NatWest Group

The Royal Bank of Scotland plc

2022 Annual Report and Accounts

Strategic report

Presentation of information

The Royal Bank of Scotland plc ('RBS plc' or 'we') is a wholly-owned subsidiary of NatWest Holdings Limited ('NWH Ltd' or 'the intermediate holding company'). 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.

RBS 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 pounds 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

RBS plc 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.

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 financial results of RBS plc.

The reportable operating segments are as follows:

Retail Banking serves personal customers in the UK.

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.

Central items & other comprises corporate treasury activity on behalf of RBS plc and its fellow subsidiaries and RBS plc's corporate service and functions activities.

Performance overview

Profit for 2022 was £1,176 million, compared with £776 million in 2021, driven by an increase in total income and a decrease in operating expenses, partially offset by net impairment losses.

Total income in 2022 was £2,071 million, compared with £1,775 million in 2021, reflecting the beneficial impact of interest rate increases, partially offset by a reduction in lending.

Operating expenses in 2022 were £892 million, compared with £1,114 million in 2021, primarily reflecting a one-off impairment of goodwill incurred in 2021, cost efficiencies and continued headcount reduction.

A net impairment loss of £20 million for 2022, compared with a net release of £360 million in 2021 principally reflects the latest macro-economics, including updated scenarios, with more weight being placed on the downside scenarios. Underlying book performance remains strong.

An operating profit before tax of £1,159 million was mainly driven by £523 million in Retail Banking and £762 million profit in Commercial & Institutional, partially offset by a £65 million loss in Private Banking.

The CET1 capital ratio decreased in 2022 to 11.6% from 13.7% reflecting a decrease in CET1 capital, predominantly due to dividends paid, offset by a £1.1 billion decrease in RWAs.

RWAs decreased to £18.5 billion from £19.6 billion, reflecting a £0.5 billion decrease in credit risk RWAs as well as a £0.6 billion decrease in operational risk RWAs following the annual recalculation in the first quarter of 2022.

Stakeholder engagement and s.172(1) statement

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 75 (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 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 Blueprint for Better Business 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 75 to 81.

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 decisions were informed by 2022 capital plans as well as regular updates on the financial and capital positions of RBS plc.

The Board Risk Committee also reviewed all capital distribution 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. Each 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 £0.2 billion which was paid on 22 February 2022 and an interim dividend of £0.65 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 74 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

36 St Andrew Square
Edinburgh EH2 2YB
Telephone: +44 (0)131 556 8555

Other principal offices

PO Box 1000
Gogarburn
Edinburgh EH12 1HQ
Telephone +44 (0)131 626 0000

24/25 St Andrew Square
Edinburgh EH2 1AF

The Royal Bank of Scotland plc
Registered in Scotland No. SC083026

Financial review

Financial summary

Summary income statement for the year ended 31 December 2022

	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	31 December 2022 £m	31 December 2021 £m	Variance £m	Variance %
Net interest income	**877**	**23**	**886**	**(4)**	**1,782**	1,342	*440*	*33*
Non-interest income	**88**	**(17)**	**252**	**(34)**	**289**	433	*(144)*	*(33)*
Total income	**965**	**6**	**1,138**	**(38)**	**2,071**	1,775	*296*	*17*
Operating expenses	**(431)**	**(71)**	**(390)**	**—**	**(892)**	(1,114)	*222*	*(20)*
Profit/(loss) before impairment losses/releases	**534**	**(65)**	**748**	**(38)**	**1,179**	661	*518*	*78*
Impairment (losses)/releases	**(11)**	**—**	**14**	**(23)**	**(20)**	360	*(380)*	*(106)*
Operating profit/(loss) before tax	**523**	**(65)**	**762**	**(61)**	**1,159**	1,021	*138*	*14*
Tax credit/(charge)					**17**	(245)	*262*	*(107)*
Profit for the year					**1,176**	776	*400*	*52*

Key metrics and ratios	2022	2021
Cost:income ratio (%) (1)	**43.1**	62.8
Loan impairment rate (bps) (2)	**5**	(84)
CET1 ratio (%) (3)	**11.6**	13.7
Leverage ratio (%) (4)	**6.4**	4.1
Risk weighted assets (£bn)	**18.5**	19.6
Loan:deposit ratio (%) (5)	**46**	46

(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 61 for further details.
(5) Loan deposit ratio is total loans divided by total deposits.

RBS plc reported a profit of £1,176 million, compared with £776 million in 2021, driven by an increase in total income and a decrease in operating expenses, partially offset by net impairment losses.

Net interest income increased by £440 million to £1,782 million compared with £1,342 million in 2021, reflecting the beneficial impact of interest rate increases. This was partially offset by lending reductions.

Non-interest income decreased by £144 million to £289 million compared with £433 million in 2021.

Net fees and commissions increased by £70 million, or 25%, to £348 million primarily due to higher transaction-related fee income and one-off intra-group fees incurred in 2021.

Other operating income decreased by £214 million to a loss of £59 million compared with a profit of £155 million in 2021, primarily reflecting:

- the sale of Adam & Company's investment management business, including non-repeat of £54 million consideration received upon the sale in 2021, and a £23 million fair value loss upon transfer of the remaining business from RBS plc to Coutts & Co during 2022, and a £14 million reduction in dividends received;
- a £61 million decrease due to losses from economic hedging resulting from interest rate fluctuations; and a number of other small movements.

Operating expenses decreased by £222 million to £892 million compared with £1,114 million in 2021, primarily due to non-repeat of an £85 million impairment of goodwill incurred in 2021, lower staff costs due to headcount reduction, and lower premises and equipment costs due to efficiencies and provision releases.

Net impairment losses of £20 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 on loans reduced by £60 million to £615 million in the year. ECL provision coverage ratio remained stable at 1.61%.

Operating profit before tax of £1,159 million included £523 million relating to Retail Banking, which increased by £384 million compared to 2021 reflecting the beneficial impact from interest rate increases and non-repeat of an £85 million impairment of goodwill incurred in 2021, partially offset by lending reduction.

Operating profit before tax in Private Banking decreased by £84 million to a loss of £65m primarily due to the net impact of the sale of Adam & Company's investment management business.

Operating profit before tax in Commercial & Institutional increased by £19 million to £762 million, primarily due to an increase in net interest income due to the beneficial impact of interest rate increases, partially offset by a reduction in net impairment releases from £336 million in 2021 to £14 million in 2022.

Operating loss before tax of £61 million in Central items & other primarily reflects losses from economic hedging driven by interest rate fluctuations.

Financial summary
Summary balance sheet as at 31 December 2022

	2022	2021	Variance	
	£m	£m	£m	%
Assets				
Cash and balances at central banks	**34,323**	38,014	*(3,691)*	*(10)*
Derivatives	**498**	220	*278*	*126*
Loans to banks - amortised cost	**1,071**	1,147	*(76)*	*(7)*
Loans to customers - amortised cost	**37,667**	42,035	*(4,368)*	*(10)*
Amounts due from holding companies and fellow subsidiaries	**21,722**	23,941	*(2,219)*	*(9)*
Other assets	**1,382**	738	*644*	*87*
Total assets	**96,663**	106,095	*(9,432)*	*(9)*
Liabilities				
Bank deposits	**986**	1,117	*(131)*	*(12)*
Customer deposits	**83,306**	92,144	*(8,838)*	*(10)*
Amounts due to holding companies and fellow subsidiaries	**3,910**	5,216	*(1,306)*	*(25)*
Derivatives	**2,683**	827	*1,856*	*224*
Notes in circulation	**2,409**	2,144	*265*	*12*
Other liabilities	**708**	900	*(192)*	*(21)*
Total liabilities	**94,002**	102,348	*(8,346)*	*(8)*
Total equity	**2,661**	3,747	*(1,086)*	*(29)*
Total liabilities and equity	**96,663**	106,095	*(9,432)*	*(9)*

Total assets decreased by £9.4 billion to £96.7 billion at 31 December 2022, compared with £106.1 billion at 31 December 2021, primarily due to a reduction in lending assets due to the continued run-off of mortgage portfolios, with intermediary new lending being originated through the NatWest Bank business, and contraction of Commercial & Institutional lending.

Cash and balances at central banks decreased by £3.7 billion to £34.3 billion, primarily driven by reduction in customer deposits and payment of a dividend.

Loans to customers – amortised cost decreased by £4.4 billion to £37.7 billion, compared with £42.0 billion as at 31 December 2021, driven by:

- a £1.6 billion decrease in Retail Banking primarily due to the continued run-off of mortgage portfolios;
- a £2.1 billion decrease in Commercial & Institutional due to a reduction in business loans and UK Government financial support scheme repayments; and
- a £0.7 billion transfer of the remaining Adam & Company business to Coutts & Co.

Amounts due from holding companies and fellow subsidiaries decreased by £2.2 billion to £21.7 billion, primarily due to the transfer of Adam & Company related balances to Coutts & Co.

Customer deposits decreased by £8.8 billion to £83.3 billion, driven by:

- a £6.4 billion decrease in interest-bearing balances; and
- a £2.1 billion decrease due to the transfer of the remaining Adam & Company business to Coutts & Co.

Amounts due to holding companies and fellow subsidiaries decreased by £1.3 billion to £3.9 billion, primarily due to movements on balances with NWB Plc and NWM Plc.

Derivatives liabilities increased by £1.9 billion to £2.7 billion driven by interest rate rises across all currencies.

Notes in circulation of £2.4 billion represent the value of the RBS plc banknotes in issue.

Total equity decreased by £1.1 billion to £2.7 billion, compared with £3.8 billion as at 31 December 2021. The decrease reflects dividend payments to NWH Ltd and a decrease in cash flow hedging reserves due to interest rate rises in all currencies, partly offset by attributable profit for the year.

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 6 to 74) 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 RBS plc.

Risk management framework

Introduction

RBS plc 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 RBS plc'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 RBS plc. It aligns risk management with RBS plc'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 RBS plc 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 RBS plc'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 RBS plc'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 RBS plc'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. RBS plc 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 RBS plc'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 RBS plc, 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 RBS plc's risk committee structure in 2022 and the main purposes of each committee.

RBS 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 future risk exposures, future risk exposures and risk appetite. Oversees the effectiveness of the risk management framework within RBS plc and (with the Audit Committee) the 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 RBS plc Board. Reviews, challenges and debates all aspects of RBS 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 RBS plc, ensuring they operate within risk appetite, policies and chosen business strategy as well as comply with regulatory and legal requirements.

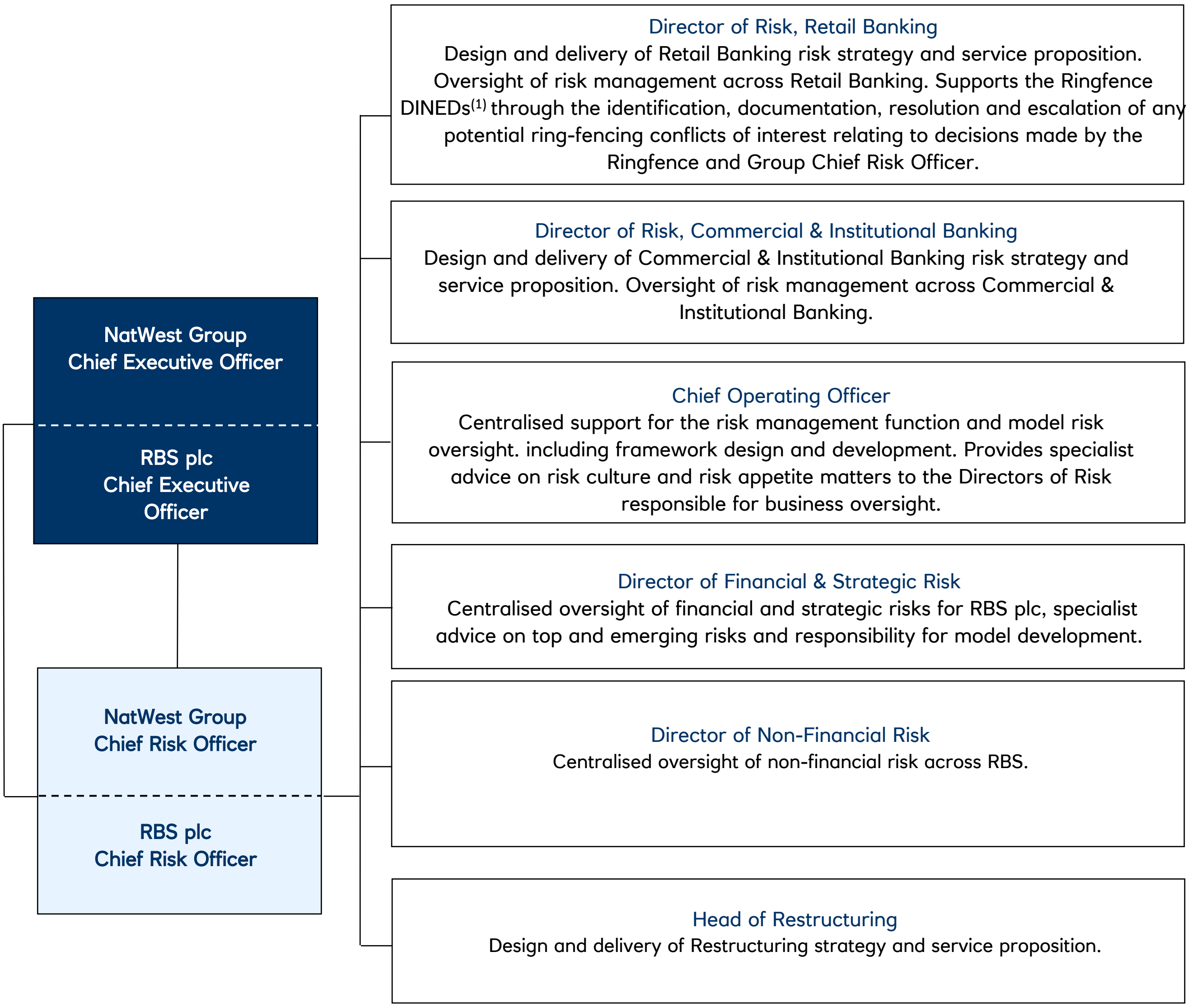
Business and function risk committees
Risk committees review and monitor all risks, providing guidance, recommendations and decisions on risks affecting the businesses and functions.

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

Risk management framework continued

Risk management structure

The diagram shows RBS plc's risk management structure in 2022 and key risk management responsibilities.



(1) Double Independent Non-Executive Directors.
(2) The NatWest Group Chief Executive Officer also performs the role of RBS plc Chief Executive Officer.
(3) The NatWest Group Chief Risk Officer also performs the role of RBS plc Chief Risk Officer.
(4) The RBS plc Chief Risk Officer reports directly to the RBS plc 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 RBS plc. 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 and the Chief Operating Officer report to the RBS plc 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 RBS plc 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 RBS plc 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 RBS plc 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 RBS plc 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 RBS plc 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 RBS plc'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 RBS plc 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 RBS plc is well placed to meet its priorities and long-term, targets even in challenging economic environments. This supports RBS plc in remaining resilient and secure as it pursues its strategic business objectives.

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

Mitigation

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

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 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 RBS plc'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 are lending and related financial guarantees and undrawn commitments. Through its payments activities RBS plc is also exposed to settlement risk.

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.

Mitigation

Mitigation techniques, as set out in the appropriate credit policies and transactional acceptance standards, are used in the management of credit portfolios across RBS plc. 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 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 – RBS plc takes collateral in the form of residential property to mitigate the credit risk arising from mortgages. RBS plc 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. RBS plc 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 – RBS plc has an actively managed panel of chartered surveying firms that cover the spectrum of geography and property sectors in which RBS plc 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, RBS plc 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 RBS plc and other lenders). RBS plc 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 RBS plc'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 RBS plc 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 RBS plc. 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 RBS plc'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 RBS plc'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 RBS plc 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 RBS plc.

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 RBS plc'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, RBS plc 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, RBS plc will work to recover its capital in a fair and efficient manner, while upholding the fair treatment of customers and RBS plc'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, RBS plc 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.

RBS plc'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 policy 2.2 for further details.

Credit risk continued

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.
- 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.

Credit risk continued

Governance and post model adjustments (audited)

The IFRS 9 PD, EAD and LGD models are subject to RBS plc'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 RBS plc'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.

ECL post model adjustments

The table below shows ECL post model adjustments.

	Retail Banking		Commercial	
	Mortgages	Other	& Institutional	Total
2022	**£m**	**£m**	**£m**	**£m**
Deferred model calibrations	**—**	**—**	**—**	**—**
Economic uncertainty	**11**	**11**	**38**	**60**
Other adjustments	**—**	**5**	**2**	**7**
Total	**11**	**16**	**40**	**67**
Of which:				
- Stage 1	***4***	***6***	***9***	***19***
- Stage 2	***2***	***10***	***30***	***42***
- Stage 3	***5***	***—***	***1***	***6***
2021				
Deferred model calibrations	11	17	11	39
Economic uncertainty	14	18	88	120
Other adjustments	10	—	—	10
Total	35	35	99	169
Of which:				
- Stage 1	*2*	*—*	*3*	*5*
- Stage 2	*26*	*30*	*96*	*152*
- Stage 3	*7*	*5*	*—*	*12*

Credit risk continued

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 £28 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 £22 million (2021 – £33 million). The primary element of the economic uncertainty adjustment was a £16 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 £5 million for COVID-19 payment holiday high-risk customers and the £14 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 £5 million uplift to reflect forward-looking provisions relating to credit cards EAD and limit utilisation modelling considerations. The £2 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 £88 million to £38 million during the year. It included an overlay of £24 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 £14 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 a £2 million overlay to mitigate the effect of operational timing delays in the identification and flagging of a SICR.

Credit risk continued

Significant increase in credit risk (SICR)

(audited)

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). RBS plc 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 RBS plc 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	>=4.306x%	1.7x 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.

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.

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.

Credit risk continued

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 £19 million (2021 – £10 million). However, credit card balances originated under the 0% balance transfer product, and representing approximately 14% 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 RBS plc 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.

Credit risk continued

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.

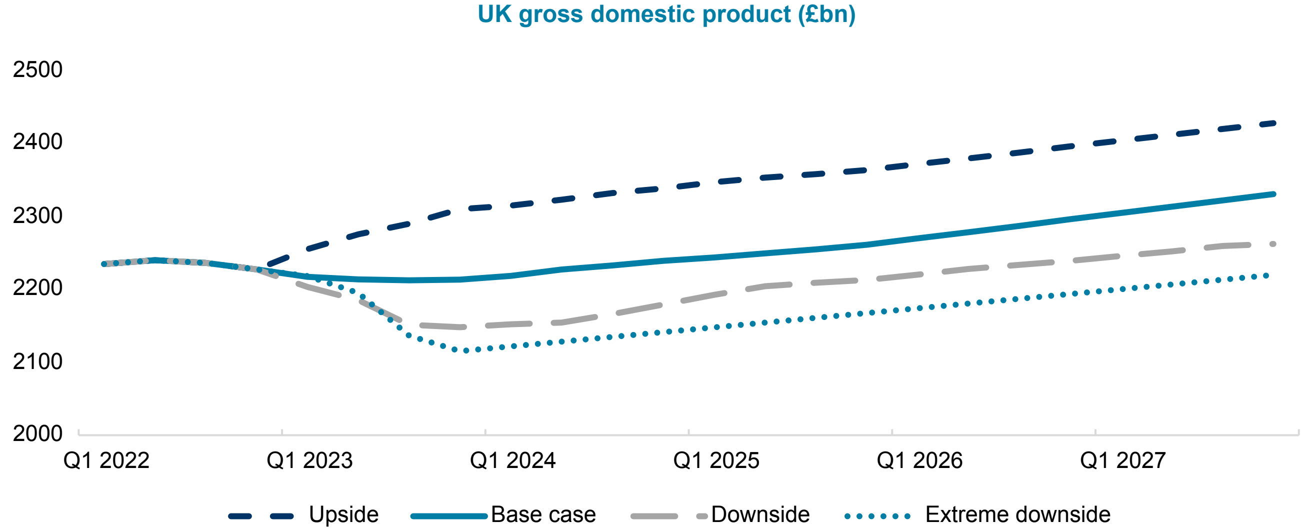
Probability weightings of scenarios

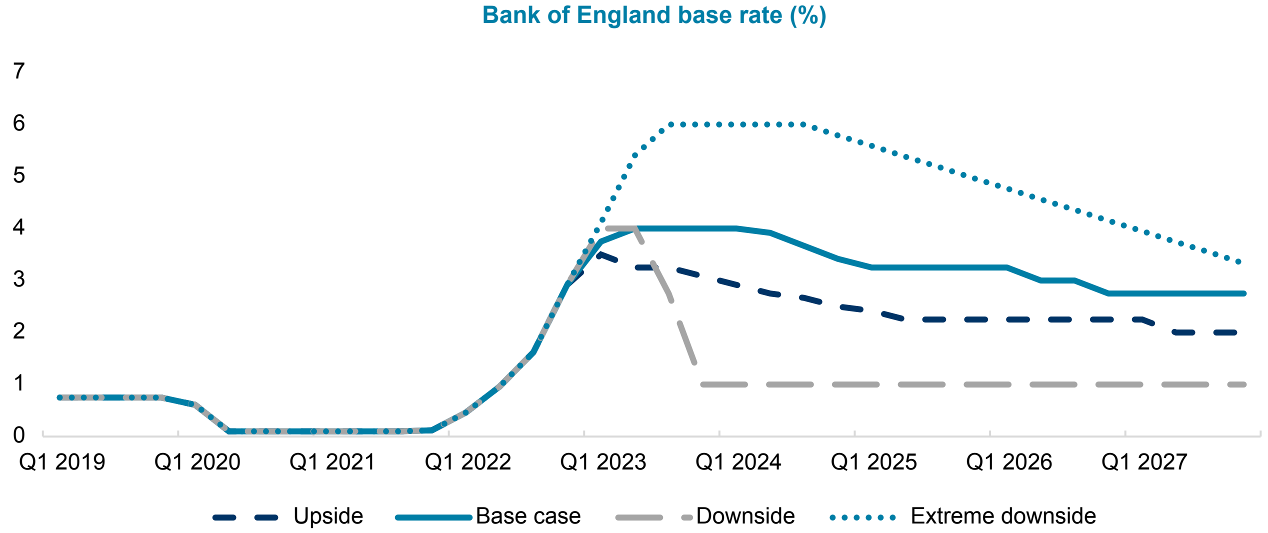
A subjective approach for assigning probability weight was used during COVID-19 due to the scale of the economic effect of COVID-19 and the range of recovery paths. Similarly, a subjective approach was used at 30 September 2022, to reflect the deteriorating outlook and shifting balance of risks in the given set of scenarios. However, RBS plc'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.

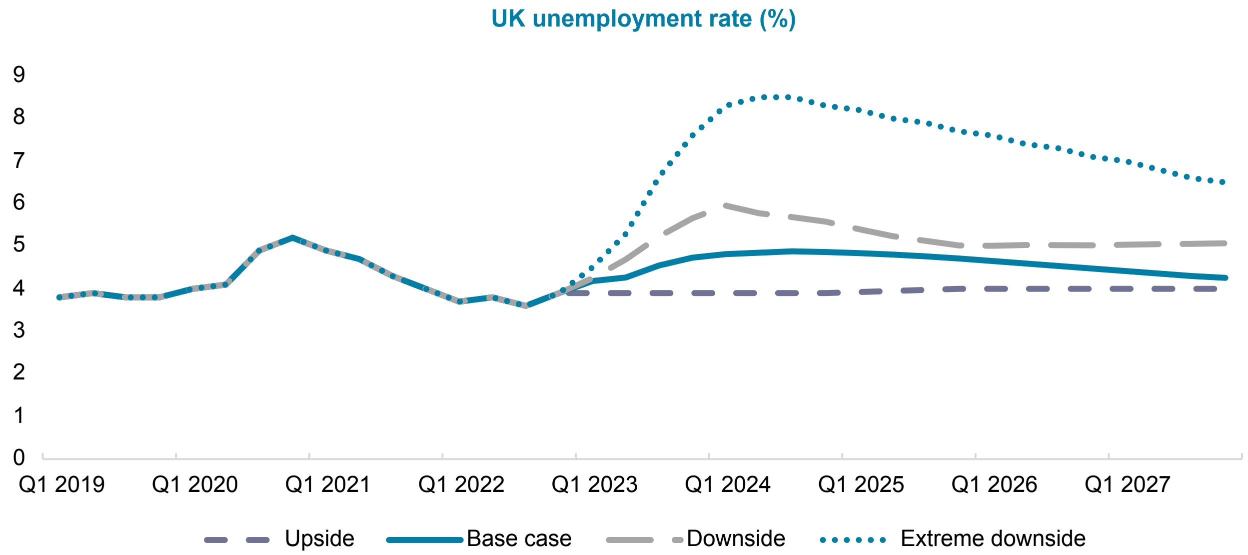
The approach involves comparing UK GDP paths for RBS plc's scenarios against a set of 1,000 model runs, following which, a percentile in the distribution is established that most closely corresponded to the scenario. Probability weight for base case is set first based on judgement, while probability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

Annual figures (audited)

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

Economic loss drivers (audited)

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 RBS plc 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. RBS plc 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.

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%. RBS plc recognises lower LGDs for these lending products as a result, with 0% applied to the government-guaranteed part of the exposure. RBS plc 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.

Credit risk continued

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, RBS plc 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.

RBS plc’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 downisde scenario	Extreme downside scenario
Stage 1 modelled loans (£m)					
Retail Banking - mortgages	11,470	11,534	12,099	11,395	10,603
Retail Banking - unsecured	1,613	1,650	1,746	1,604	1,334
Wholesale - property	7,311	7,528	7,608	7,101	5,504
Wholesale - non-property	10,123	10,758	11,104	8,908	6,474
Stage 1 modelled ECL (£m)					
Retail Banking - mortgages	4	4	5	4	4
Retail Banking - unsecured	34	34	34	34	28
Wholesale - property	19	15	12	23	23
Wholesale - non-property	30	29	25	33	33
Stage 1 coverage (%)					
Retail Banking - mortgages	0.03%	0.03%	0.04%	0.04%	0.04%
Retail Banking - unsecured	2.11%	2.06%	1.95%	2.12%	2.10%
Wholesale - property	0.26%	0.20%	0.16%	0.32%	0.42%
Wholesale - non-property	0.30%	0.27%	0.23%	0.37%	0.51%
Stage 2 modelled loans (£m)					
Retail Banking - mortgages	2,273	2,209	1,644	2,348	3,140
Retail Banking - unsecured	605	568	472	614	884
Wholesale - property	1,062	845	765	1,272	2,869
Wholesale - non-property	3,932	3,297	2,951	5,147	7,581
Stage 2 modelled ECL (£m)					
Retail Banking - mortgages	7	7	5	7	10
Retail Banking - unsecured	72	69	57	74	101
Wholesale - property	25	17	12	32	120
Wholesale - non-property	72	56	45	86	196
Stage 2 coverage (%)					
Retail Banking - mortgages	0.31%	0.32%	0.30%	0.30%	0.32%
Retail Banking - unsecured	11.90%	12.15%	12.08%	12.05%	11.43%
Wholesale - property	2.35%	2.01%	1.57%	2.52%	4.18%
Wholesale - non-property	1.83%	1.70%	1.52%	1.67%	2.59%
Stage 1 and Stage 2 modelled loans (£m)					
Retail Banking - mortgages	13,743	13,743	13,743	13,743	13,743
Retail Banking - unsecured	2,218	2,218	2,218	2,218	2,218
Wholesale - property	8,373	8,373	8,373	8,373	8,373
Wholesale - non-property	14,055	14,055	14,055	14,055	14,055
Stage 1 and Stage 2 modelled ECL (£m)					
Retail Banking - mortgages	11	11	10	11	14
Retail Banking - unsecured	106	103	91	108	129
Wholesale - property	44	32	24	55	143
Wholesale - non-property	102	85	70	119	229
Stage 1 and Stage 2 coverage (%)					
Retail Banking - mortgages	0.08%	0.08%	0.07%	0.08%	0.10%
Retail Banking - unsecured	4.78%	4.64%	4.10%	4.87%	5.82%
Wholesale - property	0.53%	0.38%	0.29%	0.66%	1.71%
Wholesale - non-property	0.73%	0.60%	0.50%	0.85%	1.63%

Credit risk continued

Measurement uncertainty and ECL sensitivity analysis (audited) continued

	Actual	Base scenario	Moderate upside scenario	Moderate downside scenario	Extreme downside scenario
Reconciliation to Stage 1 and Stage 2 ECL (£m)					
ECL on modelled exposures	263	231	195	293	515
ECL on non-modelled exposures	2	2	2	2	2
Total Stage 1 and Stage 2 ECL (£m)	265	233	197	295	517
Variance – (lower)/higher to actual total Stage 1 and Stage 2 ECL (£m)		(32.0)	(68.0)	30	252
Reconciliation to Stage 1 and Stage 2 flow exposure (£m)					
Modelled loans	38,389	38,389	38,389	38,389	38,389
Non-modelled loans	97	97	97	97	97
Other assets classes	32,976	32,976	32,976	32,976	32,976

(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.
(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 RBS plc 2021 Annual Report and Accounts for 2021 comparatives.

- During 2022, overall modelled ECL increased reflecting 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 10% of total ECL (2021 – 24%).
- If the economics were as negative as observed in the extreme downside, total Stage 1 and Stage 2 ECL was simulated to increase by £0.3 billion (approximately 95%). 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, RBS plc 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 RBS plc operates.

Credit risk – Banking activities

Introduction

This section details the credit risk profile of RBS plc's banking activities.

Refer to Accounting policy 2.2 and Note 12 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 8 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.

	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	73.7			81.9		
In scope of IFRS 9 ECL framework	73.1			81.1		
% in scope	99%			99%		
Loans to customers - in scope - amortised cost	38.5	0.6	37.9	42.5	0.7	41.8
Loans to customers - in scope - FVOCI	—	—	—	—	—	—
Loans to banks - in scope - amortised cost	1.0	—	1.0	1.1	—	1.1
Total loans - in scope	39.5	0.6	38.9	43.6	0.7	42.9
Stage 1	30.4	0.1	30.3	36.1	—	36.1
Stage 2	8.1	0.2	7.9	6.5	0.3	6.2
Stage 3	1.0	0.3	0.7	1.0	0.4	0.6
Other financial assets - in scope - amortised cost	33.6	—	33.6	37.5	—	37.5
Other financial assets - in scope - FVOCI	—	—	—	—	—	—
Total other financial assets - in scope	33.6	—	33.6	37.5	—	37.5
Stage 1	33.6	—	33.6	37.5	—	37.5
Stage 2	—	—	—	—	—	—
Stage 3	—	—	—	—	—	—
Out of scope of IFRS 9 ECL framework	0.6	na	0.6	0.8	na	0.8
Loans to customers - out of scope - amortised cost	(0.2)	na	(0.2)	0.3	na	0.3
Loans to banks - out of scope - amortised cost	0.1	na	0.1	—	na	—
Other financial assets - out of scope - amortised cost	0.7	na	0.7	0.5	na	0.5
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 – £0.6 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 £(0.2) billion (2021 – £0.2 billion).

In scope assets also include an additional £21.6 billion (2021 – £23.8 billion) of inter-Group assets not shown in table above.

Contingent liabilities and commitments

In addition to contingent liabilities and commitments disclosed in Note 20 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 £19.5 billion (2021 – £20.7 billion) comprised Stage 1 £16.4 billion (2021 – £19.0 billion); Stage 2 £3.0 billion (2021 – £1.6 billion); and Stage 3 £0.1 billion (2021 – £0.1 billion).

The ECL relating to off balance sheet exposures was nil (2021 - nil). The total ECL in the remainder of the credit risk section of £0.6 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	12,985	—	16,472	976	30,433
Stage 2	2,793	—	5,301	—	8,094
Stage 3	576	—	433	—	1,009
Inter-Group	—	—	—	21,638	21,638
	16,354	—	22,206	22,614	61,174
ECL provisions (2)					
Stage 1	38	—	46	4	88
Stage 2	78	—	99	—	177
Stage 3	205	—	167	—	372
Inter-Group	—	—	—	27	27
	321	—	312	31	664
ECL provisions coverage (1, 3)					
Stage 1 (%)	0.29	—	0.28	0.41	0.29
Stage 2 (%)	2.79	—	1.87	—	2.19
Stage 3 (%)	35.59	—	38.57	—	36.87
Inter-Group (%)	—	—	—	0.12	0.12
	1.96	—	1.41	0.41	1.61
Impairment (releases)/losses					
ECL (release)/charge					
Stage 1	(30)	1	(27)	(1)	(57)
Stage 2	37	—	(14)	—	23
Stage 3	4	(1)	27	—	30
Inter-Group	—	—	—	24	24
Total	11	—	(14)	23	20
Amounts written-off	50	—	28	—	78

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	14,862	631	19,531	1,073	36,097
Stage 2	2,575	25	3,901	—	6,501
Stage 3	499	7	483	—	989
Inter-Group	—	—	—	23,821	23,821
	17,936	663	23,915	24,894	67,408
ECL provisions (2)					
Stage 1	22	1	20	4	47
Stage 2	111	—	171	—	282
Stage 3	210	1	162	—	373
Inter-Group	—	—	—	5	5
	343	2	353	9	707
ECL provisions coverage (1, 3)					
Stage 1 (%)	0.14	0.16	0.10	0.37	0.13
Stage 2 (%)	4.33	—	4.37	—	4.34
Stage 3 (%)	42.08	14.29	33.54	—	37.71
Inter-Group (%)	—	—	—	0.02	0.02
	1.91	0.30	1.48	0.37	1.61
Impairment (releases)/losses					
ECL (release)/charge					
Stage 1	(60)	(2)	(199)	3	(258)
Stage 2	13	(1)	(110)	—	(98)
Stage 3	32	—	(27)	—	5
Inter-Group	—	—	—	(9)	(9)
	(15)	(3)	(336)	(6)	(360)
Amounts written-off	49	—	256	—	305

(1) 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.
(2) 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 £33.7 billion (2021 – £37.5 billion).
(3) The stage allocation of the ECL charge was aligned to the stage transition approach that underpins the analysis in the Flow statement section.

- 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 reflecting the 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.
- 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	**12,985**	**2,627**	**109**	**57**	**2,793**	**576**	**16,354**	**38**	**71**	**2**	**5**	**78**	**205**	**321**
Commercial & Institutional	**16,472**	**4,893**	**173**	**235**	**5,301**	**433**	**22,206**	**46**	**92**	**4**	**3**	**99**	**167**	**312**
Central items & other	**976**	**—**	**—**	**—**	**—**	**—**	**976**	**4**	**—**	**—**	**—**	**—**	**—**	**4**
Total loans	**30,433**	**7,520**	**282**	**292**	**8,094**	**1,009**	**39,536**	**88**	**163**	**6**	**8**	**177**	**372**	**637**
Of which:														
Personal	***12,985***	***2,627***	***109***	***57***	***2,793***	***576***	***16,354***	***38***	***71***	***2***	***5***	***78***	***205***	***321***
Wholesale	***17,448***	***4,893***	***173***	***235***	***5,301***	***433***	***23,182***	***50***	***92***	***4***	***3***	***99***	***167***	***316***

	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
2021	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Retail Banking	14,862	2,308	172	95	2,575	499	17,936	22	98	7	6	111	210	343
Private Banking	631	22	1	2	25	7	663	1	—	—	—	—	1	2
Personal	*597*	*1*	*1*	—	*2*	*7*	*606*	*1*	—	—	—	—	*1*	*2*
Wholesale	*34*	*21*	—	*2*	*23*	—	*57*	—	—	—	—	—	—	—
Commercial & Institutional	19,531	3,776	53	72	3,901	483	23,915	20	166	4	1	171	162	353
Central items & other	1,073	—	—	—	—	—	1,073	4	—	—	—	—	—	4
Total loans	36,097	6,106	226	169	6,501	989	43,587	47	264	11	7	282	373	702
Of which:														
Personal	*15,459*	*2,309*	*173*	*95*	*2,577*	*506*	*18,542*	*23*	*98*	*7*	*6*	*111*	*211*	*345*
Wholesale	*20,638*	*3,797*	*53*	*74*	*3,924*	*483*	*25,045*	*24*	*166*	*4*	*1*	*171*	*162*	*357*

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)						Total	
		Not past						(release) /	Amounts
	Stage 1	due	1-30 DPD	>30 DPD	Total	Stage 3	Total	charge	written-off
2022	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**£m**	**£m**
Retail Banking	**0.29**	**2.70**	**1.83**	**8.77**	**2.79**	**35.59**	**1.96**	**11**	**50**
Private Banking	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Personal	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Wholesale	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Commercial & Institutional	**0.28**	**1.88**	**2.31**	**1.28**	**1.87**	**38.57**	**1.41**	**(14)**	**28**
Central items & other	**0.41**	**—**	**—**	**—**	**—**	**—**	**0.41**	**(1)**	**—**
Total loans	**0.29**	**2.17**	**2.13**	**2.74**	**2.19**	**36.87**	**1.61**	**(4)**	**78**
Of which:									
Personal	***0.29***	***2.70***	***1.83***	***8.77***	***2.79***	***35.59***	***1.96***	***11***	***50***
Wholesale	***0.29***	***1.88***	***2.31***	***1.28***	***1.87***	***38.57***	***1.36***	***(15)***	***28***

	ECL provisions coverage							ECL	
		Stage 2 (1,2)						Total	
		Not past						(release) /	Amounts
	Stage 1	due	1-30 DPD	>30 DPD	Total	Stage 3	Total	charge	written-off
2021	%	%	%	%	%	%	%	£m	£m
Retail Banking	0.14	4.25	4.07	6.32	4.33	42.08	1.91	(15)	49
Private Banking	0.16	—	—	—	—	14.29	0.30	(3)	—
Personal	*0.17*	—	—	—	—	*14.29*	*0.33*	*(2)*	—
Wholesale	—	—	—	—	—	—	—	*(1)*	—
Commercial & Institutional	0.10	4.38	7.55	1.39	4.37	33.54	1.48	(336)	256
Central items & other	0.37	—	—	—	—	—	0.37	3	—
Total loans	0.13	4.32	4.87	4.14	4.34	37.71	1.61	(351)	305
Of which:									
Personal	*0.15*	*4.24*	*4.05*	*6.32*	*4.31*	*41.70*	*1.86*	*(17)*	*49*
Wholesale	*0.12*	*4.36*	*7.55*	*1.35*	*4.36*	*33.54*	*1.43*	*(334)*	*256*

(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 – Total ECL coverage remained broadly stable, but good book coverage increased, reflective of deteriorating economic outlook in the second half of the year but with portfolio performance remaining broadly stable. 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 reduction in overall Retail Banking Stage 3 coverage.

– Commercial & Institutional – Balance sheet reduction was mainly within property and other corporate sectors. There were continued repayments of COVID-19 government lending schemes, and also 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 and portfolio reductions. 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.

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 £m	Credit cards £m	Other personal £m	Total £m	Property £m	Corporate £m	FI £m	Sovereign £m	Total £m	£m
Loans by geography	13,986	902	1,466	16,354	8,482	12,540	1,379	781	23,182	39,536
- UK	13,986	902	1,466	16,354	8,296	10,270	668	640	19,874	36,228
- RoI	—	—	—	—	—	57	—	—	57	57
- Other Europe	—	—	—	—	64	678	1	64	807	807
- RoW	—	—	—	—	122	1,535	710	77	2,444	2,444
Loans by stage and asset quality (2)	13,986	902	1,466	16,354	8,482	12,540	1,379	781	23,182	39,536
Stage 1	11,330	649	1,006	12,985	7,245	8,209	1,290	704	17,448	30,433
- AQ1	174	—	—	174	456	472	431	276	1,635	1,809
- AQ2	—	—	—	—	1,633	372	—	—	2,005	2,005
- AQ3	45	—	—	45	1,527	874	29	407	2,837	2,882
- AQ4	8,323	14	28	8,365	1,442	1,793	770	20	4,025	12,390
- AQ5	2,397	195	349	2,941	1,332	3,278	25	1	4,636	7,577
- AQ6	279	221	411	911	633	774	19	—	1,426	2,337
- AQ7	72	201	170	443	211	626	15	—	852	1,295
- AQ8	26	17	45	88	9	17	1	—	27	115
- AQ9	14	1	3	18	2	3	—	—	5	23
Stage 2	2,240	230	323	2,793	1,058	4,087	79	77	5,301	8,094
- AQ1	15	—	—	15	—	—	—	—	—	15
- AQ2	—	—	—	—	—	2	—	—	2	2
- AQ3	10	—	—	10	4	662	—	—	666	676
- AQ4	1,070	—	16	1,086	106	1,160	47	—	1,313	2,399
- AQ5	628	9	56	693	236	602	4	—	842	1,535
- AQ6	153	31	80	264	302	621	2	77	1,002	1,266
- AQ7	125	123	70	318	291	773	22	—	1,086	1,404
- AQ8	145	59	85	289	97	225	2	—	324	613
- AQ9	94	8	16	118	22	42	2	—	66	184
Stage 3	416	23	137	576	179	244	10	—	433	1,009
- AQ10	416	23	137	576	179	244	10	—	433	1,009
Loans - past due analysis (3,4)	13,986	902	1,466	16,354	8,482	12,540	1,379	781	23,182	39,536
- Not past due	13,552	876	1,318	15,746	8,164	11,901	1,348	781	22,194	37,940
- Past due 1-30 days	164	7	12	183	110	401	23	—	534	717
- Past due 31-90 days	101	6	15	122	126	132	3	—	261	383
- Past due 91-180 days	67	5	12	84	21	7	1	—	29	113
- Past due >180 days	102	8	109	219	61	99	4	—	164	383
Loans - Stage 2	2,240	230	323	2,793	1,058	4,087	79	77	5,301	8,094
- Not past due	2,097	223	307	2,627	905	3,834	77	77	4,893	7,520
- Past due 1-30 days	98	4	7	109	33	140	—	—	173	282
- Past due 31-90 days	45	3	9	57	120	113	2	—	235	292
Weighted average life*										
- ECL measurement (years)	8	2	6	5	4	6	3	—	5	5
Weighted average 12 months PDs*										
- IFRS 9 (%)	0.91	2.93	4.92	1.35	1.47	1.61	0.41	0.23	1.44	1.40
- Basel (%)	0.84	3.19	2.89	1.13	0.76	1.10	0.31	0.23	0.90	1.00
ECL provisions by geography	86	57	178	321	116	191	5	4	316	637
- UK	86	57	178	321	109	186	5	4	304	625
- RoI	—	—	—	—	—	—	—	—	—	—
- Other Europe	—	—	—	—	1	—	—	—	1	1
- RoW	—	—	—	—	6	5	—	—	11	11
ECL provisions by stage	86	57	178	321	116	191	5	4	316	637
- Stage 1	4	14	20	38	18	27	1	4	50	88
- Stage 2	7	28	43	78	25	72	2	—	99	177
- Stage 3	75	15	115	205	73	92	2	—	167	372
ECL provisions coverage (%)	0.61	6.32	12.14	1.96	1.37	1.52	0.36	0.51	1.36	1.61
- Stage 1 (%)	0.04	2.16	1.99	0.29	0.25	0.33	0.08	0.57	0.29	0.29
- Stage 2 (%)	0.31	12.17	13.31	2.79	2.36	1.76	2.53	—	1.87	2.19
- Stage 3 (%)	18.03	65.22	83.94	35.59	40.78	37.70	20.00	—	38.57	36.87
ECL (release)/charge - Third party	(46)	22	35	11	33	(49)	1	—	(15)	(4)
Amounts written-off	11	16	23	50	6	22	—	—	28	78

For the notes to this table refer to page 40.

Credit risk – Banking activities continued

Sector analysis – portfolio summary (audited)

	Personal				Wholesale					Total
	Mortgages (1)	Credit cards	Other personal	Total	Property	Corporate	FI	Sovereign	Total	
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Other financial assets by asset quality (2)	—	—	—	—	—	—	—	33,631	33,631	33,631
- AQ1-AQ4	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*33,631*	*33,631*	*33,631*
Off-balance sheet	2,778	3,261	1,172	7,211	4,122	7,432	656	95	12,305	19,516
- Loan commitments	*2,778*	*3,261*	*1,172*	*7,211*	*3,985*	*6,801*	*549*	*95*	*11,430*	*18,641*
- Financial guarantees	*—*	*—*	*—*	*—*	*137*	*631*	*107*	*—*	*875*	*875*
Off-balance sheet by asset quality (2)	2,778	3,261	1,172	7,211	4,122	7,432	656	95	12,305	19,516
- AQ1-AQ4	*2,464*	*66*	*1,056*	*3,586*	*3,656*	*4,229*	*488*	*95*	*8,468*	*12,054*
- AQ5-AQ8	*304*	*3,136*	*113*	*3,553*	*463*	*3,124*	*168*	*—*	*3,755*	*7,308*
- AQ9	*—*	*2*	*—*	*2*	*—*	*1*	*—*	*—*	*1*	*3*
- AQ10	*10*	*57*	*3*	*70*	*3*	*78*	*—*	*—*	*81*	*151*

*Not within audit scope.

For the notes to this table refer to page 40.

Credit risk – Banking activities continued

Sector analysis – portfolio summary (audited)

2021	Personal				Wholesale					Total
	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	16,260	861	1,421	18,542	9,009	13,798	1,404	834	25,045	43,587
- UK	*16,260*	*861*	*1,421*	*18,542*	*8,909*	*12,310*	*558*	*686*	*22,463*	*41,005*
- RoI	—	—	—	—	—	*37*	—	—	*37*	*37*
- Other Europe	—	—	—	—	*79*	*743*	*5*	*64*	*891*	*891*
- RoW	—	—	—	—	*21*	*708*	*841*	*84*	*1,654*	*1,654*
Loans by stage and asset quality (2)	16,260	861	1,421	18,542	9,009	13,798	1,404	834	25,045	43,587
Stage 1	13,871	651	937	15,459	8,018	10,535	1,339	746	20,638	36,097
- AQ1	*293*	—	*5*	*298*	*332*	*33*	*341*	*276*	*982*	*1,280*
- AQ2	*39*	—	—	*39*	*1,460*	*129*	—	—	*1,589*	*1,628*
- AQ3	*9*	—	—	*9*	*1,679*	*2,302*	*43*	*438*	*4,462*	*4,471*
- AQ4	*8,424*	*7*	*38*	*8,469*	*1,358*	*2,645*	*845*	*29*	*4,877*	*13,346*
- AQ5	*4,661*	*188*	*367*	*5,216*	*1,913*	*3,355*	*61*	*1*	*5,330*	*10,546*
- AQ6	*318*	*202*	*327*	*847*	*963*	*1,211*	*16*	—	*2,190*	*3,037*
- AQ7	*85*	*223*	*138*	*446*	*298*	*829*	*32*	*2*	*1,161*	*1,607*
- AQ8	*31*	*30*	*57*	*118*	*12*	*27*	*1*	—	*40*	*158*
- AQ9	*11*	*1*	*5*	*17*	*3*	*4*	—	—	*7*	*24*
Stage 2	2,024	188	365	2,577	782	3,012	47	83	3,924	6,501
- AQ1	*11*	—	—	*11*	—	—	—	—	—	*11*
- AQ2	—	—	—	—	—	*15*	—	—	*15*	*15*
- AQ3	*2*	—	—	*2*	—	*37*	—	—	*37*	*39*
- AQ4	*584*	—	*9*	*593*	*13*	*106*	—	—	*119*	*712*
- AQ5	*703*	*12*	*76*	*791*	*223*	*908*	*3*	—	*1,134*	*1,925*
- AQ6	*171*	*38*	*127*	*336*	*100*	*648*	*16*	*83*	*847*	*1,183*
- AQ7	*124*	*103*	*65*	*292*	*377*	*855*	*24*	—	*1,256*	*1,548*
- AQ8	*345*	*27*	*69*	*441*	*41*	*356*	*4*	—	*401*	*842*
- AQ9	*84*	*8*	*19*	*111*	*28*	*87*	—	—	*115*	*226*
Stage 3	365	22	119	506	209	251	18	5	483	989
- AQ10	*365*	*22*	*119*	*506*	*209*	*251*	*18*	*5*	*483*	*989*
Loans - past due analysis (3,4)	16,260	861	1,421	18,542	9,009	13,798	1,404	834	25,045	43,587
- Not past due	*15,711*	*835*	*1,275*	*17,821*	*8,795*	*13,189*	*1,393*	*834*	*24,211*	*42,032*
- Past due 1-30 days	*212*	*6*	*20*	*238*	*91*	*415*	*7*	—	*513*	*751*
- Past due 31-90 days	*111*	*6*	*12*	*129*	*28*	*52*	*1*	—	*81*	*210*
- Past due 91-180 days	*49*	*5*	*10*	*64*	*19*	*32*	*1*	—	*52*	*116*
- Past due >180 days	*177*	*9*	*104*	*290*	*76*	*110*	*2*	—	*188*	*478*
Loans - Stage 2	2,024	188	365	2,577	782	3,012	47	83	3,924	6,501
- Not past due	*1,791*	*180*	*338*	*2,309*	*742*	*2,927*	*45*	*83*	*3,797*	*6,106*
- Past due 1-30 days	*153*	*4*	*16*	*173*	*12*	*40*	*1*	—	*53*	*226*
- Past due 31-90 days	*80*	*4*	*11*	*95*	*28*	*45*	*1*	—	*74*	*169*
Weighted average life*										
- ECL measurement (years)	8	2	5	5	6	6	5	1	6	5
Weighted average 12 months PDs*										
- IFRS 9 (%)	0.26	3.99	2.63	0.61	0.53	1.50	0.37	0.23	1.04	0.86
- Basel (%)	0.91	3.47	3.06	1.18	0.85	1.34	0.33	0.24	1.07	1.12
ECL provisions by geography	127	53	165	345	93	256	4	4	357	702
- UK	*127*	*53*	*165*	*345*	*89*	*249*	*4*	*4*	*346*	*691*
- RoI	—	—	—	—	—	—	—	—	—	—
- Other Europe	—	—	—	—	—	*4*	—	—	*4*	*4*
- RoW	—	—	—	—	*4*	*3*	—	—	*7*	*7*
ECL provisions by stage	127	53	165	345	93	256	4	4	357	702
- Stage 1	*2*	*11*	*10*	*23*	*5*	*15*	—	*4*	*24*	*47*
- Stage 2	*33*	*27*	*51*	*111*	*22*	*147*	*2*	—	*171*	*282*
- Stage 3	*92*	*15*	*104*	*211*	*66*	*94*	*2*	—	*162*	*373*
ECL provisions coverage (%)	0.78	6.16	11.61	1.86	1.03	1.86	0.28	0.48	1.43	1.61
- Stage 1 (%)	*0.01*	*1.69*	*1.07*	*0.15*	*0.06*	*0.14*	—	*0.54*	*0.12*	*0.13*
- Stage 2 (%)	*1.63*	*14.36*	*13.97*	*4.31*	*2.81*	*4.88*	*4.26*	—	*4.36*	*4.34*
- Stage 3 (%)	*25.21*	*68.18*	*87.39*	*41.70*	*31.58*	*37.45*	*11.11*	—	*33.54*	*37.71*
ECL (release)/charge - Third party	(11)	(6)	—	(17)	(152)	(178)	(5)	1	(334)	(351)
Amounts written-off	5	19	25	49	132	124	—	—	256	305

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

Credit risk – Banking activities continued

Sector analysis – portfolio summary continued (audited)

Other financial assets by asset quality (2)	—	—	—	—	—	—	—	37,472	37,472	37,472
- AQ1-AQ4	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*37,472*	*37,472*	*37,472*
Off-balance sheet	3,103	3,278	1,195	7,576	4,570	7,857	567	94	13,088	20,664
- Loan commitments	*3,103*	*3,278*	*1,191*	*7,572*	*4,440*	*7,107*	*507*	*94*	*12,148*	*19,720*
- Financial guarantees	*—*	*—*	*4*	*4*	*130*	*750*	*60*	*—*	*940*	*944*
Off-balance sheet by asset quality (2)	3,103	3,278	1,195	7,576	4,570	7,857	567	94	13,088	20,664
- AQ1-AQ4	*2,564*	*41*	*1,058*	*3,663*	*3,998*	*4,125*	*461*	*94*	*8,678*	*12,341*
- AQ5-AQ8	*535*	*3,179*	*135*	*3,849*	*568*	*3,658*	*106*	*—*	*4,332*	*8,181*
- AQ9	*—*	*1*	*—*	*1*	*1*	*1*	*—*	*—*	*2*	*3*
- AQ10	*4*	*57*	*2*	*63*	*3*	*73*	*—*	*—*	*76*	*139*

*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	0.000% - 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% - 100.00%	CCC to C
AQ10	100.00%	D

£0.1 billion (2021 – £0.1 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			
					Loan	Contingent				
	Stage 1	Stage 2	Stage 3	Total	commitments	liabilities	Stage 1	Stage 2	Stage 3	Total
2022	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Personal	**12,985**	**2,793**	**576**	**16,354**	**7,211**	**—**	**38**	**78**	**205**	**321**
Mortgages	**11,330**	**2,240**	**416**	**13,986**	**2,778**	**—**	**4**	**7**	**75**	**86**
Credit cards	**649**	**230**	**23**	**902**	**3,261**	**—**	**14**	**28**	**15**	**57**
Other personal	**1,006**	**323**	**137**	**1,466**	**1,172**	**—**	**20**	**43**	**115**	**178**
Wholesale	**17,448**	**5,301**	**433**	**23,182**	**11,430**	**875**	**51**	**98**	**167**	**316**
Property*	**7,245**	**1,058**	**179**	**8,482**	**3,985**	**137**	**18**	**25**	**73**	**116**
Financial institutions	**1,290**	**79**	**10**	**1,379**	**549**	**107**	**1**	**2**	**2**	**5**
Sovereign	**704**	**77**	**—**	**781**	**95**	**—**	**4**	**—**	**—**	**4**
Corporate	**8,209**	**4,087**	**244**	**12,540**	**6,801**	**631**	**27**	**72**	**92**	**191**
Of which:										
*Agriculture**	***569***	***203***	***12***	***784***	***201***	***7***	***3***	***5***	***4***	***12***
*Airlines and aerospace**	***77***	***163***	***—***	***240***	***382***	***112***	***—***	***2***	***—***	***2***
*Automotive**	***503***	***44***	***8***	***555***	***190***	***20***	***1***	***1***	***2***	***4***
*Chemicals**	***48***	***3***	***—***	***51***	***39***	***1***	***—***	***—***	***—***	***—***
Health	***1,101***	***236***	***39***	***1,376***	***78***	***3***	***3***	***8***	***15***	***26***
*Industrials**	***164***	***274***	***8***	***446***	***203***	***59***	***1***	***2***	***5***	***8***
*Land transport & logistics**	***579***	***189***	***43***	***811***	***327***	***59***	***1***	***3***	***8***	***12***
*Leisure**	***612***	***850***	***44***	***1,506***	***342***	***49***	***5***	***33***	***18***	***56***
*Mining & metals**	***16***	***190***	***—***	***206***	***190***	***3***	***—***	***1***	***—***	***1***
*Oil and gas**	***340***	***48***	***3***	***391***	***527***	***109***	***2***	***2***	***3***	***7***
*Power utilities**	***367***	***2***	***5***	***374***	***428***	***62***	***—***	***—***	***1***	***1***
*Retail**	***1,360***	***459***	***16***	***1,835***	***671***	***72***	***4***	***3***	***8***	***15***
*Shipping**	***18***	***22***	***—***	***40***	***18***	***8***	***—***	***1***	***—***	***1***
*Water & waste**	***23***	***32***	***—***	***55***	***90***	***22***	***—***	***—***	***—***	***—***
Total	**30,433**	**8,094**	**1,009**	**39,536**	**18,641**	**875**	**88**	**177**	**372**	**637**
2021										
Personal	15,459	2,577	506	18,542	7,572	4	23	111	211	345
Mortgages	13,871	2,024	365	16,260	3,103	—	2	33	92	127
Credit cards	651	188	22	861	3,278	—	11	27	15	53
Other personal	937	365	119	1,421	1,191	4	10	51	104	165
Wholesale	20,638	3,924	483	25,045	12,148	940	24	171	162	357
Property*	8,018	782	209	9,009	4,440	130	5	22	66	93
Financial institutions	1,339	47	18	1,404	507	60	—	2	2	4
Sovereign	746	83	5	834	94	—	4	—	—	4
Corporate	10,535	3,012	251	13,798	7,107	750	15	147	94	256
Of which:										
*Agriculture**	*617*	*248*	*8*	*873*	*181*	*8*	*2*	*7*	*3*	*12*
*Airlines and aerospace**	*154*	*197*	*—*	*351*	*248*	*120*	*—*	*10*	*—*	*10*
*Automotive**	*476*	*54*	*6*	*536*	*188*	*11*	*—*	*2*	*2*	*4*
*Chemicals**	*64*	*1*	*—*	*65*	*25*	*1*	*—*	*—*	*—*	*—*
Health	*1,264*	*356*	*44*	*1,664*	*186*	*2*	*2*	*18*	*20*	*40*
*Industrials**	*361*	*66*	*7*	*434*	*382*	*68*	*1*	*2*	*4*	*7*
*Land transport & logistics**	*450*	*166*	*4*	*620*	*438*	*121*	*—*	*11*	*1*	*12*
*Leisure**	*927*	*859*	*74*	*1,860*	*339*	*58*	*2*	*63*	*27*	*92*
*Mining & metals**	*112*	*3*	*—*	*115*	*119*	*129*	*—*	*—*	*—*	*—*
*Oil and gas**	*314*	*31*	*1*	*346*	*473*	*30*	*1*	*6*	*1*	*8*
*Power utilities**	*608*	*3*	*—*	*611*	*353*	*48*	*—*	*—*	*—*	*—*
*Retail**	*1,595*	*229*	*27*	*1,851*	*836*	*74*	*1*	*4*	*8*	*13*
*Shipping**	*45*	*23*	*14*	*82*	*20*	*8*	*—*	*—*	*3*	*3*
*Water & waste**	*136*	*41*	*—*	*177*	*243*	*18*	*—*	*—*	*—*	*—*
Total	36,097	6,501	989	43,587	19,720	944	47	282	373	702

* 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.

Credit risk – Banking activities continued

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)	235	1	406	642
Forbearance (stock)	303	1	939	1,243
Heightened Monitoring and Risk of Credit Loss	364	44	609	1,017
2021				
Forbearance (flow)	274	1	859	1,134
Forbearance (stock)	317	2	1,112	1,431
Heightened Monitoring and Risk of Credit Loss	377	2	904	1,283

Sector analysis – Portfolio summary (audited)

- Loans by geography and sector – In line with RBS plc's strategic focus, exposures continued to be mainly in the UK. In Personal, balance sheet reduction was driven by mortgages where redemptions and repayments exceeded new lending. In Wholesale. balance sheet reduction was mainly in property and other corporate sectors. There were continued repayments of COVID-19 government lending schemes, and also strategic reductions in certain sectors. Repayment performance under COVID-19 government lending schemes continues to be closely tracked and exposure continues to decrease, due to scheduled repayment activity and account closures. Exposures under the BBLS that benefit from the 100% government guarantee, account for approximately 70% of remaining government scheme exposures. BBLS missed repayment rate and recoveries stock 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 of cash and balances at central banks, these assets were 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. Off-balance sheet exposures reduced compared to 2021 and were primarily loan commitments in the AQ1-AQ4 bandings.
- Wholesale forbearance – Forbearance flow and stock decreased compared to 2021 levels, noting that 2021 was adversely affected by COVID-19.
- Heightened Monitoring and Risk of Credit Loss – Economic headwinds continue to drive an uncertain outlook. Risk of Credit Loss framework exposures, and average inflows decreased in 2022 compared to 2021, noting again that 2021 was adversely affected by COVID-19.

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).

	Gross		Maximum credit risk		CREM by type			CREM coverage		Exposure post CREM	
	exposure	ECL	Total	Stage 3	Financial (1)	Property	Other (2)	Total	Stage 3	Total	Stage 3
2022	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn
Financial assets											
Cash and balances at central banks	**33.7**	**—**	**33.7**	**—**	**—**	**—**	**—**	**—**	**—**	**33.7**	**—**
Loans - amortised cost (3)	**39.5**	**0.6**	**38.9**	**0.7**	**1.7**	**24.4**	**3.9**	**30.0**	**0.7**	**8.9**	**—**
Personal (4)	***16.3***	***0.3***	***16.0***	***0.4***	**—**	***13.9***	**—**	***13.9***	***0.4***	***2.1***	**—**
Wholesale (5)	***23.2***	***0.3***	***22.9***	***0.3***	***1.7***	***10.5***	***3.9***	***16.1***	***0.3***	***6.8***	**—**
Total financial assets	**73.2**	**0.6**	**72.6**	**0.7**	**1.7**	**24.4**	**3.9**	**30.0**	**0.7**	**42.6**	**—**
Contingent liabilities and commitments											
Personal (6,7)	**7.2**	**—**	**7.2**	**0.1**	**—**	**2.5**	**—**	**2.5**	**0.1**	**4.7**	**—**
Wholesale	**12.3**	**—**	**12.3**	**0.1**	**0.2**	**2.6**	**0.6**	**3.4**	**—**	**8.9**	**0.1**
Total off-balance sheet	**19.5**	**—**	**19.5**	**0.2**	**0.2**	**5.1**	**0.6**	**5.9**	**0.1**	**13.6**	**0.1**
Total exposure	**92.7**	**0.6**	**92.1**	**0.9**	**1.9**	**29.5**	**4.5**	**35.9**	**0.8**	**56.2**	**0.1**
2021											
Financial assets											
Cash and balances at central banks	37.5	—	37.5	—	—	—	—	—	—	37.5	—
Loans - amortised cost (3)	43.5	0.7	42.8	0.6	2.4	27.3	4.4	34.1	0.6	8.7	—
Personal (4)	*18.5*	*0.3*	*18.2*	*0.3*	—	*16.2*	—	*16.2*	*0.3*	*2.0*	—
Wholesale (5)	*25.0*	*0.4*	*24.6*	*0.3*	*2.4*	*11.1*	*4.4*	*17.9*	*0.3*	*6.7*	—
Total financial assets	81.0	0.7	80.3	0.6	2.4	27.3	4.4	34.1	0.6	46.2	—
Contingent liabilities and commitments											
Personal (6,7)	7.6	—	7.6	—	—	2.8	—	2.8	—	4.8	—
Wholesale	13.1	—	13.1	0.1	0.2	2.9	0.7	3.8	—	9.3	0.1
Total off-balance sheet	20.7	—	20.7	0.1	0.2	5.7	0.7	6.6	—	14.1	0.1
Total exposure	101.7	0.7	101.0	0.7	2.6	33.0	5.1	40.7	0.6	60.3	0.1

(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 RBS plc a legal right to set off the financial asset against a financial liability due to the same counterparty.
(3) RBS plc 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. 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) Personal Stage 3 balances primarily relate to loan commitments, the draw down of which is effectively prohibited.
(7) The Personal gross exposure value includes £0.2 billion (2021 – £0.3 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		
Personal lending	Retail Banking £m	Private Banking £m	Total £m	Retail Banking £m	Private Banking £m	Total £m
Mortgages	**13,986**	**—**	**13,986**	15,680	571	16,251
Of which:						
Owner occupied	**12,565**	**—**	**12,565**	14,090	507	14,597
Buy-to-let	**1,421**	**—**	**1,421**	1,590	64	1,654
Interest only - variable	**1,535**	**—**	**1,535**	1,921	174	2,095
Interest only - fixed	**1,687**	**—**	**1,687**	1,784	250	2,034
Mixed (1)	**1,022**	**—**	**1,022**	1,169	1	1,170
Impairment provisions (2)	**86**	**—**	**86**	126	—	126
Other personal lending (3)	**2,368**	**—**	**2,368**	2,245	37	2,282
Impairment provisions (2)	**231**	**—**	**231**	213	2	215
Total personal lending	**16,354**	**—**	**16,354**	17,925	608	18,533
Mortgage LTV ratios						
- Total portfolio	**41%**	**—**	**41%**	44%	58%	44%
- Stage 1	***41%***	**—**	***41%***	*43%*	*58%*	*44%*
- Stage 2	***44%***	**—**	***44%***	*46%*	*57%*	*46%*
- Stage 3	***42%***	**—**	***42%***	*46%*	*54%*	*46%*
- Buy-to-let	**43%**	**—**	**43%**	45%	58%	45%
- Stage 1	***42%***	**—**	***42%***	*45%*	*58%*	*45%*
- Stage 2	***44%***	**—**	***44%***	*49%*	*0%*	*49%*
- Stage 3	***45%***	**—**	***45%***	*49%*	*70%*	*50%*
Gross new mortgage lending (4)	**979**	**—**	**979**	1,129	85	1,214
Of which:						
Owner occupied	**912**	**—**	**912**	1,075	74	1,149
Weighted average LTV (5)	**65%**	**—**	**65%**	64%	67%	64%
Buy-to-let	**67**	**—**	**67**	54	11	65
Weighted average LTV (5)	**61%**	**—**	**61%**	60%	70%	62%
Interest only variable rate	**8**	**—**	**8**	13	21	34
Interest only fixed rate	**86**	**—**	**86**	104	31	135
Mixed (1)	**43**	**—**	**43**	70	—	70
Mortgage forbearance						
Forbearance flow	**30**	**—**	**30**	87	3	90
Forbearance stock	**272**	**—**	**272**	367	—	367
Current	***176***	**—**	***176***	*231*	—	*231*
1-3 months in arrears	***25***	**—**	***25***	*36*	—	*36*
>3 months in arrears	***71***	**—**	***71***	*100*	—	*100*

(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.
(4) Retail Banking excludes additional lending to existing customers.
(5) The new lending LTV in the comparative has been amended to reflect LTV at time of lending origination rather than LTV at reporting period.

- The mortgage portfolio reduced during 2022 as repayments and redemptions exceeded new business.
- 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.
- 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%	7,896	1,448	280	11	9,635	280	2	3	44	49	0.0	0.2	15.0	0.5
>50% and ≤70%	2,779	674	121	2	3,576	298	1	3	25	29	0.0	0.4	20.6	0.9
>70% and ≤80%	380	62	10	—	452	176	—	—	4	4	0.1	0.6	30.1	1.3
>80% and ≤90%	207	55	3	—	265	177	1	—	1	2	0.3	0.6	44.9	2.6
>90% and ≤100%	48	1	2	—	51	48	—	—	1	1	0.1	1.2	54.6	35.3
>100%	1	—	—	—	1	—	—	—	—	—	—	—	—	—
Total with LTVs	11,311	2,240	416	13	13,980	979	4	6	75	85	0.0	0.3	17.4	0.6
Other	19	—	—	—	19	—	—	—	—	—	—	—	—	—
Total	11,330	2,240	416	13	13,999	979	4	6	75	85	0.0	0.3	17.4	0.6
2021														
≤50%	8,416	1,158	224	12	9,810	324	1	17	54	72	—	1.5	24.7	0.8
>50% and ≤70%	3,909	755	130	2	4,796	373	1	13	29	43	—	1.7	22.3	1.0
>70% and ≤80%	745	89	20	—	854	249	—	2	5	7	—	2.0	23.0	1.1
>80% and ≤90%	160	14	5	—	179	139	—	—	2	2	—	2.6	28.9	4.3
>90% and ≤100%	45	3	2	—	50	44	—	—	1	1	—	6.2	36.9	13.2
>100%	1	1	1	—	3	—	—	—	—	—	—	—	—	—
Total with LTVs	13,276	2,020	382	14	15,692	1,129	2	32	91	125	—	1.6	23.9	0.8
Other	2	—	—	—	2	—	—	—	—	—	—	—	—	—
Total	13,278	2,020	382	14	15,694	1,129	2	32	91	125	—	1.6	23.9	0.8

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

– ECL coverage rates increased through the LTV bands with Retail Banking having only limited exposures in the highest LTV bands. 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

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)	**1,193**	1,264
Office (2)	**781**	970
Retail (3)	**848**	1,134
Industrial (4)	**511**	489
Mixed/other (5)	**105**	136
	3,438	3,993
Development		
Residential (1)	**372**	425
Office (2)	**12**	11
Retail (3)	**37**	22
Industrial (4)	**19**	20
Mixed/other (5)	**4**	5
	444	483
Total (6)	**3,882**	4,476

(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) 100% (2021 – 100%) 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 (1) £m	Stage 1 %	Stage 2 %	Stage 3 %	Total %
≤50%	**1,448**	**249**	**17**	**—**	**1,714**	**9**	**3**	**6**	**18**	**0.6**	**1.2**	**35.3**	**1.1**
>50% and ≤70%	**728**	**334**	**8**	**—**	**1,070**	**3**	**10**	**3**	**16**	**0.4**	**3.0**	**37.5**	**1.5**
>70% and ≤100%	**10**	**15**	**73**	**—**	**98**	**—**	**—**	**29**	**29**	**—**	**—**	**39.7**	**29.6**
>100%	**17**	**4**	**8**	**—**	**29**	**—**	**1**	**5**	**6**	**—**	**25.0**	**62.5**	**20.7**
Total with LTVs	**2,203**	**602**	**106**	**—**	**2,911**	**12**	**14**	**43**	**69**	**0.5**	**2.3**	**40.6**	**2.4**
Total portfolio average LTV (%)	**46%**	**53%**	**83%**	**—**	**49%**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Other (5)	**426**	**92**	**9**	**—**	**527**	**2**	**2**	**5**	**9**	**0.5**	**2.2**	**55.6**	**1.7**
Development (6)	**232**	**198**	**14**	**—**	**444**	**1**	**4**	**6**	**11**	**0.4**	**2.0**	**42.9**	**2.5**
Total	**2,861**	**892**	**129**	**—**	**3,882**	**15**	**20**	**54**	**89**	**0.5**	**2.2**	**41.9**	**2.3**
2021													
≤50%	1,758	123	18	—	1,899	1	3	5	9	0.1	2.4	27.8	0.5
>50% and ≤70%	1,071	247	16	—	1,334	1	4	2	7	0.1	1.6	12.5	0.5
>70% and ≤100%	25	78	48	—	151	—	1	8	9	—	1.3	16.7	6.0
>100%	9	3	15	—	27	—	—	12	12	—	—	80.0	44.4
Total with LTVs	2,863	451	97	—	3,411	2	8	27	37	0.1	1.8	27.8	1.1
Total portfolio average LTV (%)	45%	58%	85%	—	48%								
Other (5)	484	87	11	—	582	1	2	5	8	0.2	2.3	45.5	1.4
Development (6)	377	91	15	—	483	—	3	6	9	—	3.3	40.0	1.9
Total	3,724	629	123	—	4,476	3	13	38	54	0.1	2.1	30.9	1.2

(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 RBS plc.
– 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
RBS plc total	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	**70,490**	**47**	**6,580**	**282**	**1,071**	**373**	**78,141**	**702**
Currency translation and other adjustments	**259**	**0**	**19**	**1**	**(1)**	**(8)**	**278**	**(7)**
Inter-Group transfers	**(587)**	**(1)**	**(43)**	**(1)**	**(4)**	**—**	**(634)**	**(2)**
Transfers from Stage 1 to Stage 2	**(8,380)**	**(35)**	**8,380**	**35**	**—**	**—**	**—**	**—**
Transfers from Stage 2 to Stage 1	**5,323**	**131**	**(5,323)**	**(131)**	**—**	**—**	**—**	**—**
Transfers to Stage 3	**(99)**	**(1)**	**(713)**	**(51)**	**812**	**52**	**—**	**—**
Transfers from Stage 3	**106**	**5**	**240**	**19**	**(346)**	**(24)**	**—**	**—**
Net re-measurement of ECL on stage transfer		**(110)**		**168**		**55**		**113**
Changes in risk parameters		**44**		**(91)**		**41**		**(6)**
Other changes in net exposure	**(3,520)**	**8**	**(1,269)**	**(53)**	**(410)**	**(21)**	**(5,200)**	**(66)**
Other (P&L only items)		**1**		**(1)**		**(45)**		**(45)**
Income statement (releases)/charges		**(57)**		**23**		**30**		**(4)**
Amounts written-off	**—**	**—**	**(1)**	**(1)**	**(77)**	**(77)**	**(78)**	**(78)**
Unwinding of discount		**—**		**—**		**(19)**		**(19)**
At 31 December 2022	**63,592**	**88**	**7,870**	**177**	**1,045**	**372**	**72,507**	**637**
Net carrying amount	**63,504**		**7,693**		**673**		**71,870**	
At 1 January 2021	58,821	84	14,192	633	1,616	628	74,629	1,345
2021 movements	11,669	(37)	(7,612)	(351)	(545)	(255)	3,512	(643)
At 31 December 2021	70,490	47	6,580	282	1,071	373	78,141	702
Net carrying amount	70,443		6,298		698		77,439	

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	13,516	3	2,056	33	391	92	15,963	128
Currency translation and other adjustments	—	(1)	—	1	(3)	(4)	(3)	(4)
Transfers from Stage 1 to Stage 2	(2,115)	(2)	2,115	2	—	—	—	—
Transfers from Stage 2 to Stage 1	1,383	13	(1,383)	(13)	—	—	—	—
Transfers to Stage 3	(9)	—	(296)	(11)	305	11	—	—
Transfers from Stage 3	9	—	126	9	(135)	(9)	—	—
Net re-measurement of ECL on stage transfer		(12)		10		(4)		(6)
Changes in risk parameters		4		(18)		10		(4)
Other changes in net exposure	(1,310)	(1)	(344)	(5)	(107)	—	(1,761)	(6)
Other (P&L only items)		—		—		(30)		(30)
Income statement (releases)/charges		(9)		(13)		(24)		(46)
Amounts written-off	—	—	(1)	(1)	(10)	(10)	(11)	(11)
Unwinding of discount		—		—		(11)		(11)
At 31 December 2022	11,474	4	2,273	7	441	75	14,188	86
Net carrying amount	11,470		2,266		366		14,102	
At 1 January 2021	13,900	2	3,664	47	442	92	18,006	141
2021 movements	(384)	1	(1,608)	(14)	(51)	—	(2,043)	(13)
At 31 December 2021	13,516	3	2,056	33	391	92	15,963	128
Net carrying amount	13,513		2,023		299		15,835	

- ECL levels for mortgages reduced during the year, primarily as a result of reducing portfolio balances 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 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 - other personal unsecured	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	912	9	393	52	119	103	1,424	164
Currency translation and other adjustments	(1)	(1)	1	—	2	2	2	1
Transfers from Stage 1 to Stage 2	(487)	(12)	487	12	—	—	—	—
Transfers from Stage 2 to Stage 1	373	37	(373)	(37)	—	—	—	—
Transfers to Stage 3	(7)	—	(61)	(17)	68	17	—	—
Transfers from Stage 3	1	1	7	3	(8)	(4)	—	—
Net re-measurement of ECL on stage transfer		(29)		46		22		39
Changes in risk parameters		7		(7)		5		5
Other changes in net exposure	180	8	(92)	(9)	(17)	(5)	71	(6)
Other (P&L only items)		—		—		(3)		(3)
Income statement (releases)/charges		(14)		30		19		35
Amounts written-off	—	—	—	—	(23)	(23)	(23)	(23)
Unwinding of discount		—		—		(2)		(2)
At 31 December 2022	971	20	362	43	141	115	1,474	178
Net carrying amount	951		319		26		1,296	
At 1 January 2021	717	10	685	77	117	98	1,519	185
2021 movements	195	(1)	(292)	(25)	2	5	(95)	(21)
At 31 December 2021	912	9	393	52	119	103	1,424	164
Net carrying amount	903		341		16		1,260	

- 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
Retail Banking - credit cards	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	644	10	196	27	22	14	862	51
Currency translation and other adjustments	1	1	—	(1)	—	1	1	1
Transfers from Stage 1 to Stage 2	(277)	(8)	277	8	—	—	—	—
Transfers from Stage 2 to Stage 1	181	18	(181)	(18)	—	—	—	—
Transfers to Stage 3	(5)	—	(22)	(8)	27	8	—	—
Transfers from Stage 3	—	—	2	1	(2)	(1)	—	—
Net re-measurement of ECL on stage transfer		(10)		30		7		27
Changes in risk parameters		5		—		3		8
Other changes in net exposure	98	(2)	(29)	(11)	(7)	—	62	(13)
Other (P&L only items)		—		—		—		—
Income statement (releases)/charges		(7)		19		10		22
Amounts written-off	—	—	—	—	(16)	(16)	(16)	(16)
Unwinding of discount		—		—		(1)		(1)
At 31 December 2022	642	14	243	28	24	15	909	57
Net carrying amount	628		215		9		852	
At 1 January 2021	574	11	313	42	31	20	918	73
2021 movements	70	(1)	(117)	(15)	(9)	(6)	(56)	(22)
At 31 December 2021	644	10	196	27	22	14	862	51
Net carrying amount	634		169		8		811	

- ECL remained broadly stable during 2022 reflecting the stable portfolio performance alongside the unwind of ECL held for COVID-19 related risks in the first half of the year offset in the second half of the year, when 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
Commercial & Institutional total	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	19,156	20	3,922	171	516	162	23,594	353
Currency translation and other adjustments	179	(1)	19	—	2	(5)	200	(6)
Inter-group transfers	—	—	—	—	—	—	—	—
Transfers from Stage 1 to Stage 2	(5,454)	(13)	5,454	13	—	—	—	—
Transfers from Stage 2 to Stage 1	3,356	63	(3,356)	(63)	—	—	—	—
Transfers to Stage 3	(37)	—	(318)	(15)	355	15	—	—
Transfers from Stage 3	66	4	65	7	(131)	(11)	—	—
Net re-measurement of ECL on stage transfer		(57)		80		31		54
Changes in risk parameters		27		(66)		23		(16)
Other changes in net exposure	(741)	3	(795)	(28)	(274)	(15)	(1,810)	(40)
Other (P&L only items)		—		—		(12)		(12)
Income statement (releases)/charges		(27)		(14)		27		(14)
Amounts written-off	—	—	—	—	(28)	(28)	(28)	(28)
Unwinding of discount		—		—		(5)		(5)
At 31 December 2022	16,525	46	4,991	99	440	167	21,956	312
Net carrying amount	16,479		4,892		273		21,644	

- Exposure reduction was mainly within property and other corporate sectors. There were continued repayments of COVID-19 government lending schemes, and also strategic reductions in certain sectors.
- 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	9,668	15	2,960	146	280	99	12,908	260
Currency translation and other adjustments	169	—	9	(1)	1	(8)	179	(9)
Inter-group transfers	—	—	—	—	—	—	—	—
Transfers from Stage 1 to Stage 2	(4,266)	(9)	4,266	9	—	—	—	—
Transfers from Stage 2 to Stage 1	2,716	52	(2,716)	(52)	—	—	—	—
Transfers to Stage 3	(17)	—	(204)	(10)	221	10	—	—
Transfers from Stage 3	17	3	37	5	(54)	(8)	—	—
Net re-measurement of ECL on stage transfer		(47)		60		22		35
Changes in risk parameters		13		(61)		7		(41)
Other changes in net exposure	(322)	1	(566)	(25)	(174)	(5)	(1,062)	(29)
Other (P&L only items)		—		—		(13)		(13)
Income statement (releases)/charges		(33)		(26)		11		(48)
Amounts written-off	—	—	—	—	(22)	(22)	(22)	(22)
Unwinding of discount		—		—		(3)		(3)
At 31 December 2022	7,965	28	3,786	71	252	92	12,003	191
Net carrying amount	7,937		3,715		160		11,812	

- The reduction in exposure was due to continued repayments of COVID-19 government lending schemes, and also strategic reductions in certain sectors.
- 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.
- The flows into Stage 3 were 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 - property	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	8,245	5	794	22	226	61	9,265	88
Currency translation and other adjustments	1	(2)	—	2	—	2	1	2
Inter-group transfers	—	—	—	—	—	—	—	—
Transfers from Stage 1 to Stage 2	(1,101)	(3)	1,101	3	—	—	—	—
Transfers from Stage 2 to Stage 1	553	9	(553)	(9)	—	—	—	—
Transfers to Stage 3	(8)	—	(109)	(5)	117	5	—	—
Transfers from Stage 3	20	1	27	2	(47)	(3)	—	—
Net re-measurement of ECL on stage transfer		(9)		18		9		18
Changes in risk parameters		16		(4)		15		27
Other changes in net exposure	(399)	1	(198)	(3)	(112)	(9)	(709)	(11)
Other (P&L only items)		—		—		—		—
Income statement (releases)/charges		8		11		15		34
Amounts written-off	—	—	—	—	(6)	(6)	(6)	(6)
Unwinding of discount		—		—		(2)		(2)
At 31 December 2022	7,311	18	1,062	26	178	72	8,551	116
Net carrying amount	7,293		1,036		106		8,435	

- 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.
- The flows into Stage 3 were 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 - other	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	1,243	—	168	3	10	2	1,421	5
Currency translation and other adjustments	11	—	9	—	—	—	20	—
Inter-group transfers	—	—	—	—	—	—	—	—
Transfers from Stage 1 to Stage 2	(88)	(1)	88	1	—	—	—	—
Transfers from Stage 2 to Stage 1	86	3	(86)	(3)	—	—	—	—
Transfers to Stage 3	(13)	—	(5)	—	18	—	—	—
Transfers from Stage 3	29	—	—	—	(29)	—	—	—
Net re-measurement of ECL on stage transfer		(2)		1		1		—
Changes in risk parameters		—		—		—		—
Other changes in net exposure	(19)	—	(31)	—	11	—	(39)	—
Other (P&L only items)		—		—		—		—
Income statement (releases)/charges		(2)		1		1		—
Amounts written-off	—	—	—	—	—	—	—	—
Unwinding of discount		—		—		—		—
At 31 December 2022	1,249	—	143	2	10	3	1,402	5
Net carrying amount	1,249		141		7		1,397	

- 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	
2022	£m	ECL	£m	ECL	£m	ECL	£m	ECL
Personal								
Currently >30 DPD	29	1	2	1	6	2	37	4
Currently <=30 DPD	2,211	6	228	27	317	41	2,756	74
- PD deterioration	*1,859*	*6*	*177*	*22*	*188*	*25*	*2,224*	*53*
- PD persistence	*99*	—	*37*	*3*	*32*	*3*	*168*	*6*
- Other driver (adverse credit, forbearance etc)	*253*	—	*14*	*2*	*97*	*13*	*364*	*15*
Total Stage 2	2,240	7	230	28	323	43	2,793	78
2021								
Personal								
Currently >30 DPD	73	2	2	1	7	3	82	6
Currently <=30 DPD	1,951	31	186	26	358	48	2,495	105
- PD deterioration	*640*	*14*	*110*	*19*	*179*	*29*	*929*	*62*
- PD persistence	*612*	*8*	*52*	*4*	*149*	*16*	*813*	*28*
- Other driver (adverse credit, forbearance etc)	*699*	*9*	*24*	*3*	*30*	*3*	*753*	*15*
Total Stage 2	2,024	33	188	27	365	51	2,577	111

- 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		FI		Other		Total	
2022	£m	ECL	£m	ECL	£m	ECL	£m	ECL	£m	ECL
Wholesale										
Currently >30 DPD	120	1	111	2	2	—	—	—	233	3
Currently <=30 DPD	938	24	3,976	70	77	2	77	—	5,068	96
- PD deterioration	*568*	*14*	*3,420*	*57*	*70*	*2*	*77*	—	*4,135*	*73*
- PD persistence	*17*	—	*50*	*1*	*1*	—	—	—	*68*	*1*
- Other driver (forbearance, RoCL etc)	*353*	*10*	*506*	*12*	*6*	—	—	—	*865*	*22*
Total Stage 2	1,058	25	4,087	72	79	2	77	—	5,301	99
2021										
Wholesale										
Currently >30 DPD	25	—	41	1	—	—	—	—	66	1
Currently <=30 DPD	757	22	2,971	146	47	2	83	—	3,858	170
- PD deterioration	*209*	*13*	*1,782*	*117*	*39*	*2*	*82*	—	*2,112*	*132*
- PD persistence	*31*	*1*	*114*	*5*	*1*	—	—	—	*146*	*6*
- Other driver (forbearance, RoCL etc)	*517*	*8*	*1,075*	*24*	*7*	—	*1*	—	*1,600*	*32*
Total Stage 2	782	22	3,012	147	47	2	83	—	3,924	171

- 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.

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

2022	UK mortgages £m	UK mortgages %	Credit cards £m	Credit cards %	Other £m	Other %	Total £m	Total %
Personal trigger (1)								
PD movement	**1,881**	**84.0**	**180**	**78.3**	**195**	**60.4**	**2,256**	**80.8**
PD persistence	**99**	**4.4**	**37**	**16.1**	**32**	**9.9**	**168**	**6.0**
Adverse credit bureau recorded with credit reference agency	**204**	**9.1**	**12**	**5.2**	**17**	**5.3**	**233**	**8.3**
Forbearance support provided	**21**	**0.9**	**—**	**—**	**3**	**0.9**	**24**	**0.9**
Customers in collections	**20**	**0.9**	**—**	**—**	**—**	**—**	**20**	**0.7**
Collective SICR and other reasons (2)	**13**	**0.6**	**1**	**0.4**	**76**	**23.5**	**90**	**3.2**
Days past due >30	**2**	**0.1**	**—**	**—**	**—**	**—**	**2**	**0.1**
	2,240	**100**	**230**	**100**	**323**	**100**	**2,793**	**100**

2021	UK mortgages £m	UK mortgages %	Credit cards £m	Credit cards %	Other £m	Other %	Total £m	Total %
Personal trigger (1)								
PD movement	698	34.6	111	59.1	186	51.0	995	38.7
PD persistence	616	30.4	52	27.7	149	40.8	817	31.7
Adverse credit bureau recorded with credit reference agency	533	26.3	16	8.5	14	3.8	563	21.8
Forbearance support provided	39	1.9	1	0.5	5	1.4	45	1.7
Customers in collections	15	0.7	1	0.5	2	0.5	18	0.7
Collective SICR and other reasons (2)	117	5.8	7	3.7	9	2.5	133	5.2
Days past due >30	6	0.3	—	—	—	—	6	0.2
	2,024	100	188	100	365	100	2,577	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 continued

2022	Property £m	Property %	Corporate £m	Corporate %	FI £m	FI %	Other £m	Other %	Total £m	Total %
Wholesale trigger (1)										
PD movement	578	54.6	3,447	84.3	71	89.8	77	100.0	4,173	78.7
PD persistence	18	1.7	50	1.2	1	1.3	—	—	69	1.3
Risk of Credit Loss	271	25.6	192	4.7	3	3.8	—	—	466	8.8
Forbearance support provided	18	1.7	137	3.4	—	—	—	—	155	2.9
Customers in collections	4	0.4	11	0.3	—	—	—	—	15	0.3
Collective SICR and other reasons (2)	72	6.8	184	4.5	3	3.8	—	—	259	4.9
Days past due >30	97	9.2	66	1.6	1	1.3	—	—	164	3.1
	1,058	100	4,087	100	79	100	77	100	5,301	100
2021										
Wholesale trigger (1)										
PD movement	217	27.7	1,816	60.3	39	83.0	83	100.0	2,155	55.0
PD persistence	31	4.0	115	3.8	1	2.1	—	—	147	3.7
Risk of Credit Loss	361	46.1	618	20.5	3	6.4	—	—	982	25.0
Forbearance support provided	31	4.0	130	4.3	—	—	—	—	161	4.1
Customers in collections	6	0.8	19	0.6	—	—	—	—	25	0.6
Collective SICR and other reasons (2)	121	15.5	309	10.3	4	8.5	—	—	434	11.1
Days past due >30	15	1.9	5	0.2	—	—	—	—	20	0.5
	782	100	3,012	100	47	100	83	100	3,924	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 and a decrease in flows on to the Risk of Credit Loss framework.
- 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 with 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, 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 1 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 RBS 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 RBS plc has failed or is likely to fail.

Liquidity

Liquidity risk within RBS 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: The Royal Bank of Scotland plc, National Westminster Bank Plc and Coutts & Company. Ulster Bank Limited was removed from the UK DoLSub effective 1 January 2022 and its banking licence 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 of the UK DoLSub 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

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

Managing capital requirements: regulated entities

In line with paragraph 135 of IAS 1 'Presentation of Financial Statements', RBS plc 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 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 NatWest Group level. It is enacted through a NatWest Group-wide end to end framework.

Capital planning is integrated into RBS plc's wider annual budgeting process and is assessed and updated at least monthly. As a key operating entity, capital plans are produced and managed for RBS plc.

Capital, liquidity and funding risk continued

This is summarised below. Other elements of capital management, including risk appetite and stress testing, are set out on pages 10 and 11.

Produce capital plans	– Capital plans are produced for RBS plc, 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 RBS plc'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 RBS plc 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, RBS plc will monitor its portfolio of issued capital securities and assess the optimal blend and most cost effective means of financing.

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

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. Liquidity risk within RBS plc is managed as part of the UK DoLSub.

The size of the liquidity portfolio held in the UK DoLSub is determined by referencing NWH Group's liquidity risk appetite. The 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 portfolio, for which the NatWest Group Treasurer is responsible.

Funding risk management

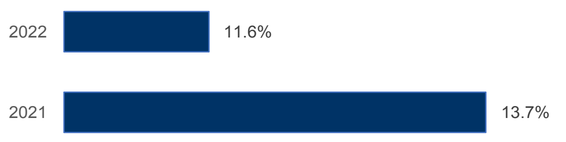
NWH Group manages funding risk through a comprehensive framework which measures and monitors the funding risk on the balance sheet.

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 210 basis points over the period due to a £0.5 billion decrease in CET1 capital and offset by a £1.1 billion decrease in RWAs. The CET1 decrease reflects the attributable profit in the period of £1.1 billion, offset by the following items:

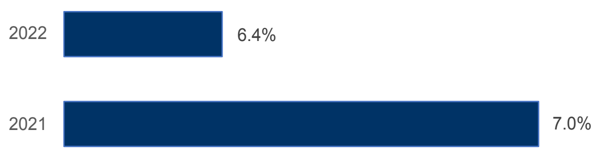
- dividends paid of £0.7 billion;
- foreseeable charges of £0.7 billion; and
- a £0.1 billion decrease in the IFRS 9 transitional adjustment on expected credit losses.

RWA

Total RWAs decreased by £1.1 billion to £18.5 billion mainly reflecting:

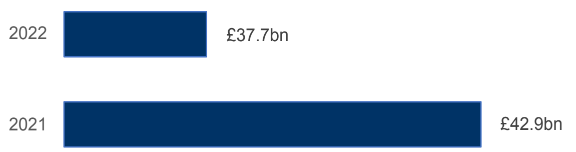
- A decrease in credit risk RWAs of £0.5 billion, primarily due to repayments and expired facilities within Commercial & Institutional in addition to improved risk metrics within Retail Banking. This was partially offset by an increase due to model adjustments applied as a result of new regulation applicable to IRB models from 1 January 2022 in addition to increased exposures within Retail Banking.
- A decrease in operational risk RWAs of £0.6 billion due to the annual recalculation in Q1 2022.

Leverage



The leverage ratio at 31 December 2022 is 6.4% 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 7.0%, which was calculated under the prior year's UK leverage methodology. The key driver of the decrease is a £0.5 billion decrease in Tier 1 capital. This is offset by a £3.0 billion decrease in leverage exposure primarily due to reduced balance sheet exposures.

Liquidity portfolio

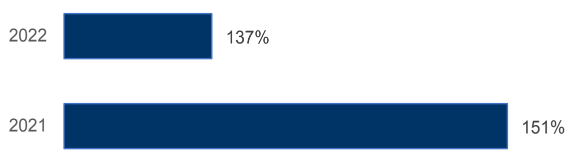


The liquidity portfolio decreased by £5.2 billion YTD as of 31 December 2022 to £37.7 billion with primary liquidity decreasing by £4.0 billion to £31.2 billion. The decrease in primary liquidity is driven by reduction in customer deposits, partially offset by a decrease in lending. The reduction in 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) 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 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 the 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 certain NatWest Group legal entities that are not currently in scope of the minimum leverage ratio requirements are expected to manage their leverage ratio at the same level as firms in scope and will be subject to the minimum requirement from 1 January 2023. There is also an expectation that non-scope firms, which includes RBS plc, should manage their leverage ratio in line with the minimum requirement.

Liquidity and funding ratios

The table below summarises the minimum requirements for key liquidity and funding metrics under the PRA framework. RBS plc is a member of the UK DoLSub which is presented below.

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

.

Capital, liquidity and funding risk continued

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)	**11.6**	13.7
Tier 1	**16.8**	18.6
Total	**25.4**	26.1
Capital	**£m**	£m
CET1 (1)	**2,149**	2,682
Tier 1	**3,119**	3,651
Total	**4,715**	5,106
RWAs		
Credit risk	**15,136**	15,634
Counterparty credit risk	**—**	—
Market risk	**8**	7
Operational risk	**3,396**	3,951
Total RWAs	**18,540**	19,592
Leverage		
Tier 1 capital (£m)	**3,119**	3,651
Leverage exposure (£m) (2)	**48,957**	88,670
Leverage ratio (%) (1) (3)	**6.4**	4.1

(1) Includes an IFRS 9 transitional adjustment of £71 million (2021 - £126 million). Excluding this adjustment, the CET1 ratio would be 11.2% (2021 – 13.1%) and the leverage ratio would be 6.2% (2021 – 4.0%).
(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 RBS plc prior to 1 January 2022. As at 31 December 2021, the UK leverage ratio for RBS plc would have been 7.0%, reflecting PRA's UK leverage methodology in 2021.

Liquidity key metrics

Liquidity within RBS 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) 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.

Capital, liquidity and funding risk continued

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.

Leverage	2022 £m	2021 £m
Cash and balances at central banks	**34,323**	38,014
Derivatives	**498**	220
Financial assets	**60,460**	67,123
Other assets	**1,382**	738
Total assets	**96,663**	106,095
Derivatives		
- netting and variation margin	**194**	—
- potential future exposures	**808**	218
Securities financing transactions gross up	**—**	—
Undrawn commitments	**6,544**	8,982
Regulatory deductions and other adjustments	**1,109**	129
Exclusion of core UK-group exposures	**(23,797)**	(26,754)
Claims on central banks	**(31,656)**	—
Exclusion of bounce back loans	**(908)**	—
Leverage exposure	**48,957**	88,670

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.

	2022		2021	
	UK DoLSub £m	RBS plc £m	UK DoLSub £m	RBS plc £m
Cash and balances at central banks	**103,708**	**31,184**	136,154	35,220
AAA to AA- rated governments	**9,843**	**—**	21,123	—
A+ and lower rated governments	**—**	**—**	—	—
Government guaranteed issuers, public sector entities and government sponsored entities	**100**	**—**	174	—
International organisations and multilateral development banks	**1,021**	**—**	1,466	—
Level 1 bonds	**10,964**	**—**	22,763	—
LCR level 1 eligible assets	**114,672**	**31,184**	158,917	35,220
LCR level 2 eligible assets	**—**	**—**	—	—
Non-LCR eligible assets	**—**	**—**	—	—
Primary liquidity	**114,672**	**31,184**	158,917	35,220
Secondary liquidity (1)	**63,849**	**6,541**	76,573	7,634
Total liquidity value	**178,521**	**37,725**	235,490	42,854

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

Capital, liquidity and funding risk continued

Funding sources (audited)

The table below shows the carrying values of the principal funding sources based on contractual maturity. Balance sheet captions include balances held at all classifications under IFRS 9.

	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	986	—	986	1,117	—	1,117
Customer deposits						
Personal	36,320	200	36,520	38,190	145	38,335
Corporate	35,077	1	35,078	39,556	2	39,558
Non-bank financial institutions (NBFI)	11,708	—	11,708	14,251	—	14,251
	83,105	201	83,306	91,997	147	92,144
Amounts due to holding company and fellow subsidiaries (1)						
Bank and customer deposits	1,640	—	1,640	2,856	248	3,104
MREL	5	403	408	4	383	387
Subordinated liabilities	1,507	—	1,507	2	1,425	1,427
	3,152	403	3,555	2,862	2,056	4,918
Total funding	87,243	604	87,847	95,976	2,203	98,179
Of which: available in resolution (2)			*1,915*			*1,815*

(1) Amounts due to holding companies and fellow subsidiaries relating to non-financial instruments of £355 million (2021 - £298 million) have been excluded from the table.
(2) 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 RBS plc'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	34,323	—	—	—	34,323	—	—	—	34,323	—	34,323
Derivatives	—	9	28	71	108	147	110	116	481	17	498
Loans to banks - amortised cost	793	2	276	—	1,071	—	—	—	1,071	—	1,071
Loans to customers - amortised cost (1)	5,646	2,383	1,515	2,327	11,871	7,142	4,771	14,498	38,282	—	38,282
Personal	533	334	435	813	2,115	2,748	2,194	9,319	16,376	—	16,376
Corporate	4,588	2,044	1,076	1,508	9,216	4,345	2,566	5,166	21,293	—	21,293
Non-bank financial institutions	525	5	4	6	540	49	11	13	613	—	613
Other assets (2)	—	—	—	—	—	—	—	—	—	68	68
Total financial assets	40,762	2,394	1,819	2,398	47,373	7,289	4,881	14,614	74,157	85	74,242
2021											
Total financial assets	46,268	3,507	1,959	2,553	54,287	7,051	4,761	15,944	82,043	133	82,176
2022											
Bank deposits	986	—	—	—	986	—	—	—	986	—	986
Customer deposits	80,967	1,349	475	314	83,105	200	—	1	83,306	—	83,306
Personal	35,965	84	125	146	36,320	200	—	—	36,520	—	36,520
Corporate	33,484	1,122	316	155	35,077	—	—	1	35,078	—	35,078
Non-bank financial institutions	11,518	143	34	13	11,708	—	—	—	11,708	—	11,708
Derivatives	1	160	165	445	771	1,270	367	116	2,524	159	2,683
Notes in circulation	2,409	—	—	—	2,409	—	—	—	2,409	—	2,409
Lease liabilities	1	1	2	4	8	14	12	73	107	—	107
Total financial liabilities	84,364	1,510	642	763	87,279	1,484	379	190	89,332	159	89,491
2021											
Total financial liabilities	93,293	1,552	209	278	95,332	466	170	271	96,239	126	96,365

(1) Loans to customers excludes £615 million (2021 - £675 million) of ECL provisions.
(2) Other assets relating to non-financial instruments of £1,314 million (2021 - £653 million) have been excluded from the table.

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)

Non-traded market risk in this entity is very low.

RBS plc's non-traded market risk exposure largely comprises structural interest rate risk arising from asset and liability hedging.

Governance, risk appetite and controls

For general information on governance, risk appetite and controls in RBS plc, refer to pages 8 to 11. For further information specific to non-traded market risk, refer to the non-traded market risk section of the NatWest Group Annual Report and Accounts.

Measurement

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

The following table shows one-day internal banking book value-at-risk (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 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. For further information on non-traded VaR metrics, refer to the non-traded market risk section of the NatWest Group Annual Report and Accounts.

	2022				2021			
	Average	Maximum	Minimum	Period-end	Average	Maximum	Minimum	Period-end
	£m	£m	£m	£m	£m	£m	£m	£m
Interest rate	1.1	2.4	0.5	1.0	0.7	1.3	0.2	0.6
Credit spread	—	—	—	—	—	—	—	—
Structural foreign exchange rate	2.3	2.7	2.0	2.6	2.8	2.9	2.7	2.7
Equity	0.1	0.1	0.1	0.1	0.1	0.1	—	0.1
Pipeline risk (1)	0.4	0.7	0.1	0.3	0.3	0.7	0.1	0.1
Diversification (2)	(1.1)			(1.3)	(2.8)			(0.6)
Total	2.8	3.8	2.1	2.7	1.1	3.0	0.3	2.9

(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) RBS plc 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.

– There were no material movements in non-traded VaR year-on-year.

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 three primary risk types: gap risk, basis risk and option risk.

To manage exposures within its risk appetite, RBS plc aggregates 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.

For further information on the types and sources of non-traded interest rate risk as well as on the purpose and methodology of the structural hedging carried out, refer to the non-traded market risk section of the NatWest Group Annual Report and Accounts.

Non-traded interest rate risk can be measured from either an economic value-based or earnings-based perspective, or a combination of the two. RBS plc uses VaR as its value-based approach and sensitivity of net interest earnings as its earnings-based approach. For further detail on these measurement approaches, refer to the non-traded market risk section of the NatWest Group Annual Report and Accounts.

Structural hedging

RBS plc 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 mortgage loans) or by using interest rate swaps, in order to provide a consistent and predictable revenue stream.

At 31 December 2022, RBS plc's structural hedge had a notional of £45 billion (2021 – £40 billion) with an average life of approximately three years.

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.

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.

	Shifts in yield curve			
2022 (1)	+25 basis points £m	-25 basis points £m	+100 basis points £m	-100 basis points £m
12-month interest earnings sensitivity	**26**	**(32)**	**106**	**(135)**
2021				
12-month interest earnings sensitivity	53	(51)	195	

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

Sensitivity of cash flow hedging reserves to interest rate movements

Interest rate swaps are used to implement the structural hedging programme. Generally, these swaps are booked in hedge accounting relationships. Changes in the valuation of swaps that are in effective cash flow hedge accounting relationships are recognised in cash flow hedge reserves. The main driver of RBS plc's cash flow hedge reserve sensitivity is the interest rate swaps that form part of the structural hedge.

The table below shows an estimate of the sensitivity of 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. For further information on the assumptions and methodology relating to this table, refer to the corresponding table in the NatWest Group Annual Report and Accounts.

2022	+25 basis points £m	-25 basis points £m	+100 basis points £m	-100 basis points £m
Cash flow hedge reserves	**(177)**	**179**	**(696)**	**727**
2021				
Cash flow hedge reserves	(171)	173	(672)	707

Accounting volatility risk

Accounting volatility risk arises when an exposure is accounted for at amortised cost but economically hedged by a derivative that is accounted for at fair value. Although this is not an economic risk, the difference in accounting between the exposure and the hedge creates volatility in the income statement. For information on how this risk is managed, refer to the non-traded market risk section of the NatWest Group Annual Report and Accounts.

Compliance and conduct risk

Definition

Compliance risk is the risk that RBS plc 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 RBS plc 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 RBS plc’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 20 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 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 aligned to a wider programme of work on the overall risk management framework.

Governance

RBS plc 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 the 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 RBS plc. 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 RBS plc’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 RBS plc’s strategic planning cycle.

Mitigation

Activity to mitigate the most material compliance and conduct risks is carried out across RBS plc with specific areas of focus in the customer-facing businesses and legal entities. Examples of mitigation include the 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 RBS plc.

Financial crime risk

Definition

Financial crime risk is the risk that RBS plc'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 RBS plc’s customers, employees or third parties undertake or facilitate financial crime, or if RBS plc’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 RBS plc.
- 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 RBS plc 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. RBS plc's systems and controls must be comprehensive and proportionate to the nature, scale and complexity of its businesses

RBS plc 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 senior risk committees and the RBS plc 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 RBS plc 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. RBS plc 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. RBS plc 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 RBS plc'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.

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 RBS plc 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 RBS plc'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.

RBS plc 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 RBS plc's Pillar 2A capital requirement.

Scenario analysis is used to assess how severe but plausible operational risks will affect RBS plc. 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 resilience

RBS plc 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.

Operational risk continued

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 RBS plc 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 RBS plc'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

RBS plc 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 NatWest Group.

Key developments in 2022

- Model risk management practices have continued to evolve, driven through a dedicated Model Management Programme. This has 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 RBS plc 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.

Model risk continued

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.

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 – either 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 defined as 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 RBS plc's values and the public agenda; and contagion (when RBS plc's reputation is damaged by failures in the wider financial sector).

Key developments in 2022

- A new reputational risk policy was implemented to manage reputational risk at an organisational level.
- 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 plc. The RBS plc reputational risk committee reviews relevant issues at an individual business or entity level, while the NatWest Group Reputational Risk Committee – opines on material, issues, cases, sectors and themes that represent material reputational risks. The NatWest Group 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. NatWest Group seeks to identify, measure and manage risk aligned to stakeholder trust. However, reputational risk is inherent in RBS plc'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 RBS plc reputational risk committee at and escalated, where appropriate, to the NatWest Group Reputational Risk Committee or the NatWest Group 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 NatWest Group's Top and Emerging Threats process (where sufficiently material) as well as through the NatWest 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 of Note 20 to the financial statements for details of material matters currently affecting NatWest 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:

RBS plc structure

The Royal Bank of Scotland plc ('RBS plc') is a wholly-owned subsidiary of NatWest Holdings Limited ('NWH Ltd' or 'the parent company'). NatWest Group plc ('NWG plc') is 'the ultimate holding company'. The term 'NatWest Group' refers to NatWest Group plc and its subsidiary and associated undertakings. NatWest Group plc is incorporated in Great Britain and has its registered office at 36 St Andrew Square, Edinburgh, EH2 2YB. Details of the principal subsidiary undertakings of RBS plc are shown in Note 28 to the accounts.

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

Activities

RBS plc is engaged principally in providing a wide range of banking and other financial services in the UK.

Results and dividends

The profit attributable to the ordinary shareholders of RBS plc for the year ended 31 December 2022 amounted to £1,122 million compared with a profit of £722 million for the year ended 31 December 2021, as set out in the income statement on page 95.

No ordinary shares were issued in 2022 or 2021.

In 2022, RBS plc paid an ordinary dividend of £0.85 billion to NWH Ltd (2021 - £2.1 billion).

Employees

At 31 December 2021, RBS plc employed 1,200 people (excluding temporary staff). National Westminster Bank Plc (NWB Plc) provides the majority of shared services (including technology) and operational processes under intra-group agreements. Details of related costs are included in Note 3 to the accounts.

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 RBS 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 RBS 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 RBS 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 to demonstrate how NatWest Group is delivering for colleagues (including building capability, diversity and inclusion and learning).

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 RBS 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. 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 RBS plc exceeded the recommendation of the FTSE Women Leaders Review of 40% female representation on board by 2025, with 46% of the Board being female; and
- with a female CEO and CFO, RBS 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 Limited 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 RBS 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 RBS 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 2022 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 RBS 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 pages 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 2022 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. 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 RBS 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.

RBS 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 RBS plc. The Board is collectively responsible for the long-term success of RBS plc and the delivery of sustainable value to its shareholders. The Board's role is to provide leadership of RBS plc. It monitors and maintains the consistency of RBS 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 risk management framework); and it monitors performance against risk appetite for RBS plc. It approves RBS plc's key financial objectives and keeps the capital and liquidity positions of RBS 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, Wealth 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 RBS plc, RBS plc's system of standards of internal controls, and monitors RBS 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 RBS 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 RBS 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 RBS 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 2 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 RBS 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 RBS plc's principal risks in accordance with the NatWest Group risk appetite framework; monitors performance against risk appetite for RBS plc; and considers any material risks and approves, as appropriate, recommended actions escalated by the Board Risk Committee.

RBS 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.

RBS plc operates within NatWest Group's integrated 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 RBS 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. RBS 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 NWH Ltd risk governance, can be found in the risk and capital management section of this report (pages 6 to 74).

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 RBS 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 RBS 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 RBS 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 RBS plc, 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 plc 2022 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 comparable 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: in 2022, for example, topics included 'ways of working' and 'health and safety in the context of the pandemic'. 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's 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 RBS plc are consistent with those at NatWest Group level. RBS plc 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 the RBS plc 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 RBS 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 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 of RBS plc, during the period from 1 January 2022 to 17 February 2023.

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 RBS plc's Executive Committee, individuals authorised by the PRA/FCA and certain directors and/or officers of NatWest Group subsidiaries.

Going concern
RBS plc'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 Financial review. RBS plc's regulatory capital resources and significant developments in 2022 , and anticipated future developments are detailed in the Capital, liquidity and funding section on pages 59 to 66. This section also describes RBS plc'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 RBS 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 RBS 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 RBS plc's auditors and have indicated their willingness to continue in office. A resolution to re-appoint EY LLP as RBS 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

The Royal Bank of Scotland plc
is registered in Scotland No. SC083026

Statement of directors' responsibilities

This statement should be read in conjunction with the responsibilities of the auditor set out in their report on pages 84 to 94.

The directors are responsible for the preparation of the Annual Report and Accounts. The directors are required by the Companies Act 2006 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 the Bank. 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 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 the Bank 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 the Bank 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 taken as a whole; and
- the Strategic report and Directors' report (incorporating the Financial review) include a fair review of the development and performance of the business and the position of the Bank 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	Executive directors	Non-executive directors
Howard Davies	Alison Rose-Slade DBE	Francesca Barnes
	Katie Murray	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 The Royal Bank of Scotland plc

Opinion

We have audited the financial statements of The Royal Bank of Scotland plc (the "Bank") for the year ended 31 December 2022 which comprise the Income statement, the Statement of comprehensive income, the Balance Sheet, the Statement of changes in equity, the Cash flow statement, the Accounting policies and the related notes 1 to 28, and the Risk and capital management section of the Strategic report identified as 'audited'. The financial reporting framework that has been applied in their preparation is applicable law and UK adopted international accounting standards.

In our opinion, the financial statements:
- give a true and fair view of the Bank's affairs as at 31 December 2022 and of its profit for the year then ended;
- have been properly prepared in accordance with UK adopted international accounting standards; and
- have been prepared in accordance with the requirements 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 are independent of the Bank 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 public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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 Bank's ability to continue to adopt the going concern basis of accounting included:
- In conjunction with our walkthrough of the Bank'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 Bank's risk profile and risk management practices were considered including credit risk, market risk, compliance and conduct risk, climate risk and operational risk;
- We evaluated management's assessment by considering the Bank's ability to continue in operation and meets its liabilities under different scenarios including the impact of the Bank'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 Bank'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 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 Bank's ability to continue as a going concern.

An overview of the scope of our audit

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for the Bank. This enables us to form an opinion on the financial statements. We take into account the size and risk profile of the component and its activities, the organisation of the Bank and effectiveness of NWG 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.

In assessing the risk of material misstatement to the Bank financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, of the five reporting components of the Bank, we selected three components based on size and risk, which represent the principal business units within the Bank.

The scoping for the current year is as follows:

Component	Scope	Key locations
Retail Banking	Full	United Kingdom
Commercial Banking	Full	United Kingdom
Central items and other (including Services, and Treasury)	Full	United Kingdom, India

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	100%	0%	0%	100%
Total equity	87%	0%	13%	100%
Total income	100%	0%	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.

Involvement with component teams

In establishing our overall approach to the Bank 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.

An overview of the scope of our audit

Climate change

Stakeholders are increasingly interested in how climate change will impact the Company. The Company 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 Company 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 Company 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 Company 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 Company'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 Bank reported total gross loans of £61.2 billion (2021: £67.4 billion) and £664 million of expected credit losses (ECL) (2021: £707 million). Management's judgments and estimates are especially subjective due to significant uncertainty associated with the assumptions used. These include the current geopolitical and economic 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 including any changes to scenarios required through 31 December 2022; - Adjustments - Appropriateness, completeness and valuation of model adjustments which represent approximately 10% of total ECL including any 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 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 Bank's portfolios, risk profile, impact of the current geopolitical and economic outlook and climate change on the Bank'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 model design and formulae, alternative modelling techniques, recalculating the PD, LGD and EAD, and model implementation. We also considered the results of the Bank'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, identified with reference to external sources, including higher risk sectors such as commercial real estate, agriculture, oil and gas, mining, retail, leisure and aviation, 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 12 to the financial statements

(1) NWH Audit Committee covers the ring-fenced bank legal entities of NatWest Group, including RBS plc.

Risk	Our response to the risk
Future profitability estimates impacting the recognition of Deferred tax	
At 31 December 2022, the Bank had a deferred tax asset balance of £1.0 billion (2021: £0.2 billion). The recognition of deferred tax assets is based on estimates of future profitability for the entity which require significant management judgment and include the risk of management bias. The recognition of deferred tax 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 which are driven by delivery of the bank's strategy; – Cost forecasts given the strategic ambitions of the bank and potential headwinds from inflation and supply chain issues; and – Macroeconomic and model assumptions used in forecasting (growth rates, macroeconomic assumptions, etc.) including the current uncertain geopolitical and economic outlook.	Controls testing: We evaluated the design and operating effectiveness of controls over the preparation and review of the legal entity forecasts, the significant assumptions, inputs and judgments underpinning these, as well as other significant tax adjustments applied in the DTA 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 DTA 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 Bank's forecasts were reasonable by comparing these to other scenarios from a variety of external sources. We evaluated how the long-term growth rates used by management compared to our ranges which were developed using external market data. Revenue forecasts: We evaluated the underlying business strategies, comparing to expected market trends considering anticipated balance sheet changes and historic performance. We obtained an understanding of the Bank's strategy and the extent to which decisions had been factored into the forecasts, where appropriate, in accordance with the relevant accounting standards. 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 Bank'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.

Key observations communicated to the NWH Group Audit Committee

We are satisfied that management methodologies judgements and assumptions supporting the recognition of deferred tax asssets 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.
- We are satisfied that management has exercised appropriate judgment in assessing the extent to which it is probable that there will be future taxable profits to recover deferred tax assets; and
- Control deficiencies were identified in the process to assess the ability to recognise deferred tax assets for which compensating controls were identified to mitigate the risk of material misstatement.

Relevant references in the Annual Report and Accounts

Note 14 to the financial statements

Risk	Our response to the risk
Provisions for customer redress, litigation and other regulatory matters	
At 31 December 2022, the Bank has reported £0.1 billion (2021: £0.2 billion) of provisions for liabilities and charges, including £0.1 billion (2021: £0.2 billion) for customer redress, litigation and other regulatory matters as detailed in Note 16 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 provisions 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 Bank'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 the current economic conditions take effect or implementation, respectively.

Relevant references in the Annual Report and Accounts

Accounting policies
Note 16 and 20 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 Bank 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 Bank 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 Bank, 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 Bank to be £57 million (2021: £35 million), which is 5% (2021: 5%) of the profit before tax of the Bank of £1,159 million (2021: £1,021 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 Bank materiality is consistent with the wider industry and is the standard for listed and regulated entities.

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 Bank's overall control environment, our judgment was that performance materiality was 75% (2021: 75%) of our planning materiality, namely £43 million (2021: £27 million). We have based the percentage of performance materiality from the prior year considering on a number of considerations, including the number and amount of identified misstatements, the effectiveness of the control environment and other factors affecting the entity and its financial reporting. Audit work at component teams 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 Bank as a whole and our assessment of the risk of misstatement at that component. In the current year, the range of performance materiality allocated by the primary audit engagement team to components was between £8 million and £23 million (2021: £8 million to £27 million).

Reporting threshold

An amount below which identified misstatements are considered as being clearly trivial.

We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of £3 million (2021: £2 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, and Statement of directors' responsibilities, 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 or a material misstatement of the other information. 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 the 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 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, or returns adequate for our audit have not been received from branches not visited by us; or
- the 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 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 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 Bank and management.

- We obtained an understanding of the legal and regulatory frameworks that are applicable to the Bank 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 Bank 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 Bank and regulatory bodies; reviewed minutes of the Board and Risk Committees; and gained an understanding of the Bank'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 Bank'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.
- Based on this understanding we designed our audit procedures to identify non-compliance with such 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 Bank 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 Audit Committee we were appointed by the Bank on 4 May 2016 to audit the financial statements of the Bank 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 the periods from our appointment through 31 December 2022.
- The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Bank and we remain independent of the Bank in conducting the audit.
- The audit opinion is consistent with the additional report to the Audit Committee

Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

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		**2,036**	1,449
Interest payable		**(254)**	(107)
Net interest income	1	**1,782**	1,342
Fees and commissions receivable		**455**	413
Fees and commissions payable		**(107)**	(135)
Other operating income		**(59)**	155
Non-interest income	2	**289**	433
Total income		**2,071**	1,775
Staff costs		**(58)**	(120)
Premises and equipment		**1**	(32)
Other administrative expenses		**(814)**	(838)
Depreciation and amortisation		**(21)**	(124)
Operating expenses	3	**(892)**	(1,114)
Profit before impairment losses/releases		**1,179**	661
Impairment (losses)/releases	12	**(20)**	360
Operating profit before tax		**1,159**	1,021
Tax credit/(charge)	7	**17**	(245)
Profit for the year		**1,176**	776
Attributable to:			
Ordinary shareholders		**1,122**	722
Paid-in equity holders		**54**	54
		1,176	776

Statement of comprehensive income for the year ended 31 December 2022

	2022 £m	2021 £m
Profit for the year	**1,176**	776
Items that do qualify for reclassification		
FVOCI financial assets	**—**	1
Cash flow hedges (1)	**(1,803)**	(766)
Currency translation	**2**	(2)
Tax	**492**	222
	(1,309)	(545)
Other comprehensive loss after tax	**(1,309)**	(545)
Total comprehensive (loss)/income for the year	**(133)**	231
Attributable to:		
Ordinary shareholders	**(187)**	177
Paid-in equity holders	**54**	54
	(133)	231

(1) 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 104 to 130, the accounting policies on pages 99 to 103 and the audited sections of the Financial review and Risk and capital management on pages 4 to 74 form an integral part of these financial statements.

Balance sheet as at 31 December 2022

	Note	2022 £m	2021 £m
Assets			
Cash and balances at central banks	8	**34,323**	38,014
Derivatives	11	**498**	220
Loans to banks - amortised cost	8	**1,071**	1,147
Loans to customers - amortised cost	8	**37,667**	42,035
Amounts due from holding companies and fellow subsidiaries	8	**21,722**	23,941
Other assets	14	**1,382**	738
Total assets		**96,663**	106,095
Liabilities			
Bank deposits	8	**986**	1,117
Customer deposits	8	**83,306**	92,144
Amounts due to holding companies and fellow subsidiaries	8	**3,910**	5,216
Derivatives	11	**2,683**	827
Notes in circulation		**2,409**	2,144
Other liabilities	16	**708**	900
Total liabilities		**94,002**	102,348
Total equity		**2,661**	3,747
Total liabilities and equity		**96,663**	106,095

The accompanying notes on pages 104 to 130, the accounting policies on pages 99 to 103 and the audited sections of the Financial review and Risk and capital management on pages 6 to 74 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

The Royal Bank of Scotland plc
Registration No. SC083026

Statement of changes in equity for the year ended 31 December 2022

	2022 £m	2021 £m
Called-up share capital - at 1 January and 31 December	**20**	20
Paid-in equity - at 1 January	**969**	969
Redeemed	**(499)**	—
Issued	**500**	—
At 31 December	**970**	969
FVOCI reserve - at 1 January	**(3)**	(4)
Unrealised gains	**—**	1
At 31 December	**(3)**	(3)
Cash flow hedging reserve - at 1 January	**(168)**	376
Amount recognised in equity(2)	**(1,952)**	(564)
Amount transferred from equity to earnings	**149**	(202)
Tax	**492**	222
At 31 December	**(1,479)**	(168)
Foreign exchange reserve - at 1 January	**(2)**	—
Retranslation of net assets	**2**	(2)
At 31 December	**—**	(2)
Retained earnings - at 1 January	**2,931**	4,309
Profit attributable to ordinary shareholders and other equity owners	**1,176**	776
Ordinary dividends paid	**(850)**	(2,100)
Paid-in equity dividends paid	**(54)**	(54)
Redemption of paid-in equity		
- gross	**(41)**	—
- tax	**(9)**	—
At 31 December	**3,153**	2,931
Total equity at 31 December	**2,661**	3,747
Attributable to:		
Ordinary shareholders	**1,691**	2,778
Paid-in equity holders	**970**	969
	2,661	3,747

(1) The total distributable reserves for RBS plc is £1,671 million (2021 – £2,758 million).
(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 104 to 130, the accounting policies on pages 99 to 103 and the audited sections of the Financial review and Risk and capital management on pages 4 to 74 form an integral part of these financial statements.

Cash flow statement for the year ended 31 December 2022

	Note	2022 £m	2021 £m
Cash flows from operating activities			
Operating profit before tax		**1,159**	1,021
Adjustments for:			
Impairment losses/(releases)		**20**	(360)
Depreciation and amortisation		**21**	124
Write-down of investment in group undertakings		**—**	3
Change in fair value taken to profit or loss on other liabilities and subordinated liabilities		**(110)**	(67)
Elimination of foreign exchange differences		**(336)**	37
Other non-cash items		**158**	(199)
Dividends receivable from subsidiaries		**(8)**	(22)
Profit on sale of subsidiaries and associates		**—**	(34)
Loss/(profit) on sale of net assets/liabilities		**24**	(4)
Loss/(profit) on sale of property, plant and equipment		**1**	(5)
Interest payable on MRELs and subordinated liabilities		**95**	86
Charges and releases on provisions		**(10)**	67
Defined benefit pension schemes		**7**	9
Net cash flows from trading activities		**1,021**	656
Increase in derivative assets		**(2,230)**	(39)
Increase in loans to banks		**(5)**	(44)
Decrease in loans to customers		**3,750**	6,928
Increase in amounts due from holding companies and fellow subsidiaries		**(2,862)**	(285)
Decrease in other assets		**88**	34
Decrease in bank deposits		**(131)**	(35)
(Decrease)/increase in customer deposits		**(6,599)**	7,516
(Decrease)/increase in amounts due to holding companies and fellow subsidiaries		**(1,073)**	741
Increase in derivative liabilities		**1,856**	39
Increase in notes in circulation		**265**	501
Decrease in other liabilities		**(205)**	(170)
Changes in operating assets and liabilities		**(7,146)**	15,186
Income tax paid		**(228)**	(50)
Net cash flows from operating activities (1,2)		**(6,353)**	15,792
Cash flows from investing activities			
Purchase of other financial assets		**—**	(1)
Sale of property, plant and equipment		**8**	20
Purchase of property, plant and equipment		**(21)**	(5)
Disposal of net assets and liabilities		**270**	155
Profit on disposal of net assets and liabilities		**—**	4
Disposal of subsidiaries and associates		**—**	54
Dividends received from subsidiaries		**8**	22
Net cash flows from investing activities		**265**	249
Cash flows from financing activities			
Movement in MRELs		**(16)**	(16)
Movement in subordinated liabilities		**(78)**	(70)
Movement in paid-in equity		**(40)**	—
Dividends paid		**(904)**	(2,154)
Net cash flows from financing activities	21	**(1,038)**	(2,240)
Effects of exchange rate changes on cash and cash equivalents		**547**	(19)
Net (decrease)/increase in cash and cash equivalents		**(6,579)**	13,782
Cash and cash equivalents at 1 January		**60,208**	46,426
Cash and cash equivalents at 31 December	22	**53,629**	60,208

(1) Includes interest received of £2,058 million (2021 - £1,426 million) and interest paid of £215 million (2021 - £103 million).
(2) The total cash outflow for leases is £12 million (2021 - £14 million), including payment of principal amount of £9 million (2021 - £11 million) which are included in the operating activities in the cash flow statement.

The accompanying notes on pages 104 to 130, the accounting policies on pages 99 to 103 and the audited sections of the Financial review and Risk and capital management on pages 4 to 74 form an integral part of these financial statements.

Accounting policies

1. Presentation of financial statements

The Royal Bank of Scotland plc (RBS plc) is incorporated in the UK and registered in Scotland. 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 which are stated at fair value.

The effect of the amendments to IFRS effective from 1 January 2022 on our financial statements was immaterial.

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 on 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 deferred tax is 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
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 12
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 15

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 RBS plc company or on RBS plc 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. 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.

2.3. 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.

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.

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 or in ordinary shares of NatWest Group plc subject to deferral, forfeiture and clawback 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 generally subject to vesting conditions.

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.

3.3. 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.

3.4. 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 measured at fair value and changes in fair value reported in the income statement; or
- designated at fair value through profit or loss 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 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 to income statement.

3.5. 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.

3.6. Capital instruments

We classify a financial instrument that we issue 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.

3.7. 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. 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 two 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.

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.

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	**411**	122
Loans to customers - amortised cost	**1,305**	1,292
Amounts due from holding company and fellow subsidiaries	**320**	35
Interest receivable	**2,036**	1,449
Balances with banks	**2**	2
Customer deposits	**142**	42
Amounts due to holding company and fellow subsidiaries	**107**	60
Other financial liabilities	**3**	3
Interest payable	**254**	107
Net interest income	**1,782**	1,342

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.

For accounting policy information see Accounting policy 3.1.

2 Non-interest income

	2022 £m	2021 £m
Net fees and commissions (1)	**348**	278
Other operating income		
Profit on disposal of subsidiaries and associates (2)	**—**	34
Hedge ineffectiveness	**(10)**	(10)
Net (loss)/income from economic hedging	**(20)**	41
(Loss)/gain on disposal of amortised cost assets and liabilities (3)	**(23)**	20
(Loss)/profit on sale pf property, plant and equipment	**(1)**	5
Dividend income	**8**	22
Other income	**(13)**	43
	(59)	155
Non-interest income	**289**	433

(1) Refer to Note 4 for further analysis.
(2) 2021 relates to profit on sale of Adam & Company's investment management business.
(3) 2022 includes £23 million loss on transfer of remaining Adam & Company's business to Coutts.

For accounting policy information see Accounting policy 3.1.

3 Operating expenses

	2022 £m	2021 £m
Wages, salaries and other staff costs	44	102
Social security costs	5	6
Pension costs	9	12
- defined benefit schemes (see Note 5)	7	9
- defined contribution schemes	2	3
Staff costs	58	120
Premises and equipment (1)	(1)	32
Other administrative expenses (2,3)	814	838
Depreciation and amortisation (4)	21	124
Administrative expenses	834	994
Operating expenses	892	1,114

(1) 2022 includes release of property provisions due to lease exits and change in economic assumptions.
(2) Includes £759 million (2021 - £763 million) recharges from other NatWest Group entities, mainly NWB Plc which provides the majority of shared services (including technology) and operational processes.
(3) Includes litigation costs. Further details are provided in Note 16.
(4) 2021 includes impairment of goodwill of £85 million.

For accounting policy information see Accounting policy 3.2.

1,200 front office customer-facing staff (2021 – 1,500) are contractually employed by NWB Plc with all related staff costs paid by RBS plc and no staff (2021 – 100) contractually employed by and paid by RBS plc.

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.

The business 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.

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.

Central items & other comprises corporate treasury activity on behalf of RBS plc and its fellow subsidiaries and RBS plc's corporate service and functions activities.

2022	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
Net interest income	**877**	**23**	**886**	**(4)**	**1,782**
Net fees and commissions	**88**	**6**	**254**	**—**	**348**
Other operating income	**—**	**(23)**	**(2)**	**(34)**	**(59)**
Total income	**965**	**6**	**1,138**	**(38)**	**2,071**
Depreciation and amortisation	**(11)**	**(2)**	**(8)**	**—**	**(21)**
Other operating expenses	**(420)**	**(69)**	**(382)**	**—**	**(871)**
Impairment (losses)/releases	**(11)**	**—**	**14**	**(23)**	**(20)**
Operating profit/(loss)	**523**	**(65)**	**762**	**(61)**	**1,159**
2021					
Net interest income	637	27	642	36	1,342
Net fees and commissions	74	10	194	—	278
Other operating income	—	64	13	78	155
Total income	711	101	849	114	1,775
Depreciation and amortisation	(104)	(4)	(16)	—	(124)
Other operating expenses	(483)	(81)	(426)	—	(990)
Impairment releases	15	3	336	6	360
Operating profit	139	19	743	120	1,021

Total revenue (1)

2022	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
External	**800**	**6**	**860**	**766**	**2,432**
Inter-segment	**32**	**3**	**27**	**(62)**	**—**
Total	**832**	**9**	**887**	**704**	**2,432**
2021					
External	807	95	783	332	2,017
Inter-segment	(22)	9	42	(29)	—
Total	785	104	825	303	2,017

(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	**933**	**3**	**1,111**	**24**	**2,071**
Inter-segment	**32**	**3**	**27**	**(62)**	**—**
Total	**965**	**6**	**1,138**	**(38)**	**2,071**
2021					
External	732	92	807	144	1,775
Inter-segment	(21)	9	42	(30)	—
Total	711	101	849	114	1,775

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	**59**	**1**	**132**	**—**	**192**
- Credit and debit card fees	**78**	**—**	**51**	**—**	**129**
- Lending and financing	**2**	**—**	**82**	**—**	**84**
- Other	**9**	**5**	**36**	**—**	**50**
Total	**148**	**6**	**301**	**—**	**455**
Fees and commissions payable	**(60)**	**—**	**(47)**	**—**	**(107)**
Net fees and commissions	**88**	**6**	**254**	**—**	**348**

2021	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
Fees and commissions receivable					
- Payment services	59	2	123	—	184
- Credit and debit card fees	67	—	36	—	103
- Lending and financing	2	1	99	—	102
- Other	10	7	7	—	24
Total	138	10	265	—	413
Fees and commissions payable	(64)	—	(71)	—	(135)
Net fees and commissions	74	10	194	—	278

2022	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
Assets	**19,548**	**2**	**22,321**	**54,792**	**96,663**
Liabilities	**39,084**	**21**	**48,878**	**6,019**	**94,002**

2021	Retail Banking £m	Private Banking £m	Commercial & Institutional £m	Central items & other £m	Total £m
Assets	20,893	2,800	24,168	58,234	106,095
Liabilities	39,143	2,541	57,256	3,408	102,348

All of RBS plc's activities, by location of offices, are based in the UK.

5 Pensions

Eligible employees of RBS plc can participate in membership of the NatWest Group operated pension schemes. The principal defined benefit scheme is the NatWest Group Pension Fund (the Main section). The Main section was closed to new entrants in October 2006 and since then employees have been offered membership to the RBS Group Retirements Savings Plan, a defined contribution pension scheme. The NatWest Group pension schemes are further disclosed in the NatWest Group 2022 Annual Report and Accounts.

For accounting policy information see Accounting policy 3.2.

6 Auditor's remuneration

Amounts payable to RBS plc's auditor for statutory audit and other services are set out below:

	2022 £m	2021 £m
Fees payable for the audit of RBS plc's annual accounts	**4.2**	3.9
Fees payable to the auditor for other services to RBS plc	**—**	—
Total audit and audit-related assurance service fees	**4.2**	3.9

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	(252)	(232)
Over provision in respect of prior years	2	12
	(250)	(220)
Deferred Tax		
Charge for the year	(61)	(46)
UK tax rate change impact (1)	(3)	42
Increase/(decrease) in the carrying value of deferred tax assets in respect of UK losses	331	(14)
Under provision in respect of prior years (2)	—	(7)
Tax credit/(charge) for the year	17	(245)

(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.

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	(220)	(194)
Non-deductible goodwill impairment	—	(16)
Items not allowed for tax:		
- losses on disposals and write downs	(6)	(3)
- UK bank levy	(2)	(3)
- regulatory and legal actions	—	(1)
- other disallowable items	(6)	(1)
Non-taxable items	2	11
Increase/(decrease) in the carrying value of deferred tax assets in respect of:		
- UK losses	331	(14)
Banking surcharge	(91)	(81)
Tax on paid-in equity dividends	10	10
UK tax rate change impact	(3)	42
Adjustments in respect of prior years	2	5
Actual tax credit/(charge)	17	(245)

For accounting policy information see Accounting policy 3.3.

Deferred tax

RBS plc makes provision for deferred tax on temporary differences where tax recognition occurs at a different time from accounting recognition. Deferred tax assets of £1,048 million were recognised as at 31 December 2022 (2021 - £289 million).

	2022 £m	2021 £m
Deferred tax liability	—	—
Deferred tax asset	(1,048)	(289)
Net deferred tax asset	(1,048)	(289)

Net deferred tax asset comprised:

	Accelerated capital allowances £m	Expense provisions £m	Financial instruments (1) £m	Tax losses carried forward £m	Other £m	Total £m
At 1 January 2021	(39)	(1)	155	(200)	(7)	(92)
Charge/(credit) to income statement	8	(6)	—	24	(1)	25
Charge to other comprehensive income	—	—	(222)	—	—	(222)
At 31 December 2021	(31)	(7)	(67)	(176)	(8)	(289)
Charge/(credit) to income statement	9	4	(5)	(276)	1	(267)
Credit to other comprehensive income	—	—	(492)	—	—	(492)
At 31 December 2022	(22)	(3)	(564)	(452)	(7)	(1,048)

(1) The in-year movement predominantly relates to cash flow hedges.

7 Tax continued

Critical accounting policy: Deferred tax

The deferred tax assets of £1,048 million as at 31 December 2022 (2021 - £289 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. RBS plc'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 – RBS plc 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 partly based on forecast performance beyond the horizon 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 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.

RBS plc – A deferred tax asset of £452 million (2021 - £176 million) has been recognised in respect of losses of £1,821 million of total losses of £3,692 million carried forward at 31 December 2022. The losses were transferred from NatWest Markets Plc as a consequence of the ring fencing regulations. RBS plc expects the deferred tax asset to be utilised against future taxable profits by the end of 2029.

Deferred tax assets of £468 million (2021 - £814 million) have not been recognised in respect of tax losses carried forward of £1,871 million (2021 - £3,257 million). The tax losses can be carried forward indefinitely.

8 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 SPPI. 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 SPPI, including contingent and leverage features, non-recourse arrangements and features that could modify the time value of money.

For accounting policy information see Accounting policies notes 3.4, 3.5 and 3.7.

The following tables analyse RBS plc's financial assets and liabilities in accordance with the categories of financial instruments in IFRS 9.

Assets	MFVTPL (1) £m	FVOCI (1) £m	Amortised cost £m	Other assets £m	Total £m
Cash and balances at central banks			**34,323**		**34,323**
Derivatives (2)	**498**				**498**
Loans to banks - amortised cost (3)			**1,071**		**1,071**
Loans to customers - amortised cost (4)			**37,667**		**37,667**
Amounts due from holding companies and fellow subsidiaries	**—**	**—**	**21,610**	**112**	**21,722**
Other assets	**67**	**1**	**—**	**1,314**	**1,382**
31 December 2022	**565**	**1**	**94,671**	**1,426**	**96,663**
Cash and balances at central banks			38,014		38,014
Derivatives (2)	220				220
Loans to banks - amortised cost (3)			1,147		1,147
Loans to customers - amortised cost (4)			42,035		42,035
Amounts due from holding companies and fellow subsidiaries	—	—	23,815	126	23,941
Other assets	84	1	1	652	738
31 December 2021	304	1	105,012	778	106,095

Liabilities	Held-for-trading (1) £m	Amortised cost £m	Other liabilities £m	Total £m
Bank deposits (5)		**986**		**986**
Customer deposits		**83,306**		**83,306**
Amounts due to holding companies and fellow subsidiaries	**—**	**3,555**	**355**	**3,910**
Derivatives (2)	**2,683**			**2,683**
Notes in circulation		**2,409**		**2,409**
Other liabilities (6)		**126**	**582**	**708**
31 December 2022	**2,683**	**90,382**	**937**	**94,002**
Bank deposits (5)		1,117		1,117
Customer deposits		92,144		92,144
Amounts due to holding companies and fellow subsidiaries	—	4,918	298	5,216
Derivatives (2)	827			827
Notes in circulation		2,144		2,144
Other liabilities (6)		158	742	900
31 December 2021	827	100,481	1,040	102,348

(1) Includes instruments predominantly held at level 2 of the fair value hierarchy.
(2) Includes hedging derivative assets of £480 million (2021 - £171 million) and hedging derivative liabilities of £2,524 million (2021 - £701 million).
(3) Includes items in the course of collection from other banks of £59 million (2021 - £14 million).
(4) Includes finance lease receivables of £1 million (2021 - £5 million).
(5) Includes items in the course of transmission to other banks of £8 million (2021 - £8 million).
(6) Includes lease liabilities of £107 million (2021 - £133 million) held at amortised cost.

8 Financial instruments – classification continued

The below tables include amounts due from/to holding companies and fellow subsidiaries:

	2022			2021		
	Holding companies £m	Fellow subsidiaries £m	Total £m	Holding companies £m	Fellow subsidiaries £m	Total £m
Assets						
Loans to banks - amortised cost	—	18,511	18,511	—	21,322	21,322
Loans to customers - amortised cost	—	3,099	3,099	—	2,493	2,493
Other assets	—	112	112	—	126	126
Amounts due from holding companies and fellow subsidiaries	—	21,722	21,722	—	23,941	23,941
Derivatives (1)	—	498	498	—	220	220
Liabilities						
Bank deposits - amortised cost	—	1,016	1,016	—	2,391	2,391
Customer deposits - amortised cost	—	624	624	—	713	713
Other financial liabilities - subordinated liabilities (2)	1,507	—	1,507	1,427	—	1,427
MREL instruments issued to NatWest Holdings Limited	408	—	408	387	—	387
Other liabilities	15	340	355	—	298	298
Amounts due to holding companies and fellow subsidiaries	1,930	1,980	3,910	1,814	3,402	5,216
Derivatives (1)	—	2,681	2,681	—	826	826

(1) Intercompany derivatives are included within the derivative classification on the balance sheet.
(2) USD $1,850 million fixed rate subordinated notes. See Note 15.

8 Financial instruments – classification continued

Interest rate benchmark reform

RBS plc 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 RBS plc'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:

	Rates subject to IBOR reform			
	GBP LIBOR	USD IBOR	Other IBOR	Total
2021	£m	£m	£m	£m
Loans to customers - amortised cost	484	447	1	932
Amounts due to holding companies and fellow subsidiaries	—	387	—	387
Loan commitments (1)	62	538	—	600
Derivatives notional (£bn)	—	1.9	—	1.9

(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.

AT1 issuances

RBS 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 an IBOR rate or 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 17.

9 Financial Instruments: fair value of financial instruments measured at amortised cost

The following table shows the carrying value and fair value of financial instruments measured at amortised cost on the balance sheet.

	Items where fair value approximates carrying value	Carrying value	Fair value	Fair value hierarchy level	
				Level 2	Level 3
2022	£m	£m	£m	£m	£m
Financial assets					
Cash and balances at central banks	34,323				
Loans to banks	—	1,071	1,071	976	95
Loans to customers		37,667	36,752	—	36,752
Amounts due from holding companies and fellow subsidiaries		21,610	21,610	—	21,610
Other assets	—				
2021					
Financial assets					
Cash and balances at central banks	38,014				
Loans to banks	—	1,147	1,147	1,073	74
Loans to customers		42,035	41,471	—	41,471
Amounts due from holding companies and fellow subsidiaries		23,815	23,816	—	23,816
Other assets	1				

2022					
Financial liabilities					
Bank deposits	890	96	89	—	89
Customer deposits	80,001	3,305	3,310	574	2,736
Amounts due to holding companies and fellow subsidiaries	911	2,644	2,637	1,908	729
Notes in circulation	2,409				
Other liabilities	—				
2021					
Financial liabilities					
Bank deposits	1,023	94	94	—	94
Customer deposits	89,787	2,357	2,334	654	1,680
Amounts due to holding companies and fellow subsidiaries	568	4,350	4,397	1,862	2,535
Notes in circulation	2,144				
Other liabilities	1				

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, RBS plc'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, such as institutional and corporate lending.

(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.

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.

For accounting policy information see Accounting policy note 3.4.

10 Financial instruments - maturity analysis

Remaining maturity

The following table shows the residual maturity of financial instruments, based on contractual date of maturity.

	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	**34,323**	**—**	**34,323**	38,014	—	38,014
Derivatives	**43**	**455**	**498**	32	188	220
Loans to banks - amortised cost	**1,071**	**—**	**1,071**	1,147	—	1,147
Loans to customers - amortised cost	**11,260**	**26,407**	**37,667**	14,375	27,660	42,035
Amounts due from holding companies and fellow subsidiaries (1)	**21,610**	**—**	**21,610**	23,290	525	23,815
Other assets (2)	**3**	**65**	**68**	7	78	85
Liabilities						
Bank deposits	**986**	**—**	**986**	1,117	—	1,117
Customer deposits	**83,104**	**202**	**83,306**	91,997	147	92,144
Amounts due to holding companies and fellow subsidiaries (3)	**3,152**	**403**	**3,555**	2,862	2,056	4,918
Derivatives	**140**	**2,543**	**2,683**	4	823	827
Notes in circulation	**2,409**	**—**	**2,409**	2,144	—	2,144
Lease liabilities	**9**	**98**	**107**	12	121	133

(1) Excludes non-financial instruments of £112 million (2021 – £126 million).
(2) Excludes non-financial instruments of £1,314 million (2021 - £653 million).
(3) Excludes non-financial instruments of £355 million (2021 – £298 million).

Liabilities by contractual cash flow maturity with a maturity of 20 years or less

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 the conditions could be fulfilled without considering the probability of the conditions being met. For example, if a structured note automatically prepays when 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 the year end.

Liabilities with a contractual maturity of greater than 20 years - 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 RBS plc's liquidity position.

HFT liabilities of £160 million (2021 - £126 million) have been excluded from the tables.

10 Financial instruments - maturity analysis continued

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	**897**	**—**	**—**	**—**	**89**	**—**
Customer deposits	**82,308**	**799**	**200**	**—**	**—**	**—**
Amounts due to holding companies and fellow subsidiaries	**1,651**	**1,625**	**424**	**—**	**—**	**—**
Derivatives	**162**	**629**	**1,381**	**429**	**137**	**14**
Notes in circulation	**2,409**					
Lease liabilities	**3**	**7**	**17**	**14**	**29**	**34**
	87,430	**3,060**	**2,022**	**443**	**255**	**48**
Guarantees and commitments notional amount						
Guarantees (1)	**367**	**—**	**—**	**—**	**—**	**—**
Commitments (2)	**17,125**	**—**	**—**	**—**	**—**	**—**
	17,492	**—**	**—**	**—**	**—**	**—**

2021	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	1,117	—	—	—	—	—
Customer deposits	91,569	428	145	—	2	—
Amounts due to holding companies and fellow subsidiaries	2,803	141	1,960	77	53	—
Derivatives	12	50	308	161	136	62
Notes in circulation	2,144	—	—	—	—	—
Lease liabilities	3	8	19	15	27	32
	97,648	627	2,432	253	218	94
Guarantees and commitments notional amount						
Guarantees (1)	283	—	—	—	—	—
Commitments (2)	22,331	—	—	—	—	—
	22,614	—	—	—	—	—

(1) RBS plc is only called upon to satisfy a guarantee when the guaranteed party fails to meet its obligations. RBS plc expects most guarantees it provides to expire unused.
(2) RBS plc 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. RBS plc does not expect all facilities to be drawn, and some may lapse before drawdown.

11 Derivatives

RBS plc uses derivatives to manage its own risk such as foreign exchange risk and interest rate risk.

	2022			2021		
	Notional £m	Assets £m	Liabilities £m	Notional £m	Assets £m	Liabilities £m
Exchange rate contracts	8	—	—	—	—	—
Interest rate contracts	43,140	498	2,683	41,023	220	827
		498	2,683		220	827

For accounting policy information see Accounting policies notes 3.4 and 3.7.

RBS plc applies hedge accounting to reduce the accounting mismatch caused in the income statement by using derivatives to hedge interest rate risk foreign exchange and the foreign exchange risk associated with net investment and foreign operations.

RBS plc's interest rate hedging relates to the management of RBS plc's non-trading structural interest rate risk, caused by the mismatch between fixed interest rates and floating interest rates on its financial instruments. RBS plc 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 document 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, 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 RBS plc 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, EURIBOR and SONIA. These risk components are identified using the risk management systems of RBS plc and encompass the majority of the hedged item's fair value risk.

Exchange rate risk also arises in RBS plc 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.

For all cash flow hedging and fair value hedge relationships RBS plc 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. The method used for comparing movements is either regression testing or the dollar offset method. The method for testing effectiveness and the period over which the test is performed depends on the applicable risk management strategy and is applied consistently to each risk management strategy. Hedge effectiveness is assessed on a cumulative basis and the determination of effectiveness is in line with the requirements of IAS39.

RBS plc 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.

11 Derivatives continued

Included in the table above are derivatives held for hedging purposes as follows:

	2022				2021			
	Notional £m	Assets £m	Liabilities £m	Change in fair value used for hedge ineffectiveness (1) £m	Notional £m	Assets £m	Liabilities £m	Change in fair value used for hedge ineffectiveness (1) £m
Fair value hedging - interest rate contracts	**3,985**	**190**	**109**	**332**	3,787	93	371	133
Cash flow hedging - interest rate contracts	**34,947**	**290**	**2,414**	**(1,814)**	25,805	78	330	(792)
	38,932	**480**	**2,523**	**(1,482)**	29,592	171	701	(659)

(1) The change in fair value used for hedge ineffectiveness includes instruments that were derecognised in the year.

The following table shows the period in which the notional of hedging contract ends:

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	20+ years £m	Total £m
Fair value hedging								
Hedging assets - interest rate risk	**7**	**58**	**250**	**208**	**481**	**740**	**289**	**2,033**
Hedging liabilities - interest rate risk	**—**	**1,537**	**415**	**—**	**—**	**—**	**—**	**1,952**
Cash flow hedging								
Hedging assets - interest rate risk	**525**	**4,393**	**12,704**	**12,461**	**1,748**	**—**	**—**	**31,831**
Average fixed interest rate (%)	***1.16***	***0.98***	***0.84***	***1.91***	***0.80***	**—**	**—**	***1.28***
Hedging liabilities - interest rate risk	**233**	**1,500**	**49**	**468**	**866**	**—**	**—**	**3,116**
Average fixed interest rate (%)	***0.38***	***1.00***	***0.82***	***0.79***	***0.78***	**—**	**—**	***0.86***
2021								
Fair value hedging								
Hedging assets - interest rate risk	11	18	154	283	555	755	268	2,044
Hedging liabilities - interest rate risk	—	—	1,743	—	—	—	—	1,743
Cash flow hedging								
Hedging assets - interest rate risk	—	—	10,150	10,936	2,203	—	—	23,289
Average fixed interest rate (%)	—	—	*0.85*	*0.57*	*0.91*	—	—	*0.72*
Hedging liabilities - interest rate risk	—	—	1,233	49	1,234	—	—	2,516
Average fixed interest rate (%)	—	—	*0.24*	*0.82*	*0.67*	—	—	*0.46*

11 Derivatives continued

The table below analyses assets and liabilities, including intercompany subject to hedging derivatives:

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 on hedged items ceased to be adjusted for hedging gains or losses £m
Fair value hedging - interest rate				
Loans to customers - amortised cost	1,831	(216)	(437)	11
Other financial liabilities - debt securities in issue	408	(12)	25	—
Subordinated liabilities	1,507	(32)	88	—
Total	1,915	(44)	113	—
Cash flow hedging - interest rate				
Loans to banks and customers - amortised cost (2)	31,831		2,006	
Bank and customer deposits	3,116		(210)	
Total	34,947		1,796	

2021	£m	£m	£m	£m
Fair value hedging - interest rate				
Loans to customers - amortised cost	2,289	228	(182)	12
Other financial liabilities - debt securities in issue	387	12	14	—
Subordinated liabilities	1,427	53	54	—
Total	1,814	65	68	—
Cash flow hedging - interest rate				
Loans to banks and customers - amortised cost	23,289		826	
Bank and customer deposits	2,516		(63)	
Total	25,805		763	

(1) The change in fair value used for hedge ineffectiveness includes instruments that were derecognised in the year.
(2) Includes cash and balances at central banks.

11 Derivatives continued

The following shows analysis of the pre-tax cash flow hedge reserve:

	2022 Cash flow hedge reserve £m	2021 Cash flow hedge reserve £m
Continuing		
Interest rate risk	**(2,058)**	(277)
De-designated		
Interest rate	**4**	26
Total	**(2,054)**	(251)

	2022 Cash flow hedge reserve £m	2021 Cash flow hedge reserve £m
Amount recognised in equity		
- Interest rate risk	**(1,952)**	(564)
Total	**(1,952)**	(564)
Amount transferred from equity to earnings		
- Interest rate risk to net interest income	**135**	(167)
- Interest rate risk to non-interest income (1)	**14**	(35)
Total	**149**	(202)

(1) There was £14 million (2021 - £35 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:

	2022 £m	2021 £m
Fair value hedging		
Loss on the hedged items attributable to the hedged risk	**(324)**	(114)
Gain on the hedging instruments	**332**	133
Fair value hedging ineffectiveness	**8**	19
Cash flow hedging		
Interest rate risk	**(18)**	(29)
Cash flow hedging ineffectiveness	**(18)**	(29)
Total	**(10)**	(10)

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 (fair value hedge);
- differences in the repricing basis between the hedging instrument and hedged cash flows (cash flow hedge); and
- upfront present values on the hedging derivatives where hedge accounting relationships have been designated after the trade date (cash flow hedge and fair value hedge).

12 Loan impairment provisions

Loan exposure and impairment metrics

The table below summarises loan and related credit impairment measures within the scope of ECL framework.

	2022 £m	2021 £m
Loans - amortised cost		
Stage 1	**30,433**	36,097
Stage 2	**8,094**	6,501
Stage 3	**1,009**	989
Inter-group	**21,638**	23,821
	61,174	67,408
ECL provisions (2)		
Stage 1	**88**	47
Stage 2	**177**	282
Stage 3	**372**	373
Inter-group	**27**	5
	664	707
ECL provision coverage (1)		
Stage 1 (%)	**0.29**	0.13
Stage 2 (%)	**2.19**	4.34
Stage 3 (%)	**36.87**	37.71
Inter-group (%)	**0.12**	0.02
	1.61	1.61
Impairment (releases)/losses		
ECL (release)/charge		
Stage 1	**(57)**	(258)
Stage 2	**23**	(98)
Stage 3	**30**	5
Inter-group	**24**	(9)
	20	(360)
Amounts written off	**78**	305

(1) ECL provisions coverage is calculated as total ECL provisions divided by third party loans – amortised cost and FVOCI.
(2) The table shows gross loans only and excludes amounts that are outside the scope of the ECL framework. Refer to page 32 for 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 totalling £33.7 billion (2021 – £37.5 billion).

Credit risk enhancement and mitigation

For information on credit risk enhancement and mitigation held as securities, refer to Risk and capital management – Credit risk enhancement and mitigation section.

Critical accounting policy: Loan impairment provisions

Accounting policy 2.2 sets out how the expected loss approach is applied. At 31 December 2022, customer loan impairment provisions amounted to £664 million (2021 - £707 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.

13 Investments in Group undertakings

Investments in Group undertakings are carried at cost less impairment losses as follows.

	2022 £m	2021 £m
At 1 January	6	28
Disposals	-	(19)
Impairment of investments	-	(3)
At 31 December	6	6

The 2021 disposal was related to the RBS plc disposal of its subsidiary Adam & Company Investment Management Limited.

The table below shows the principal subsidiaries of RBS plc. Their capital consists of ordinary shares which are unlisted. All of the subsidiary undertakings are owned by RBS plc directly and have an accounting reference date of 31 December. Refer to Note 28 for details of all subsidiary undertakings.

	Nature of business	Country of incorporation and principal area of operation
The One Account Limited	Service company	Great Britain

14 Other assets

	2022 £m	2021 £m
Other financial assets	68	85
Investment in Group undertakings (Note 13)	6	6
Property, plant and equipment	120	145
Accrued income	42	43
Deferred tax (Note 7)	1,048	289
Acceptances	85	154
Other assets	13	16
	1,382	738

15 Subordinated liabilities

	2022 £m	2021 £m
Dated loan capital	1,507	1,427
	1,507	1,427

Dated loan capital		First call date	Maturity date	Capital treatment	2022 £m	2021 £m
$1,850 million	5.182% notes	Dec-23	Dec-28	Tier 2	1,507	1,427
					1,507	1,427

16 Other liabilities

	2022 £m	2021 £m
Lease liabilities	**107**	133
Provisions for liabilities and charges	**127**	201
Accruals	**57**	104
Deferred income	**45**	49
Current tax	**265**	234
Acceptances	**85**	154
Other liabilities	**22**	25
	708	900

Provisions for liabilities and charges	Redress and other Litigation (1) £m	Property £m	Financial commitments and guarantees £m	Other £m	Total £m
At 1 January 2022	**114**	**46**	**23**	**18**	**201**
Expected credit losses impairment release	**—**	**—**	**(5)**	**—**	**(5)**
Charge to income statements	**24**	**2**	**—**	**1**	**27**
Releases to income statement	**(12)**	**(17)**	**—**	**(8)**	**(37)**
Provisions utilised	**(42)**	**(8)**	**—**	**(9)**	**(59)**
At 31 December 2022	**84**	**23**	**18**	**2**	**127**

(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.

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 policy note 2.3.

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 RBS plc 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.
- Property: This includes provision for contractual costs associated with vacant properties.
- Litigation and other provisions: These materially comprise provisions for property onerous contracts and restructuring costs. Onerous contract provisions comprise an estimate of the costs involved with 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. For further information in relation to legal proceedings and discussion of the associated uncertainties, refer to Note 20.

17 Share capital and reserves

Allotted, called up and fully paid	2022 £m	2021 £m	Number of shares 2022 000s	Number of shares 2021 000s
Ordinary shares of £1	**20**	20	**19,500**	19,500

Ordinary shares

No ordinary shares were issued during 2022 or 2021.

In 2022, RBS plc paid an ordinary dividend of £0.85 billion to NWH Ltd (2021 - £2.1 billion).

Paid-in equity

Comprises equity instruments issued by RBS plc other than those legally constituted as shares.

Additional Tier 1 instruments issued by RBS plc having the legal form of debt are classified as equity under IFRS. The coupons on these instruments are non-cumulative and payable at RBS's discretion.

	2022 £m	2021 £m
Additional Tier 1 instruments		
US$1,350 billion 3.9683% instruments callable August 2023 (1)	**470**	969
GBP£500 million 6.8543% instruments callable May 2027	**500**	-
	970	969

(1) Coupon reset on 15th August 2022 from 6.49% to 3.9683%. Instrument was partially redeemed in June 2022.

Capital recognised for regulatory purposes cannot be redeemed without Prudential Regulation Authority consent. This includes ordinary shares and additional Tier 1 instruments.

For accounting policy information see Accounting policy 3.6.

18 Unconsolidated structured entities

RBS plc has lending to unconsolidated structured entities of £122 million (2021 - £129 million) and loan commitments of £46 million (2021 – £7 million).

19 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 based on the PRA transitional basis for RBS plc are set out below.

	2022 £m	2021 £m
Shareholders' equity (excluding non-controlling interests)		
Shareholders' equity	2,661	3,747
Other equity instruments	(970)	(969)
	1,691	2,778
Regulatory adjustments and deductions		
Cash flow hedging reserve	1,479	168
Deferred tax assets	(439)	(161)
Prudential valuation adjustments	(2)	(4)
Adjustment under IFRS 9 transitional arrangements	71	126
Foreseeable dividends	(650)	(225)
Insufficient coverage for non-performing exposures	(1)	—
	458	(96)
CET1 capital	2,149	2,682
Additional Tier 1 (AT1) capital		
Qualifying instruments and related share premium	970	969
	970	969
Tier 1 capital	3,119	3,651
Qualifying Tier 2 capital		
Qualifying instruments and related share premium	1,537	1,372
Other regulatory adjustments	59	83
Tier 2 capital	1,596	1,455
Total regulatory capital	4,715	5,106

In the management of capital resources, RBS 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%. RBS plc has complied with the PRA's capital requirements throughout the year.

A number of subsidiaries and sub-groups within NatWest 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.

20 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 RBS plc 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 RBS plc's expectation of future losses.

For accounting policy information see Accounting policy note 2.3.

	2022 £m	2021 £m
Contingent liabilities and commitments		
Guarantees	**367**	283
Other contingent liabilities	**441**	498
Standby facilities, credit lines and other commitments	**17,202**	22,430
	18,010	23,211

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. RBS plc'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 RBS plc's normal credit approval processes.

Guarantees – RBS plc gives guarantees on behalf of customers. A financial guarantee represents an irrevocable undertaking that RBS plc will meet a customer's specified obligations to a third party if the customer fails to do so. The maximum amount that RBS plc could be required to pay under a guarantee is its principal amount as in the table above. RBS plc 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 RBS plc 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 RBS plc 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.

Capital Support Deed

RBS plc, together with certain other subsidiaries of NatWest Holdings Ltd, is party to a Capital Support Deed (CSD). Under the terms of the CSD, RBS plc 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 RBS plc's capital resources in excess of the capital and financial resources needed to meet its regulatory requirements. RBS 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 RBS plc from other parties to the CSD becomes immediately repayable, such repayment being limited to RBS plc's available resources.

Trustee and other fiduciary activities

In its capacity as trustee or other fiduciary role, RBS plc may hold or place assets on behalf of individuals, trusts, companies, pension schemes and others. The assets and their income are not included in its financial statements. RBS plc earned fee income of £5 million (2021 - £8 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

20 Memorandum items continued

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

RBS plc and certain members of NatWest 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.

NatWest 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 NatWest 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. NatWest 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 NatWest 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 NatWest 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 NatWest Group has recognised. Where (and as far as) liability cannot be reasonably estimated, no provision has been recognised. NatWest 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 16 for information on material provisions.

Matters which are, or could be material, in which RBS plc 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.

Litigation

Claims by customers regarding NatWest Group's Global Restructuring Group (GRG)

NatWest Group is dealing with a number of active and threatened litigation claims brought by current and former customers of RBS plc and other NatWest Group companies on a wide variety of bases who allege that they have suffered losses as a result of NatWest Group's treatment of SME customers by its former Global Restructuring Group. These include customers who were ineligible, or chose not, to pursue a complaint through NatWest Group's designated complaints process for SME customers, which is now closed.

RBS plc remains exposed to potential new litigation claims from customers who are dissatisfied with their complaint outcome or who were ineligible to complain.

Regulatory matters

NatWest Group's businesses and financial condition can be affected by the actions of various governmental and regulatory authorities in the UK, the US, the EU and elsewhere. NatWest Group has 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. NatWest 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 NatWest Group, remediation of systems and controls, public or private censure, restriction of NatWest 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 RBS plc, 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.

RBS plc 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.

21 Analysis of changes in financing during the year

	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
At 1 January	989	989	1,427	1,464	387	397
Issue of paid-in equity	500	—				
Redemption of paid-in equity	(540)	—				
Interest on subordinated liabilities			(78)	(70)		
Interest on MRELs					(16)	(16)
Net cash flows from financing activities	(40)	—	(78)	(70)	(16)	(16)
Effects of foreign exchange			165	16	45	4
Changes in fair value of subordinated liabilities and MRELs			(85)	(53)	(25)	(14)
Interest on subordinated liabilities and MRELs			78	70	17	16
Other	41	—	—	—	—	—
At 31 December	990	989	1,507	1,427	408	387

(1) Subordinated liabilities are included within amount due to holding companies and fellow subsidiaries.
(2) MRELs balances are included in amounts due to holding companies and fellow subsidiaries.

22 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.

	2022 £m	2021 £m
At 1 January	60,208	46,426
Net (decrease)/increase in cash and cash equivalents	(6,579)	13,782
At 31 December	53,629	60,208
Comprising:		
Cash and balances at central banks	34,323	38,014
Loans to banks including intragroup balances	19,306	22,194
Cash and cash equivalents	53,629	60,208

23 Directors' and key management remuneration

The composition of RBS 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 RBS 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 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 RBS plc are also directors of NatWest Group plc, details of their share interests can be found in the NatWest Group 2022 Annual Report and Accounts 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.

24 Transactions with directors and key management

At 31 December 2022, amounts outstanding in relation to transactions, arrangements and agreements entered into by RBS plc, as defined in UK legislation, were £9,636,586 in respect of loans to eight persons who were directors of RBS plc at any time during the financial period.

For the purposes of IAS 24 Related party disclosures, key management comprises directors of RBS plc and members of RBS plc's 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 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.

25 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%.

RBS plc 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 together with banking transactions such as loans and deposits undertaken in the normal course of banker-customer relationships.

Bank of England facilities

RBS plc may participate in a number of schemes operated by the Bank of England in the normal course of business. RBS plc is a UK authorised institution and is 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. RBS plc also has access to Bank of England reserve accounts: sterling current accounts that earn interest at the Bank of England base rate.

Other related parties

In its role as providers of finance, RBS plc provides development and other types of capital support to businesses. These investments are made in the normal course of business. To further strategic partnerships, RBS plc 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.

Other net income/(expenses) represents the share of post-tax results of associates and joint ventures, profit (or loss) on disposal of subsidiaries, associates and joint ventures, and gains on acquisitions.

Holding companies and fellow subsidiaries

Transactions RBS plc enters with its holding companies and fellow subsidiaries also meet definition of related party transactions. The table below discloses transactions between RBS plc and fellow subsidiaries of NatWest Group.

	2022 £m	2021 £m
Interest receivable	**320**	35
Interest payable	**(107)**	(60)
Fees and commissions receivable	**36**	1
Fees and commissions payable	**(27)**	(48)
Other administrative expenses (1)	**(759)**	(763)
	(537)	(835)

(1) Includes internal service recharges of £759m

Amount due from/to holding companies and fellow subsidiaries are shown in Note 9. During the year Coutts & Company acquired the Adam & Company business from The Royal Bank of Scotland plc for a net consideration value of £270m. This was acquired as a business under common control and the acquisition method was applied. 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.

26 Ultimate holding company

RBS plc's ultimate holding company is NatWest Group plc~~,~~ and its intermediate parent company is NatWest Holdings Ltd ('NWH Ltd or 'the intermediate holding company').

NatWest Group plc is incorporated in the United Kingdom registered in Scotland and NWH Ltd is registered in England. As at 31 December 2022, NatWest Group plc heads the largest group in which RBS plc is consolidated. Copies of the consolidated accounts 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 the ultimate holding company and is therefore RBS plc's ultimate controlling party.

27 Post balance sheet events

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.

28 Related undertakings

Legal entities and activities at 31 December 2022

In accordance with the Companies Act 2006, RBS plc's related undertakings and the accounting treatment for each are listed below. All undertakings are wholly-owned by RBS plc or subsidiaries of RBS plc and are consolidated in NatWest Group's accounts by reason of contractual control (Section 1162(2) CA 2006), unless otherwise indicated. RBS plc 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 RBS plc and fully consolidated for accounting purposes

Entity Name	Activity	Regulatory treatment	Notes
The One Account Ltd	BF	FC	(1)

The following table details active related undertakings incorporated in the UK where RBS plc ownership is less than 100%.

Entity Name	Accounting treatment	Regulatory treatment	Group %	Notes
Oaxaca Ltd	OTH	IA	0	(2)

Key:
BF Banking and financial institution
FC Full consolidation

	Registered addresses	Country of incorporation
(1)	250 Bishopsgate, London, EC2M 4AA, England	UK
(2)	5 Little Portland Street, London, W1W 7JD	UK