050 across its financed emissions, assets under management and operational value chain.

Furthermore, as part of its efforts to support the transition to a net-zero economy, NatWest Group has announced its plans to (i) stop lending and underwriting to companies with more than 15% of activities related to thermal and lignite coal, unless they had a Credible Transition Plan in line with the 2015 Paris Agreement in place by end of 2021; phase out of thermal and lignite coal for UK and non-UK customers who have UK coal production, coal-fired generation and coal-related infrastructure by 1 October 2024, with a full global phase out by 1 January 2030; (ii) to stop lending and underwriting to major oil and gas producers unless they had a Credible Transition Plan aligned with the 2015 Paris Agreement in place by the end of 2021; (iii) from February 2023 stop providing reserve based lending specifically for the purpose of financing oil and gas exploration, extraction and production for new customers, and, after the 31 December 2025 not to renew, refinance or extend existing reserve- based lending specifically for the purpose of financing oil and gas exploration, extraction and production; and (iv) stop providing reserve-based lending and borrowing base financing to upstream Oil and Gas companies specifically for the purpose of financing upstream assets located in Arctic or Antarctic Waters.

In December 2022, NatWest Group published its science based targets validated by Science Based Target Initiative (SBTi) for its own operational footprint and for 79% of its loans and investments (debt securities and equity shares) on its 2019 balance sheet, at sector level. NatWest Group has also announced and in the future it may also announce other climate ambitions and targets which support its overarching strategy to address climate change.

Making the changes necessary to contribute to achieving NatWest Group's strategy on addressing climate change, including achieving NatWest Group's climate ambitions and targets and executing its transition plan, may adversely affect NWB Group's business and operations and will require significant reductions to its financed emissions and to its exposure to customers that do not align with a transition to net zero or do not have a credible transition plan in place. Increases in lending and financing activities may wholly or partially offset some or all these reductions, which may increase the extent of changes and reductions necessary. It is anticipated that achieving these reductions, together with the active management of climate and sustainability-related risks and other regulatory, policy and market changes, is likely to necessitate material and accelerated changes to NWB Group's business, operating model its existing exposures and the products and services NWB Group provides to its customers (potentially on accelerated timescales) which may adversely affect NWB Group's ability to achieve its financial targets and generate sustainable returns.

NatWest Group (including NWB Group) also needs to ensure that its strategy and business model adapt to changing national and international standards, industry and scientific practices, regulatory requirements and market expectations regarding climate change, which remain under continuous development and are subject to different interpretations. There can be no assurance that these standards, practices, requirements and expectations will not be interpreted differently than what was the understanding of NatWest Group (including NWB Group) when defining its climate-related ambitions and targets or change in a manner that substantially increases the cost or effort for NatWest Group (including NWB Group) to achieve such ambitions and targets. In addition, NatWest Group's ambitions and targets may prove to be considerably more difficult or even impossible to achieve under such changing circumstances. This may be exacerbated if NatWest Group (including NWB Group) chooses or is required to accelerate its climate-related ambitions or targets as a result of (among other things) UK or international regulatory developments or stakeholder expectations.

NWB Group's ability to contribute to achieving NatWest Group's strategy to address climate change, including achieving its climate ambitions and targets will depend to a large extent on many factors and uncertainties beyond NatWest Group's (including NWB Group's) control. These include the extent and pace of climate change, including the timing and manifestation of physical and transition risks, the macro-economic environment, the timely implementation and integration of adequate government policies, the effectiveness of actions of governments, legislators, regulators, businesses, investors, customers and other stakeholders to mitigate the impact of climate and sustainability-related risks, changes in customer behaviour and demand, changes in the available technology for mitigation, the roll-out of low carbon infrastructure and the availability of accurate, verifiable, reliable, consistent and comparable data. See also, '*There are significant challenges in accessing reliable, verifiable and comparable climate and other sustainability-related data due to availability, quality and other limitations, which contribute to the substantial uncertainties in accurately modelling and reporting on climate and sustainability information, as well as making appropriate important internal decisions*.'

These external factors and other uncertainties will make it challenging for NatWest Group to meet its climate ambitions and targets and for NWB Group to contribute to them and there is a significant risk that all or some of these will not be achieved.

Any delay or failure by NWB Group to contribute to setting, making progress against or meeting NatWest Group's climate-related ambitions and targets may adversely affect NWB Group, its reputation, future results, financial condition and/or prospects and may increase the climate and sustainability-related risks NWB Group faces.

There are significant limitations related to accessing reliable, verifiable and comparable climate and other sustainability-related data, including as a result of lack of standardisation, consistency and completeness which, alongside other factors, contribute to substantial uncertainties in accurately modelling and reporting on climate and sustainability information, as well as making appropriate important internal decisions.

Meaningful reporting of climate and sustainability-related risks and opportunities and their potential impacts and related metrics depends on access to accurate, reliable, consistent and comparable climate and sustainability-related data from counterparties or customers. Data may not be generally available or, if available, may not be accurate, verifiable, auditable, reliable, consistent, or comparable. Any failure of NWB Group to incorporate climate and/or sustainability-related factors into its counterparty and customer data sourcing and accompanying analytics, or to collect or develop accurate, verifiable, auditable, reliable, consistent and comparable counterparty and customer data, may adversely affect NWB Group's ability to prepare meaningful reporting of climate and sustainability-related risks and opportunities, and it may adversely affect NWB Group's regulatory compliance, reputation, business and its competitive position.

In the absence of other sources, reporting of financed emissions by financial institutions, including NWB Group, is necessarily based on aggregated information developed by third parties that may be prepared in an inconsistent way using different methodologies, interpretations, or assumptions. NWB Group's climate and sustainability-related disclosures use a greater number and level of assumptions and estimates than many of its financial disclosures. These assumptions and estimates are highly likely to change over time, and, when coupled with the longer timeframes used in these climate and sustainability-related disclosures, make any assessment of materiality inherently uncertain. In particular, in the absence of actual emissions monitoring and measurement, emissions estimates are based on industry and other assumptions that may not be accurate for a given counterparty or customer. There may also be data gaps that are filled using proxy data, such as sectoral averages, again developed in different ways. As a result, NWB Group's climate and sustainability-related disclosures may be amended, updated or restated in the future as the quality and completeness of NWB Group's data and methodologies continue to improve. These data quality challenges, gaps and limitations could have a material impact on NWB Group's ability to make effective business decisions about climate risks and opportunities, including risk management decisions, to comply with disclosure requirements and to monitor and report progress in meeting ambitions and targets.

Significant risks, uncertainties and variables are inherent in the assessment, measurement and mitigation of climate-related risks. These include data quality gaps and limitations mentioned above, as well as the pace at which climate science, greenhouse gas accounting standards and various emissions reduction solutions develop. In addition, there is significant uncertainty about how climate change and the transition to a net-zero economy will unfold over the coming years and decades and how and when climate-related risks will manifest. These timeframes are considerably longer than NWB Group's historical strategic, financial, resilience and investment planning horizons.

As a result, it is very difficult to predict and model the impact of climate-related risks into precise financial and economic outcomes and impacts. Climate-related risks present significant methodological challenges due to their forward-looking nature, the lack and/or quality of historical testing capabilities, lack of standardisation and incompleteness of emissions and other climate and sub-sector related data and the immature nature of risk measurement and modelling methodologies. The evaluation of climate-related risk exposure and the development of associated potential risk mitigation techniques largely depend on the choice of climate scenario modelling methodology and the assumptions made which involves a number of risks and uncertainties, for example:

- climate scenarios are not predictions of what is likely to happen or what NatWest Group would like to happen, rather they explore the possible implications of different judgments and assumptions by considering a series of scenarios;
- climate scenarios do not provide a comprehensive description of all possible future outcomes;
- lack of specialist expertise in banks such that NWB Group needs to rely on third party advice, modelling, and data which is also subject to many limitations and uncertainties;
- immaturity of modelling of and data on climate-related risks on financial assets which will evolve rapidly in the coming years;
- the number of variables and forward-looking nature of climate scenarios which makes them challenging to back test and benchmark;
- the significant uncertainty as to how the climate will evolve over time, how and when governments, regulators, businesses, investors and customers respond and how those responses impact the economy, asset valuations, land systems, energy systems, technology, policy and wider society;
- the assumptions will be continually evolving with more data/information which may affect the baselines for comparability across reporting periods and impact internal and external verification processes; and
- the pace of the development of the methodologies across different sectors may be different and

therefore it may be challenging to report on the whole balance sheet with regard to emissions.

Accordingly, these risks and uncertainties coupled with significantly longer timeframes make the outputs of climate-related risk modelling, including emission reduction targets and pathways, inherently more uncertain than outputs modelled for traditional financial planning cycles based on historical financial information. Furthermore, there is a lack of scientific, industry and regulatory consensus regarding the appropriate metrics, methodologies, modelling and standardised reporting to enable the assessment of the location, acuteness, and severity of environmental risks (including nature and biodiversity-related risks) and the monitoring and mitigation of these risks in the economy and financial system.

Capabilities within NWB Group to appropriately assess, model, report and manage climate and sustainability-related risks and impacts and the suitability of the assumptions required to model and manage climate and sustainability-related risks appropriately are developing. The development of NWB Group's capabilities to assess, model, report and manage the impacts of climate change and broader environmental risk (including nature and biodiversity-related risks) is in its early stages. Even when those capabilities are developed, the high level of uncertainty regarding any assumptions modelled, the highly subjective nature of risk measurement and mitigation techniques, incorrect or inadequate assumptions and judgments and data quality gaps and limitations may lead to inadequate risk management information and frameworks, or ineffective business adaptation or mitigation strategies, which may adversely affect NWB Group's regulatory compliance, reputation, future results, financial condition and/or prospects.

A failure to implement effective climate change resilient governance, procedures, systems and controls in compliance with legal and regulatory expectations to manage climate and sustainability-related risks and opportunities could adversely affect NWB Group's ability to manage those risks.

The prudential regulation of climate-related risks is an important driver in how NWB Group develops its risk appetite for financing activities or engaging with counterparties. Legislative and regulatory authorities are publishing expectations as to how banks should prudently manage and transparently disclose climate-related and environmental risks under prudential rules.

In April 2019, the PRA published a supervisory statement ('SS 3/19') with particular focus on the management of financial risks from climate change with respect to governance, risk management, scenario analysis and disclosures. In response to the PRA's SS 3/19, following the submission of initial plans in October 2019, on 8 October 2020 NatWest Group provided the PRA with an update to its original plan, noting that the COVID-19 pandemic had disrupted some elements of its original plan and, as a result, the updated plan would require additional operating cycles reaching into 2022 and beyond to prove embedding. Throughout 2022, NatWest Group provided the PRA with updates on how it had addressed the commitments made in its October 2020 plan, noting the delivery of a first generation, largely qualitative in nature, approach to the supervisory requirements. In 2022, the PRA has also started actively supervising firms against their supervisory expectations, and it issued another 'Dear CEO letter' providing a summary of capabilities, which the PRA would expect firms to be able to demonstrate, setting out thematic observations on firms' levels of embeddedness, and providing examples of effective practices identified.

In June 2021, the Bank of England launched its 2021 Biennial Exploratory Scenario ('2021 CBES') to stress test the resilience of the current business models of the largest banks, insurers and the financial system to the physical and transition risks from climate change under three climate scenarios. NatWest Group delivered its first 2021 CBES submission to the PRA in October 2021 and its submission to the second phase of the 2021 CBES exercise in the first quarter of 2022. In May 2022, the PRA published the results of the 2021 CBES which has shown that UK banks, including NatWest Group (including NWB Group), need to do more to understand and manage their exposure to climate risks and that the lack of available data on corporates' current emissions and future transition plans is a collective issue affecting all participating firms. In July 2022, the participating banks in the 2021 CBES exercise were invited to discuss methodologies and challenges with regards to climate risk scenario analysis.

In October 2022, the Bank of England and the PRA held a conference to facilitate discussion on the complex issues associated with adjusting the capital framework to take account of climate-related financial risks with the aim of providing more guidance on its approach to climate and capital by the end of 2022. The Bank of England does not think capital frameworks should be used to address the causes of climate change. However, as set out in the PRA's Climate Change Adaptation Report 2021, and as with any other risk, it does think the capital framework could be a useful tool within the broader regulatory frameworks to ensure that PRA-regulated firms are resilient to climate risks.

Any failure of NatWest Group (including NWB Group) to fully and timely embed climate-related risks into its risk management practices and framework to appropriately identify, measure, manage and mitigate the various climate-related physical and transition risks and apply the appropriate product governance in line with applicable legal and regulatory requirements and expectations, may adversely affect NWB Group's regulatory compliance, prudential capital requirements, liquidity position, reputation, future results, financial condition and/or prospects.

Climate and sustainability-related disclosures are a rapidly evolving area and increasingly expose NWB Group to risk in the face of legal and regulatory expectations, regulatory enforcement and class action risk. NatWest Group and its subsidiaries currently are and in the future will be subject to increasing entity-wide climate-related and other non-financial disclosure requirements, including pursuant to the recommendations of the Task Force on Climate-related Financial Disclosure ('TCFD'), the proposed SEC Climate Disclosure Rules and ISSB sustainability reporting requirements and under other regimes. As from February 2022, NatWest Group is required to provide enhanced climate-related disclosures consistent with the TCFD recommendations to comply with the FCA Policy Statement on 'Proposals to enhance climate-related disclosures by listed issuers and clarification of existing disclosure obligations' (PS 20/17) which introduced new Listing Rules that require commercial companies with a UK premium listing – such as NatWest Group - to make climate-related disclosures, consistent with TCFD, on a 'comply or explain' basis.

By its Policy Statement 'Enhancing climate-related disclosures by standard listed companies' (PS 21/23), the FCA has confirmed its final policy position set forth in PS 20/17, extended the scope of issuers that are subject to the new Listing Rules and added guidance provisions on transition plan disclosure (for issuers in scope of both the PS 20/17 and the new PS 21/23 rules). NWB Plc is currently not in scope of the FCA Policy Statement (PS 20/17) or Policy

Statement (PS 21/23) and therefore, it is not required to publish climate-related disclosures consistent with the TCFD at the company level. As required by the FCA Policy Statement (PS 20/17) or Policy Statement (PS 21/23), NatWest Group publishes climate-related disclosures that it believes are consistent with the TCFD for the consolidated group, including NWB Group.

In addition, as of 5 April 2022, NatWest Group is also required to prepare mandatory climate-related financial disclosures pursuant to The Companies (Strategic Report) (Climate-related Financial Disclosure) Regulations 2022. NWB Plc, being a subsidiary of NatWest Group, falls under the subsidiary exemption of The Companies (Strategic Report) (Climate-related Financial Disclosure) Regulations 2022. Therefore, NWB Plc to date is not required to produce any separate, standalone climate-related disclosures.

Furthermore, in October 2022, the FCA published a Consultation Paper on '*Sustainability Disclosure Requirements (SDR) and investment labels*' (CP 22/20) which proposes that the FCA will require all regulated firms to ensure that from June 2023 the naming and marketing of financial products and services in the UK is clear, fair and not misleading, and consistent with the sustainability profile of the products or services, i.e. proportionate and not exaggerated.

Misrepresenting or over-emphasising the extent to which an investment, strategy or other type of product takes into account environmentally friendly, sustainable or ethical features and concerns, using misleading labels and language in relation to such products and/or omitting material information about NWB Group's contribution to the climate crisis (including its direct or indirect contribution to greenhouse gas emissions), or other sustainability-related issues, could potentially result in complaints, regulatory intervention, claims and/or litigation and reputational damage.

Any failure of NWB Group to implement robust and effective climate and sustainability-related disclosure governance and to embed appropriate product governance policies, procedures and controls to make accurate public statements and claims about how environmentally friendly, sustainable or ethical NWB Group's products and services are and to apply these in line with applicable legal and regulatory requirements and expectations, may adversely affect NWB Group's regulatory compliance and reputation and could give rise to litigation.

Increasing levels of climate, environmental, human rights and other sustainability-related laws, regulation and oversight which are constantly evolving may adversely affect NWB Group.

There is an increasing number of EU, UK and other regulatory and legislative initiatives to address issues around climate change (including promoting the transition to a net-zero economy), environment (including nature and biodiversity), human rights and other sustainability-related risks and opportunities. As a result, an increasing number of laws, regulations and legislative actions, including proposals, guidance, policy and regulatory initiatives many of which have been introduced or amended recently and are subject to further changes, is likely to affect the financial sector and the wider economy.

Many of these initiatives are focused on developing standardised definitions and criteria for green and sustainable criteria of assets and liabilities, integrating climate change and sustainability into decision-making and customers' access to green and sustainable financial products and services which may have a significant impact on the services provided by NWB Group, and its subsidiaries and its associated credit, market and financial risk profile. They could also impact NWB Group's recognition of its climate and sustainable funding and financing activity and may adversely affect NWB Group's ability to achieve its strategy and climate and sustainable funding and financing ambitions.

In addition, NWB Group's EU and other non-UK subsidiaries and branches are and will continue to be subject to an increasing array of the EU/EEA and US climate and sustainability-related legal and regulatory requirements. These requirements (potentially including the EU Corporate Sustainability Due Diligence Directive or the EU Corporate Sustainability Reporting Directive) may be applicable to UK businesses such as NWB Group, or used as the basis for UK laws and regulations (such as the UK Green Taxonomy and the FCA's Consultation Paper on 'Sustainability Disclosure Requirements (SDR) and investment labels' (CP 22/20)), or be regarded by investors and regulators as best practice standards whether or not they apply to UK businesses (such as the EU Green Bond Standard). Any divergence between UK, EU/EEA and US climate and sustainability-related legal and regulatory requirements and their interpretation may result in NWB Group, or any of its subsidiaries, not meeting regulatory requirements, investors' expectations may increase the cost of doing business (including increased operating costs) and contentious regulatory and litigation risk and may restrict access of NWB Group's UK business to the EU/EEA and US market.

NatWest Group (including NWB Group) is also participating in various voluntary carbon reporting and other standard setting initiatives for disclosing climate and sustainability-related information, many of which have differing objectives and methodologies and are at different stages of development in terms of how they apply to financial institutions.

Compliance with these developing and evolving climate and sustainability-related legal and regulatory requirements is likely to require NWB Group to implement significant changes to its business models, products and other governance, internal controls over financial reporting, disclosure controls and procedures, modelling capability and risk management systems, which may increase the cost of doing business, and entail additional change risk and increased compliance, regulatory sanctions and litigation (including settlements) costs.

Failure to implement and comply with these legal and regulatory requirements or emerging best practice expectations may have a material adverse effect on NWB Group's regulatory compliance and may result in regulatory sanctions, reputational damage and investor disapproval each of which may adversely affect NWB Group's future results, financial condition and/or prospects.

NWB Group may be subject to potential climate, environmental, human rights and other sustainability-related litigation, enforcement proceedings, investigations and conduct risk.

Due to increasing new climate and sustainability-related jurisprudence, laws and regulations in the UK and other jurisdictions, growing demand from investors and customers for environmentally sustainable products and services, and regulatory scrutiny, financial institutions, including NWB Group, may through their business activities, face increasing litigation, conduct, enforcement and contract liability risks related to climate change, environmental degradation, human rights violations and other social, governance and sustainability-related issues.

These risks may arise, for example, from claims pertaining to: (i) failure to meet obligations, targets or commitments relating to, or to disclose accurately, or provide updates on material climate and/or sustainability-related risks, or otherwise provide fair, balanced and appropriate disclosure to investors, customers, counterparties and other stakeholders; (ii) conduct, mis-selling and customer protection claims, including claims which may relate to alleged insufficient product understanding, unsuitable product offering and /or reliance upon information provided by NatWest Group or claims alleging unfair pricing of climate-related products, for example in relation to products where limited liquidity or reliable market data exists for benchmarking purposes or which may be impacted by future climate policy uncertainty or other factors; (iii) marketing that portrays products, securities, activities or policies as having positive climate, environmental or sustainable outcomes to an extent that may not be the case, or may not adequately be qualified and/or omits material information about NWB Group's contribution to the climate crisis and/or its direct / indirect contribution to greenhouse gas emissions or other sustainability related issues; (iv) damages claims under various tort theories, including common law public nuisance claims, or negligent mismanagement of physical and/or transition risks; (v) alleged violations of officers', directors' and other fiduciaries' duties, for example by financing various carbon-intensive, environmentally harmful or otherwise highly exposed assets, companies, and industries; (vi) changes in the understanding of what constitutes positive climate, environmental or sustainable outcomes as a result of developing climate science, leading to discrepancy between current product offerings and investor and/or market and/or broader stakeholder expectations; (vii) any weaknesses or failures in specific systems or processes associated particularly with climate, environmental or sustainability linked products, and/or human rights due diligence, including any failure in the timely implementation, onboarding and/or updating of such systems or processes; or (viii) counterparties, collaborators, customers to whom NatWest Group (including NWB Group) provides services and third parties in NWB Group's value chain who act, or fail to act, or undertake due diligence, or apply appropriate risk management and product governance in a manner that may adversely affect NatWest Group's (including NWB Group's) reputation or sustainability credentials.

Furthermore, there is a risk that shareholders, campaign groups, customers and special interest groups could seek to take legal action against NWB Group for financing or contributing to climate change, environmental degradation and human rights violations and for not supporting the principles of 'just transition' (i.e. maximising the social benefits of the transition, mitigating the social risks of the transition, empowering those affected by the change, anticipating future shifts to address issues up front and mobilising investments from the public and private sectors).

There is a risk that as environmental and climate science develop and societal understanding of these issues increases and deepens, courts, regulators and enforcement authorities may apply the then current understandings of environmental, climate and broader sustainability-related matters retrospectively when assessing claims about historical conduct or dealings of financial institutions, including NatWest Group. See also, NWB Group is exposed to the risks of various litigation matters, regulatory and governmental actions and investigations as well as remedial undertakings, including conduct-related reviews, anti-money laundering and redress projects, the outcomes of which are inherently difficult to predict, and which could have an adverse effect on NWB Group.'

These potential litigation, conduct, enforcement and contract liability risks may have a material adverse effect on NWB Group's ability to achieve its strategy, including its climate ambition, and may adversely affect NWB Group's reputation, future results, financial condition and/or prospects.

A reduction in the ESG ratings of NatWest Group (including NWB Group) could have a negative impact on NatWest Group's (including NWB Group's) reputation and on investors' risk appetite and customers' willingness to deal with NatWest Group (including NWB Group).

ESG ratings from agencies and data providers which rate how NatWest Group (including NWB Group) manages environmental, social and governance risks are increasingly influencing investment decisions pertaining to NatWest Group and/or NWB Group and/or their subsidiaries' securities or being used as a basis to label financial products and services as environmentally friendly or sustainable. ESG ratings are (i) unsolicited; (ii) subject to the assessment and interpretation by the ESG rating agencies; (iii) provided without warranty; (iv) not a sponsorship, endorsement, or promotion of NatWest Group (including NWB Group) by the relevant rating agency; and (v) may depend on many factors some of which are beyond NatWest Group's and NWB Group's control (e.g. any change in rating methodology). In addition, certain NatWest Group entities offer or sell products and services to customers and counterparties based exclusively or largely on a rating by an unregulated ESG rating agency. ESG rating agencies, at this stage, are not subject to any specific regulatory or other regime or oversight (although there are proposals by regulators in different jurisdictions to regulate rating agencies and data providers). Regulators have expressed concern that harm may arise from potential conflicts of interest within ESG rating and review or opinion providers and there is a lack of transparency in methodologies and data points, which renders ratings and reviews incomparable between agencies or providers. There is currently no market consensus on what precise attributes are required for a particular asset to be classified as 'ESG'. Any reduction in the ESG ratings of NatWest Group (including NWB Group), or a regulatory sanction or enforcement action involving an ESG rating agency used by a NatWest Group entity, could have a negative impact on NWB Group's reputation, could influence investors' risk appetite for NWB Group's and/or its subsidiaries' securities, particularly ESG securities, could increase the cost of issuing securities for NWB Group and/or its subsidiaries and could affect a customer's willingness to deal with NWB Group.

Operational and IT resilience risk

Operational risks (including reliance on third party suppliers and outsourcing of certain activities) are inherent in NWB Group's businesses.

Operational risk is the risk of loss or disruption resulting from inadequate or failed internal processes, procedures, people or systems, or from external events, including legal and regulatory risks. NWB Group offers a diverse range of products and services supported directly or indirectly by third party suppliers. As a result, operational risks or losses can arise from a number of internal or external factors (including for example, payment errors or financial crime and fraud), for which there is continued scrutiny by third parties on NWB Group's compliance with financial crime requirements; see '*NWB Group is exposed to the risks of various litigation matters, regulatory and governmental actions and investigations as well as remedial undertakings, including conduct-related reviews, anti-money laundering and redress projects, the outcomes of which are inherently difficult to predict, and which could have an adverse effect on NWB Group.*'

These risks are also present when NWB Group relies on critical service providers (suppliers) or vendors to provide services to it or its customers, as is increasingly the case as NWB Group outsources certain activities, including with respect to the implementation of technologies, innovation and responding to regulatory and market changes.

Operational risks continue to be heightened as a result of the implementation of NatWest Group's purpose-led strategy, and the organisational and operational changes involved, including: NatWest Group's current cost-controlling measures, the progression towards working as One Bank across NatWest Group (of which NWB Group is part) to serve customers and conditions affecting the financial services industry generally (including macro-economic and other geo-political developments) as well as the legal and regulatory uncertainty resulting therefrom. It is unclear as to how the future ways of working may evolve, including in respect of how working practices may develop, or how NWB Group will evolve to best serve its customers. Any of the above may place significant pressure on NWB Group's ability to maintain effective internal controls and governance frameworks.

The effective management of operational risks is critical to meeting customer service expectations and retaining and attracting customer business. Although NWB Group has implemented risk controls and mitigation actions, with resources and planning having been devoted to mitigate operational risk, such measures may not be effective in controlling each of the operational risks faced by NWB Group. Ineffective management of such risks may adversely affect NWB Group's future results, financial conditions and/or prospects.

NWB Group is subject to increasingly sophisticated and frequent cyberattacks.
NatWest Group experiences a constant threat from cyberattacks across the entire NatWest Group (including NWB Group) and against NatWest Group and NWB Group's supply chain, reinforcing the importance of due diligence of and close working relationship with the third parties on which NWB Group relies. NWB Group is reliant on technology, against which there is a constantly evolving series of attacks that are increasing in terms of frequency, sophistication, impact and severity. As cyberattacks evolve and become more sophisticated, NWB Group is required to continue to invest in additional capability designed to defend against emerging threats. In 2022, NWB Group and its supply chain were subjected to a small number of Distributed Denial of Service ('DDOS') and ransomware attacks, which are a pervasive and significant threat to the financial services industry. The focus is to manage the impact of the attacks and sustain availability of services for NWB Group's customers. NWB Group continues to invest significant resources in the development and evolution of cyber security controls that are designed to minimise the potential effect of such attacks.

Hostile attempts are made by third parties to gain access to, introduce malware (including ransomware) into and exploit vulnerabilities of NWB Group's IT systems. NWB Group has information and cyber security controls in place to seek to minimise the impact of any such attacks, which are subject to review on a continuing basis, but given the nature of the threat, there can be no assurance that such measures will prevent the potential negative impacts of any such attacks from occurring. See also, '*NWB Group's operations are highly dependent on its complex IT systems and any IT failure could adversely affect NWB Group.*'

Any failure in NWB Group's cybersecurity policies, procedures or controls, may result in significant financial losses, major business disruption, inability to deliver customer services, or loss of data or systems or other sensitive information (including as a result of an outage) and may cause associated reputational damage. Any of these factors could increase costs (including costs relating to notification of, or compensation for customers, credit monitoring or card reissuance), result in regulatory investigations or sanctions being imposed, or may affect NWB Group's ability to retain and attract customers. Regulators in the UK, US, Europe and Asia continue to recognise cybersecurity as an important systemic risk to the financial sector and have highlighted the need for financial institutions to improve their monitoring and control of, and resilience (particularly of critical services) to cyberattacks, and to provide timely reporting or notification of them, as appropriate. Cyberattacks on NWB Group's counterparties may also damage NWB Group's operations. Additionally, third parties may also fraudulently attempt to induce employees, customers, third party providers or other users who have access to NWB Group's systems to disclose sensitive information in order to gain access to NWB Group's data or systems or that of NWB Group's customers or employees. Cybersecurity and information security events can derive from groups or factors such as: internal or external threat actors, human error, fraud or malice on the part of NWB Group's employees or third parties, including third party providers, or may result from technological failure. Any of the above may have an adverse effect on NWB Group's reputation, future results, financial condition and/or prospects.

NWB Group expects greater regulatory engagement, supervision and enforcement to continue at a high level in relation to its overall resilience to withstand IT and IT-related disruption, either through a cyberattack or some other disruptive event. Such increased regulatory engagement, supervision and enforcement is uncertain in relation to the scope, cost, consequence and the pace of change, which may adversely affect NWB Group's future results, financial condition and/or prospects. Due to NWB Group's reliance on technology and the increasing sophistication, frequency and impact of cyberattacks, such attacks may have an adverse effect on NWB Group.

In accordance with the Data Protection Act 2018 and the European Union Withdrawal Act 2018, the Data Protection, Privacy and Electronic Communications (Amendments Etc.) (EU Exit) Regulations 2019, as amended by the Data Protection, Privacy and Electronic Communications (Amendments Etc.) (EU Exit) Regulations 2020 ('UK Data Protection Framework') and European Banking Authority ('EBA') Guidelines on ICT and Security Risk Management, NWB Group is required to ensure it implements timely, appropriate and effective organisational and technological safeguards against unauthorised or unlawful access to the data of NWB Group, its customers and its employees. In order to meet this requirement, NWB Group relies on the effectiveness of its internal policies, controls and procedures to protect the confidentiality, integrity and availability of information held on its IT systems, networks and devices as well as with third parties with whom NWB Group interacts. A failure to monitor and manage data in accordance with the UK Data Protection Framework and EBA requirements of the applicable legislation may result in financial losses, regulatory fines and investigations and associated reputational damage.

NWB Group operations and strategy are highly dependent on the accuracy and effective use of data.
NWB Group relies on the effective use of accurate data to support, monitor, evaluate, manage and enhance its operations and deliver its strategy. Investment is being made in data tools and analytics, including raising awareness around data ethical usage and privacy across NWB Group. The availability and accessibility of current, complete, detailed, accurate and, wherever possible, machine-readable customer segment and sub-sector data,

together with appropriate governance and accountability for data, is fast becoming a critical strategic asset, which is subject to increased regulatory focus. Failure to have or be able to access that data or the ineffective use or governance of that data could result in a failure to manage and report important risks and opportunities or satisfy customers' expectations including the inability to deliver products and services. This could also result in a failure to deliver NWB Group's strategy and could place NWB Group at a competitive disadvantage by increasing its costs, inhibiting its efforts to reduce costs or its ability to improve its systems, controls and processes, which could result in a failure to deliver NWB Group's strategy. These data weaknesses and limitations, or the unethical or inappropriate use of data, and/or non-compliance with data protection laws could give rise to conduct and litigation risks and may increase the risk of operational challenges, losses, reputational damage or other adverse consequences due to inappropriate models, systems, processes, decisions or other actions.

NWB Group's operations are highly dependent on its complex IT systems and any IT failure could adversely affect NWB Group.

NWB Group's operations are highly dependent on the ability to process a very large number of transactions efficiently and accurately while complying with applicable laws and regulations. The proper functioning of NatWest Group's (including NWB Group's) payment systems, financial crime, fraud systems and controls, risk management, credit analysis and reporting, accounting, customer service and other IT systems (some of which are owned and operated by other entities in NatWest Group or third parties), as well as the communication networks between their branches and main data processing centres, is critical to NWB Group's operations.

Individually or collectively, any critical system failure, material loss of service availability or material breach of data security could cause significant damage to (i) important business services and (ii) NWB Group's ability to provide services to its customers, which could result in reputational damage, significant compensation costs and regulatory sanctions (including fines resulting from regulatory investigations), or a breach of applicable regulations and could affect NWB Group's regulatory approvals, competitive position, business and brands, which could undermine its ability to attract and retain customers. NWB Group outsources certain functions as it innovates and offers new digital solutions to its customers to meet the demand for online and mobile banking. Outsourcing alongside hybrid working patterns of NWB Group employees, heighten the above risks.

NWB Group uses IT systems that enable remote working interface with third-party systems, and NWB Group could experience service denials or disruptions if such systems exceed capacity or if a third-party system fails or experiences any interruptions, all of which could result in business and customer interruption and related reputational damage, significant compensation costs, regulatory sanctions and/or a breach of applicable regulations.

In 2022, NWB Group continued to make considerable investments to further simplify, upgrade and improve its IT and technology capabilities (including migration of certain services to cloud platforms). NWB Group also continues to develop and enhance digital services for its customers and seeks to improve its competitive position through enhancing controls and procedures and strengthening the resilience of services including cyber security. Any failure of these investment and rationalisation initiatives to achieve the expected results, due to cost challenges or otherwise, may adversely affect NWB Group's operations, its reputation and ability to retain or grow its customer business or adversely affect its competitive position.

NWB Group relies on attracting, retaining and developing diverse senior management and skilled personnel, and is required to maintain good employee relations.

NWB Group's success depends on its ability to attract, retain through creating an inclusive environment, and develop highly skilled and qualified diverse personnel, including senior management, directors and key employees especially for technology and data focused roles, in a highly competitive market and under internal cost efficiency pressures.

NWB Group's ability to do this may be more difficult due to the cost-controlling measures, a failure to pay employees competitive compensation, heightened regulatory oversight of banks and the increasing scrutiny of, and (in some cases) restrictions placed upon, employee compensation arrangements (in particular those of banks that have been in receipt of government support such as NatWest Group). This may impact the cost of hiring, training and retaining diverse skilled personnel. In addition, certain economic, market and regulatory conditions and political developments may reduce the pool of candidates for key management and non-executive roles, including non-executive directors with the right skills, knowledge and experience, or increase the number of departures of existing employees. Moreover, a failure to foster a diverse and inclusive workforce may adversely affect NWB Group's employee engagement and the formulation and execution of its strategy, and could also have an adverse effect on its reputation with customers, investors and regulators.

The inability to compensate employees competitively and/or any reduction of compensation, as a result of negative economic developments or otherwise, could have an adverse effect on NWB Group's ability to hire, retain and engage appropriately qualified employees, especially at a senior level, which may adversely affect NatWest Group's future results, financial condition and/or prospects.

Many of NWB Group's employees in the UK, the ROI and continental Europe are represented by employee representative bodies, including trade unions and works councils. Engagement with its employees and such bodies is important to NWB Group in maintaining good employee relations. Any failure to do so may adversely affect NWB Group's ability to operate its business effectively.

A failure in NWB Group's risk management framework could adversely affect NWB Group, including its ability to achieve its strategic objectives.

Risk management is an integral part of all of NWB Group's activities and delivery of its long-term strategy. NatWest Group's Enterprise-Wide Risk Management Framework sets out the approach for managing risk within the NWB Group including in relation to risk governance and risk appetite. A failure to adhere to this framework, or any material weaknesses or deficiencies in the framework's controls and procedures, could adversely affect NatWest Group's financial condition and strategic delivery including in relation to inaccurate adherence to agreed risk appetite statements and accurate risk reporting of risk exposures.

In addition, financial crime risk management is dependent on the use and effectiveness of financial crime assessment, systems and controls. Weak or ineffective financial crime processes and controls may risk NWB Group inadvertently facilitating financial crime which may result in regulatory investigation, sanction, litigation, fines and reputational damage. Financial crime continues to evolve, whether through fraud, scams, cyber-attacks or other criminal activity. NatWest Group (and NWB Group) has made and continues to make significant, multi-year investments to strengthen and improve its overall financial crime control framework with prevention systems and capabilities. As part of its ongoing programme of investment, there is current and future investment planned to further strengthen financial crime controls over the coming years, including investment in new technologies and capabilities to further enhance customer due diligence, transaction monitoring, sanctions and anti-bribery and corruption systems.

Ineffective risk management may arise from a wide variety of factors, including lack of transparency or incomplete risk reporting, manual processes and controls, inaccurate data, inadequate IT systems, unidentified conflicts or misaligned incentives, lack of accountability control and governance, incomplete risk monitoring and management or insufficient challenges or assurance processes, or a failure to timely complete risk remediation projects. Failure to manage risks effectively, or within regulatory expectations, could adversely affect NWB Group's reputation or its relationship with its regulators, customers, shareholders or other stakeholders.

NWB Group's operations are inherently exposed to conduct risks, which include business decisions, actions or reward mechanisms that are not responsive to or aligned with NWB Group's regulatory obligations, customers' needs or do not reflect NWB Group's customer-focused strategy, ineffective product management, unethical or inappropriate use of data, information asymmetry, implementation and utilisation of new technologies, outsourcing of customer service and product delivery, the possibility of mis-selling of financial products and mishandling of customer complaints. Some of these risks have materialised in the past and ineffective management and oversight of conduct risks may lead to further remediation and regulatory intervention or enforcement.

NWB Group's businesses are also exposed to risks from employee-misconduct including non-compliance with policies and regulations, negligence or fraud (including financial crimes and fraud), any of which could result in regulatory fines or sanctions and serious reputational or financial harm to NWB Group. Remote working arrangements for NWB Group employees continues to place heavy reliance on the IT systems that enable remote working and may place additional pressure on NWB Group's ability to maintain effective internal controls and governance frameworks. Remote working arrangements are also subject to regulatory scrutiny to ensure adequate recording, surveillance and supervision of regulated activities, and compliance with regulatory requirements and expectations, including requirements to: meet threshold conditions for regulated activities; ensure the ability to oversee functions (including any outsourced functions); ensure no detriment is caused to customers; and ensure no increased risk of financial crime.

NWB Group has been seeking to embed a strong risk culture across the organisation and has implemented policies and allocated new resources across all levels of the organisation to manage and mitigate conduct risk and expects to continue to invest in risk management, including the ongoing development of a NatWest Group risk management strategy in line with regulatory expectations. However, such efforts may not insulate NWB Group from instances of misconduct and no assurance can be given that NWB Group's strategy and control framework will be effective. Any failure in NWB Group's risk management framework could negatively affect NWB Group and its financial condition through reputational and financial harm and may result in the inability to achieve its strategic objectives for their customers, employees and wider stakeholders.

NWB Group's operations are subject to inherent reputational risk.

Reputational risk relates to stakeholder and public perceptions of NWB Group arising from an actual or perceived failure to meet stakeholder or the public's expectations, including with respect to NatWest Group's purpose-led strategy and related targets, the creation of the Commercial & Institutional business segment, the progression towards working as One Bank across the NatWest Group (of which NWB Group is part) to serve customers, or due to any events, behaviour, action or inaction by NWB Group, its employees or those with whom NWB Group is associated. See also, '*NWB Group's businesses are subject to substantial regulation and oversight, which are constantly evolving and may adversely affect NWB Group.*' This includes harm to its brand, which may be detrimental to NWB Group's business, including its ability to build or sustain business relationships with customers, and may cause low employee morale, regulatory censure or reduced access to, or an increase in the cost of, funding.

Reputational risk may arise whenever there is, or there is perceived to be, a material lapse in standards of integrity, compliance, customer or operating efficiency and may adversely affect NWB Group's ability to attract and retain customers. In particular, NWB Group's ability to attract and retain customers (particularly, corporate/institutional and retail depositors) and engage with counterparties may be adversely affected by factors including: negative public opinion resulting from the actual or perceived manner in which NWB Group or any other member of NatWest Group conducts or modifies its business activities and operations, media coverage (whether accurate or otherwise), employee misconduct, NWB Group's financial performance, IT systems failures or cyberattacks, data breaches, financial crime and fraud, the level of direct and indirect government support, or the actual or perceived practices in the banking and financial industry in general, or a wide variety of other factors.

Modern technologies, in particular online social networks and other broadcast tools that facilitate communication with large audiences in short timeframes and with minimal costs, may also significantly increase and accelerate the impact of damaging information and allegations.

Although NWB Group has implemented a Reputational Risk Policy to monitor the identification, assessment and management of customers, transactions, products and issues which represent a reputational risk, NWB Group cannot be certain that it will be successful in avoiding damage to its business from reputational risk.

Legal, regulatory and conduct risk

NWB Group's businesses are subject to substantial regulation and oversight, which are constantly evolving and may adversely affect NWB Group.

NWB Group is subject to extensive laws, regulations, guidelines, corporate governance practice and disclosure requirements, administrative actions and policies in each jurisdiction in which it operates, which represents ongoing compliance and conduct risks. Many of these have been introduced or amended recently and are subject to further material changes, which may increase compliance and conduct risks, particularly as EU/EEA and UK laws diverge as a result of Brexit. NWB Group expects government and regulatory intervention in the financial services industry to remain high for the foreseeable future.

In recent years, regulators and governments have focused on reforming the prudential regulation of the financial services industry and the manner in which the business of financial services is conducted. Measures have included: enhanced capital, liquidity and funding requirements, implementation of the UK ring-fencing regime, implementation and strengthening of the recovery and resolution framework applicable to financial institutions in the UK, the EU and the US, financial industry reforms (including in respect of MiFID II), corporate governance requirements, restrictions on the compensation of senior management and other employees, enhanced data protection and IT resilience requirements, financial market infrastructure reforms (including enhanced data protection and IT resilience requirements), enhanced regulations in respect of the provision of 'investment services and activities' and increased regulatory focus in certain areas, including conduct, consumer protection, competition and disputes regimes, anti-money laundering, anti-corruption, anti-bribery, anti-tax evasion, payment systems, sanctions and anti-terrorism laws and regulations.

In addition, there is significant oversight by competition authorities of the jurisdictions in which NWB Group operates. The competitive landscape for banks and other financial institutions in the UK, EU/EEA, Asia and the US is rapidly changing. Recent regulatory and legal changes have and may continue to result in new market participants and changed competitive dynamics in certain key areas. Regulatory and competition authorities, including the CMA, are currently also looking at and focusing more on how they can support competition and innovation in digital and other markets. Recent regulatory changes, proposed (such as US proposals to increase regulation around cybersecurity) or future developments and heightened levels of public and regulatory scrutiny in the UK, the EU and the US have resulted in increased capital, funding and liquidity requirements, changes in the competitive landscape, changes in other regulatory requirements and increased operating costs, and have impacted, and will continue to impact, product offerings and business models.

Other areas in which, and examples of where, governmental policies, regulatory and accounting changes and increased public and regulatory scrutiny could have an adverse effect (some of which could be material) on NWB Group include, but are not limited to, the following:

- general changes in government, central bank, regulatory or competition policy, or changes in regulatory regimes that may influence investor decisions in the jurisdictions in which NWB Group operates;
- rules relating to foreign ownership, expropriation, nationalisation and confiscation of assets;
- increased scrutiny including from the CMA, FCA and Payment Systems Regulator ('PSR') for the protection and resilience of, and competition and innovation in, digital and other markets, UK payment systems and retail banking developments relating to the UK initiative on Open Banking, Open Finance and the European directive on payment services;
- the ongoing compliance by NatWest Group with CMA's Market Orders including the Retail Banking Market Order 2017 (the 'Order') and SME Undertakings as well as the ongoing consultation by the UK Government to introduce penalties for breaches of such requirements (in addition to the current customer remediation requirements);
- ongoing competition litigation in the English courts around payment card interchange fees, combined with increased regulatory scrutiny (from the PSR) of the Visa and Mastercard card schemes;
- increased risk of new class action claims being brought against NWB Group in the Competition Appeal Tribunal for breaches of competition law;
- new or increased regulations relating to customer data protection as well as IT controls and resilience, such as the proposed UK Data Protection and Digital Information Bill and in India, the Digital Personal Data Protection Bill;
- the introduction of, and changes to, taxes, levies or fees applicable to NWB Group's operations, such as the imposition of a financial transaction tax, introduction of global minimum tax rules, changes in tax rates, changes in the scope and administration of the Bank Levy, increases in the bank corporation tax surcharge in the UK, restrictions on the tax deductibility of interest payments or further restrictions imposed on the treatment of carry-forward tax losses that reduce the value of deferred tax assets and require increased payments of tax
- increased regulatory focus on customer protection (such as the FCA's Consumer Duty policy statement and final rules and guidance in retail or other financial markets;
- the potential introduction by the Bank of England of a Central Bank Digital Currency which could result in deposit outflows, higher funding costs, and/or other implications for UK banks including NWB Group; and
- regulatory enforcement in the form of PRA imposed financial penalties for failings in banks' regulatory reporting governance and controls, and regulatory scrutiny following the 2019 PRA 'Dear CEO letter' regarding PRA's ongoing focus on: the integrity of regulatory reporting, which the PRA considers has equal standing with financial reporting; the PRA's thematic reviews of the governance, controls and processes for preparing regulatory returns of selected UK banks, including NatWest Group; the publication of the PRA's common findings from those reviews in September 2021; and NatWest Group's programme of improvements to meet PRA expectations.

These and other recent regulatory changes, proposed or future developments and heightened levels of public and regulatory scrutiny in the UK, the EU and the US have resulted in increased capital, funding and liquidity requirements, changes in the competitive landscape, changes in other regulatory requirements and increased operating costs, and have impacted, and will continue to impact, competitive position, product offerings and business models. Future competition investigations, market reviews, or the regulation of mergers may lead to the imposition of financial penalties or market remedies that may adversely affect NatWest Group's competitive or financial position. Any of these developments (including any failure to comply with new rules and regulations) could also have a significant impact on NWB Group's authorisations and licences, the products and services that NWB Group may offer, its reputation and the value of its assets, NWB Group's operations or legal entity structure, and the manner in which NWB Group conducts its business. Material consequences could arise should NWB Group be found to be non-compliant with these regulatory requirements. Regulatory developments may also result in an increased number of regulatory investigations and proceedings and have increased the risks relating to NWB Group's ability to comply with the applicable body of rules and regulations in the manner and within the timeframes required.

Changes in laws, rules or regulations, or in their interpretation or enforcement, or the implementation of new laws, rules or regulations, including contradictory or conflicting laws, rules or regulations by key regulators or policymakers in different jurisdictions, or failure by NWB Group to comply with such laws, rules and regulations, may adversely affect NWB Group's business, results of operations and outlook. In addition, uncertainty and insufficient international regulatory coordination as enhanced supervisory standards are developed and implemented may adversely affect NWB Group's ability to engage in effective business, capital and risk management planning.

NWB Group is exposed to the risks of various litigation matters, regulatory and governmental actions and investigations as well as remedial undertakings, including conduct-related reviews, anti-money laundering and redress projects, the outcomes of which are inherently difficult to predict, and which could have an adverse effect on NWB Group.

NWB Group's operations are diverse and complex and it operates in legal and regulatory environments that expose it to potentially significant civil actions (including those following on from regulatory sanction), as well as criminal, regulatory and governmental proceedings. NWB Group has resolved a number of legal and regulatory actions over the past several years but continues to be, and may in the future be, involved in such actions in the US, the UK, Europe and other jurisdictions.

NWB Group is currently, has recently been and will likely be involved in a number of significant legal and regulatory actions, including investigations, proceedings and ongoing reviews (both formal and informal) by governmental law enforcement and other agencies and litigation proceedings, including in relation to the offering of securities, conduct in the foreign exchange market, the setting of benchmark rates such as LIBOR and related derivatives trading, the issuance, underwriting, and sales and trading of fixed-income securities (including government securities), product mis-selling, customer mistreatment, anti-money laundering, antitrust, VAT recovery and various other issues. Legal and regulatory actions are subject to many uncertainties, and their outcomes, including the timing, amount of fines, damages or settlements or the form of any settlements, which may be material and in excess of any related provisions, are often difficult to predict, particularly in the early stages of a case or investigation. NWB Group's expectation for resolution may change and substantial additional provisions and costs may be recognised in respect of any matter.

For information relating to legal and regulatory proceedings and matters to which NWB Group is currently exposed, see '*Litigation and regulatory matters*' at Note 26 to the consolidated accounts.

Recently resolved matters or adverse outcomes or resolution of current or future legal or regulatory actions, including conduct-related reviews or redress projects, could increase the risk of greater regulatory and third-party scrutiny and could have material collateral consequences for NWB Group's business and result in restrictions or limitations on NWB Group's operations. These may include consequences resulting from the need to reapply for various important licences or obtain waivers to conduct certain existing activities of NWB Group, which may take a significant period of time and the results and implications of which are uncertain.

Failure to obtain such licences or waivers may adversely affect NWB Group's business, including if it results in NWB Group being precluded from carrying out certain activities. This in turn and/or any fines, settlement payments or penalties may adversely affect NWB Group's capital position. Similar consequences could result from legal or regulatory actions relating to other parts of NatWest Group.

Failure to comply with undertakings made by NWB Group to its regulators may result in additional measures or penalties being taken against NWB Group. In addition, any failure to administer conduct redress processes adequately, or to handle individual complaints fairly or appropriately, could result in further claims as well as the imposition of additional measures or limitations on NWB Group's operations, additional supervision by NWB Group's regulators, and loss of investor confidence.

NWB Group may not effectively manage the transition of LIBOR and other IBOR rates to replacement risk-free rates.

UK and international regulators are driving the transition from the use of interbank offer rates ('IBORs'), to replacement rates generally referred to as 'risk-free rates' ('RFRs'). As of 31 December 2021, LIBOR, as currently determined, has ceased for all tenors of GBP, JPY, CHF, EUR, and for the 1 week and 2-month tenors for USD. The remaining USD LIBOR tenors, as currently determined, are due to cease after 30 June 2023. The FCA has used its powers under the UK Benchmarks Regulation ('UK BMR') to require, for a limited period of time after 31 December 2021, the ongoing publication of the 1-, 3-, and 6-month GBP and JPY LIBOR tenors using a changed methodology (i.e., 'Art23A LIBOR' on a synthetic basis). The UK has passed the Critical Benchmarks (References and Administrators' Liability) Act 2021 ('Critical Benchmarks Act') which establishes a framework that allows the ongoing use of Art23A LIBOR under certain circumstances where contracts have not pro-actively transitioned onto the replacement rates. These concessions provided under UK BMR and the Critical Benchmarks Act are temporary. The FCA confirmed that Art23A will no longer be available from: (i) the end of 2022 for JPY, (ii) March 2023 for 1- and 6-month GBP LIBOR and (iii) March 2024 for 3-month GBP LIBOR. The transition away from these temporary concessions may expose NWB Group, its customers and the financial services industry more widely to various risks, including: (i) the FCA further restricting use of Art23A LIBOR resulting in proactive transition of contracts; and (ii) mis-matches between positions in cleared derivatives and the exposures they are hedging where those exposures are permitted to make use of Art23A LIBOR. Although the formal cessation date for the remaining USD LIBOR tenors (as currently determined) is not until the end of June 2023, US and UK regulators have clarified that this is only to support the rundown of existing USD LIBOR exposures. No new contracts should reference these USD LIBOR tenors after 31 December 2021, other than in a very limited range of circumstances. NWB Group will continue to have ongoing exposure to the remaining USD LIBOR tenors until cessation in June 2023.

NWB Group has held significant exposures to various IBORs and has actively sought to transition away from these during 2021 and 2022 in accordance with regulatory expectations and milestones. Transition measures have included the pro-active development of new products using the replacement rates, restructuring existing LIBOR exposures to reference these replacement rates and embedding RFR transition language into relevant contracts. Central Counterparty Clearing houses (CCPs) conducted mass conversion exercises in December 2021 covering GBP, JPY, CHF and EUR LIBOR, transitioning derivatives to the relevant RFR, conversion exercises for USD are scheduled for May 2023. NWG entities, along with many of their major counterparties, have adhered to the ISDA IBOR fall-backs protocol which establishes a contractual process to transition from IBORs to RFRs for bilateral derivative products.

These transition efforts have involved extensive engagement with customers, industry working groups and regulators to seek to deliver transition in a transparent and economically appropriate manner. These changes coincide with the recognition that market liquidity is lower than it has been and whilst it will be inherently difficult to disaggregate the different impacts from each other it may be that similar levels of market liquidity are not reached for these RFR products, clear and consistent market conventions for all replacement products may not be implemented or they may not be accepted by market participants including NWB Group counterparties. Where there remains an uncertainty around the manner of transition to RFRs, NWB Group, clients and the financial services industry are exposed to the related risks.

Examples of these risks include (i) legal (including litigation) risks relating to documentation for new and the majority of existing transactions (including, changes, lack of changes, unclear contractual provisions, and disputes in respect of these); (ii) financial risks from any changes in valuation of financial instruments linked to relevant IBORs, including cost of funds and relevant risk management related financial models; (iii) changes to benchmark rates could impact pricing, interest rate or settlement mechanisms for certain instruments; (iv) operational risks linked to the adaptation of IT systems, trade reporting infrastructure and operational processes, as well as ensuring compliance with restrictions on new USD LIBOR usage after December 2021; (v) conduct risks arising from communication of the potential impact on customers, engagement with customers during and after the transition period, or non-acceptance by customers of replacement rates; and (vi) different legislative provisions in different jurisdictions, for example, unlike certain US states and the EU, the UK has not provided a clear and robust safe harbour to protect against litigation and potential liability arising out of the switch to 'synthetic LIBOR'.

Although the majority of NWG's IBOR exposure has already been transitioned to RFRs, there remains a large population linked to USD LIBOR, scheduled for transition by June 2023. Until IBOR transition is complete there is some uncertainty as to the impact of the transition, or the potential costs of implementing any relevant remedial action including in the event that the transition is not completed in a timely manner, or at all. The implementation of any alternative RFRs may be impossible or impracticable under the existing terms of certain financial instruments and may adversely affect their value or return and therefore on NWB Group's future results.

Changes in tax legislation or failure to generate future taxable profits may impact the recoverability of certain deferred tax assets recognised by NWB Group.

In accordance with the accounting policies set out in '*Critical accounting policies and key sources of estimation uncertainty*', NWB Group has recognised deferred tax assets on losses available to relieve future profits from tax only to the extent it is probable that they will be recovered. The deferred tax assets are quantified on the basis of current tax legislation and accounting standards and are subject to change in respect of the future rates of tax or the rules for computing taxable profits and offsetting allowable losses.

Failure to generate sufficient future taxable profits or further changes in tax legislation (including with respect to rates of tax) or accounting standards may reduce the recoverable amount of the recognised tax loss deferred tax assets, amounting to £1,117 million as at 31 December 2022. Changes to the treatment of certain deferred tax assets may impact NWB Group's capital position. In addition, NWB Group's interpretation or application of relevant tax laws may differ from those of the relevant tax authorities and provisions are made for potential tax liabilities that may arise on the basis of the amounts expected to be paid to tax authorities. The amounts ultimately paid may differ materially from the amounts provided depending on the ultimate resolution of such matters.

Forward-looking statements

Cautionary statement regarding forward-looking statements

This document may include forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995, such as statements that include, without limitation, the words 'expect', 'estimate', 'project', 'anticipate', 'commit', 'believe', 'should', 'intend', 'will', 'plan', 'could', 'probability', 'risk', 'Value-at-Risk (VaR)', 'target', 'goal', 'objective', 'may', 'endeavour', 'outlook', 'optimistic', 'prospects' and similar expressions or variations on these expressions. These statements concern or may affect future matters, such as NWB Group's future economic results, business plans and strategies. In particular, this document may include forward-looking statements relating to NWB Group in respect of, but not limited to: its economic and political risks, its regulatory capital position and related requirements, its financial position, profitability and financial performance (including financial, capital, cost savings and operational targets), the implementation of NatWest Group's purpose-led strategy, its environmental, social and governance and climate related targets, its access to adequate sources of liquidity and funding, increasing competition from new incumbents and disruptive technologies, its exposure to third party risks, its ongoing compliance with the UK ring-fencing regime and ensuring operational continuity in resolution, its impairment losses and credit exposures under certain specified scenarios, substantial regulation and oversight, ongoing legal, regulatory and governmental actions and investigations, the transition of LIBOR and IBOR rates to replacement risk free rates and NWB Group's exposure to, operational risk, conduct risk, financial crime risk, cyber, data and IT risk, key person risk and credit rating risk. Forward-looking statements are subject to a number of risks and uncertainties that might cause actual results and performance to differ materially from any expected future results or performance expressed or implied by the forward-looking statements. Factors that could cause or contribute to differences in current expectations include, but are not limited to, future growth initiatives (including acquisitions, joint ventures and strategic partnerships), the outcome of legal, regulatory and governmental actions and investigations, the level and extent of future impairments and write-downs, legislative, political, fiscal and regulatory developments, accounting standards, competitive conditions, technological developments, interest and exchange rate fluctuations, and general economic and political conditions and the impact of climate related risks and the transitioning to a net zero economy. These and other factors, risks and uncertainties that may impact any forward-looking statement or the NWB Group's actual results are discussed in the NWB Plc's UK 2021 Annual Report and Accounts (ARA). The forward-looking statements contained in this document speak only as of the date of this document and NWB Plc does not assume or undertake any obligation or responsibility to update any of the forward-looking statements contained in this document, whether as a result of new information, future events or otherwise, except to the extent legally required.