NatWest Group

NatWest Markets Plc

2022 Annual Report and Accounts

Contents

Approval of Strategic report

The Strategic report for the year ended 31 December 2022 set out on pages 2 to 28 was approved by the Board of Directors on 16 February 2023.

By order of the Board

Company Secretary
Scott Gibson
16 February 2023

Chairman
Frank Dangeard

Executive Directors
Robert Begbie, CEO
Simon Lowe, CFO

Non-Executive Directors
Vivek Ahuja
Tamsin Rowe
Anne Simpson

Presentation of information

NatWest Markets Plc ('NWM Plc') is a wholly owned subsidiary of NatWest Group plc or 'the ultimate holding company'. The NatWest Markets Group ('NWM Group') comprises NWM Plc and its subsidiary and associated undertakings.

The term 'NatWest Group' comprises NatWest Group plc and its subsidiary and associated undertakings.

The term 'NatWest Markets' refers to the NatWest Markets operating segment representing the primary business activities for NWM Group. This segment also forms part of the NatWest Group Commercial & Institutional segment.

Performance highlights

Against a backdrop of volatile market conditions throughout 2022, we continued to support our customers' evolving needs with innovative financing and risk solutions. We progressed on delivering an integrated customer proposition and improved connectivity across the newly formed NatWest Group Commercial & Institutional segment, which aims to enable us to unlock further opportunities and to build even deeper relationships with NatWest Group customers in 2023. In a challenging environment, we also made good progress on building a sustainable business and creating a platform for growth in areas where we plan to expand.

NWM Group reported an operating loss before tax for the year ended 31 December 2022 of £447 million, compared with a loss of £714 million for the year ended 31 December 2021. Higher income largely reflected improved performance in Fixed Income, in addition to stronger performance in our Currencies and Capital Markets businesses in 2022. Other operating expenses for the year under review were £1,048 million compared with £1,167 million for the year ended 31 December 2021, primarily reflecting higher costs recognised in the prior year in relation to technology investment and the refocusing of NWM Group.

Please refer to the Financial review section on page 29 for further details on the financial performance for the period.

Financial highlights

	2022 £m	2021 £m
Total income	**689**	401
Other operating expenses (1)	**1,048**	1,167
Income excl. asset disposals/strategic risk reduction and OCA (2)	**695**	459
Operating loss before tax	**(447)**	(714)

Capital and leverage highlights (3)

	2022	2021
CET1 ratio (3)	**17.2%**	17.9%
MREL ratio (3)	**40.4%**	42.1%
Leverage ratio (4)	**5.4%**	4.3%
Liquidity coverage ratio	**253%**	205%
RWAs	**£21.4bn**	£22.7bn

ESG highlights

	2022	2021
Climate and sustainable funding and financing (5)	**£12.2bn**	£9.7bn

(1) Excludes litigation and conduct costs.
(2) Asset disposals/strategic risk reduction includes the costs of exiting positions and the impact of risk-reduction transactions entered into as part of the optimisation of the entity's capital usage. OCA refers to own credit adjustments.
(3) These metrics are shown for NWM Plc. Capital, leverage and risk weighted assets (RWAs) are based on Prudential Regulation Authority (PRA) transitional arrangements for NWM Plc. Regulatory capital is monitored and reported at NWM Plc level. CET1 stands for Common Equity Tier 1 capital and MREL refers to the minimum requirement for own funds and eligible liabilities.
(4) Following the Financial Policy Committee's planned review of the UK's leverage ratio framework, the PRA introduced changes to the framework from 1 January 2022. The leverage ratio for 31 December 2022 in the above table reflects the UK leverage ratio for NWM Plc, as per the new framework. As at 31 December 2021, the UK leverage ratio was 4.8%, which was calculated under the prior year's PRA UK leverage methodology.
(5) This comprises funding and financing for climate and sustainable finance to support transition towards a net-zero and climate-resilient economy. NatWest Group uses its climate and sustainable funding and financing inclusion criteria (CSFFI criteria) to determine the assets, activities and companies that are eligible to be counted towards its climate and sustainable funding and financing targets.

Outlook (1,2)

We aim to generate sustainable and attractive returns over the medium term, with efficient capital usage.

Medium-term outlook

Metric (3)	Estimate
CET1 ratio	~14%
MREL ratio (4)	>30%
Leverage ratio	>4%

NWM Plc 2023 funding plan targets £3–5 billion of public benchmark issuance.

(1) This supersedes all prior guidance.
(2) The guidance, targets, expectations and trends discussed in this section represent management's current expectations and are subject to change, including as a result of the factors described in the 'Risk factors' section in this document. These statements constitute forward-looking statements. Refer to 'Forward-looking statements' in this document.
(3) All metrics presented relate to NWM Plc.
(4) Includes total regulatory capital, non-eligible capital and down streamed internal MREL.

Chief Executive's review

2022 has been another challenging year and I am proud of the way we have supported our customers and managed risk in an uncertain economic environment.

Delivering on our strategy of sustainable growth

Our total income was £689 million and the operating loss before tax for the year was £447 million. This reflected a stronger current year performance compared to 2021, largely driven by improved performance in Fixed Income against volatile market conditions, in addition to stronger performance in both Currencies and Capital Markets. We continued to reduce operating costs and progressed in closing legacy matters. We returned £430 million of capital to NatWest Group via dividends during the year up to 31 December 2022. We maintained a robust capital position and reported a strong CET1 ratio of 17.2% and leverage of 5.4%, with our risk-weighted assets (RWAs) reducing slightly to £21.4 billion reflecting lower levels of counterparty credit and operational risk, offset partially by increases in credit and market risk.

Building closer customer relationships

The creation by NatWest Group of the Commercial & Institutional segment has enhanced our ability to work across NatWest Group to deliver on opportunities including revenue growth. We've onboarded approximately 650 additional NatWest Holdings Commercial customers to NatWest Markets for foreign exchange services and are working closely with our colleagues in the Wealth segment on further foreign exchange growth opportunities. We have developed our Capital Markets business through private financing and continued to support the growth of our funds business.

Supporting climate transition

We've continued to support our customers' transition to net zero as well as their broader ESG ambitions and targets. In 2022, we completed £12.2 billion of climate and sustainable funding and financing, contributing to the NatWest Group target of £100 billion aimed to be delivered between 1 July 2021 and the end of 2025.

Our progress has also been recognised externally with multiple awards including at the Environmental Finance Bond Awards and the Global Capital Covered Bond Awards.

NatWest Group was an active contributor at COP27 and I was pleased to support discussions with customers, other financial institutions and industry groups on how banks can help finance the transition to net zero.

Progressing our digital agenda

Responding to and anticipating our customers' digital needs will be important if we're to differentiate ourselves in the industry. Financial markets are increasingly embracing distributed ledger technology and the creation of our Digital Capital Markets team is helping us to innovate in this exciting growth area. For example, we delivered two successful pilots of a cross-ledger debt issuance during the year. We're also continuing to digitise and automate processes to enhance the customer experience.

Creating an inclusive, purpose-led culture

I'm pleased with the progress we've made on instilling a positive attitude to progress, change and improvement across the business. One of the ways we've done this is by establishing a Diversity, Equity and Inclusion Action Committee to share best practice and agree and drive an action-orientated approach to how we attract, develop and retain colleagues.

I believe that in 2023 we will be in a strong position to support the Commercial & Institutional segment by delivering our products and capabilities to more customers. This will help generate the sustainable growth we are targeting and ultimately drive value for all our stakeholders.

Robert Begbie
Chief Executive Officer

Our purpose framework

Our purpose
As part of NatWest Group, we are aligned to its purpose, which informs everything we do. We aim to be the partner of choice to meet the financial markets needs of NatWest Group's customers, knowing that when they thrive, so do we. By providing the expertise, global footprint and products that our customers need, it enables us to drive sustainable long-term returns for our business.

Our stakeholders
As a purpose-led organisation, we aim to balance the different interests of all our stakeholders – customers, colleagues, communities and shareholders – in our decision-making, especially when there are difficult choices to be made.

Following our successful purpose workshops in 2021, in 2022 we built upon this with structured CEO engagement. We developed a quarter-on-quarter approach for embedding purpose-driven decision-making into fora such as the Reputational Risk Committee.

Our growth strategy
Our strategy for growth ensures that we are focused on what we believe is relevant and right for our customers, society and the environment. It focuses on how we plan to grow our business and financial returns to create long-term sustainable value as part of the Commercial & Institutional segment. We also aim to maintain our leadership ambition in climate and sustainable funding and financing and continue to drive innovation in this area. Finally, we plan to work together across the segment, leveraging our global platform and continuing to develop and maintain our purpose-driven culture.

Our values
Our values are at the heart of how we deliver our purpose-led strategy. In early 2022, having engaged with colleagues, customers, community stakeholders and suppliers, we launched our refreshed values of being inclusive, curious, robust, sustainable and ambitious. These refreshed values now form an integral part of our cultural identity.

Our positive influence
We recognise the huge responsibilities that our role brings, and this informs our considered approach. From supporting local housing associations to funding initiatives for sustainability-based targets across our global clients, we aim to continue to have a positive influence on the environment and wider society.

Aligned to NatWest Group's purpose are three focus areas where we believe we can make a long-term, meaningful contribution to our customers, colleagues and communities:

Climate
Supported by our dedicated Climate and Sustainability teams, we plan to continue to grow our climate and ESG activities, and aim to be a leader in climate and sustainable funding and financing.

Enterprise
We continue to serve more of our core NatWest Group customers, removing barriers to enterprise and providing businesses in the UK with the backing they need to grow.

Learning
We are creating the conditions that allow our colleagues to thrive personally and professionally, while continuing to share our industry insight with our customers.

Our business model: How we create and protect value

Our purpose:

NWM Group aims to be the partner of choice to meet the financial markets needs of NatWest Group customers.

1. Our key strengths and resources	– Digitally led Currencies and Risk Solutions businesses that are well connected across NatWest Group, operating seamlessly to deliver for customers. – Innovative Capital Markets platform with industry-leading structuring and distribution expertise, backed by climate and ESG capabilities. – Clear ambition to play a leading role in climate, ESG and award-winning innovation in sustainable financing. – Talented and diverse workforce with an inclusive and collaborative culture. – Strong capital and liquidity positions.
2. Our business	**Our customers** As part of NatWest Group, we support our corporate and institutional customers. We work in close collaboration with teams across NatWest Group to provide capital markets and risk management solutions to its customers, and we aim to be the partner of choice for our customers' financial markets needs. **Our operations** We think and act as one bank for our customers, leveraging NatWest Group's expertise and shared services. NWM Group is headquartered in the UK with trading hubs in Asia, Europe and the US. Financial markets access is offered by NWM Group across NatWest Markets Plc (NWM Plc) and its subsidiaries, including NatWest Markets Securities Inc. and NatWest Markets N.V. (NWM N.V.). **Our products and solutions** We provide liquidity and risk management in our Currencies and Fixed Income businesses through a combination of voice and electronic distribution channels. Through our Capital Markets business, we provide an integrated proposition across financing, solutions and advisory services. We understand the power of building deep and enduring relationships. One of the ways we do this is by providing relevant market colour, content and ideas to customers. Our strategists and content experts across Currencies, Fixed Income and Capital Markets offer industry and economic insights in the key economies where our customers do business. We have a sharp focus on digitisation and automation and we offer a range of digital foreign exchange (FX), fixed income, risk management and international payments options which use our applications or APIs (application programme interfaces), including Agile Markets, FXmicropay and Rate Manager. – Fixed Income We have long-standing expertise in the fixed income markets and offer cash bond, repo and interest rate derivatives, with a focus on sterling, euros and US dollars, that supports our customers' financing and hedging needs. In addition, we provide liquidity and credit for investment-grade and high-yield bonds and loans for both financial institutions and corporate issuers. – Currencies We are an award-winning foreign exchange service provider offering FX spot, forwards, cross-currency swaps and options, as well as an FX prime service and FX digital solutions. – Capital Markets We aim to be the partners of choice for our customers. We help them to access global debt capital markets across a wide variety of products and target markets, including bonds, loans, commercial paper, medium-term notes (MTNs), private placements, as well as via bespoke financing solutions and primary lending products. We also provide customers with thought leadership, advice and products to support their climate and ESG strategies through our ESG and Climate capital markets platform.

3. Value created for our stakeholders and society

Also refer to board engagement with key stakeholders on page 14.

NatWest Group

- Provides access to financial markets for NatWest Group customers, through an integrated proposition and expertise.
- Consistent return of capital to NatWest Group via dividends paid throughout 2022 totalling £430 million.

Customers

Our support for customers has been recognised by a number of industry awards, including:

- NatWest Group was awarded 'Green Bond of the Year for Financial Institutions', 'Social Bond of the Year for Financial Institutions' and 'Green Bond use of proceeds Innovation of the Year', while NatWest Markets won the award for 'Lead Manager of the Year, social bonds - local authority/municipality award' at the Environmental Finance Bond Awards 2022.
- NatWest Markets was named 'Best Sterling Lead Manager' and two deals which we supported as joint bookrunner were voted 'Best Sterling Deal' and 'Deal of the Year' at the Global Capital Covered Bond Awards 2022.
- NatWest Group was named 'Most Impressive Investment Bank for Corporate Green and ESG-Linked Bonds' and 'Most Impressive FIG House in Sterling' at the GlobalCapital Bond Awards 2022.
- NatWest Markets was recognised as a 2022 Greenwich Leader in United Kingdom Corporates FX Service Quality and awarded first place for the ninth year running in 2022.
- We are committed to investing in our workforce. Our integrated wellbeing strategy allows us to support colleagues, customers and communities, and is a key part of being a purpose-led organisation.

NatWest Markets investors

- We maintain a strong capital base and liquidity, providing confidence to existing and future investors on the stability of NWM Group as a business.

Community and environment

- We completed a total of £12.2 billion of climate and sustainable funding and financing (CSFF) in 2022, contributing a cumulative £15.5 billion towards the NatWest Group target of £100 billion aimed to be delivered between 1 July 2021 and the end of 2025.

Regulators and industry bodies

- We provide insights via our active participation in trade associations and industry-wide forums on key topics such as the final stages of the transition away from LIBOR (and in the US, SOFR or Secured Overnight Financing Rate), the EMIR REFIT (Regulatory Fitness and Performance Program) and sustainable funding and financing.
- For more details on our participation in industry-wide climate-related and ESG forums, refer to our Climate-related disclosures on page 18.

Strategic progress

A strategy to deliver our purpose and drive sustainable returns.

	Strategic priorities	Progress in the year	Our priorities
Supporting our customers	Work as part of One Bank to invest in growth areas that we believe matter the most to our customers.	– The establishment of the NatWest Group Commercial & Institutional segment provided a platform for us to deliver a more integrated experience for our customers and to grow our business across our product set. – We delivered growth through our corporate FX business, building on our existing commercial relationship and improving connectivity with our Wealth segment.	– Support the growth of our Commercial & Institutional customer businesses through collaboration with our Capital Markets, Sales & Trading teams. – Build on our momentum in addressing the climate challenge and other ESG matters, as well as our leading risk solutions proposition – leveraging Commercial & Institutional customer businesses to support the transition agenda for our customers.
Powered by innovation and partnership	Use technology, leverage our digital expertise and partner with leading external organisations to deliver excellent customer experience.	– We completed the implementation of our agreement with BNP Paribas for the provision of house futures and associated back-office services. – Following a successful pilot in 2021 we launched Collection ID, a foreign exchange service in approximately 40 currencies for multi-currency receipts, replacing the need for currency accounts and manual transfers, automating currency conversion, and providing transparent and competitive real-time FX rates for our customers. – Carbonplace was set up as a separate entity in December 2022 with a CEO and board, and with all nine founder financial institutions confirming their funding requirements. – Through our Digital Capital Markets business, we delivered two successful pilots of cross-ledger debt issuance and the related legal framework, which we can build on in 2023.	– Continue to explore opportunities to support customer needs through innovative technology solutions. – Carbonplace will deliver a production platform, build out functionality and onboard banks, exchanges and customers to the platform as it looks to grow and support the market for carbon credits. – Refine our digital issuance proposition and operational readiness for adoption.
Simple to deal with	Transform how we operate and simplify the business to improve both efficiency, and the customer and colleague experience.	– We continued to invest in our API-first approach, with over 10 APIs now on the Bank of APIs, supporting our FX and Rates businesses. – We have completed the vast majority of colleague migrations to the NatWest Group technology platform. This has simplified our technology estate and improved collaboration across teams. – In line with NatWest Group's strategy, Other operating expenses has reduced by £119 million reflecting progress made on underlying cost reductions.	– Enterprise-wide adoption of APIs and leverage those connections to deliver value to our customers. – Simplify our technology estate and ensure all our people have the technology they need to do their role most effectively.
Sharpened capital allocation	Demonstrate effective capital management by optimising risk-weighted assets (RWAs) and redeploying capital to our growth areas.	– Our Capital Management unit carefully managed capital allocation and prioritisation, optimising to support the growth of our segment customer businesses. – We returned £430 million of capital to NatWest Group via dividends during the year to 31 December 2022.	– Continue dividends/capital allocations to NatWest Group.

Underpinned by our commitment to sustainability and climate action.

Operating environment

NWM Group continues to adapt to evolving market trends.

The environment we operate in is constantly changing. Understanding the multiple influences on our business enables us to be prepared for change, to respond quickly and to create value for the long term.

Competitive landscape

Overview

NWM Group offers risk management, trading solutions and debt financing to both financial institutions and UK, European, and US corporate customers. It competes with large domestic banks, major international banks and a number of investment banks. During 2022 continued focus and investment to expand ESG and sustainable financing solutions, as well as a growing focus on risk management solutions for customers, have been common themes across corporate and investment banks. Competition also continues from non-bank liquidity providers using low-latency and algorithmic trading to participate in high-volume flow markets.

During 2022 there was solid performance across Fixed income, Currencies and Commodities (FICC) divisions in the industry, while mergers and acquisitions were subdued due to market uncertainty and declining initial public offering (IPO) valuations, with a particular impact on US banks compared to European banks. The market experienced stronger performance in currencies, which benefitted from heightened FX volatility. Institutions servicing debt capital markets saw increased issuance activity in the first half of the year, with the second half seeing more focused, sustainability-driven deal pipelines.

Our response

NWM Group continued to refine and innovate its products and services to support the needs of corporate and institutional customers. By doing so, we also looked to preserve strong market positions in FX and capital markets in our areas of focus, whilst also evolving our rates risk solutions offering to align with the needs of our customers.

Economy

Overview

NWM Group's activities primarily relate to the UK, EU and US, with the majority of its income from operations in the UK. In all of these regions economic growth slowed in the second half of 2022 as inflation and interest rates rose. Unemployment stayed low but asset markets displayed turbulence.

There were big shifts in interest rate expectations, as inflation looked set to be more entrenched than expected; and these shifts were associated with falls in bond prices. In the UK this was exacerbated by political instability and changes in the direction of fiscal policy, culminating in intervention in the gilt market by the Bank of England to restore financial stability. Sterling and the euro weakened against the dollar before recovering somewhat in the fourth quarter. Major equity indices showed divergent trends, with US and Asian markets generally lower at the end of the year, compared to more modest declines and small gains in Europe and the UK.

Our response

NWM Group's business and financial position correlates to the economic conditions, particularly economic growth and the general level of interest rates and volume of transactions, prevailing in its primary markets. Despite an uncertain economic outlook, NWM Group remained focused on meeting the diverse needs of customers in the UK and internationally.

Regulation

Overview

NWM Group operates in a highly regulated market which continues to evolve in scope. It is primarily regulated by: the Financial Conduct Authority and Prudential Regulation Authority in the UK; De Nederlandsche Bank (Dutch Central Bank) and the Autoriteit Financiële Markten (the Dutch Authority for the Financial Markets) in The Netherlands, The Federal Financial Supervisory Authority ('BaFin') in Germany; the Securities and Exchange Commission, Commodity Futures Trading Commission, Chicago Mercantile Exchange, Federal Reserve Bank of New York, Office of the Comptroller of the Currency, and National Futures Association in the US; and the Monetary Authority of Singapore, Hong Kong Monetary Authority, and Japan Financial Services Agency in Asia.

Our response

NWM Group has a global framework to identify, capture and implement new and changing regulation across its international footprint. This includes an established prudential programme which coordinates the regulatory changes encompassed by the Finalised Basel III framework. The programme oversees required capital model changes, Internal Models Approach (IMA) eligibility and business readiness for the revised regulations as well as required changes across trading, risk, finance and technology; and simulates the capital impact of the revised regulations. We have direct engagement with regulatory bodies as and when required to keep them informed of ongoing compliance with regulations and market standards, as well as indirect contact via trade associations to help shape future regulatory requirements.

Climate change

Overview

NWM Group recognises that climate change is a global issue which has significant implications and inherent risks for our customers, colleagues, suppliers and partners, as well as for NWM Group itself. These risks are subject to increasing regulatory, political and societal change. Conversely, the requirement to reduce carbon emissions also means NWM Group has a significant role to play in areas such as the provision of climate and sustainable funding and financing and in seeking to help reduce the most harmful activities.

Our response

Throughout 2022, NWM Group continued to play a key role in delivering NatWest Group's climate ambition and climate-related targets, and in preparing NatWest Group's climate transition plan, while working to help our customers better understand the role they can play in tackling climate change.

For further details refer to 'Climate-related disclosures' section on page 18 and NatWest Group's 2022 Climate-related Disclosures Report on our corporate website at natwestgroup.com.

Technology

Overview

Economic and social impacts continue to influence the market resulting in industry challenges and opportunities – particularly around the use of technology to drive customer-centricity and profitability. The entry of fin techs and disruptors into the market ensures a focus on the digitalisation of products and services to meet customer demands through simple, frictionless customer experiences, including onboarding. Integration and use of data to personalise, tailor and enhance these experiences is critical to maximising this opportunity. The continued challenge of modernising and simplifying complex technology to enable agility and rapid response to evolve customer needs remains a priority across the industry.

Our response

In 2022 we continued to support the refocusing of NWM Group to meet the financial markets needs of NatWest Group customers as well as positioning ourselves for success as part of the Commercial & Institutional segment. Our key areas of focus remained: customers, colleagues and capability. We continued to focus on designing and delivering digital products and services for our customers – emphasising the opportunity to deliver capability across the bank. To support collaboration, we rationalised and simplified the colleague experience. Building capability, by enhancing the technology estate through simplification, modernisation and building resilience, continues to be a top priority. In line with the One Bank approach, we partner with our peers across NatWest Group and our technology suppliers to build a consistent NatWest technology platform.

Cyber threats

Overview

Cyberattacks pose a constant risk to our operations, both in relation to our own digital estate and indirectly with regards to our supply chain, reinforcing the importance of due diligence with the third parties on whom we rely.

Our response

We continue to invest significant resources in the development and evolution of cybersecurity controls. We perform rigorous due diligence and governance in relation to our third parties to ensure they are aligned to our security controls and practices.

Human rights and modern slavery

Overview

At NatWest Markets, we understand that businesses have an important role to play in promoting respect for human rights and we seek to promote and respect human rights through the continued implementation of policies and practices covering our colleagues, customers and suppliers.

Our response

Our approach to respecting human rights takes into account a range of international standards and principles including the UN Guiding Principles on Business and Human Rights (UNGPs). The NatWest Group Human Rights Position Statement was reviewed and updated in 2022.

Tackling modern slavery forms an integral part of our approach to human rights. For the fourth year, our NatWest Markets colleagues supported the TRIBE Freedom Foundation and raised over £18,000 to assist its anti-slavery projects, enabling long-term support for survivors and helping to prevent modern slavery.

Further information on our approach to human rights, including our annual Modern Slavery and Human Trafficking Statement, can be found at natwestgroup.com.

Risk overview

Effective risk management ensures that NWM Group delivers its long-term strategy and fulfils its purpose.

Our approach to risk management

NWM Group operates within NatWest Group's enterprise-wide risk management framework (EWRMF), which provides a common risk language and framework to facilitate effective risk management. The framework applies to all subsidiary legal entities and links each component of the framework to help deliver NWM Group's strategy in a safe and sustainable way.

Risk culture

NatWest Group's multi-year programme to enhance risk management capability at every level of the organisation continued in 2022, with an ongoing emphasis on risk culture. We refreshed our approach to risk culture under a new banner of intelligent risk-taking, intensifying focus on robust risk management behaviours and practices.

Evolving our risk culture, in line with our purpose-led strategy and our values across all three lines of defence, enables us to support better customer outcomes, develop a stronger and more sustainable business, and deliver an improved cost base. During 2022, five key outcomes to deliver on the intelligent risk-taking approach were also identified. These outcomes focused on behaviours, leadership, risk practices, decision-making, and roles and responsibilities.

Risk governance

NWM Group's governance structure facilitates sound risk management decision-making, in line with standards of good corporate governance. The Board oversees the effectiveness of the EWRMF across NWM Group and regularly assesses NWM Group's top and emerging threats. In addition, the key risk committees have the following roles and responsibilities:

- The Board Risk Committee (BRC) is responsible for providing oversight of current and potential future risk exposures, risk profile, risk appetite and risk culture. The BRC also oversees the effectiveness of the EWRMF across NWM Group, and reviews the performance of NWM Group relative to risk appetite and risk policy.
- The Executive Risk Committee (ERC) reviews, challenges and debates all material risk and control matters across NWM Group. It supports the CEO and other accountable individuals in discharging their risk management accountabilities. It considers NWM Group's risk profile relative to current and future strategy and oversees implementation of the risk management framework.

Three lines of defence

In line with industry best practice and sound risk governance principles, NWM Group adopts a three lines of defence model of risk governance. Everyone has a responsibility for the intelligent management of risk in day-to-day activities. This includes actively demonstrating risk practices and behaviours that are consistent with NWM Group's desired risk culture.

As the second line of defence, the Risk function has a clear mandate to undertake proactive risk oversight and monitoring of all risk management activities. The Risk function designs and maintains the EWRMF. The Chief Risk Officer leads the Risk function and plays an integral role in advising the Board on NWM Group's risk profile. This includes continuous monitoring activities to confirm that NWM Group engages in sustainable risk-taking activities in pursuit of strategic objectives.

Risk appetite

The risk appetite framework is a component of the EWRMF and establishes the extent of permissible risk-taking to support business outcomes and delivery of the strategy. The EWRMF sets out the requirements on how risk appetite is implemented through risk policies and standards and translated into operational procedures. This consistent approach is followed for all principal risks, frameworks, tools and techniques to support efficient and effective consolidation and interpretation.

Risk directory and principal risks

To ensure common language and a consistent approach across NatWest Group, the risk directory defines and documents all principal risks that NWM Group may face, categorised into financial and non-financial risks. The risk directory is an important component of the EWRMF, underpinning the linkage between strategy, risk appetite, risk reporting and governance.

Anti-bribery and corruption (ABC)

NWM Group is committed to ensuring it acts responsibly and ethically, both when pursuing its own business opportunities and when awarding business. Consequently, it has embedded appropriate policies, procedures and controls so that its employees, and any other parties it does business with, understand these obligations and abide by them whenever they act for NWM Group. ABC training is mandatory for all staff on an annual basis, with targeted training appropriate for certain roles. NWM Group considers ABC risk in its business processes including, but not limited to, corporate donations, charitable sponsorships, political activities and commercial sponsorships. Where appropriate, ABC contract clauses are required in written agreements.

Enterprise-wide risk management framework

Risk culture	Risk governance	Three lines of defence	Risk appetite

Common risk language, architecture and approach

Risk directory and principal risks

Financial risks	Non-financial risks
Traded market risk	Conduct risk
Non-traded market risk	Financial crime risk
Credit risk	Operational risk
Capital adequacy	Regulatory compliance risk
Liquidity and funding	Model risk
Earnings stability	Reputational risk
Pension risk	
Climate risk	

Top and emerging threats

Top and emerging threats are a component of NatWest Group's EWRMF and identify and manage threats that could have a significant negative impact on our ability to operate or deliver NWM Group's strategy. They are specific scenarios that usually combine elements of several principal risks and require a coordinated management response. Top and emerging threats are subject to regular review by senior governance forums including the Board, ERC and BRC.

Horizon scanning is an important activity, enabling NWM Group to identify, assess and mitigate top and emerging threats including via strategic planning. A range of methods are used including internal working groups, scenario analysis and consulting with external experts to ensure an external perspective is incorporated. In 2022, there was increased focus on assessing and understanding how different individual risks and threats are correlated with each other, including via scenario analysis. This approach helps to integrate strategic risk considerations into business processes and planning and strategy.

Additional areas of risk focus

Model risk

Models are increasingly used as a key basis for informing important business decisions. It is therefore necessary to understand the potential for adverse consequences from model errors and the potential for inappropriate use of modelled outputs. Ensuring models used by NWM Group are designed effectively – and that model assumptions and techniques remain fit for purpose – continued to be a key risk management focus in 2022. This included a programme of ongoing work to upgrade a number of models to improve performance and compliance with new regulatory requirements.

Compliance and conduct

Further progress was made on the compliance and conduct agenda during 2022. These align to a wider programme of work on the overall NatWest Group EWRMF.

In December 2021, NWM Plc pled guilty in the United States Federal Court to one count of wire fraud and one count of securities fraud. This related to historical spoofing conduct by former employees in US treasuries markets between January 2008 and May 2014 as well as, separately, during approximately three months in 2018. The Department of Justice (DoJ) monitor was appointed on 7 October 2022 in line with the plea agreement. It is envisaged that the DoJ will be engaged in working with NatWest Markets over a three-year period.

Top and emerging threats

NWM Group employs a regular process for identifying and managing its top and emerging threats. These are specific scenarios of concern that could have a significant negative impact on NWM Group's ability to operate or meet its strategic objectives. Details of these threats – and actions taken to mitigate them – are outlined below.

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

Top and emerging threats continued

Regulatory, legal and conduct risks	NWM Group is subject to extensive laws and regulations and disclosure requirements, which present ongoing compliance and conduct risks. NWM Group implements new regulatory requirements, where applicable, and incorporates the implications of related changes in its strategic and financial plans. NWM Group expects government and regulatory focus on the financial services industry to remain high for the foreseeable future.	Stable risk

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

Section 172 (1) Statement

Board engagement with key stakeholders

Here we highlight who our key stakeholders are, what matters to them, and how the NWM Plc Board engages with them to create value.

What matters to them	How we engaged	Outcome of engagement
Customers		
The NWM Plc Board is mindful of the significance of providing a reliable service to our customers and supporting them to manage their financial risks and achieve their short- and long-term financial goals.	– The NWM Plc Board received regular updates on customer issues via reports from the NWM Plc CEO and business heads, as well as briefings in relation to the establishment of the Commercial & Institutional segment. – The NWM Plc Board was updated on the nature and extent of financing activity provided to customers throughout the reporting period, during which there were significant changes in macroeconomic conditions. The NWM Plc Board was also regularly updated on resource allocation between different customer products and segments.	The NWM Plc CEO continued to meet with customers throughout the year to understand their needs and how best these can be supported by NWM Plc as part of the Commercial & Institutional segment.
Colleagues		
The NWM Plc Board appreciates the importance of a wide range of topics which impact the workforce, including diversity, equity and inclusion.	– The NWM Plc Board asked colleagues to share thoughts on what it's like to work for NatWest Group, including in NWM Plc, by completing colleague opinion surveys. – The NatWest Group-level Colleague Advisory Panel provided a mechanism for directors to engage directly with colleagues on topics of strategic interest. – Colleagues were encouraged to report any concerns relating to wrongdoing or misconduct using NatWest Group's whistleblowing service, Speak Up.	The NatWest Markets Diversity, Equity and Inclusion (DE&I) Action Committee feeds into the One Bank Diversity, Equity and Inclusion (DE&I) Action Committee which has been established to share best practice, agree and drive a focused, action orientated and impactful One Bank approach to Diversity, Equity and Inclusion.
Community and environment		
The NWM Plc Board recognises the growing importance of climate change and its potential impact on our society.	– The NWM Plc Board received regular updates on the progress made on green finance along with dedicated sessions held in relation to carbon markets, climate taxonomy and regulation, product labelling and reporting. – The NWM Plc CEO continued to lead a forum which oversees NWM Group's response to the risks posed by climate change and explores the opportunities for growth in the ESG market.	The NWM Plc Board is committed to managing the wider social, environmental and economic impacts of NWM Plc's operations.
Regulators		
The focus of regulatory engagement in 2022 was on the strategic change programme and Go-forward European strategy, the creation of the Commercial & Institutional segment, and trading, including rates and FX.	– The NWM Plc Board recognised the importance of open and continuous dialogue with regulators, and the NWM Plc Chairman, executive directors and non-executive directors had regular meetings with the PRA and FCA.	The NWM Plc Board received regular reports on regulatory matters and outcomes of engagement from the Chief Governance and Regulatory Officer.
Suppliers		
The NWM Plc Board is mindful of the role suppliers play in ensuring a reliable service is delivered to customers, and of the importance of our relationships with key suppliers.	– The NWM Plc Board regularly received analytics including updates on the transfer of support functions to NatWest Group and the creation of the Commercial & Institutional segment to improve operating efficiency. This allowed NWM Plc to be aware of and isolate any issues for remediation.	The NWM Plc Board received a post-functionalisation update. This noted material improvements in the application of policy requirements since ring-fencing and functionalisation, and provided an update on the monitoring of the performance of critical Internal Service Management services.

In this statement we describe how our 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 NWM Plc Board reviews and confirms its key stakeholder groups for the purposes of section 172 annually. For 2022, these remained: customers; colleagues; community and environment; regulators; and suppliers. Examples of how the NWM Plc Board has engaged with key stakeholders, including the impact of principal decisions, can be found in this statement and on page 14.

Supporting effective NWM Plc Board discussions and decision-making

Our purpose continues to influence NWM Plc Board discussions and decision-making.

Our NWM Plc Board and committee terms of reference reinforce the importance of considering both our purpose and the matters set out in section 172 in NWM Plc Board discussions and decision-making. Our NWM Plc Board and committee paper template includes a section for authors to explain how their paper aligns with our purpose, and a separate section for them to include an assessment of the relevant stakeholder impacts for the directors to consider.

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

Principal decisions

Principal decisions are those decisions taken by the NWM Plc Board that are material, or of strategic importance, to the company or are significant to NWM Plc's key stakeholders. Set out below is an example of the principal decisions taken by the NWM Plc Board during 2022.

The factors considered were:
- likely long-term consequences
- employee interests
- relationships with customers, suppliers and others
- the impact on community and environment
- maintaining a reputation for high standards of business conduct
- acting accordingly.

Case study: approval of the annual internal capital adequacy assessment process

What was the decision-making process?

In March 2022, the NWM Plc Board approved the annual internal capital adequacy assessment process (ICAAP) for onward submission to the PRA. The purpose of the ICAAP is to review the capital plan and its alignment to risk appetite along with the Pillar 2A and 2B assessments.

The NWM Plc Board Risk Committee and NWM Plc Assets and Liabilities Committee also reviewed the ICAAP in advance of the NWM Plc Board and recommended them to the NWM Plc Board for approval.

To support the NWM Plc Board in its decision-making, directors received comprehensive papers prepared by management which updated the NWM Plc Board on the vulnerabilities and scenarios used and considered in the ICAAP, along with the second line of defence opinion on the execution of the stress-testing process.

How did the directors fulfil their duties under section 172? How were stakeholder interests considered? How did the decision align to our purpose?

In approving the ICAAP, directors were mindful of their duties under section 172 including the likely long-term consequences of the decision and whether the ICAAP would support the long-term sustainable success of the company.

Substantial analysis was completed to evaluate options and assess the long-term impacts of the ICAAP on key stakeholder groups (including employees, customers, investors, suppliers and the community and environment), what their concerns were likely to be, and the key messages that would support engagement.

NWM Plc's ICAAP included a Ukraine scenario that laid out the observed near-term impacts, the elements of the conflict reflected in the assessments, and the plans around further scenario analysis.

There was also extensive engagement with representatives of NatWest Group to ensure that the approved ICAAP would support the delivery of NatWest Group's overarching purpose and promote a high standard of business conduct. It was confirmed that the NWM Plc ICAAP scenarios were also being used for NatWest Group ICAAP and NWM Plc results would be consolidated into the NatWest Group ICAAP. This engagement ensured that the NWM Plc Board understood the views of NatWest Group and could balance these with the interests of other stakeholders in making their decision to approve the NWM Plc ICAAP.

The assessments in the ICAAP help ensure the safety and soundness of the bank, through determining appropriate levels of capital to hold. The ICAAP thereby ensures that we can continue to provide vital services to the stakeholders that NWM Plc serves and achieve NWM Plc's purpose of championing the potential of people, families and businesses.

How was our purpose considered as part of the decision?

Considering relevant stakeholder interests is key to purposeful decision-making. The continued use of the purposeful decision-making page referred to previously provided the NWM Plc Board with a detailed analysis of stakeholder considerations and impacts using the five categories in the 'Blueprint for Better Business' framework, specifically: 'honest and fair with customers and suppliers'; 'a responsible and responsive employer'; 'a good citizen'; 'a guardian for future generations'; and 'delivering long-term sustainable performance'. The relevant stakeholders can then be considered depending on the decision in hand.

Actions and outcomes

The NWM Plc Board approved the annual internal capital adequacy assessment process at its meeting on 24 March 2022. The NWM Plc Board will continue to review and approve the ICAAP on an annual basis alongside the internal liquidity adequacy assessment process (ILAAP).

Our colleagues

By supporting our colleagues in what they do and by ensuring that NWM Group is a great place to work, we can champion their potential and collectively deliver our purpose.

Our Human Resources (HR) policies and procedures are, wherever possible, aligned to NatWest Group. Information on Group-wide progress can be found in the 'Colleagues' section in the NatWest Group 2022 Annual Report and Accounts.

Supporting our colleagues' wellbeing

During 2022, we have once again focused on supporting and championing development opportunities for all colleagues and people managers, including:

- Monthly events and engagement email summary sent to global Front Office and Chief Operating Office teams, spotlighting a wide range of personal development, extra-curricular and wellbeing initiatives happening across NWM Group and NatWest Group.
- Monthly 'This is us learning' newsletter which includes leaders sharing their thoughts on learning and development, a spotlight on a NatWest Group learning and development initiative and specific/ relevant learning for colleagues in the NatWest Markets business. The newsletter generated good engagement from colleagues.
- In-person training for people managers: 'Leading every day' had 60 attendees in 2022 and was dedicated to the fundamental best practices of being a line manager. These sessions will continue in 2023.
- 'Talent to watch' 2022: a development programme for those identified as upcoming talent by senior management in NatWest Markets, including a year of exclusive access to coaching sessions, 'Insights' training and Executive Committee networking opportunities.

Diversity, equity and inclusion (DE&I)

We are focused on developing a community that champions diversity while creating an inclusive workplace which gives our people the best opportunity to succeed and grow their careers.

In 2022 we established a Diversity, Equity and Inclusion Action Committee to share best practice, agree and drive an action-orientated approach with senior leadership accountability. The Committee comprises senior leaders and colleagues from across NWM Group, as well as representatives from our employee-led networks to ensure we continue to listen to our colleagues' voices. The committee is structured around three workstreams: attract, retain and develop.

Some key deliverables under these workstreams in 2022 included:

Attract: A collaboration with The Return Hub, an organisation that specialises in women returning from career breaks. We are working with The Return Hub on open senior vacancies to try to increase our pipeline of female talent and to help us to attract senior women back into the workplace.
Retain: A full review of our annual promotion process, with the panel now including Inclusion Interview Ambassadors. The ambassadors are accredited in interview support and sit on interview panels, helping to bring diversity, challenge and an objective lens to the decision-making process.
Develop: We have also introduced 'empty chairs' at senior-level meetings and committees. This initiative allows members of our talent population to attend key decision-making and leadership fora and provides an opportunity to ensure diversity of thought as well as increasing visibility of colleagues across the business. We are embedding team-based active bystander learning, helping to upskill and equip colleagues with the tools to help them to challenge non-inclusive behaviours.

Targets

We align to the NatWest Group target to have full gender balance in our CEO-3 and above global roles by 2030. Our NatWest Markets target for 2022 was 25%, and as at 31 December 2022, we had 26% women in our top three layers. The reported mean gender pay gap is 38.4% (median: 31.9%) and the mean gender bonus gap is 63.2% (median: 65.7%).

The NatWest Markets 2022 target relating to representation of colleagues from ethnic minority backgrounds in the top four leadership layers of the organisation was 20%. As at 31 December 2022, of 78% of colleagues who disclosed their ethnicity, we have 18% of colleagues from ethnic minority backgrounds in our CEO-4 and above positions.

We recognise we have more to do and continue to focus on the recruitment, retention and advancement of women and colleagues from ethnic minority backgrounds.

Learning and enterprise

We are guided by our purpose, with our areas of focus helping us create a positive impact. You can read about our climate focus from page 18.

As we look to support customers across the Commercial & Institutional segment with a deeper understanding of issues they are faced with, including both regulatory changes and global issues such as climate change – the focus areas of enterprise and learning are intrinsically linked.

Enterprise

We continue to work across NatWest Group to support initiatives which remove barriers to enterprise and provide businesses in the UK with the support they need to grow.

NatWest Group is one of the founding partners of the Sustainable Markets Initiative (SMI) and is a member of the Financial Services taskforce. The NatWest Markets business support SMI in a very practical way by seconding people each year into the SMI for them to place in their programme of work. We also work with the SMI and other members to review the actions we can take through our financing activity to support transformational change.

During 2022, one of the key examples of our focus on enterprise was at COP27, where the role of agriculture in the transition to net zero was very prominent. To explore this important topic, members of NatWest Markets and the broader Commercial & Institutional segment represented NatWest Group at a workshop that we ran in collaboration with another SMI taskforce, the Agri Business taskforce. The purpose of the session was to explore actionable steps for finance to take to support food systems change. Leaders came together from across the private sector to look at problems facing the agricultural sector. This allowed us to look at this issue from a variety of perspectives, considering both the short- and long-term impacts for enterprise, and to think creatively about financing solutions.

An example of how we are demonstrating support for this sector is our work with our customer, Compass (read more in the 2022 NatWest Group Annual Report and Accounts).

Learning

The creation of the Commercial & Institutional segment has further supported the One Bank mindset and allowed us to unlock opportunities across the bank. We recognise that we must first upskill colleagues so that they feel confident talking to their customers about broader products and services. We have continued to do this both with NatWest Markets colleagues and also with colleagues from across the bank.

ESG and climate

We worked with a combination of third parties and our own subject matter experts to create a training programme in 2022 that was role-specific, covering a number of themes across ESG and climate. This learning was supplemented by a number of formal training programmes, including the University of Edinburgh's Climate Change transformation programme and our internal ESG Learning Hub. Colleagues have been able to join a number of sessions covering topics ranging from carbon markets through to greenwashing, as we continue on our ESG learning journey and evolve our training in line with market developments.

Foreign exchange (FX)

To promote the FX Centre of Excellence within NatWest Group, a concerted education programme has taken place to help develop the understanding and knowledge of the FX offering across the bank. This has included workshops and regular drop-in sessions with different areas of the bank such as Coutts, Trustee Depository Services within RBSI, Mid-Market regional and Coverage and Sector Content banking teams and Structured Finance colleagues. This supplements the regular, ongoing markets updates calls that we deliver to approximately 300 bankers on a fortnightly basis as well as client insight breakfasts around the country.

For our junior colleagues, we have put a targeted FX training programme in place focusing on 10 topics to instil confidence and empower individuals to have impactful conversations with stakeholders and customers on our FX product suite and capabilities.

Customers

We have continued to share our industry insight with customers on a number of topics including LIBOR, Wholesale Markets Review and Margin phase 6. We have also run a series of climate and ESG-focused webinars throughout the year.

Climate-related disclosures

Basis of reporting

Under the Companies (Strategic Report) (Climate-related Financial Disclosure) Regulations 2022, NWM Group, as a wholly owned subsidiary of NatWest Group, is currently not required to publish climate-related financial disclosures at the company level. NWM Group is also not currently in scope of the FCA Policy Statements on the Listing Rules (PS 20/17 and PS 21/23) that require commercial companies with a UK premium listing – such as NatWest Group - to make climate-related disclosures, consistent with TCFD recommendations, on a 'comply or explain' basis. NatWest Group publishes those climate-related disclosures for the consolidated group, including NWM Group.

Consistent with previous years, the headings of the TCFD recommendations have been used below within this report. However, use of the TCFD headings does not necessarily imply that the disclosures in this section are consistent with the relevant TCFD-recommended disclosures and related guidance, as required by the FCA Listing Rules.

Overview

Throughout 2022, NWM Group continued to support NatWest Group's climate ambition – to be a leading bank in the UK helping address the climate challenge. At the same time, we also worked to help our customers better understand the role they can play in the transition to net zero. The table below summarises the progress NWM Group has made during 2022 with regards to climate-related risks, opportunities and areas of future focus.

Climate disclosure pillar	2022 progress	Areas of future focus
Governance	– Training for NWM Plc Board to continue building climate knowledge and provide ongoing oversight of management's response to climate-related risks and opportunities. – During 2022, the NWM Climate and Sustainability Committee (chaired by the NWM CEO) met 10 times to support embedding climate in decision making in NWM Group, as well as acting as an escalation route to the NatWest Group Climate Change Executive Steering Group (CCESG).	– Continue to enhance product governance and visibility of reporting within NWM Group to increase awareness and understanding. – Build operating rhythm of the newly established Climate and ESG Product Specialist Forum set up to review complex technical elements of specific transactions, in particular key performance indicators (KPIs). – Continue to review management roles and the responsibilities framework to incorporate management of climate-related risks and opportunities across the Commercial & Institutional segment.
Strategy	– Continued to support our customers in issuing and/or with the provision of ESG-labelled products. – Focused resources on product innovation and market evolution, and actively supporting our customers with their ESG ratings. – Introduced new partners and encouraged further collaboration through Carbonplace, a voluntary carbon market technology platform. – Maintained our position as a leading green, social, sustainability and sustainability-linked debt (GSS/S) bookrunner in our chosen markets and geographies. – Participated in industry working groups contributing to the development of industry guidelines and produced a Financial Markets Standards Board (FMSB) white paper on ESG rating methodologies. – Considered climate risk within strategic planning activity as climate data availability evolves. – Contributed to the development of NatWest Group's Climate transition plan, with specific focus on developing the financial institutions (FI) sector transition considerations. – Analysed the NWM Group banking book loans to provide an initial view of sector and counterparty-level financed emissions estimates, recognising the challenges of assessing financed emissions for FIs given technical limitations in carbon footprinting.	– In order to further understand and support our customers and the transition to net zero, customer transition plan assessments (CTPA) methodology is being developed by NatWest Group and will be rolled out across NWM Group. – In conjunction with the rest of the Commercial & Institutional segment, build out the product suite to include trade finance. – Increase ESG engagement in the private finance business. – Further develop the educational programme for colleagues and a customer training workstream in 2023. – Continue to invest in developing technology and data capabilities for the embedding of climate-related data into key customer-facing systems, decision processes and governance.

Overview continued

Risk management	– Credit risk: Work commenced to develop and pilot a more quantitative and automated climate risk scorecard, incorporating customer transition plan assessment and scenario analysis. – Greenwashing training was provided to client-facing staff on a mandatory basis. – An initial suite of key risk indicators (KRIs) was established and used to monitor climate risk exposure in NWM Group in 2022. – Market risk: NWM Group identified the market risk impact of climate risks for fair-valued positions across the portfolio in 2022.	– Credit risk: continued development and launch of a more quantitative climate risk scorecard. – Operational risk: additional design, implementation and embedding of climate change considerations in risk and control frameworks across NWM Group, further developing the non-financial climate risk assessment undertaken in 2022. – Data analysis and technology build to support future decision-making. – Stress testing and modelling capability will be examined for further development. – Further greenwashing training will be provided in 2023.
Metrics and targets	– NWM Group has contributed a total of £15.5 billion in the 18 months since the launch of the £100 billion NatWest Group climate and sustainable funding and financing target in July 2021. – NWM Group's exposure to heightened climate-related risk sectors was updated to enable a more granular review of climate-related risk exposure completed at a sub-sector level. – Estimation of NWM Group capital markets facilitated emissions by sector, based on the Partnership for Carbon Accounting Financials (PCAF) consultation paper.	– Development of approach for the estimation of facilitated emissions.

Governance

NWM Plc, as a subsidiary of NatWest Group Plc, is part of the NatWest Group integrated governance structure. The NWM Plc Board and senior management oversight of climate-related risks and opportunities is supported by embedding climate within our established governance structure and operating rhythm.

NWM Plc climate governance structure

NWM Plc climate governance structure, together with roles and responsibilities, is summarised in the table below.

	Forum	Role/responsibility
Board-level governance	NWM Plc Board	The NWM Plc Board approves NWM Group's strategy and objectives within the aims of NatWest Group. This includes progress towards delivering on NatWest Group's strategy, such as climate ambitions and targets. During 2022, the NWM Plc Board received updates on progress towards climate and sustainability funding and financing targets and transition planning.
	NWM Plc Board Risk Committee	The NWM Plc Board Risk Committee (BRC) is responsible for the oversight of NWM Group's risk profile. The BRC has been involved in discussions on the development of NWM Group's climate risk appetite.
	NWM Plc Audit Committee	The NWM Plc Audit Committee is responsible for the oversight of the entity's material disclosures, including non-financial disclosures.
Executive-level governance	NWM Climate and Sustainability Committee	The NWM Climate and Sustainability Committee (CSC) is the senior NWM Group forum which has the objective of assessing and managing climate-related risks and opportunities. The CSC supports the NWM Group CEO to discharge the delegated Senior Management Function (SMF) accountability from the NatWest Group CEO for identifying and managing financial risks and opportunities arising from climate change, supported by the NWM Climate Sponsor, the nominated segment representative.
	NWM Executive Risk Committee	The NWM Executive Risk Committee (ERC) is responsible for the review and challenge of all climate-related risks. It reviews the risk management framework and oversees the management of risk appetite.
	NWM Executive Disclosure Committee	The NWM Executive Disclosure Committee (EDC) reviews all material financial and non-financial (including climate) disclosures to ensure they are made on a timely basis as required by the Disclosure and Transparency Rules (incorporating the Market Abuse Regulation (596/2014)) or the Listing Rules and any applicable regulations.
	NWM Reputational Risk Committee	The NWM Reputational Risk Committee (RRC) is responsible for considering all reputational risks presented by any aspect of our business activities, including the bank's involvement in certain transactions with proposed climate and environmental risks or benefits.

NWM Plc Board-level oversight

NWM Group remains focused on ensuring clear roles and responsibilities on climate risks and opportunities are in place across the NWM Plc Board, Board committees, management forums and individuals.

The NWM Plc Board continues to build climate knowledge and provides ongoing oversight of management's response to climate-related risks and opportunities. During 2022 dedicated sessions were held in relation to carbon markets, climate taxonomy and regulation, product labelling and reporting.

During 2022 an area of focus for the NWM Plc Board was the consideration of the key opportunities and challenges presented by the NatWest Group transition-planning process.

NWM Plc management's responsibilities

NatWest Group has adopted an integrated climate governance structure with legal entity boards and accountable individuals within business areas ensuring climate considerations are built into decision-making processes, with clear escalation and reporting routes in place to the NatWest Group Climate Change Executive Steering Group (CCESG). The CCESG is responsible for delivery and implementation of strategic climate ambitions. The CCESG includes cross-segment and functional representatives, including the NWM Group CEO.

As part of the integrated cross-bank approach, the NWM CEO has been designated to support the NatWest Group CEO in discharging the Senior Management Function 1 (SMF1) accountability for identifying and managing the risk and opportunities of climate change in NWM Group.

To support the NWM CEO and accountable individuals with their responsibilities, and to enhance the integration of climate-related issues, NWM Group continues to operate the NWM Group Climate and ESG Programme Delivery Meeting which is overseen by the NWM CEO-chaired CSC.

Strategy

Climate change has potentially significant implications for NWM Group and our customers, investors, partners, suppliers and colleagues. NWM Group supports and contributes to NatWest Group's ambition to be a leading bank in the UK helping to address the climate challenge, recognising that through our financing activity, NWM Group contributes both directly and indirectly to NatWest Group's efforts to tackle what is a global challenge. As a purpose-led organisation, we aim to engage and support our customers' transition to a net-zero economy noting that there is a dependency on timely UK Government regulatory policy and technology developments, as well as on our customers and society to respond. As part of the strategy, it is important to incorporate a balanced approach between ensuring that the risks are considered and mitigated, while optimising the opportunities that the transition of our customers present.

Climate-related risks

Climate risk is the risk of financial loss or adverse non-financial impacts associated with climate change, and the political, economic and environmental responses to it. Climate risk can arise through either physical, transition or liability risks. Climate change represents an inherent risk to NWM Group, not only from its impact on the global economy and the businesses of its customers, but also through its potential effects on asset values, operational costs and business models.

To assess climate change transition and physical risk, NWM Group has undertaken a high-level analysis of political, economic, sociological, technological, legal and environmental (PESTLE) factors to facilitate a more informed understanding of the wider business environment. This exercise supports the further development of our broader strategic thinking and can be used by NWM Group to consider potential future business threats and take action to avoid or minimise their impact. The assessment will be used to inform decision-making, targeting product development, the allocation of resources and scenario analysis stress testing.

NWM Group has identified a number of climate-related risks that may affect our businesses and strategy. NWM Group also considers climate risk within its strategic planning activity, including product strategies, to validate the adequacy of its approach in response to assessed climate risk exposure.

Emissions resulting from NWM Group business activities include financed emissions attributable to our lending and investments, facilitated emissions attributable to the underwriting that NWM Group undertakes, emissions attributable to our trading book (including fixed income and currencies) and emissions from our own operations.

NWM Group, as part of NatWest Group, has started to use financed and facilitated emissions as a potential estimation of the climate impact of our banking book and underwriting activities. However, there are data limitations and potential challenges as the methodologies evolve, impacting both NWM Group's banking and trading book exposures.

Financing activities

Financed emissions – Lending and investments

Financed emissions currently play a reduced role within NWM Group. Drawn lending exposures, as defined by the PCAF standard only account for approximately 10% of NWM Group's total assets as at 31 December 2022; the undrawn loan commitments are currently excluded, and therefore could potentially increase the financed emission estimations during challenging market conditions if called up by the customers.

NWM investments (c£11.5 billion), predominantly relate to sovereign debt securities and treasury bills (included within our liquidity portfolio) and FI debt securities in our banking book. Financed emissions for Sovereigns, Supranationals and Agencies will be considered in 2023.

Due to a lack of granular availability of customer level climate data, FI's are still developing measurement methodologies and capabilities to assess their scope 3 emissions. Therefore, lending exposures will cause an increase in estimated financed emission figures once scope 3 is incorporated. NWM Group, as part of Natwest Group, is working towards developing interim decision-making tools until data is readily available across this customer segment.

Facilitated emissions – Bond Underwriting

During 2022, there was an increased focus on the facilitated emissions generated by the financial services industry through intermediation activities and the associated facilitated emissions that are; (i) off-balance-sheet: representing services rather than financing and (ii) take the form of "flow" activity- temporary association with transactions. This resulted in a PCAF Capital Markets working group that focused on developing a methodology for estimating facilitated emissions attributable to capital markets underwriting activities.

Underwriting activities are an important part of the NWM Group business, and as a result the facilitated emissions attributable to these underwriting activities could potentially be significant. Informed by the PCAF consultation paper (September 2022), NWM Group has performed a preliminary estimation of facilitated emissions in corporate capital markets transactions. See illustration of the facilitated emissions associated with our corporate bond underwriting in the metrics and targets section on page 28.

Trading activities

Our trading book activities (which include fixed income and currencies) are also impacted by climate-related risks. Preliminary analysis carried out in 2022 (see page 24 on Traded Market Risk) indicated that climate risk drivers were not likely to put NWM Group out of appetite for market risk. However, given the nature of the assets, current monitoring methodologies and tools are still immature and evolving. We have commenced with preliminary tools which are focused on the sectors in NWM Group trading activities where there is heightened climate risk to fair value positions.

Due to the size of the trading book within the NWM Group business, the associated emissions have potential to be significant. However, at present, the scale of these emissions is uncertain given that trading book positions can be more short term and dynamic in nature compared to the banking book. This is currently an industry-wide challenge with no agreed approach on quantification of trading book related emissions.

A growing focus on carbon markets within the financial sector, as well as within NWM Group will require close monitoring of the nature and use of carbon credits to ensure that robust controls are implemented for the verification of projects as well as the sale of carbon credits. As carbon credits can act as a facilitator enabling high-emitting exposures to be worked out, controls are required to ensure appropriate use within customer climate strategies and transition plans.

Other risks

Whilst the NatWest Group environmental, social and ethical (ESE) risk framework helps us assess and manage reputational risks associated with our lending and loan underwriting activities, these policies are not applied to our bond underwriting activities or trading business and as a result, potentially increase the reputational risk in this area. However, in February 2020, NatWest

Group stated that it planned to stop lending and underwriting to companies with more than 15% of activities relating to thermal and lignite coal unless they had a Credible Transition Plan in line with the 2015 Paris Agreement in place by end of 2021 and to stop lending and underwriting to major oil and gas producers unless they had a Credible Transition Plan aligned with the 2015 Paris Agreement in place by the end of 2021.

There will be reliance on the modelling of climate-related risks which depends on access to accurate, reliable, consistent and comparable climate and sustainability-related data from counterparties or customers. Ongoing monitoring and verification will be required to ensure the outcomes are rational and can provide decision-making trajectory in the first instance. This will require ongoing training and up-skilling across the functions and customer-facing teams.

For further information on how NWM Group identifies and assesses climate-related risks, please refer to the Risk and capital management section on page 77 and our identified Climate-related Risk Factors on page 184.

Climate-related opportunities

We continue to facilitate our customers in accessing financing, advice and expertise. NWM Group is supporting NatWest Group's climate ambitions by contributing to the following key strategic themes.

Supporting customers and the transition to net zero

During 2022, we continued to support our customers in lead managing a broad range of green, social, and sustainability (GSS) bonds, sustainability-linked bonds (SLBs) and underwriting sustainability-linked loans (SLLs).

As part of the expansion of environmental and societal-focused products, we closed three ESG-linked repos (with total commitment of £27.6 million) and two ESG-linked FX transactions. We also continued to act as dealers for six ESG-labelled commercial paper programmes and helped set up one new programme in this asset class in 2022, as well as distributing a notional amount of £295million in ESG deposits, as part of the NatWest Markets Short Term ESG Product Framework.

In 2022 NWM Group contributed £12.2 billion of climate and sustainable funding and financing towards NatWest Group's £100 billion target (to be achieved between 1 July 2021 and the end of 2025). Key transaction highlights include[(1)]:

- €5 billion five-year green OBL ('Bundesobligationen') by Germany, its first OBL green bond syndication.
- inaugural dual tranche sustainability bond for Compass Group, which contributes towards its net-zero goals and is the first of its kind in the catering sector.
- €500 million green bond for Alliander N.V, further to NWM Group supporting the company with the update of its green finance framework, in which the issuer used reasonable efforts to align the selection criteria of the eligible green asset categories against the Technical Screening Criteria for Climate Change Mitigation of the EU Taxonomy (Climate Delegated Act of June 2021).
- €500 million inaugural green bond for Achmea B.V., after launching its Green Finance Framework in 2022.

As a result, we maintained our position as a leading green, social and sustainability and sustainability-linked (GSS/S) debt book runner in our chosen markets and geographies ranking number one lead manager for UK Financial Institutions Group (FIG)[(2,3)] and UK corporate GSS/S debt issuance[(3)]. Our support for customers has been recognised by three industry awards in 2022: GlobalCapital Bond Awards[(4)] for Most Impressive Bank for Green and ESG-Linked Bonds, IJGlobal ESG Awards[(5)] for ESG Financial Adviser Award (Europe) and Environmental Finance Bond Awards receiving the award for Lead manager of the year, social bonds – local authority/municipality[(6)].

In addition, for mid-sized corporates, engagement was strengthened through greater focus on their ESG activity that could be financed in the private placement market.

Carbon markets

As one of several financial institutions that has helped develop Carbonplace[(7)] - a carbon marketplace which harnesses blockchain-enabled technology that aims to provide a record of ownership and enable trading of certified carbon-credits, NatWest Group has introduced new partners to join the carbon settlement platform and continues to have active conversations with interested parties to enable the purchase and settlement of voluntary carbon credits (VCCs), giving customers greater access to a wide range of VCCs.

NWM Group engaged with customers across several sectors to understand their needs and has developed its customer proposition which will enable the execution of purchase and sale of VCCs (removal and avoidance credits), to support our UK customers in their transition to net zero.

Powerful partnerships and collaboration

Thought leadership and building capabilities

NWM Group's subject matter experts have delivered 197 articles and 85 events[(8)] throughout 2022 across a variety of climate and ESG themes aimed at assisting our customers' learning journeys incorporating climate, environmental and social elements. As part of this agenda, NWM Group also contributed a chapter on 'sustainable treasury teams' for a book entitled *Responsible Investment in Fixed Income Markets*, published in October 2022 by Routledge further supporting customer education on the need to transition to net zero.

In addition to the articles, podcasts and webinars accessible to all colleagues, targeted training was also undertaken in 2022, such as an Introduction to Greenwashing, as well as a session on sustainability-linked products jointly hosted with a law firm. A new training programme for front office and functional roles will be rolled out in 2023.

(1) Selected deal announcements: Client stories | NatWest Corporates and Institutions
(2) Financial Institutions Group includes banks, insurance companies, real estate, funds and trusts and other investment entities.
(3) Source: Dealogic, 31 December 2022 – excludes money market and short-term debt. GSS/S – Green, Social, Sustainability and Sustainability-linked
(4) Global Capital Bond Awards recognise NatWest | NatWest Corporates and Institutions
(5) https://www.ijglobal.com/articles/167854/ijglobal-esg-financial-adviser-europe-natwest
(6) Lead manager of the year, social bonds - local authority/municipality: NatWest Markets - Environmental Finance (environmental-finance.com).
(7) Carbonplace is a voluntary carbon market technology platform being developed by nine financial institutions: BNP Paribas, CIBC, Itaú Unibanco, National Australia Bank, NatWest Group, Standard Chartered, BBVA, SMBC and UBS. The platform will provide the infrastructure to facilitate trading solutions for voluntary carbon credits.
(8) Number includes 21 podcasts delivered during 2022.

Strategy continued

We have an ambition to work collaboratively with our partners, stakeholders and peers to contribute to the NatWest Group climate ambition. During 2022, NWM Group participated in and influenced a number of industry working groups:

- **Partnership for Carbon Accounting Financials (PCAF) facilitated emissions working group**: We contributed to the work aimed at developing an industry standard to measure and report facilitated emissions in capital markets transactions.
- **FMSB ESG Ratings working group**: We chaired the group to produce a white paper examining ESG rating methodologies and data collection processes that has fed into the International Organization of Securities Commissions (IOSCO), European Securities and Markets Authority (ESMA) and Financial Conduct Authority (FCA) working groups.
- **International Capital Markets Association (ICMA) Sustainable commercial paper task force**: We acted as coordinator and contributed to setting industry standards for this asset class.

Getting our own house in order

Own operational footprint

NatWest Group's target to reduce our direct own operations carbon footprint by 50% by 2025, against a 2019 baseline applies to NWM Group and, therefore, emissions attributable to NWM own operations are subsumed into NatWest Group's estimation of own operational footprint for the consolidated group.

Data and technology

NWM Group is progressing towards embedding relevant data, both internal and from third-party ESG data providers, which will be used to support the decision-making process across all business units in the organisation.

We believe that this integration will support our alignment with legal and regulatory expectations, as well as NWM Group's implementation and future refinement of the NatWest Group's Climate transition plan, although we continue to recognise the significant challenges related to the availability of accurate, reliable and verifiable data.

NWM Group's role in the NatWest Group Climate transition plan

In February 2023, NatWest Group published its initial Climate transition plan. NWM Group does not have its own climate transition plan at an entity level although NatWest Group's climate transition planning work, including its initial Climate transition plan encompasses the NWM Group balance sheet.

NWM Group's work focussed on the development of a qualitative Customer Transition Plan Assessment (CTPA) for FIs. In parallel, this work is connected with the Climate Risk Scorecards (CRS). NWM Group's suite of climate and ESG products and services also support NatWest Group customers' transition strategies.

Risk management

How climate-related risks are integrated into NWM Group's risk management processes

Climate risk is the risk of financial loss or adverse non-financial impacts associated with climate change, and the political, economic and environmental responses to it. Climate risk can arise through either physical, transition or liability risks. Climate change represents an inherent risk to NWM Group, not only from its impact on the global economy and the businesses of its customers, but also through its potential effects on asset values, operational costs and business models.

Climate risk is recognised as a principal risk as well as a factor affecting other financial and non-financial risks. During 2022 NWM Group has continued to mature our integration of climate risk within NatWest Group's risk management. Climate risk was first included as a principal risk in the NatWest Group risk directory in early 2021, alongside an iterative multi-year approach for full integration. The timing of this multi-year journey reflects both the complexity of the task and the evolving nature of climate data capabilities and supporting tools.

During 2021, a first-generation implementation of climate risk maturity was achieved for NWM Group. This required the application of predominantly qualitative approaches, concentrated within priority sectors or customers to be implemented. During 2022, we enhanced our level of maturity. This has seen an increase in the application of quantitative analysis, the increased utilisation of data within decision-making, risk monitoring and risk reporting. There are still gaps in data availability and a lack of consistency in the data available through third-party sources which contributes to the substantial uncertainties in accurately modelling and reporting on climate sustainability information as well as making internal risk management decisions.

In 2022, NWM Group has also started to use a number of key risk indicators, including limits and triggers, to provide the CSC with regular base-level information on exposure to climate risk such as exposure to sectors which are at heightened climate risk. In 2023 we plan to develop these into operational limits, initially in shadow form while the data and limits are tested. NatWest Group has also developed updated risk appetite measures which are planned to be implemented in 2023.

Our processes for identifying, assessing and managing climate-related risks

Climate risk is classified as a top and emerging threat to NWM Group and considered as part of NWM Group's top and emerging threats framework.

The effective management of climate risk requires the full integration of climate-related risk factors into strategic planning, transactions and decision-making.

Relative significance

Climate risk is considered relatively significant where NWM Group's exposure to a principal risk could be taken outside of appetite due to climate-related risk factors.

During 2022, NWM Group assessed whether climate-related risk factors could be considered "relatively significant" to take NWM Group's exposure to a principal risk outside of appetite.

The assessment identified the following principal risks as most exposed to climate-related impacts:
- credit risk
- operational risk
- reputational risk
- conduct risk
- regulatory compliance risk.

Where this has been identified, enhancements may be required to the respective risk framework so it is adequate to respond to climate-related risk, and many of these are summarised in the Risk Management section. Some of the work already being undertaken enhances the relevant risk frameworks, for example, within credit risk - more quantitative scorecards are being developed and within conduct risk - NWM Group has enhanced its product governance policies and procedures to include a number of climate and ESG considerations. During 2023, work will be undertaken to make further enhancements to the risk framework to respond to climate-related risks.

Additionally, NWM Group's exposures to climate-related risks have been recognised as potentially significant to other principal risks: pension risk, capital risk, liquidity and funding risk, market risk and model risk, which will be monitored accordingly.

A non-financial climate risk assessment was undertaken in 2022 and there will need to be additional design, implementation and embedding of climate change considerations in risk and control frameworks across NWM Group as a result of that assessment.

The potential impact of NWM Group's activities on climate change risk as a causal factor for principal risks will be regularly reassessed and managed through the annual refresh of the NatWest Group Enterprise Wide Risk Management Framework (EWRMF) and its individual components.

Scenario analysis: executed analysis and capability build

Climate scenario analysis is a critical tool to help identify and develop strategies to manage the impacts that climate change may have on NatWest Group, the wider economy and society.

Traded market risk

Climate change has the potential to affect all market risk factors that NWM Group is exposed to. Climate regulatory guidance is in its infancy for traded market risk. However, NWM Group is enhancing its climate market risk framework and building climate into scenario analysis and risk appetite. In 2022 NWM Group developed a first-generation short-term climate transition stress test.

The scenario assessed the impact of a disorderly transition to a low-carbon economy on fair-valued positions in NWM Group. It explores hypothetical new EU and UK regulation mandating firms to reduce carbon emissions across all scopes by 50% by 2030, with a government carbon tax from 2025. These shocks are applied instantaneously across the issuer and counterparty credit spread risks in the trading book. Scenarios are expected to be refined further as improved data becomes available.

As regulatory guidance develops, NWM Group will continue to develop a range of key metrics and internal reporting tools to assess and monitor climate-related risks and opportunities.

Risk management continued

Credit risk

NWM Group credit book exposures were included in an internal climate scenario analysis, carried out to support participation in the 2021 CBES. This modelled stage 3 credit impairments under three climate pathways: early action, late action, and no additional action scenarios. Traded risk was excluded, which aligned with the CBES guidelines. Modelling showed NWM Group is most exposed to transition risk and principally a late transition.

ICAAP

A priority area of focus for NWM Group as a part of NatWest Group over 2022 has been to continue to enhance how we incorporate climate risk into our capital adequacy assessment process (ICAAP) and strategic planning process. This ensures that we appropriately capitalise for what we expect are likely to be the most material source of climate risk on our business over the capital planning horizon. NWM Group 2021 ICAAP assessment included a forward-looking view of our capital adequacy under a scenario leveraging the CBES 'Late Action' scenario, featuring a disruptive transition. Our approach will be enhanced for the 2022 ICAAP exercise to utilise our sectoral scenario modelling to embed transition risk within the macroeconomic variables. This will help capture the risk where we are exposed to sectors expected to be impacted more by the climate transition.

Longer-term model development strategy

NWM Group is focused on developing transition-risk modelling to incorporate stress macro factors and fair valued risk in the NWM Group banking book as well as the expansion of physical risk methodology, which is a multi-year journey. In addition, as NWM Group ingests more climate data, we will examine the climate stress testing operating model, including development of scenario model analysis.

Climate risk scorecards

Having launched initial qualitative climate risk scorecards in 2021, during 2022 NWM Group as part of NatWest Group, rolled out additional scorecards across the wholesale portfolio aligned to underlying PD models. Qualitative scorecards now cover approximately 90% of the NatWest Group wholesale Exposure at Default(1).

The insights generated by the qualitative scorecards allow us to better assess climate-related risks and opportunities at both a wholesale portfolio and individual wholesale customer level. To support this, a visualisation tool for use by colleagues in interpreting the scorecard data outputs has been developed in 2022. This is the starting point to allow us to identify, assess and manage climate risk and to provide the right support to customers.

In parallel with the roll-out of qualitative climate risk scorecards, over 2022 NWM Group has started to develop a more quantitative and automated climate risk scorecard methodology. This approach takes insights from the development and implementation of the initial suite of scorecards and builds upon this by making better use of existing climate risk analytics capabilities e.g., climate risk scenario analysis. The outputs continue to be a relative, rather than absolute, measure of both physical and transition risk.

From 2023 NWM Group will start to expand the methodology across the majority of the wholesale portfolio and once fully developed, we aim for it to be used within credit decisioning.

NWM N.V. Group sector environmental risk materiality assessment

In 2022 NWM N.V. Group piloted an initial limited environmental risk materiality assessment, with the aim to understand how environmental risks could potentially impact the NWM N.V. Group's lending book.

This initial assessment was undertaken (i) at the sector level top-down assessment, which helped NWM N.V. Group to identify sectors with high and very high environmental risk; and (ii) at the counterparty level, a bottom-up assessment, which provided insights of the sensitivities of how environmental risk could potentially have an impact on the financial performance for a small sample of selected counterparties. Given the limitations of data availability, NWM N.V. Group used a combination of counterparty data and third-party data to complete the initial pilot assessment. NWM N.V. Group intends on further detailing the assessments and extending them to more counterparties.

Building on this body of work, NWM Group, together with NWM N.V. Group, has undertaken an initial scoping exercise, also focused on potential product development and growth opportunities linked to nature and biodiversity.

How colleague education helps us manage climate risk

Developing colleague knowledge of climate risk is a key part of the bank's climate risk policy. We recognise that gaps and limitations in climate expertise and capabilities would inhibit our ability to effectively manage climate risk, which we are trying to minimise through role-based climate training.

NWM Group have focused on role-specific training for ESG education including greenwashing training provided to customer-facing colleagues on a mandatory basis. We worked with individual business area representatives across NWM Group to consult on the training completed, and outstanding role-specific requirements. This was used to focus our 2022 training plan, in which sessions were delivered with tracked attendance ensuring maximum staff coverage. We have focused on ESG 'technical' training delivered locally with a blend of internal and external training leads and continued to make available the University of Edinburgh Climate Change programme to NWM Group colleagues.

(1) Excludes sovereign exposure, where we apply the Country Climate Change Vulnerability Index to assess the level of climate risk, and Central Items relating to liquidity management activities.

Metrics and targets

NWM Group does not estimate or report own operations or financed emissions estimates at an entity level. However, the NatWest Group own operations emissions estimates include NWM Group operations and NWM Group lending is included in the estimates of financed emissions reported in the NatWest Group climate-related disclosures report. Financed emissions are GHG emissions that NatWest Group finances through its lending and investment activity. These activities fall within Scope 3, category 15 of the GHG Protocol.

Financed emissions currently play a reduced role within NWM Group. Drawn lending exposures, as defined by the PCAF standard are only approximately 10% of NWM Group's total assets as at 31 December 2022; the undrawn loan commitments of £13.9 billion as at 31 December 2022 could potentially increase the financed emission estimations during challenging market conditions if called up by the customers.

This section includes the metrics used to assess climate-related risks and opportunities as relevant to NWM Group.

Heightened climate-related risk sectors

The table below highlights all sectors with NWM Group exposure [1,2] classified as heightened climate risk. NatWest Group updated the heightened climate-related risk methodology in 2022[1] to enable a more granular review of climate-related risk exposure to its business to be completed at a sub-sector level. Exposure is based on loans, loan commitments and contingent obligations. The loans reported in the table below include all NWM Group lending to customers, including lending contributing to the climate and sustainable funding and financing target.

The total exposure to heightened climate-related risk sectors and portfolios increased by £0.8 billion during the year ending 31 December 2022. Items of note include:

- Increase in exposures across several sectors, including Power utilities, was principally driven by the planned transfer of Western European Large Corporate Customers from NatWest Holdings to NatWest Markets N.V.
- Increased heightened exposure in the Oil and gas sector by £0.3 billion compared with 31 December 2021 was mainly driven by commodity traders where NWM Group has supported existing customers with additional liquidity facilities during 2022.
- As at 31 December 2022, the exposure to Oil and gas majors amounted to £0.29 billion (31 December 2021 – £0.27 billion), representing 49% of the total exposure to the oil and gas sector.
- Exposure to coal customers (within the Power utilities sector), as defined in the credible transition plan (CTP) assessment[5] completed in 2021, was £0.19 billion as at 31 December 2022 (£0.18 billion as at 31 December 2021).

	31 December 2022					31 December 2021				
Sector/Portfolio	Loans [1] £m	Off-balance sheet [4] £m	Total sector exposure [3] £m	Of which: heightened £m	As a % of NWM Group %	Loans [1] £m	Off-balance sheet [2] £m	Total sector exposure £m	Of which: heightened £m	As a % of NWM Group %
Wholesale sectors										
Commercial real estate	70	110	180	180	0.7%	97	182	279	279	1.4%
Housing associations	22	—	22	22	0.1%	23	—	23	23	0.1%
Power utilities	118	2,597	2,715	1,025	4.0%	88	1,398	1,486	477	2.4%
Construction	102	76	178	178	0.7%	—	76	76	76	0.4%
Agriculture	2	1	3	3	0.0%	40	1	41	41	0.2%
Land transport and logistics	71	315	386	280	1.1%	75	231	306	256	1.3%
Leisure	1	158	159	1	0.0%	3	304	307	72	0.4%
Oil and gas	23	550	573	573	2.2%	269	40	309	309	1.5%
Building materials	8	19	27	27	0.1%	3	12	15	15	0.1%
Airlines and aerospace	23	412	435	171	0.7%	7	207	214	170	0.8%
Automotive	45	625	670	670	2.6%	49	686	735	735	3.6%
Water and waste	32	256	288	165	0.6%	55	209	264	122	0.6%
Industrials	90	276	366	45	0.2%	5	263	268	—	0.0%
Mining and metals	3	—	3	3	0.0%	3	—	3	3	0.0%
Chemicals	13	64	77	77	0.3%	—	62	62	62	0.3%
Shipping	2	14	16	16	0.1%	—	1	1	1	0.0%
Retail	9	522	531	—	0.0%	—	293	293	—	0.0%
Total exposure	634	5,995	6,629	3,436	13.4%	717	3,965	4,682	2,641	13.1%
Total NWM Group all sectors	11,337	14,534	25,871	3,436		8,547	11,714	20,261	2,641	

(1) Refer to NatWest Group 2022 Climate-related Disclosures Report section 4.2 for further details of the identification and review process.
(2) Loans to customers and banks – amortised cost and FVOCI. This table shows gross loans only. Debt securities to heightened climate-related risk sectors of £63m as at 31 December 2022 (£49m in the commercial real estate sector and £14m in the Retail sector) are not included in this table – total NWM Group debt securities and treasury bills – amortised cost and FVOCI equate to £11.8 billion as at 31 December 2022 (£8.4 billion at as 31 December 2021).
(3) Total NWM Group all sectors includes balances to the Financial institutions sector of £9.9bn which contains securitisations and leveraged loans. Underlying exposures for leveraged loans and securitisations are generally diversified and are primarily managed as an Asset class at a client level rather than via sector frameworks. As such the Financial Institutions sector has not been further analysed to consider exposures which may otherwise be included within sectors that are exposed to heightened climate risk.
(4) Total off-balance sheet includes undrawn loan commitments of £13.9bn and contingent liabilities of £0.6bn.
(5) Further details of NatWest Group's approach to the assessment of credible transition plans for oil and gas majors and coal customers can be found on page 30 of the 2021 NatWest Group Climate-related Disclosure Report.

Metrics and targets continued

Climate and sustainable funding and financing [1]

As part of supporting customers' transition to net zero, NatWest Group (including NWM Group) have a target to provide £100 billion climate and sustainable funding and financing between July 2021 and end 2025. NatWest Group uses its climate and sustainable funding and financing inclusion (CSFFI) criteria[1] to determine the assets, activities and companies that are eligible to be included within its climate and sustainable funding and financing targets.

In the 18 months since the £100 billion target began, NatWest Group has completed £32.6 billion of climate and sustainable funding and financing, including £15.5 billion from NWM Group[2].

In the year ended 31 December 2022, climate and sustainable funding and financing aligned bonds and private placements account for 25% of the total lead managed or placed transactions by NWM Group (c.21% for full year 2021, using the 2022 criteria[1] to include sustainability for a like for like comparison).

The table below summarises NWM Group climate and sustainable funding and financing activity.

Climate and sustainable funding and financing [1]	Full year ended 31 December 2022 £m	Full year ended 31 December 2021 £m	Cumulative progress towards 100bn target [2] £m
Underwriting			
Green and Sustainability bond public issuances and private placements[3]	**9,953**	8,227	12,730
Green loan underwriting[3]	**—**	153	
Sustainability-linked bonds and private placements[4]	**790**	201	991
Wider financing within the CSFFI[5]	**75**	430	75
Total underwriting	**10,818**	9,011	13,976
Lending			
Sustainability-linked loans[4]	**1,344**	639	1,691
Total	**12,162**	9,650	15,487

Notes

(1) For the full year ended 31 December 2022, the NatWest Group 2021 CSFFI criteria published in October 2021 have been used to determine the assets, activities and companies that are eligible to be counted. For the year ended 31 December 2021, the CSFFI criteria published in February 2021 were applied. The revised CSFFI criteria published in December 2022 will be used from 1 January 2023. Full details of the CSFFI criteria can be found at natwestgroup.com

(2) The £15,487 million climate and sustainable funding and financing contribution towards the £100 billion target is comprised of £3,325 million recorded in second half of 2021 and £12,162 million in 2022.

(3) Underwriting of specific use-of-proceeds debt capital market issuances for project expenditures, as well as green loan commitments when customers meet the CSFFI criteria. Amounts represent the NWM Group share of the notional (total underwriting amount lead managed or placed by NWM Group), based on the number of underwriters within a specific deal. During the year ended 31 December 2022, 52 green bonds and private placements totalling a notional amount of £41.6 billion (53 deals, £38.7 billion during full year 2021), account for 20% of the total lead managed or placed transactions by NWM Group during the period (c.16% for full year 2021). The CSFFI criteria allow for the inclusion of eligible sustainability bonds, which began to be reported from 1 January 2022 (20 deals, CSFF contribution £2.2 billion in the year ended 31 December 2022).

(4) Sustainability-Linked Loans, Bonds and private placements made to customers, in line with Loan Market Association (LMA) Sustainability-Linked Loan principles and International Capital Market Association (ICMA) Sustainability-Linked Bond principles where deal targets include green performance indicators, aligned to CSFFI criteria.

(5) In addition to transactions that directly meet CSFFI criteria based on use of proceeds for green purposes, the CSFFI criteria also includes wider financing (including bonds and private placements) to a customer who can evidence (to NatWest Group's satisfaction through review of the customers' profit and loss statement or balance sheet): 50% or more of revenues from the categories and sectors outlined in the criteria, or for fund clients 75% of assets under management invested in assets that meet the CSFFI criteria, or for Real Estate and Utilities companies 75% of their assets in categories or sectors outlined by the CSFFI criteria. The NWM Group balance for 2022 represents Private placements.

Metrics and targets continued

Estimates of Facilitated emissions on corporate bond underwriting

Banks play a key role as facilitators between issuers and investors, by offering and conducting financial intermediation activities critical to the functioning of capital markets.

Although PCAF's own methodology for financed emissions accounting continues to develop to provide an industry-wide approach, there is an increasing demand for additional disclosure by facilitators – such as NWM Group - to address intermediation activities and the associated facilitated emissions.

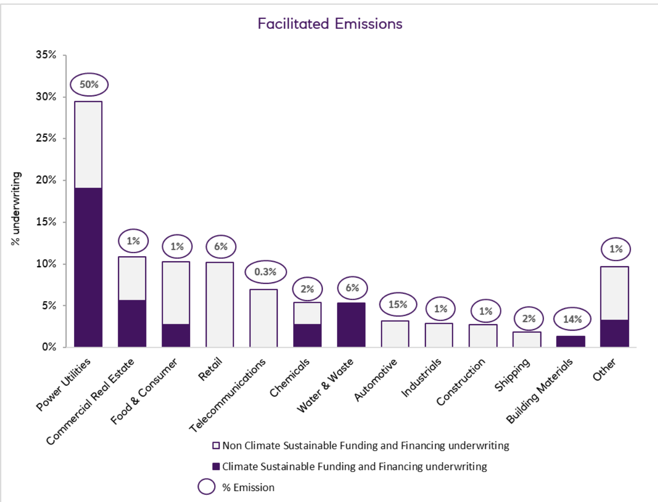
Facilitation activities differ from on balance sheet lending in two respects: they are off-balance sheet (representing services rather than financing) and they can take the form of a flow activity (temporary association with transactions) rather than a stock activity (recorded on the balance sheet). The PCAF Working Group gathered to support the development of a standard to estimate facilitated emissions, agreed that facilitated emissions need to be reported separately from financed emissions and are not additive with financed emissions.

To support the development of a standard to measure and report facilitated emissions related to underwriting of corporate capital markets transactions across the industry, NWM Group joined the PCAF Working Group on Capital Markets Activities in January 2022.

The PCAF working group published a proposed methodology[1] for facilitated emissions for capital market instruments in September 2022 prior to its consultation period. In the absence of a finalised standard, NWM Group has used the recommendations of the PCAF consultation paper as the basis of our methodology to inform the estimation of facilitated emissions.

Facilitated emissions metrics presented relate only to capital markets corporate bond underwriting activities (per PCAF) and not any other intermediation or flow activities and services such as secondary trading. As PCAF guidance evolves, NWM Group aims to further develop and align its methodology to estimate on its facilitated emissions. For the time being, it is important to note that the amounts presented are estimates.

The chart below shows NWM Group's percentage of underwriting by corporate sector, including climate and sustainable funding and financing underwriting, with estimated facilitated emissions percentages in 2022. Estimated facilitated emissions percentage reflects the percentage for a sector based on total estimated facilitated emissions for NWM Group.



Underwriting is an important part of the NWM Group business and the facilitated emissions related to this activity could potentially be significant. The adjacent analysis indicates the following:

- the estimated facilitated emissions from the Power utilities sector constitutes 50% of NWM Group's estimated facilitated emissions, of which 63% are green bonds[2] that are expected to have a lower emissions footprint. However, the same emission intensity was applied regardless of issuance type.
- The second highest contributing sector is the Automotive industry with 15% of the estimated facilitated emissions, while only representing 3% of NWM Group's total underwriting.
- Building materials make up 14% of the estimated facilitated emissions; however, all of these issuances, were green bonds[2].
- The remaining 10 sectors contributed 21% to the estimated facilitated emissions analysis making up 66% of the total underwriting of which 20% were green and sustainability bonds[2].

NWM Group Methodology used for estimation.

(1) The PCAF consultation paper[1] recommends splitting the responsibility amongst the transaction lead managers (passive and active) based on volumes, which we source from Dealogic. This determines the proportion of the 'facilitated' part of the transaction each arranger takes responsibility for, thus providing the volume against which facilitated emissions is estimated[3,4]. Co-managers are not counted and therefore such volumes are not taken into consideration.

(2) The PCAF consultation paper[1] defines an issuer as solely corporates that issue a debt or equity capital markets instrument. FI and SSA issuers were out of scope for the initial terms of reference for the PCAF working group and the proposed methodology included in the consultation paper.

(3) NWM Group has decided to apply a 100% weighting for the emissions estimation for the corporate capital markets transactions versus the Global Systemically Important Banks (G-SIB)[1] alternative at 17% also considered within the consultation paper.

(4) Identifying emissions to customers: where available, economic intensities from NatWest Group's financed emissions modelling are extracted for customers for which volumes have been sourced following steps 1 and 2 above. Economic intensities are applied to volumes, to estimate facilitated emissions.

(5) Unmatched customers: For those customers that cannot be matched, the relevant emission sector averages are used[5,6].

(6) Currently, green bonds do not have an explicit emissions footprint and therefore NWM Group shows the breakdown of conventional versus green bonds to highlight the expected difference of estimated facilitated emissions associated with the bond underwriting.

(1) September 2022 - PCAF launches public consultation on Capital Markets Facilitated Emissions methodology (carbonaccountingfinancials.com)
(2) NatWest Group 2021 CSFFI criteria published in October 2021 have been used to determine the assets, activities and companies that are eligible to be counted.
(3) NWM Group has chosen to recognise the entire volume amount in the year of underwriting as opposed to over the life of the security.
(4) Percentage underwriting refers to NWM allocation which is calculated using Dealogic Tranche Value face (GBP) / no. of Tranche Lead Managers.
(5) NWM Group source customer level emission data if possible. Where customer level data is not available, emission sector averages are used for emission intensities from 2021 and if not available 2020 data is applied against 2022 underwriting volumes.
(6) The use of 2020 emission intensities may not incorporate recent changes in business activities and could result in the estimation of a higher rate of facilitated emissions for the sector.

Financial review

Presentation of information

NatWest Markets Plc ('NWM Plc') is a wholly owned subsidiary of NatWest Group plc or 'the ultimate holding company'. The term 'NWM Group' or 'we' refers to NWM Plc and its subsidiary and associated undertakings.

The term 'NatWest Group' refers to NatWest Group plc and its subsidiary and associated undertakings. The term 'NWH Group' refers to NatWest Holdings Limited ('NWH') and its subsidiary and associated undertakings. The term 'NatWest Bank Plc' or 'NWB Plc' refers to National Westminster Bank Plc.

NWM Group publishes its financial statements in pounds sterling ('£' or 'sterling'). The abbreviations '£m' and '£bn' represent millions and thousands of millions of pounds sterling, respectively, and references to 'pence' represent pence where amounts are denominated in pound sterling ('GBP'). 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.

Non-IFRS financial measures

NWM Group prepares its financial statements in accordance with generally accepted accounting principles (GAAP). This document contains a number of adjusted or alternative performance measures, also known as non-GAAP or non-IFRS performance measures. These measures are adjusted for certain items which management believe are not representative of the underlying performance of the business and which distort period-on-period comparison. These non-IFRS measures provide users of the financial statements with a consistent basis for comparing business performance between financial periods and information on elements of performance that are one-off in nature. The non-IFRS measures also include the calculation of metrics that are used throughout the banking industry. These non-IFRS measures are not measures within the scope of IFRS and are not a substitute for IFRS measures. Refer to the section, 'non-IFRS financial measures', on page 172 for further information and calculations of non-IFRS financial measures included throughout this document, and, where relevant, the most directly comparable IFRS financial measures.

Performance overview

NWM Group reported a loss for the year ended 31 December 2022 of £264 million compared with a loss of £491 million for the year ended 31 December 2021. Higher income largely reflected stronger performance across the product suite in 2022 compared with the prior year. Operating expenses for the current year were slightly lower than in 2021, as an increase in litigation and conduct costs was offset by a decrease in other operating expenses.

Financial performance

- Income of £689 million in 2022 was up by £288 million compared with £401 million in 2021. The increase was largely driven by Fixed Income performance, which continued to be impacted by challenging market conditions but improved compared with the prior year, and stronger performances in Currencies, as FX volatility heightened during the current year, and in Capital Markets.
- Operating expenses of £1,128 million were £22 million lower compared with £1,150 million in 2021. Litigation and conduct costs of £80 million reflected ongoing progress in closing legacy matters, and were up by £97 million compared with £17 million credit in 2021. Other operating expenses of £1,048 million were £119 million lower than £1,167 million in 2021, largely reflecting higher costs recognised in the prior year in relation to technology investment and the refocusing of NWM Group.
- Impairment losses were £8 million in 2022, compared with releases of £35 million in 2021 which were largely driven by credit improvements and releases on individual exposures.
- NWM Group's total assets and liabilities decreased by £13.2 billion and £12.4 billion to £189.8 billion and £183.2 billion respectively at 31 December 2022, compared with the prior year. The decreases were primarily driven by reductions in trading assets and liabilities, largely reflecting risk management activity undertaken in the current year, in addition to lower derivative fair values, largely driven by market volatility in 2022 including increases in interest rates across major currencies and the strengthening of USD.
- Total dividends paid to NatWest Group plc during the year ended 31 December 2022 amounted to £430 million.

Capital and leverage

- Total NWM Plc RWAs were £21.4 billion at 31 December 2022, compared with £22.7 billion at 31 December 2021. The decrease in the year reflected lower levels of counterparty credit and operational risk, offset partially by increases in credit and market risk.
- NWM Plc's Common Equity Tier 1 (CET1) ratio was 17.2% at 31 December 2022, compared with 17.9% at 31 December 2021. The decrease in the year was largely driven by dividends paid to NatWest Group plc and other reserve movements, partially offset by the decrease in RWAs.
- NWM Plc's leverage ratio, calculated in accordance with changes to the UK's leverage ratio framework introduced by the PRA which came into effect from 1 January 2022, was 5.4% at 31 December 2022. As at 31 December 2021, the UK leverage ratio was 4.8%, which was calculated under the prior year's UK leverage methodology.
- Total MREL for NWM Plc at 31 December 2022 was £8.7 billion, or 40.4% of RWAs, compared with £9.6 billion or 42.1% of RWAs at 31 December 2021. The decrease in the year was largely due to the redemption of two internal instruments issued to NatWest Group plc of €1.1 billion and €1.0 billion respectively, offset by a new internal instrument issued to NatWest Group plc of $1.1 billion.

Liquidity and funding

- NWM Plc's liquidity portfolio at 31 December 2022 was £18.6 billion with an LCR of 253%, compared with £16.1 billion and an LCR of 205% at 31 December 2021. Stressed coverage ratio was 199% at 31 December 2022, compared with 146% at 31 December 2021.
- NWM Plc issued £4.6 billion of public benchmark transactions during 2022 against guidance of £4-5 billion of public benchmark issuance in full year 2022. Transactions included a benchmark transaction under the US MTN programme of $1.5 billion of notes, five benchmark transactions under the EMTN programme across EUR, CHF and our inaugural GBP benchmark amounting to £3.1 billion of notes, and an inaugural transaction under the AUD debt issuance programme of AUD 0.6 billion of notes. NWM Plc also raised funding in other formats throughout the year such as private placements and secured note transactions.
- On 13 January 2023, NWM Plc issued a total of €1.5 billion of notes under the EMTN programme in benchmark transactions.

NWM Group business review

The table below presents a segmental analysis of key lines of NWM Group's income statement. Commentary refers to the table below as well as the statutory income statement presented on page 97.

	2022			2021				
	NatWest Markets	Central items & other	Total	NatWest Markets	Central items & other	Total	Variance	
Income statement	£m	£m	£m	£m	£m	£m	£m	%
Net interest income	91	—	91	8	—	8	83	1,038
Non-interest income	601	(3)	598	401	(8)	393	205	52
Total income	692	(3)	689	409	(8)	401	288	72
Litigation and conduct costs	(22)	(58)	(80)	—	17	17	(97)	(571)
Other operating expenses (1)	(1,033)	(15)	(1,048)	(1,157)	(10)	(1,167)	119	(10)
Operating expenses	(1,055)	(73)	(1,128)	(1,157)	7	(1,150)	22	(2)
Operating loss before impairment losses/releases	(363)	(76)	(439)	(748)	(1)	(749)	310	(41)
Impairment (losses)/releases	(8)	—	(8)	35	—	35	(43)	(123)
Operating loss before tax	(371)	(76)	(447)	(713)	(1)	(714)	267	(37)
Tax credit			183			223	(40)	(18)
Loss for the year			(264)			(491)	227	(46)
Income (2)								
Fixed Income	40	—	40	(64)	—	(64)	104	(163)
Currencies	513	—	513	427	—	427	86	20
Capital Markets	398	—	398	336	—	336	62	18
Capital Management Unit and other (3)	(62)	(3)	(65)	(35)	(8)	(43)	(22)	51
Income including shared revenue, before asset disposals and OCA	889	(3)	886	664	(8)	656	230	35
Revenue shared with or paid to fellow NatWest Group subsidiaries	(191)	—	(191)	(197)	—	(197)	6	(3)
Income excluding asset disposals and OCA	698	(3)	695	467	(8)	459	236	51
Asset disposals/Strategic risk reduction (4)	(48)	—	(48)	(64)	—	(64)	16	(25)
Own credit adjustments (OCA)	42	—	42	6	—	6	36	600
Total income	692	(3)	689	409	(8)	401	288	72

(1) A presentational change was made in Q1 2022 whereby strategic costs are included within Other operating expenses and not reported separately.
(2) Product performance includes gross income earned on a NatWest Group-wide basis, including amounts contributed to other NatWest Group subsidiaries. Income including shared revenue, before asset disposals and OCA includes revenue share from other NatWest Group subsidiaries but before revenue share is paid to or contributed to those subsidiaries.
(3) Capital Management Unit was set up in Q3 2020 to manage the capital usage and optimisation across all parts of NatWest Markets. The income shown here materially relates to legacy positions. Other relates to income booked to the Central items & other operating segment.
(4) Asset disposals/Strategic risk reduction relates to the costs of exiting positions, which includes changes in carrying value to align to the expected exit valuation, and the impact of risk reduction transactions entered into as part of the optimisation of the entity's capital usage.

Income

Net interest income was £91 million for 2022, compared with £8 million in 2021. Net interest income largely represents interest income from lending activity and capital hedges, offset by interest expense from the funding costs of the business. The movement compared with the prior year largely reflected growth in lending and reduced funding costs for the business driven by the ongoing repayment of legacy debt.

Non-interest income increased by £205 million to £598 million, compared with £393 million in 2021. The increase was largely driven by Fixed Income performance, which continued to be impacted by challenging market conditions but improved compared with the prior year, and stronger performances in Currencies, as FX volatility heightened during the current year, and in Capital Markets. Own credit adjustments were £42 million for 2022, reflecting the widening of credit spreads, compared with £6 million in 2021.

Operating expenses

Operating expenses of £1,128 million in the current year were £22 million lower than £1,150 million in 2021. Litigation and conduct costs of £80 million reflected ongoing progress in closing legacy matters, and were up by £97 million compared with £17 million credit in 2021. Other operating expenses of £1,048 million were £119 million lower than £1,167 million in 2021, largely reflecting higher costs recognised in the prior year in relation to technology investment and the refocusing of NWM Group.

Impairments

Impairment losses were £8 million in 2022, compared with releases of £35 million in 2021 which were largely driven by credit improvements and releases on individual exposures.

Tax credit

The 2022 tax credit of £183 million on operating loss before tax of £447 million is higher than the expected tax credit based on the UK corporation tax rate of 19%. There is non-taxable income from the RPI uplift on UK Government index linked gilts and a tax credit for the banking surcharge, partially offset by a decrease in the carrying value of the deferred tax asset in respect of losses. Refer to note 7 Tax for further information.

NatWest Markets segment

The operating loss before tax was £371 million compared with a loss of £713 million in 2021. Income excluding asset disposals and own credit adjustments of £698 million was £231 million higher than £467 million in 2021, largely reflecting stronger performance across the product suite in the current year. Operating expenses of £1,055 million were £102 million lower than £1,157 million in 2021, largely reflecting higher costs recognised in the prior year in relation to technology investment and the refocusing of NWM Group.

Central items & other segment

The operating loss before tax was £76 million compared with a loss of £1 million in 2021. Litigation and conduct costs of £58 million reflected ongoing progress in closing legacy matters, and were up by £75 million from £17 million credit in 2021.

NWM Group business review continued
Balance sheet profile as at 31 December 2022

NWM Group's balance sheet profile is summarised below. Commentary refers to the tables below as well as the consolidated balance sheet on page 98.

Assets	2022 £bn	2021 £bn	2022 £bn	2021 £bn	Liabilities
Cash and balances at central banks	**17.0**	16.6			
Securities	**9.9**	25.0	**9.5**	25.0	Short positions
Reverse repos (1)	**21.5**	20.7	**23.7**	19.4	Repos (2)
Derivative cash collateral posted (3)	**12.7**	12.0	**17.7**	17.6	Derivative cash collateral received (4)
Other trading assets	**1.2**	1.4	**1.9**	2.5	Other trading liabilities
Total trading assets	**45.3**	59.1	**52.8**	64.5	Total trading liabilities
Loans - amortised cost	**11.3**	8.4	**6.7**	4.1	Deposits - amortised cost
Settlement balances	**2.6**	2.1	**2.0**	2.1	Settlement balances
Amounts due from holding company and fellow subsidiaries	**0.7**	1.5	**6.2**	6.1	Amounts due to holding company and fellow subsidiaries
Other financial assets	**11.9**	8.8	**21.1**	19.3	Other financial liabilities
Other assets	**0.8**	0.9	**0.8**	1.0	Other liabilities
Funded assets	**89.6**	97.4	**89.6**	97.1	Liabilities excluding derivatives
Derivative assets	**100.2**	105.6	**93.6**	98.5	Derivative liabilities
Total assets	**189.8**	203.0	**183.2**	195.6	Total liabilities
					of which:
			23.5	21.1	wholesale funding (5)
			7.7	9.2	short-term wholesale funding (5)
Net derivative assets	**3.5**	3.6	**5.6**	2.9	Net derivative liabilities

(1) Comprises bank reverse repos of £4.6 billion (2021 - £3.9 billion) and customer reverse repos of £16.9 billion (2021 - £16.8 billion).
(2) Comprises bank repos of £1.6 billion (2021 - £0.8 billion) and customer repos of £22.1 billion (2021 - £18.6 billion).
(3) Comprises derivative cash collateral posted relating to banks of £4.6 billion (2021 - £4.3 billion) and customers of £8.1 billion (2021 - £7.7 billion).
(4) Comprises derivative cash collateral received relating to banks of £7.5 billion (2021 - £8.1 billion) and customers of £10.2 billion (2021 - £9.5 billion).
(5) Predominantly comprises bank deposits (excluding repos), debt securities in issue and third-party subordinated liabilities.

Total assets and liabilities decreased by £13.2 billion and £12.4 billion to £189.8 billion and £183.2 billion respectively at 31 December 2022, compared with £203.0 billion and £195.6 billion at 31 December 2021. The decreases were primarily driven by reductions in trading assets and liabilities, largely reflecting risk management activity undertaken in the current year, in addition to lower derivative fair values, largely driven by market volatility in 2022 including increases in interest rates across major currencies and the strengthening of USD.

Trading assets which primarily relate to client-led activity as well as derivative cash collateral posted, decreased by £13.8 billion to £45.3 billion at 31 December 2022 from £59.1 billion at 31 December 2021, mainly driven by a reduction in securities reflecting risk management activity undertaken in the current year, partially offset by increases in derivative cash collateral posted and reverse repos. **Trading liabilities** decreased by £11.7 billion to £52.8 billion at 31 December 2022 from £64.5 billion at 31 December 2021, mainly driven by a reduction in short positions reflecting risk management activity undertaken in the current year, partially offset by an increase in repos.

Derivative assets and derivative liabilities were down by £5.4 billion to £100.2 billion and by £4.9 billion to £93.6 billion respectively compared with year end 2021. The decreases in mark-to-market values were largely driven by market volatility in 2022 including increases in interest rates across major currencies and the strengthening of USD.

Loans to customers – amortised cost increased by £2.7 billion to £10.2 billion at 31 December 2022, mainly driven by new lending in the current year.

Other financial assets increased by £3.1 billion to £11.9 billion, largely reflecting an increase in held-to-collect securities purchased to support customer primary issuance.

Other financial liabilities increased to £21.1 billion from £19.3 billion at 31 December 2021, driven by new issuance partially offset by maturities, and includes £16.4 billion of medium-term notes issued.

Board of directors and secretary

Board and committees

Chairman

Frank Dangeard
Chairman of the Board and Chairman of the Nominations and Governance Committee

Executive directors

Robert Begbie
Chief Executive Officer

Simon Lowe
Chief Financial Officer

Independent non-executive directors

Vivek Ahuja
Chairman of Board Risk Committee

Anne Simpson
Chairman of Audit Committee

Tamsin Rowe
Chairman of the Performance and Remuneration Committee

Board changes in 2022

David King resigned as Chief Financial Officer on 31 March 2022.

Simon Lowe was appointed as Chief Financial Officer on 28 July 2022.

Sarah Wilkinson resigned from the Board on 26 September 2022.

Auditors

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

Registered office

36 St Andrew Square
Edinburgh EH2 2YB

Principal office

NatWest Markets Plc

250 Bishopsgate
London EC2M 4AA

NatWest Markets N.V.

Claude Debussylaan 94
1082 MD Amsterdam
The Netherlands

NatWest Markets Holdings USA Inc.

600 Washington Blvd
Stamford
CT 06901 USA

NatWest Markets Plc

Registered in Scotland No. SC090312

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 33 to 80) 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 NWM Group.

Risk management framework

Introduction

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

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

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

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

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

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

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

Risk management framework continued

Culture

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

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

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

Training

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

Our Code

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

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

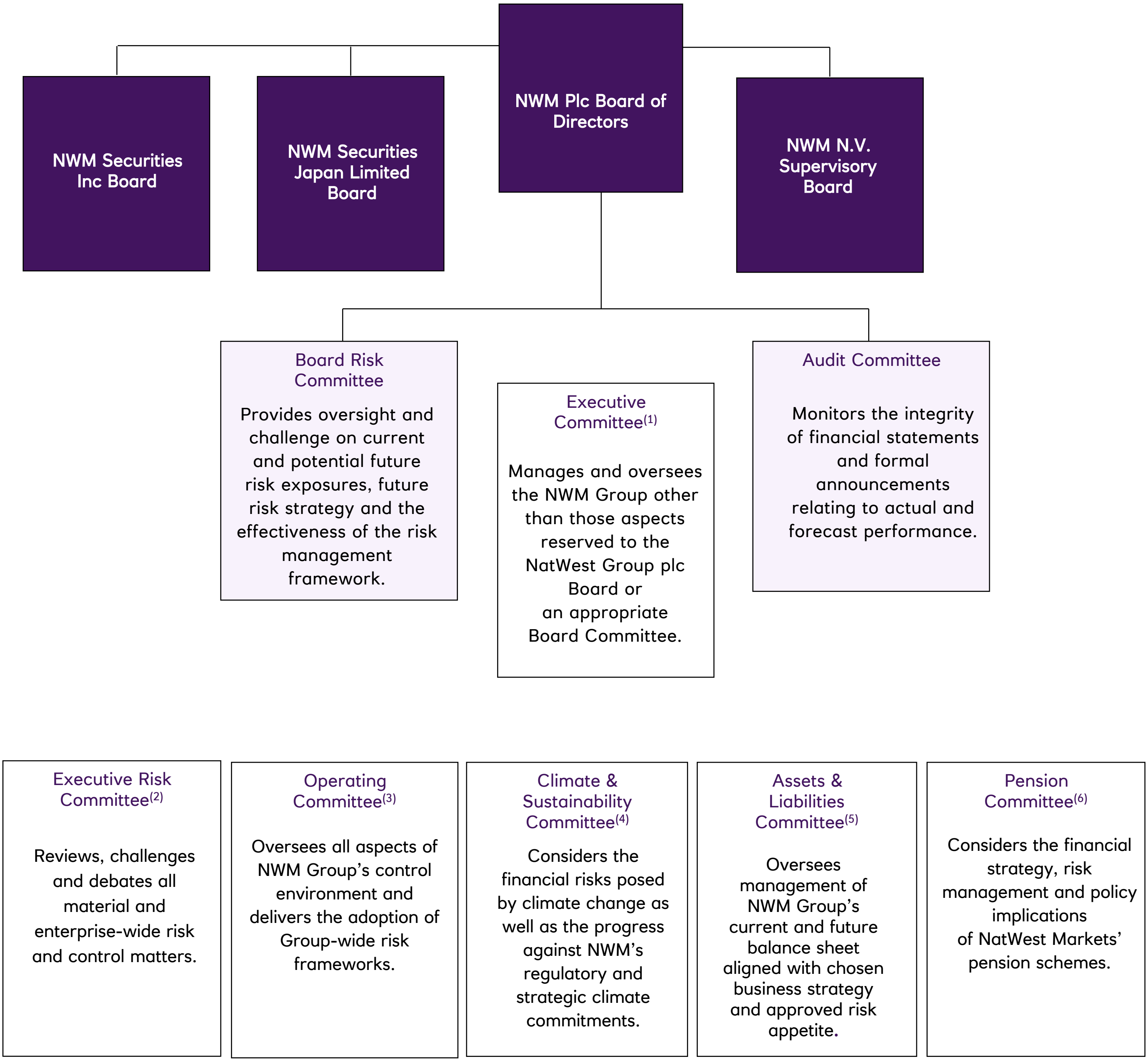
Where appropriate, if conduct falls short of NatWest Group's required standards, the accountability review process is used to assess how this should be reflected in pay outcomes for the individuals concerned. The NatWest Group remuneration policy ensures that the remuneration arrangements for all employees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

Risk management framework continued

Governance

Committee structure

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



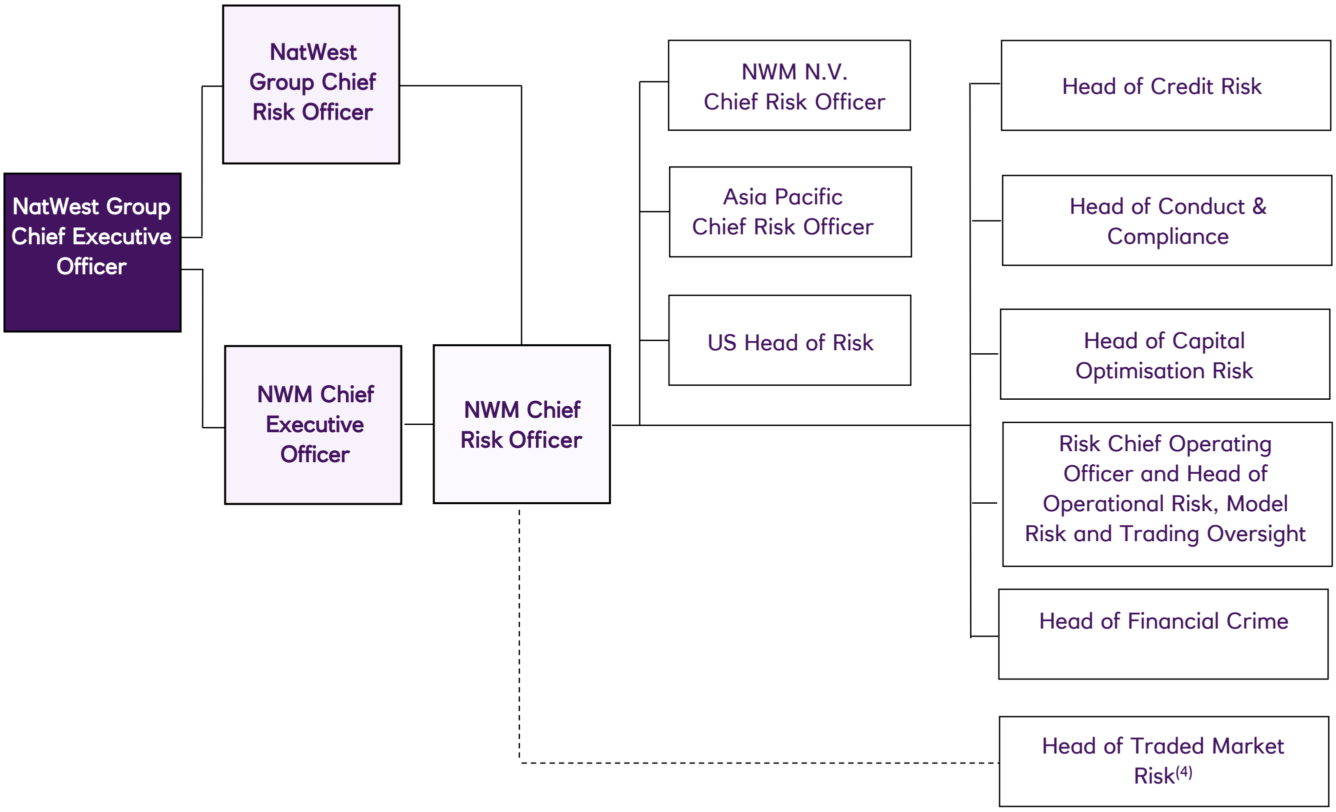
(1) The NWM Chief Executive Officer has established the Executive Committee to support him in discharging his individual responsibilities in managing the day to day activities of NWM.
(2) The Executive Risk Committee is chaired by the NWM Chief Risk Officer and supports him in discharging his risk management accountabilities.
(3) The Operating Committee is chaired by the NWM Chief Operating Officer and supports him in discharging his individual accountabilities in accordance with the authority delegated to him by the NWM Chief Executive Officer.
(4) The Climate & Sustainability Committee is chaired by the NWM Chief Executive Officer and supports him in discharging his climate risk accountabilities.
(5) The Assets & Liabilities Committee is chaired by the NWM Chief Financial Officer and supports him in discharging his individual accountabilities relating to treasury and balance sheet management.
(6) The Pension Committee is chaired by the NWM Chief Financial Officer and supports him in discharging his individual accountabilities relating to the management of NatWest Markets' pension schemes.
(7) The Financial Crime Risk Committee, the E-Trading Oversight Committee, the Reputational Risk Committee, the Valuations Committee, the Enterprise-Wide Risk Committee, the Policy Approval Committee, the Model Risk Committee, the Provisions Committee and the Credit Risk Committee are not shown here. They support the Executive Risk Committee in discharging its risk management responsibilities.

Risk management framework continued

Governance

Risk management structure

The diagram shows NWM Group's risk management structure in 2022.



(1) The NWM Chief Risk Officer reports directly to the NWM Chief Executive Officer and the NatWest Group Chief Risk Officer. The NWM Chief Risk Officer also has an additional reporting line to the chair of the NWM Board Risk Committee, and a right of access to the committee.

(2) The NWM Group Risk function is independent and provides oversight of risk management activities to ensure risks are adequately monitored and controlled. The heads of risk work closely with the NWM N.V. Chief Risk Officer, the US Head of Risk and the Chief Risk Officer Asia Pacific to ensure consistency across the international businesses.

(3) The NWH Group Risk function provides services across NatWest Group, including – where agreed – to the NWM Chief Risk Officer. These services are managed, as applicable, through service level agreements and resource augmentation agreements.

(4) The role holder sits in NWH Group but is directed by the NWM 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 NWM Group Board.

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

Second line of defence

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

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

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

Third line of defence

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

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

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

Risk appetite

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

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

Risk appetite framework

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

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

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

The Board reviews and approves the risk appetite framework annually.

Establishing risk appetite

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

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

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

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

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

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

Risk management framework continued

Identification and measurement

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

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

Mitigation

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

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

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 NWM 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 NWM 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 NWM 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 NWM 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.

Stress testing is used widely across NatWest Group, including at NWM Group level. 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 NWM Group's recovery plan.

Risk management framework continued

Reverse stress testing is also carried out in order to identify and assess scenarios that would cause NWM Group's business model to become unviable. Reverse stress testing allows potential vulnerabilities in the business model to be examined more fully.

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 NWM 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.

Under stress testing, the peak-to-trough change in CET1 may be affected by the transitions from Stage 1 to Stage 2 in stress conditions. Stress and peak-to-trough movements are used to help assess the amount of capital NWM 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 NWM Group's specific capital requirements through the Pillar 2 framework.

Capital allocation

NWM Group has mechanisms to allocate capital across its 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 Assets & Liabilities 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 Assets & Liabilities 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.

Internal assessment of liquidity

Under the liquidity risk management framework, NWM Group maintains the Internal Liquidity Adequacy Assessment Process. This includes assessment of net stressed liquidity outflows under a range of extreme but plausible stress scenarios detailed in the following table.

Type	Description
Idiosyncratic scenario	The market perceives NWM 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. NWM 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.

NWM 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.

Risk management framework continued

Stress testing – recovery and resolution planning

Within NWM Group, both NWM Plc and NWM N.V. each have a recovery plan explaining how they would identify and respond to a financial stress event and restore their financial position so that they remain 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 critical services and products to be maintained, as well as core business lines while operating within risk appetite and restoring financial condition. It is assessed for appropriateness on an ongoing basis and is updated annually. The NWM Plc plan is reviewed and approved by the Board prior to submission to the PRA each year.

Fire drill simulations of possible recovery events are used to test the effectiveness of the 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 the overall 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.

Traded market risk

NatWest Markets carries out regular market risk stress testing to identify vulnerabilities and potential losses in excess of, or not captured in, value-at-risk. The calculated stresses measure the impact of changes in risk factors on the fair values of the trading portfolios.

NatWest Markets conducts historical, macroeconomic and vulnerability-based stress testing. Historical stress testing is a measure that is used for internal management. Using the historical simulation framework employed for value-at-risk, the current portfolio is stressed using historical data since 1 January 2005. This methodology simulates the impact of the 99.9 percentile loss that would be incurred by historical risk factor movements over the period, assuming variable holding periods specific to the risk factors and the businesses.

Historical stress tests form part of the market risk limit framework and their results are reported regularly to senior management. Macroeconomic stress tests are carried out periodically as part of the bank-wide, cross-risk capital planning process. The scenario narratives are translated into risk factor shocks using historical events and insights by economists, risk managers and the first line.

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.

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.

Internal scenarios

During 2022, NWM Group continued to review and refine its internal scenarios where appropriate.

In addition, NWM Group vulnerabilities are considered as part of the development of all NatWest Group-wide integrated scenarios and exercises.

Risk management framework continued

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. NWM Group contributed to NatWest Group's participation 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.

NWM Group also contributed to NatWest Group's submission to the Bank of England's Climate Biennial Exploratory Scenario conducted in late 2021 and early 2022.

In addition to its participation in NatWest Group's stress testing programme, NWM Group has a further regulatory commitment in relation to its traded risk model approvals for market risk (IMA) and counterparty credit risk (IMM). A robust stress testing framework is a regulatory requirement.

The purpose of this stress testing framework includes the identification of possible causes of large losses, an estimation of their size and potential impact on capital adequacy together with the identification of steps that could be taken to manage those exposures as required. Such risk management-led stress testing covers both traded market risk and counterparty credit risk and is used to monitor and set risk appetite.

The requirements of NWM Group's stress testing programme are codified in NWM Group's stress testing policy and associated mandatory procedures.

Market risk (audited)

NWM Group is exposed to traded market risk through its trading activities and to non-traded market risk through its banking activities. Traded and non-traded market risk exposures are managed and discussed separately. The traded market risk section begins below. The non-traded market risk section begins on page 45.

Pension-related activities also give rise to market risk. Refer to page 75 for more information on risk related to pensions.

Traded market risk

Definition (audited)

Traded market risk is the risk arising from changes in fair value on positions, assets, liabilities or commitments in trading portfolios as a result of fluctuations in market prices.

Sources of risk (audited)

Traded market risk mainly arises from NWM Group's trading activities. These activities provide a range of financing, risk management and investment services to clients – including corporations and financial institutions – around the world. From a market risk perspective, activities are focused on rates; currencies; and traded credit.

NWM Group undertakes transactions in financial instruments including debt securities, as well as securities financing and derivatives.

The key categories of traded market risk are interest rate risk, credit spread risk and foreign currency price risk.

Trading activities may also give rise to counterparty credit risk. For further detail, refer to the Credit risk section.

Key developments in 2022

- The year was marked by periods of increased market volatility reflecting UK political developments, global inflationary concerns and the invasion of Ukraine.
- The significant volatility in Gilts, sterling swaps and inflation entered the rolling window for VaR calculation during 2022. However, traded VaR and SVaR remained within appetite and, on an average basis, decreased compared to 2021, aided by NWM Group's continued disciplined approach to risk-taking.

Governance (audited)

Market risk policy statements set out the governance and risk management framework. Responsibility for identifying, measuring, monitoring and controlling market risk arising from trading activities lies with the relevant trading business. The Market Risk function independently advises on, monitors and challenges the risk-taking activities undertaken by the trading business ensuring these are within the constraints of the market risk framework, policies, and risk appetite statements and measures.

Risk appetite

NWM Group's qualitative appetite for traded market risk is set out in the traded market risk appetite statement. Quantitative appetite is expressed in terms of exposure limits. The limits at NWM Group level comprise value-at-risk (VaR), stressed value-at-risk (SVaR) and stress-testing limits. More details on these are provided on the following pages.

For each trading business, a document known as a dealing authority compiles details of all applicable limits and trading restrictions. The desk-level mandates comprise qualitative limits related to the product types within the scope of each desk, as well as quantitative metrics specific to the desk's market risk exposures. These additional limits and metrics aim to control various risk dimensions such as exposure size, aged inventory, currency and tenor.

The limits are reviewed to reflect changes in risk appetite, business plans, portfolio composition and the market and economic environments and recalibrated to ensure that they remain aligned to NWM Group RWA targets. Limit reviews focus on optimising the alignment between traded market risk exposure and capital usage.

To ensure approved limits are not breached and that NWM Group remains within its risk appetite, triggers have been set such that if exposures exceed a specified level, action plans are developed by the relevant business and the Market Risk function and implemented.

For more detail on risk appetite, refer to page 37.

Monitoring and mitigation

Traded market risk is identified and assessed by gathering, analysing, monitoring and reporting market risk information at desk, business and NWM Group-wide levels. Industry expertise, continued system developments and techniques such as stress testing are also used to enhance the effectiveness of the identification and assessment of all material market risks.

Traded market risk exposures are monitored against limits and analysed daily. A daily report summarising the position of exposures against limits at desk, business and NWM Group levels is provided to senior management and market risk managers across the function. Limit reporting is supplemented with regulatory capital and stress testing information as well as ad-hoc reporting.

A risk review of trading businesses is undertaken weekly with senior risk and front office staff. This includes a review of profit and loss drivers, notable position concentrations and other positions of concern.

Business profit and loss performance is monitored automatically through loss triggers which, if breached, require a remedial action plan to be agreed between the Market Risk function and the business. The loss triggers are set using both a fall-from-peak approach and an absolute loss level. In addition, regular updates on traded market risk positions are provided to NWM Group's Executive Risk Committee and Board Risk Committee.

Traded market risk continued

Measurement (audited)

NWM Group uses VaR, SVaR and the incremental risk charge to measure traded market risk. Risks that are not adequately captured by VaR or SVaR are captured by the Risks Not In VaR (RNIV) framework to ensure that NWM Group is adequately capitalised for market risk. In addition, stress testing is used to identify any vulnerabilities and potential losses.

The key inputs into these measurement methods are market data and risk factor sensitivities. Sensitivities refer to the changes in trade or portfolio value that result from small changes in market parameters that are subject to the market risk limit framework. Revaluation ladders are used in place of sensitivities to capture the impact of large moves in risk factors or the joint impact of two risk factors.

The suite of internal metrics used for risk management purposes at NWM Group level have been designed to capture correlation effects and to allow for an aggregated view of traded market risk across risk types, markets and business lines while also taking into account the characteristics of each risk type.

Value-at-risk

For internal risk management purposes, VaR assumes a time horizon of one trading day and a confidence level of 99%.

The internal VaR model – which captures all trading book positions including those products approved by the regulator – is based on a historical simulation, utilising market data from the previous 500 days on an equally-weighted basis.

The model also captures the potential impact of interest rate risk, credit spread risk, foreign currency price risk, equity price risk and commodity price risk.

When simulating potential movements in such risk factors, a combination of absolute, relative and rescaled returns is used.

The performance and adequacy of the VaR model are tested regularly through the following processes:

- Back-testing: Internal and regulatory back-testing is conducted on a daily basis. For further information on back-testing, refer to the following page.
- Ongoing model validation: VaR model performance is assessed both regularly and, on an ad-hoc basis if market conditions or portfolio profile change significantly.
- Model Risk Management review: As part of the model lifecycle, all risk models (including the VaR model) are independently reviewed to ensure the model is still fit for purpose given current market conditions and portfolio profile. For further detail on the independent model validation carried out by Model Risk Management, refer to page 79. More information relating to pricing and market risk models is presented in the NatWest Group Pillar 3 Report.

One-day 99% traded internal VaR (audited)

The table below shows one-day 99% internal VaR for the trading portfolios of NWM Group, split by exposure type.

	2022				2021			
Traded internal VaR (1-day 99%)	Average £m	Maximum £m	Minimum £m	Period end £m	Average £m	Maximum £m	Minimum £m	Period end £m
Interest rate	7.3	12.6	4.1	9.0	10.4	25.3	4.5	8.9
Credit spread	7.8	12.0	6.0	6.4	11.3	13.4	9.4	10.7
Currency	3.1	8.0	1.2	1.5	3.4	9.4	1.7	2.2
Equity	—	0.3	—	—	0.4	0.8	—	0.2
Commodity	—	—	—	—	0.1	0.5	—	—
Diversification (1)	(7.5)			(6.8)	(12.3)			(10.5)
Total	10.7	15.1	7.2	10.1	13.3	23.9	9.3	11.5

(1) NWM Group benefits from diversification across various financial instrument types, currencies and markets. The extent of the diversification benefit depends on the correlation between the assets and risk factors in the portfolio at a particular time. The diversification factor is the sum of the VaR on individual risk types less the total portfolio VaR.

- On an average basis, total traded VaR was lower in 2022 than in 2021 despite the increased market volatility related to sterling Gilts, swaps and inflation entering the rolling window for VaR calculation during 2022.
- The decrease in average interest rate VaR reflected the lower tenor basis risk in sterling flow trading in 2022 than in 2021. This followed the application of a regulator-approved update to the VaR model in Q3 2021 to address the impact of the transition from LIBOR to alternative risk-free rates.
- Credit spread VaR also decreased, mainly because the heightened market volatility in March 2020, resulting from the onset of the COVID-19 crisis, dropped out of the VaR window during H1 2022.

Traded market risk continued

VaR back-testing

The main approach employed to assess the VaR model's ongoing performance is back-testing, which counts the number of days when a loss exceeds the corresponding daily VaR estimate, measured at a 99% confidence level.

Two types of profit and loss (P&L) are used in back-testing comparisons: Actual P&L and Hypothetical P&L. For more details on the back-testing approach and the differences between internal and regulatory VaR, refer to the Market risk section of the NatWest Group Pillar 3 Report.

The table below shows regulatory back-testing exceptions in NWM Plc for the 250-business-day period to 31 December 2022 for one-day 99% traded regulatory VaR compared with Actual and Hypothetical (Hypo) P&L.

	Back-testing exceptions	
	Actual	Hypo
NWM Plc	10	16

- In the 250-day rolling window to 31 December 2022, NWM Plc experienced 10 Actual and 16 Hypothetical VaR P&L back-testing exceptions.
- Most of these occurred during H1 2022, reflecting significant market volatility in sterling Gilts, swaps and inflation due to UK political developments, global inflationary concerns and the invasion of Ukraine.
- A prospective update to make the VaR model more sensitive to recent market conditions has been submitted to the PRA.

The table below shows internal back-testing exceptions in the major NWM businesses for the 250-business-day period to 31 December 2022. Internal back-testing compares one-day 99% traded internal VaR with Actual and Hypo P&L.

	Back-testing exceptions	
	Actual	Hypo
Rates	2	6
Currencies	—	7
Credit	—	—
xVA	1	1

- The exceptions in the Rates business were mainly driven by market moves in sterling, euro and US dollar rates and sterling inflation.
- The exceptions in the Currencies business were mainly driven by market moves related to sterling, the euro and the US dollar.
- The total xVA loss was driven by a loss due to the default of a counterparty.

Stressed VaR (SVaR)

As with VaR, the SVaR methodology produces estimates of the potential change in the market value of a portfolio, over a specified time horizon, at a given confidence level. SVaR is a VaR-based measure using historical data from a one-year period of stressed market conditions. A simulation of 99% VaR is run on the current portfolio for each 250-day period from 2005 to the current VaR date, moving forward one day at a time. The SVaR is the worst VaR outcome of the simulated results.

This is in contrast with VaR, which is based on a rolling 500-day historical data set. A time horizon of ten trading days is assumed with a confidence level of 99%. NWM Group's internal traded SVaR model captures all trading book positions.

The table below analyses 10-day 99% internal SVaR for the trading portfolios of NWM Group.

	2022				2021			
	Average £m	Maximum £m	Minimum £m	Period end £m	Average £m	Maximum £m	Minimum £m	Period end £m
Total internal traded SVaR	70	206	34	40	95	175	46	66

- Traded SVaR was, on an average basis, lower in 2022 than in 2021, following the reduction in tenor basis risk in sterling flow trading resulting from the VaR model update in Q3 2021.

Traded market risk continued

Risks Not In VaR (RNIVs)

The RNIV framework is used to identify and quantify market risks that are not fully captured by the internal VaR and SVaR models.

RNIV calculations form an integral part of ongoing model and data improvement efforts to capture all market risks in scope for model approval in VaR and SVaR.

For further qualitative and quantitative disclosures on RNIVs, refer to the Market risk section of the NatWest Group Pillar 3 Report.

Stress testing

For information on stress testing, refer to page 38.

Incremental risk charge (IRC)

The IRC model quantifies the impact of rating migration and default events on the market value of instruments with embedded credit risk (in particular, bonds and credit default swaps) held in the trading book. It further captures basis risk between different instruments, maturities and reference entities. For further qualitative and quantitative disclosures on the IRC, refer to the Market risk section of the NatWest Group Pillar 3 Report.

Non-traded market risk

Definition (audited)

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

Sources of risk (audited)

The key sources of non-traded market risk are interest rate risk, credit spread risk, foreign exchange risk and equity risk.

For detailed qualitative and quantitative information on each of these risk types, refer to the separate sub-sections starting on the following page.

Key developments in 2022

- NWM Plc's non-traded internal VaR decreased on an average basis compared to 2021, driven by a decrease in credit spread VaR. This was driven by the COVID-19-related market volatility in March 2020 dropping out of the VaR calculation window and by changes in fair value loan positions. Interest rate VaR increased reflecting higher volatility in interest rates, particularly in sterling, towards year-end.
- NWM Plc maintains a structural hedge of its common equity and reserves. At 31 December 2022, the notional amount of the structural hedge in place was £3.3 billion (£3.9 billion at 31 December 2021). NWM N.V. implemented a structural hedge of its common equity and reserves in 2022; at 31 December 2022, the notional amount of this hedge, in sterling equivalent terms, was £1.6 billion.

Governance (audited)

Responsibility for identifying, measuring, monitoring and controlling market risk arising from non-trading activities lies with the relevant business. Oversight is provided by NWM Group's Non-Traded Market Risk function.

Risk positions are reported regularly to NWM Group's Executive Risk Committee and the Board Risk Committee, as well as to the Assets & Liabilities Committee (ALCo). Non-traded market risk policy statements set out the governance and risk management framework.

Non-traded market risk is managed separately on both sides of the ring-fence. It is aggregated and monitored against risk appetite at both NWM Plc and NatWest Group levels.

Risk appetite

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

Its quantitative appetite is expressed in terms of exposure limits. At the NWM Plc level, the Board limit comprises a VaR measure. This is supplemented with SVaR, sensitivities (including to the CET1 ratio), earnings-at-risk and economic-value-of-equity measures monitored at Executive governance level.

To ensure limits are not breached and that NWM Plc remains within its risk appetite, triggers have been set such that if exposures exceed a specified level, action plans are developed by the business, Non-Traded Market Risk and Finance for implementation. Limits are reviewed regularly to reflect changes in risk appetite, business plans, portfolio composition and the external environment. For further information on risk appetite, refer to page 37.

Non-traded market risk continued

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

The market risk exposures arising as a result of banking activities are measured using a combination of value-based metrics (VaR and sensitivities) and earnings-based metrics. The following table shows NWM Plc's one-day internal banking book VaR at a 99% confidence level, split by risk type. VaR values for each year are calculated based on one-day values for each of the 12 month-end reporting dates. For NWM N.V., refer to the appropriate key point below the table.

	2022				2021			
	Average	Maximum	Minimum	Period end	Average	Maximum	Minimum	Period end
NWM Plc	£m	£m	£m	£m	£m	£m	£m	£m
Interest rate	4.1	7.0	2.3	5.8	2.8	3.4	2.1	2.6
Credit spread	3.5	4.7	3.0	3.9	5.8	7.8	4.4	4.9
Foreign exchange rate	3.6	4.8	2.8	4.7	4.8	5.9	4.3	4.4
Equity risk	1.4	2.6	1.1	1.1	2.8	3.1	2.5	2.6
Diversification (1)	(5.1)			(5.6)	(7.8)			(7.0)
Total	7.5	9.9	5.7	9.9	8.4	10.9	6.4	7.5

(1) NWM 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.

- In NWM Plc, total non-traded internal VaR decreased on an average basis, driven by the decrease in credit spread VaR. This was driven by the COVID-19-related market volatility in March 2020 dropping out of the VaR calculation window during H1 2022, and by changes in fair value loan positions.
- Foreign exchange and equity risks also decreased, offsetting the increase in interest rate risk.
- Interest rate VaR increased reflecting higher volatility in interest rates, particularly in sterling, towards year-end.
- Equity risk VaR decreased due to disposals of legacy equity investments.
- In NWM N.V., in sterling equivalent terms, non-traded VaR was £0.6 million on an average basis (2021 - £0.9 million) and £0.4 million on a period end basis (2021 - £0.5 million).

Interest rate risk

Non-traded interest rate risk (NTIRR) mainly arises from capital hedges, in portfolios held for liquidity purposes and from interest rate repricing mismatches between assets and liabilities in other portfolios. When aggregated, these products form portfolios of assets and liabilities with varying degrees of sensitivity to changes in market interest rates. Mismatches can give rise to volatility in net interest income as interest rates vary.

NTIRR comprises the following three primary risk types:

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

To manage exposures within appetite, NWM Group aggregates its interest rate positions and hedges these externally using cash and derivatives (primarily interest rate swaps).

Credit spread risk

Credit spread risk arises from the potential adverse economic impact of a change in the spread between bond (or other credit-sensitive instrument) yields and swap rates, where the portfolios are accounted at fair value through other comprehensive income. Credit risk also arises on loan portfolios classified at fair value.

To ensure NWM Group can continue to meet its obligations in the event that access to wholesale funding markets is restricted, it maintains a liquidity buffer in the form of bond portfolios – comprising primarily high-quality securities – and central bank cash.

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

Non-traded market risk continued

Foreign exchange risk

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

- Structural foreign exchange rate risk – mainly arises from the capital deployed in foreign subsidiaries and branches.
- Transactional foreign exchange rate risk – arises from customer transactions and profits and losses that are in a currency other than the functional currency.

Structural foreign exchange rate risk is assessed and managed by NWM Plc Treasury, with the aim of reducing NWM Plc's solo CET1 ratio sensitivity to unexpected movements in spot foreign exchange rates.

The position is managed within risk appetite levels under delegated authority from NWM Plc ALCo. The sensitivity of the CET1 ratio to exchange rates is reported to NWM Plc senior management monthly.

Gains or losses arising from the retranslation of net investments in overseas operations are recognised in equity reserves and reduce the sensitivity of capital ratios to foreign exchange rate movements primarily arising from the retranslation of non-sterling denominated RWAs.

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

Foreign exchange exposures (audited)

The table below shows NWM Group's structural foreign currency exposures.

2022	Net investments in foreign operations £m	Net investment hedges £m	Structural foreign currency exposures £m	Economic hedges £m	Residual structural foreign currency exposures £m
US dollar (1)	**1,239**	**(303)**	**936**	**(936)**	**—**
Euro	**2,702**	**(420)**	**2,282**	**—**	**2,282**
Swiss franc	**184**	**(184)**	**—**	**—**	**—**
Other non-sterling	**390**	**(78)**	**312**	**—**	**312**
	4,515	**(985)**	**3,530**	**(936)**	**2,594**
2021					
US dollar (1)	1,250	(260)	990	(853)	137
Euro	2,400	(221)	2,179	—	2,179
Swiss franc	171	(171)	—	—	—
Other non-sterling	392	(69)	323	—	323
	4,213	(721)	3,492	(853)	2,639

(1) Economic hedges of US dollar net investments in foreign operations represent US dollar equity securities that do not qualify as net investment hedges for accounting purposes.

- Sterling weakened against the US dollar, to 1.21 at 31 December 2022 compared to 1.35 at 31 December 2021. It also weakened against the euro, to 1.13 at 31 December 2022 compared to 1.19 at 31 December 2021.
- Changes in foreign currency exchange rates affect equity in proportion to structural foreign currency exposure. For example, a 5% strengthening or weakening in foreign currencies against sterling would result in a gain or loss of £0.2 billion in equity, respectively.

Capital, liquidity and funding risk

NWM 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 & 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 are set by applicable regulations to determine capital eligibility.

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

Liquidity consists of assets that can be readily converted to cash within a short timeframe and 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;
- Credit ratings;
- Wholesale market conditions; and
- Depositor and investor behaviour.

Sources (audited)

Capital

The eligibility of instruments and financial resources as regulatory capital is laid down by applicable regulation. Capital is categorised by applicable regulation under two tiers (Tier 1 and Tier 2) according to the ability to absorb losses on either a going or gone concern basis, degree of permanency and the ranking of loss absorption. 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 perpetual in nature, with an initial call period of at least five years from issue and are written off or converted into CET1 capital if a pre-specified CET1 ratio is reached. The sum of CET1 and AT1 capital is referred to as Tier 1 capital.
- Tier 2 capital - Tier 2 capital is the bank entities' supplementary capital and provides loss absorption on a gone concern basis. 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 NWM Plc has failed. Tier 2 capital absorbs losses after Tier 1 capital. It typically consists of subordinated debt securities with a minimum initial maturity of five years.

Minimum requirement for own funds and eligible liabilities (MREL)

In addition to capital, other specific loss absorbing instruments, including senior notes with a residual maturity of at least one year issued by NWM Plc, may be used to cover certain gone concern capital requirements.

Liquidity

NWM Group maintains a prudent approach to the definition of liquidity resources. Liquidity resources are divided into primary and secondary liquidity as follows:
- Primary liquid assets include cash and balances at central banks, Treasury bills and other high-quality government and US agency bonds.
- Secondary liquid assets are eligible as collateral for local central bank liquidity facilities. These assets may include lower-quality bonds and eligible 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

NWM Group's primary funding sources are as follows:

Type	Description
Wholesale markets	Includes: – Short-term (less than 1 year) unsecured money market funding. – Commercial paper and certificates of deposit. – Secured repo market funding.
Term debt	Includes: – Long-term (typically more than 1 year) senior unsecured and secured debt securities. – Long-term subordinated liabilities.
Internal capital and MREL	Includes: – Equity, AT1, Tier 2 capital instruments and MREL issued to NatWest Group plc (under the Single Point of Entry regime).

Capital, liquidity and funding risk continued

Managing capital, liquidity and funding requirements: regulated entities

In line with paragraph 135 of IAS 1 'Presentation of Financial Statements', NWM Group manages capital having regard to regulatory requirements. Regulatory capital, MREL, RWA and leverage is monitored and reported on an individual regulated bank legal entity basis ('bank entity'), which is the CRR transitional basis as relevant in the UK and EU.

Liquidity metrics including the LCR are presented for the solo legal entity as regulated by the PRA. Disclosures for funding sources and notes issued are presented for NWM Group rather than for NatWest Markets Plc.

Key developments in 2022

- NWM Plc's RWAs decreased by £1.3 billion to £21.4 billion at 31 December 2022, reflecting lower levels of counterparty credit and operational risk, partially offset by increases in credit and market risk.
- NWM Plc's CET1 ratio decreased by 70 basis points to 17.2% at 31 December 2022, from 17.9% at 31 December 2021, largely driven by dividends paid to NatWest Group plc and other reserve movements, partially offset by the decrease in RWAs.
- The leverage ratio at 31 December 2022 of 5.4% has been calculated in accordance with changes to the UK's leverage ratio framework introduced by the PRA which came into effect from 1 January 2022. As at 31 December 2021, the UK leverage ratio was 4.8%, which was calculated under the prior year's UK leverage methodology.
- NWM Plc's MREL at 31 December 2022 was £8.7 billion, or 40.4% of RWAs, compared to £9.6 billion or 42.1% of RWAs at 31 December 2021. The decrease in the year was largely due to the redemption of a €1.1 billion internal instrument and a €1.0 billion internal instrument, offset by a new internal instrument of $1.1 billion issued to NatWest Group plc.
- The NWM Plc liquidity portfolio was £18.6 billion at 31 December 2022, an increase of £2.5 billion from £16.1 billion at the prior year end.
- The LCR for NWM Plc was 253% at 31 December 2022, compared with 205% at 31 December 2021.

Capital management

Capital management is the process by which banks ensure that they have sufficient capital and other loss absorbing instruments to operate effectively. This includes meeting minimum regulatory requirements, operating within Board-approved risk appetite, maintaining credit ratings and supporting strategic goals. Capital management is critical in supporting banks businesses. Capital management within NWM Group is executed in accordance with the NatWest Group-wide framework.

NWM Plc's capital plans are produced and updated by the bank on a monthly basis. This process includes integration into NatWest Group's wider annual budgeting process and is summarised below. Other elements of capital management, including risk appetite and stress testing, are set out on pages 37 and 38.

Produce capital plans	– A capital plan is produced for NWM Plc using a five-year planning horizon under expected and stress conditions. Stressed capital plans are produced to support internal stress testing through the ICAAP or for regulatory purposes. – A shorter term (rolling 12 month) forecast is updated 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 ensure that capital of sufficient quantity and quality is planned to be available to support NWM Group's business and strategic plans over the planning horizon within approved risk appetite, as determined via stress testing, and minimum regulatory requirements. – Impact assessment captures input from across NWM Group including from businesses.
Inform capital actions	– Capital planning informs potential capital actions including managing capital through new issuance, redemptions or internal transactions. – Decisions on capital actions will be influenced by strategic and regulatory requirements, the cost and prevailing market conditions. – As part of capital planning, NWM Group will monitor its portfolio of capital securities and assess the optimal blend.

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

Liquidity and funding management

Liquidity and funding management follows a similar process to that outlined above for capital.

Liquidity portfolio management

The size of the portfolio is determined by reference to NWM Group's liquidity risk appetite. Consistent with NatWest Group, NWM Group retains a prudent approach to setting the composition of the liquidity portfolio, which is subject to internal policies and limits covering quality of counterparty, maturity mix and currency mix. NWM Group categorises its liquidity portfolio, including its locally managed liquidity portfolios, into primary and secondary liquid assets. The majority of the NWM Plc portfolio is managed by NatWest Holdings Treasury on behalf of NWM Plc, for which the NatWest Markets Treasurer is responsible.

NatWest Markets Securities Inc. and NatWest Markets N.V., both of which are significant operating subsidiaries of NWM Plc, hold locally managed liquidity portfolios to comply with local regulations that differ from PRA rules.

The liquidity value of the portfolio is determined by taking current market prices and applying a discount or haircut, to determine a liquidity value that represents the amount of cash that can be generated by the asset.

Funding risk management

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

The long-term obligations of NWM Group must be met with diverse and stable funding sources, the behavioural maturity of these liabilities must at a minimum equal those of the assets.

Capital, liquidity and funding risk continued

Minimum requirements

Capital ratios

The Bank entities are subject to minimum capital requirements relative to RWAs. The table below summarises the CRR end-point minimum requirements of capital to RWAs that NWM Plc is expected to meet.

Type	CET1	Total Tier 1	Total capital
Minimum capital requirements	4.5%	6.0%	8.0%
Capital conservation buffer (1)	2.5%	2.5%	2.5%
Countercyclical capital buffer (1)	0.5%	0.5%	0.5%
Total (2)	7.5%	9.0%	11.0%

(1) The institution specific countercyclical capital buffer requirement is based on the weighted average of geographical exposures. The Financial Policy Committee (FPC) increased UK countercyclical capital buffer rate from 0% to 1% from 13 December 2022, with a further increase from 1% to 2% anticipated from 5 July 2023. Foreign exposures may be subject to different countercyclical capital buffer rates dependent on the rate set in those jurisdictions. The capital conservation buffer and the countercyclical capital buffer are required to be met with CET1 capital only.
(2) In addition, NWM Plc is subject to Pillar 2A requirements which are not disclosed publicly.

Leverage ratio

At present, NWM Plc only has a leverage ratio reporting requirement, and not a regulatory minimum leverage requirement. Following the publication of the new UK leverage ratio framework on 8 October 2021, NWM Plc will be subject to the minimum leverage requirement from 1 January 2023.

Liquidity ratio

NWM Plc has a minimum liquidity coverage ratio (LCR) requirement under the PRA framework of 100%.

Measurement

Capital, RWAs and leverage

Capital resources, RWAs and leverage based on the PRA transitional arrangements for NWM Plc are set out below. Regulatory capital is monitored and reported at legal entity level for large subsidiaries of NatWest Group.

Capital adequacy ratios	2022 %	2021 %
CET1	17.2	17.9
Tier 1	20.4	21.0
Total	25.7	25.9
Total MREL	40.4	42.1
Capital	£m	£m
CET1 (1)	3,682	4,072
Tier 1	4,361	4,755
Total	5,502	5,870
Total MREL (2)	8,652	9,555
RWAs		
Credit risk	7,110	6,878
Counterparty credit risk	5,682	6,854
Market risk	7,152	6,934
Operational risk	1,478	2,020
Total RWAs	21,422	22,686

(1) CET1 includes £250 million foreseeable ordinary dividend deduction in December 2021. There is no foreseeable ordinary dividend deduction in December 2022.
(2) Includes senior debt instruments issued to NatWest Group plc with a regulatory value of £3.2 billion (2021 - £3.7 billion).

Leverage

The leverage ratio for December 2022 has been calculated in accordance with the Leverage Ratio (CRR) part of the PRA rulebook. The comparatives reflect the previous CRR framework which was applicable prior to 1 January 2022.

	2022	2021
Leverage exposure (£m) (3)	81,083	110,603
Tier 1 capital (£m)	4,361	4,755
Leverage ratio (%) (4)	5.4	4.3

(3) Leverage exposure is broadly aligned to the accounting value of on and off-balance sheet exposures, subject to specific adjustments for derivatives, securities financing positions and off-balance sheet exposures.
(4) Following the Financial Policy Committee's planned review of the UK's leverage ratio framework, the PRA has introduced changes to the framework from 1 January 2022. The leverage ratio for 31 December 2022 in the above table reflects the UK leverage ratio for NWM Plc, as per the new framework. As at 31 December 2021, the UK leverage ratio was 4.8%, which was calculated under the prior year's PRA UK leverage methodology.

Capital, liquidity and funding risk continued

Leverage exposure

The leverage exposure for December 2022 has been calculated in accordance with the Leverage Exposure (CRR) part of the PRA rulebook. The comparatives reflect the previous CRR framework which was applicable prior to 1 January 2022.

Leverage	2022 £m	2021 £m
Cash and balances at central banks	**13,467**	12,294
Trading assets	**27,301**	41,222
Derivatives	**96,258**	103,042
Net loans to customers	**27,011**	21,988
Other assets	**5,024**	4,008
Total assets	**169,061**	182,554
Derivatives		
- netting	**(95,223)**	(106,317)
- potential future exposures	**16,540**	32,235
Securities financing transactions gross up	**2,862**	1,298
Undrawn commitments	**5,239**	4,993
Regulatory deductions and other adjustments	**(3,077)**	(3,186)
Exclusion of core UK-group exposures	**(852)**	(974)
Claims on central banks	**(13,467)**	—
Leverage exposure (1)	**81,083**	110,603

(1) Following the Financial Policy Committee's planned review of the UK's leverage ratio framework, the PRA has introduced changes to the framework from 1 January 2022. The leverage exposure for December 2022 in the above table reflects the UK leverage exposure for NWM Plc, as per the new framework. As at 31 December 2021, the UK leverage exposure was £98,317 million which was calculated under the prior year's PRA UK leverage methodology.

Liquidity portfolio (audited)

The table below shows the liquidity portfolio by LCR product, with the incorporation of discounts (or haircuts) used within the internal stressed outflow coverage liquidity risk measure. Secondary liquidity comprises assets eligible for discount at central banks, which do not form part of the liquid asset portfolio for LCR or stressed outflow coverage purposes.

	Liquidity value (1)	
NatWest Markets Plc	2022 £m	2021 £m
Cash and balances at central banks	**13,472**	12,277
AAA to AA- rated governments	**4,766**	3,457
A+ and lower rated governments	**59**	18
Government guaranteed issuers, public sector entities and government sponsored entities	**13**	13
International organisations and multilateral development banks	**182**	140
LCR level 1 bonds	**5,020**	3,628
LCR level 1 assets	**18,492**	15,905
LCR level 2 assets	**—**	—
Non-LCR eligible assets	**—**	—
Primary liquidity	**18,492**	15,905
Secondary liquidity (2)	**68**	190
Total liquidity value	**18,560**	16,095

The table below shows the liquidity value of the liquidity portfolio by currency.

Total liquidity portfolio	GBP £m	USD £m	EUR £m	Other £m	Total £m
2022	**8,660**	**3,379**	**6,460**	**61**	**18,560**
2021	7,947	3,010	5,120	18	16,095

(1) Liquidity value is aligned to the internal stressed outflow coverage, which is stated after discounts (or haircuts) are applied to the instruments.
(2) 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 NWM Group's carrying values of the principal funding sources based on contractual maturity.

	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	2,427	642	3,069	1,244	564	1,808
of which: repos (amortised cost)	*799*	—	*799*	*522*	—	*522*
Customer deposits	3,353	261	3,614	2,161	107	2,268
of which: repos (amortised cost)	—	254	254	—	—	—
Trading liabilities (1)						
Repos (2)	23,740	—	23,740	19,389	—	19,389
Derivative cash collateral received	17,663	—	17,663	17,619	—	17,619
Other bank and customer deposits	414	654	1,068	832	704	1,536
Debt securities in issue	54	743	797	178	796	974
	41,871	1,397	43,268	38,018	1,500	39,518
Other financial liabilities						
Customer deposits (designated at fair value)	253	797	1,050	568	—	568
Debt securities in issue						
commercial paper and certificates of deposits	3,084	85	3,169	5,179	115	5,294
medium term notes (MTNs)	2,368	14,050	16,418	2,693	9,737	12,430
Subordinated liabilities	206	260	466	275	688	963
	5,911	15,192	21,103	8,715	10,540	19,255
Amounts due to holding company and fellow subsidiaries (3)						
MREL	2,199	974	3,173	939	2,919	3,858
Other bank and customer deposits	1,288	—	1,288	623	—	623
Subordinated liabilities	—	1,519	1,519	—	1,464	1,464
	3,487	2,493	5,980	1,562	4,383	5,945
Total funding	57,049	19,985	77,034	51,700	17,094	68,794
Of which: available in resolution (4)			*2,753*			*6,010*

(1) Funding sources excludes short positions of £9,524 million (2021 - £24,964 million) reflected as trading liabilities on the balance sheet.
(2) Comprises Central and other bank repos of £1,642 million (2021 - £827 million), other financial institution repos of £19,354 million (2021 - £16,935 million) and other corporate repos of £2,744 million (2021 - £1,627 million).
(3) Amounts due to holding company and fellow subsidiaries relating to non-financial instruments of £211 million (2021 - £181 million) and intercompany settlement balances of £26 million (2021 – Nil) have been excluded from the table.
(4) 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 in December 2021 (updating June 2018).

Capital, liquidity and funding risk continued

Senior notes and subordinated liabilities - residual maturity profile by instrument type (audited)

The table below shows NWM Group's debt securities in issue, subordinated liabilities and internal resolution instruments by residual maturity.

	Trading liabilities	Other financial liabilities				Amounts due to holding company and fellow subsidiaries		
	Debt securities in issue	Debt securities in issue						
	MTNs	Commercial paper and CDs	MTNs	Subordinated liabilities	Total	Internal MREL	Subordinated liabilities	Total notes in issue
2022	£m	£m	£m	£m	£m	£m	£m	£m
Less than 1 year	**54**	**3,084**	**2,368**	**206**	**5,658**	**2,199**	**—**	**7,911**
1-3 years	**474**	**73**	**9,011**	**—**	**9,084**	**974**	**830**	**11,362**
3-5 years	**37**	**12**	**4,403**	**18**	**4,433**	**—**	**—**	**4,470**
More than 5 years	**232**	**—**	**636**	**242**	**878**	**—**	**689**	**1,799**
Total	**797**	**3,169**	**16,418**	**466**	**20,053**	**3,173**	**1,519**	**25,542**
2021								
Less than 1 year	178	5,179	2,693	275	8,147	939	—	9,264
1-3 years	335	105	4,907	222	5,234	2,919	824	9,312
3-5 years	112	10	4,425	21	4,456	—	—	4,568
More than 5 years	349	—	405	445	850	—	640	1,839
Total	974	5,294	12,430	963	18,687	3,858	1,464	24,983

The table below shows the currency breakdown of total notes in issue.

2022	GBP £m	USD £m	EUR £m	Other £m	Total £m
Commercial paper and CDs	**496**	**679**	**1,994**	**—**	**3,169**
MTNs	**1,301**	**5,249**	**7,991**	**2,674**	**17,215**
External subordinated liabilities	**19**	**102**	**345**	**—**	**466**
Internal MREL due to NatWest Group plc	**—**	**3,173**	**—**	**—**	**3,173**
Subordinated liabilities due to NatWest Group plc	**—**	**689**	**830**	**—**	**1,519**
Total	**1,816**	**9,892**	**11,160**	**2,674**	**25,542**
2021 Total	853	9,156	13,467	1,507	24,983

Credit risk

Definition (audited)

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

Sources of risk (audited)

The principal sources of credit risk for NWM Group are lending, off-balance sheet products, derivatives and securities financing, debt securities, and settlement risk through trading activities.

Key developments in 2022 (audited)

- The credit profile remained stable, but the outlook is uncertain from inflationary pressure, compounded by rising interest rates and geopolitical tension. NWM Group has yet to see signs of financial stress materially affect customers' ability to repay.
- Expected credit loss (ECL) reduced during 2022, primarily reflecting a fall in Stage 3 cases. Overall ECL coverage decreased for the same reason.
- Current and potential credit exposure increased in context of business growth. The effect of inflation on customers continues to be assessed. Sector appetite is reviewed regularly and where appropriate adjusted for those sectors most effected by current economic and geopolitical conditions.
- NWM Group continued to progress embedding climate change considerations in credit assessment and monitoring, including scenario analysis to assess the materiality of climate change risks.

Governance (audited)

The Credit Risk function provides oversight and challenge of frontline credit risk management activities. Authority is delegated to credit risk officers who operate within designated limits set at a customer level and a portfolio level.

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 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 provisions and model committees.
- Development and approval of credit grading models.

A Credit Risk Committee provides oversight of the overall credit risk profile and sector/product/asset class concentrations.

Risk appetite

Credit risk appetite aligns to the strategic risk appetite set by the Board and is set and monitored through a risk appetite framework.

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 and are expressed as a set of mandatory controls.

Identification and measurement

Credit stewardship (audited)

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

Asset quality (audited)

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

Counterparty credit risk

Counterparty credit risk arises from the obligations of customers under derivative and securities financing transactions. It is a material part of NWM Group's credit risk.

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

Mitigation

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

Assessment and monitoring

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.

Credit risk continued

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 systems, 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

Early problem identification

Each sector has 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 NWM Group. There are two classifications in the framework that apply to non-defaulted customers who are in financial stress – Heightened Monitoring and Risk of Credit Loss. For the purposes of provisioning, all exposures categorised as Heightened Monitoring or Risk of Credit Loss are categorised as Stage 2 and subject to a lifetime loss assessment. The framework also applies to those customers that have met NWM Group's default criteria (AQ10 exposures). Defaulted exposures are categorised as Stage 3 impaired for provisioning purposes.

Customers classified in the Heightened Monitoring category are those who are still performing but have certain characteristics – such as trading issues, covenant breaches, material PD downgrades and past due facilities – that may affect the ability to meet repayment obligations. Heightened Monitoring customers require pre-emptive actions to return or maintain their facilities within 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 NWM Group in the next 12 months should mitigating action not be taken or not be successful.

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

Restructuring

Where customers are categorised as Risk of Credit Loss, relationships are mainly managed by the Restructuring team in NatWest Bank Plc as a service to NWM Group. The team protects NWM Group's capital by working with corporate and commercial customers to support their turnaround and recovery strategies and enable them to return to mainstream banking.

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. The type of forbearance offered is tailored to the customer's individual circumstances and 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.

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.

Credit risk continued

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.

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

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

Model build:

- The determination of economic indicators that have most influence on credit loss for each portfolio and the severity of impact (this leverages existing stress testing models which are reviewed annually).
- The build of term structures to extend the determination of the risk of loss beyond 12 months that will influence the impact of lifetime loss for exposures in Stage 2.

Model application:

- The assessment of the SICR and the formation of a framework capable of consistent application.
- The determination of asset lifetimes that reflect behavioural characteristics while also representing management actions and processes (using historical data and experience).
- The choice of forward-looking economic scenarios and their respective probability weights.

Refer to Accounting policies note 9 for further details.

IFRS 9 ECL model design principles (audited)

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

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

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

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 driver's 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.

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

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 NWM Group's model risk policy that stipulates periodic model monitoring, periodic re-validation and defines approval procedures and authorities according to model materiality. Various post model adjustments were applied where management judged they were necessary to ensure an adequate level of overall ECL provision. All post model adjustments were subject to formal approval through provisioning governance, and were categorised as follows:

- 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 NWM Group's ongoing ECL adequacy assessment process. A holistic framework has been established including reviewing a range of economic data, external benchmark information and portfolio performance trends with a particular focus on segments of the portfolio that are likely to be more susceptible to the high inflation environment and supply chain disruption.

ECL post model adjustments (audited)

The table below shows ECL post model adjustments.

	2022 £m	2021 £m
Deferred model calibrations	—	—
Economic uncertainty	1	2
Other adjustments	—	—
Total	1	2
Of which:		
- Stage 1	—	—
- Stage 2	*1*	*2*
- Stage 3	—	—

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). NWM Group has adopted a framework to identify deterioration based primarily on relative movements in lifetime PD supported by additional qualitative backstops. The principles applied are consistent across NWM Group and align to credit risk management practices, where appropriate.
The framework comprises the following elements:

- IFRS 9 lifetime PD assessment (the primary driver) – on modelled portfolios, the assessment is based on the relative deterioration in forward-looking lifetime PD and is assessed monthly. To assess whether credit deterioration has occurred, the residual lifetime PD at balance sheet date (which PD is established at date of initial recognition) 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. In broad terms, a doubling of PD would indicate a SICR. However, the PD uplift must be at least 0.1%.
- 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 and exposures managed within the Risk of Credit Loss framework.

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

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.

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.

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 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 – asset duration is based on annual customer review schedules and will be set to the next review date.

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 for the UK portfolios include UK gross domestic product (GDP), world GDP, the unemployment rate, the house price index, and the Bank of England base rate. Similar metrics are used for other key country exposures in NWM Group.

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.

Credit risk continued

Economic loss drivers (audited)

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.

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.

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.

Credit risk continued

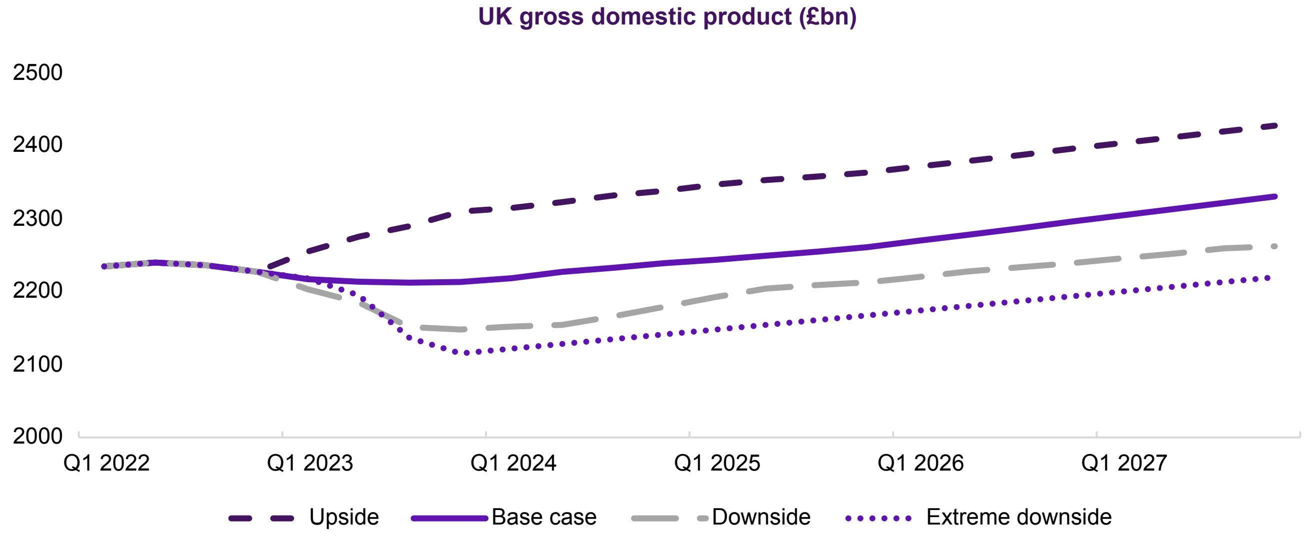
Probability weightings of scenarios

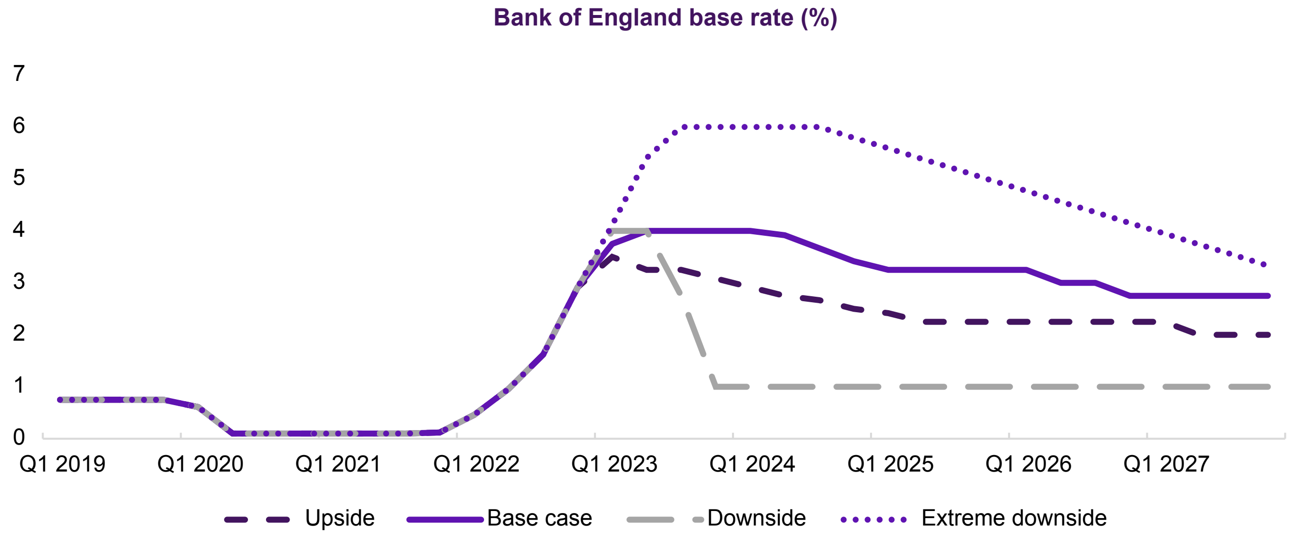
A subjective approach for assigning probability weight was used during COVID-19 due to the scale of the economic effect of COVID-19 and the range of recovery paths. Similarly, a subjective approach was used up to 30 September 2022, to reflect the deteriorating outlook and shifting balance of risks in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

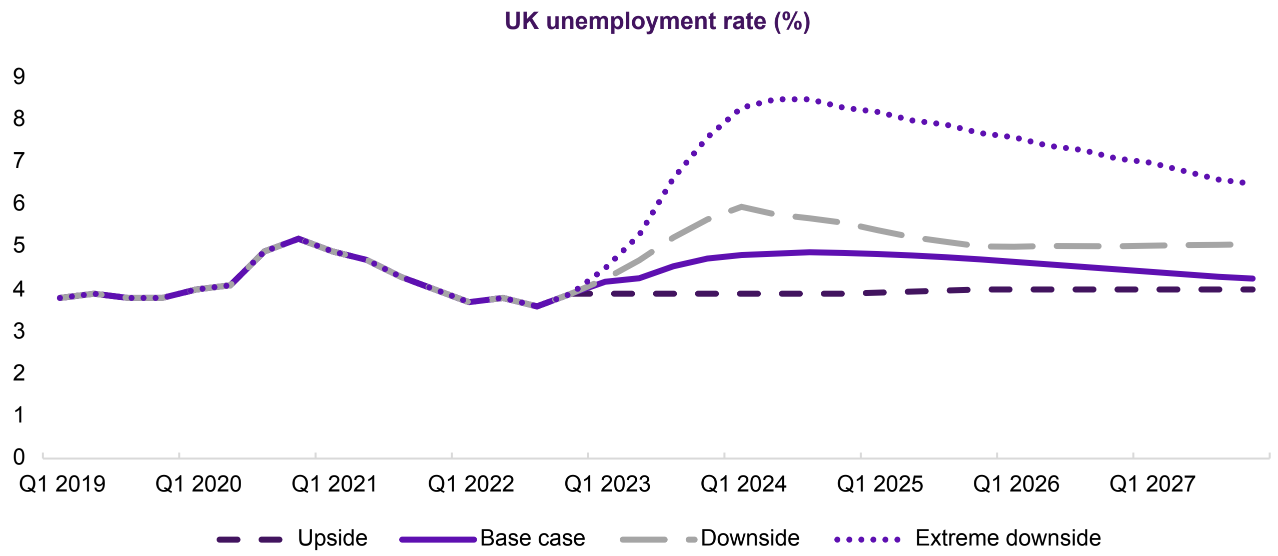
The approach involves comparing UK GDP paths for NWM Group's scenarios against a set of 1,000 model runs, following which, a percentile in the distribution is established that most closely corresponded to the scenario. Probability weight for base case is set first based on judgement, while probability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

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

Credit risk continued
Economic loss drivers







Credit risk continued

Economic loss drivers (audited)

Annual figures

GDP - annual growth

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

Commercial real estate price - four quarter change

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

Unemployment rate - annual average

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

Consumer price index - four quarter change

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

House price index - four quarter change

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

UK stock price index - four quarter change

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

Bank of England base rate - annual average

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

Worst points

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

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

Credit risk continued

Economic loss drivers (audited)

Use of the scenarios in lending

The lending ECL methodology is based on the concept of CCIs. The CCIs represent 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 approach is the long-standing observation that loss rates in the portfolios tend to follow regular cycles. This allows NWM Group to enrich the range and depth of future economic conditions embedded in the final ECL beyond what would be obtained from using the discrete macro-economic scenarios alone.

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. NWM Group has considered where these are most likely to affect the customer base. Furthermore, the rising cost of borrowing during 2022 for businesses 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 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 economic response models 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 lending, where new models with a higher weight on stock price indices were introduced for the most material portfolios.

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

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

Credit risk continued

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. In the simulations, NWM Group has assumed that the economic macro variables associated with these scenarios replace the existing base case economic assumptions, giving them a 100% probability weighting and therefore serving as a single economic scenario.

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

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

31 December 2022	Actual	Base scenario	Moderate upside scenario	Moderate downside scenario	Extreme downside scenario
Stage 1 modelled loans (£m)	10,941	11,054	11,159	10,566	9,622
Stage 1 modelled ECL (£m)	20	17	13	24	30
Stage 1 coverage (%)	0.18%	0.15%	0.12%	0.23%	0.31%
Stage 2 modelled loans (£m)	490	377	272	865	1,809
Stage 2 modelled ECL (£m)	8	4	4	12	38
Stage 2 coverage (%)	1.63%	1.06%	1.47%	1.39%	2.10%
Stage 1 and Stage 2 modelled loans (£m)	11,431	11,431	11,431	11,431	11,431
Stage 1 and Stage 2 modelled ECL (£m)	28	21	17	36	68
Stage 1 and Stage 2 coverage (%)	0.24%	0.18%	0.15%	0.31%	0.59%
Variance – (lower)/higher to actual total Stage 1 and Stage 2 ECL (£m)		(7)	(11)	8	40
Reconciliation to Stage 1 and Stage 2 flow exposure (£m)					
Modelled loans	11,431	11,431	11,431	11,431	11,431
Other asset classes	28,935	28,935	28,935	28,935	28,935

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

Measurement uncertainty and ECL adequacy (audited)

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, NWM Group utilised a framework of quantitative and qualitative measures to support the directional change and levels of ECL coverage, including economic data, credit performance insights and problem debt trends. This was particularly important for consideration of post model adjustments.

As the effects of the high inflation environment and supply chain disruption evolve during 2022 and into 2023 and government support schemes have to be serviced, there is a risk of credit deterioration. However, the income statement effect of this will be mitigated by the forward-looking provisions retained on the balance sheet at 31 December 2022.There are a number of key factors that could drive further downside to impairments, through deteriorating economic and credit metrics and increased stage migration as credit risk increases for more customers. Such factors would include an adverse deterioration in GDP and unemployment in the economies in which NWM Group operates.

Credit risk – Trading activities

This section details the credit risk profile of NWM Group's trading activities.

Securities financing transactions and collateral (audited)

The table below shows securities financing transactions in NWM Group. Balance sheet captions include balances held at all classifications under IFRS.

	Reverse repos			Repos		
2022	Total £m	Of which: can be offset £m	Outside netting arrangements £m	Total £m	Of which: can be offset £m	Outside netting arrangements £m
Gross	**36,945**	**36,411**	**534**	**39,340**	**34,857**	**4,483**
IFRS offset	**(14,547)**	**(14,547)**	**—**	**(14,547)**	**(14,547)**	**—**
Carrying value	**22,398**	**21,864**	**534**	**24,793**	**20,310**	**4,483**
Master netting arrangements	**(2,445)**	**(2,445)**	**—**	**(2,445)**	**(2,445)**	**—**
Securities collateral	**(19,221)**	**(19,221)**	**—**	**(17,865)**	**(17,865)**	**—**
Potential for offset not recognised under IFRS	**(21,666)**	**(21,666)**	**—**	**(20,310)**	**(20,310)**	**—**
Net	**732**	**198**	**534**	**4,483**	**—**	**4,483**
2021						
Gross	45,511	44,861	650	44,333	43,186	1,147
IFRS offset	(24,422)	(24,422)	—	(24,422)	(24,422)	—
Carrying value	21,089	20,439	650	19,911	18,764	1,147
Master netting arrangements	(900)	(900)	—	(900)	(900)	—
Securities collateral	(19,467)	(19,467)	—	(17,863)	(17,863)	—
Potential for offset not recognised under IFRS	(20,367)	(20,367)	—	(18,763)	(18,763)	—
Net	722	72	650	1,148	1	1,147

Debt securities (audited)

The table below shows debt securities held at mandatory fair value through profit or loss by issuer as well as ratings based on the lowest of Standard & Poor's, Moody's and Fitch.

	Central and local government			Financial institutions	Corporate	Total
2022	UK £m	US £m	Other £m	£m	£m	£m
AAA	**—**	**—**	**469**	**766**	**3**	**1,238**
AA to AA+	**—**	**2,345**	**1,042**	**1,114**	**21**	**4,522**
A to AA-	**2,205**	**—**	**372**	**77**	**29**	**2,683**
BBB- to A-	**—**	**—**	**916**	**149**	**296**	**1,361**
Non-investment grade	**—**	**—**	**—**	**65**	**49**	**114**
Unrated	**—**	**—**	**—**	**1**	**3**	**4**
Total	**2,205**	**2,345**	**2,799**	**2,172**	**401**	**9,922**
Short positions	**(2,313)**	**(1,293)**	**(3,936)**	**(1,875)**	**(107)**	**(9,524)**
2021						
AAA	—	—	2,011	838	—	2,849
AA to AA+	—	3,329	3,145	1,401	62	7,937
A to AA-	6,919	—	1,950	308	57	9,234
BBB- to A-	—	—	3,792	346	513	4,651
Non-investment grade	—	—	31	163	82	276
Unrated	—	—	—	3	3	6
Total	6,919	3,329	10,929	3,059	717	24,953
Short positions	(9,790)	(56)	(12,907)	(2,074)	(137)	(24,964)

Credit risk – Trading activities continued

Derivatives (audited)

The table below shows third party derivatives by type of contract. The master netting agreements and collateral shown do not result in a net presentation on the balance sheet under IFRS.

	2022							2021		
	Notional									
	GBP £bn	USD £bn	EUR £bn	Other £bn	Total £bn	Assets £m	Liabilities £m	Notional £bn	Assets £m	Liabilities £m
Gross exposure						101,020	95,478		104,614	97,500
IFRS offset						(2,509)	(2,509)		—	—
Carrying value	2,574	4,238	5,475	1,183	13,470	98,511	92,969	11,718	104,614	97,500
Of which:										
Interest rate (1)	2,276	2,843	4,922	278	10,319	52,529	47,873	8,558	66,091	57,955
Exchange rate	296	1,390	545	905	3,136	45,746	44,821	3,146	38,369	39,202
Credit	2	5	8	—	15	236	275	14	154	343
Carrying value					13,470	98,511	92,969	11,718	104,614	97,500
Counterparty mark-to-market netting						(76,722)	(76,722)		(83,633)	(83,633)
Cash collateral						(14,064)	(9,480)		(14,938)	(9,902)
Securities collateral						(4,210)	(1,185)		(2,428)	(1,070)
Net exposure						3,515	5,582		3,615	2,895
Banks (2)						647	669		314	404
Other financial institutions (3)						1,724	1,936		1,549	1,515
Corporate (4)						1,062	2,890		1,683	905
Government (5)						82	87		69	71
Net exposure						3,515	5,582		3,615	2,895
UK						1,257	2,753		1,940	1,030
Europe						1,195	1,990		709	1,008
US						753	626		645	653
RoW						310	213		321	204
Net exposure						3,515	5,582		3,615	2,895
Asset quality of uncollateralised derivative assets										
AQ1-AQ4						3,001			2,909	
AQ5-AQ8						498			649	
AQ9-AQ10						16			57	
Net exposure						3,515			3,615	

(1) The notional amount of interest rate derivatives includes £7,651 billion (2021 – £5,830 billion) in respect of contracts cleared through central clearing counterparties.
(2) Transactions with certain counterparties with which NWM Group has netting arrangements but collateral is not posted on a daily basis; certain transactions with specific terms that may not fall within netting and collateral arrangements; derivative positions in certain jurisdictions where the collateral agreements are not deemed to be legally enforceable.
(3) Includes transactions with securitisation vehicles and funds where collateral posting is contingent on NWM Group's external rating.
(4) Mainly large corporates with which NWM Group may have netting arrangements in place, but operational capability does not support collateral posting.
(5) Sovereigns and supranational entities with no collateral arrangements, collateral arrangements that are not considered enforceable, or one-way collateral agreements in their favour.

Credit risk – Trading activities continued

Derivatives: settlement basis and central counterparties (audited)

The table below shows the third-party derivative notional and fair value by trading and settlement method.

	Notional				Asset		Liability	
		Traded over the counter						
2022	Traded on recognised exchanges £bn	Settled by central counterparties £bn	Not settled by central counterparties £bn	Total £bn	Traded on recognised exchanges £m	Traded over the counter £m	Traded on recognised exchanges £m	Traded over the counter £m
Interest rate	707	7,651	1,961	10,319	113	52,416	33	47,840
Exchange rate	2	—	3,134	3,136	—	45,746	—	44,821
Credit	—	—	15	15	—	236	—	275
Equity and commodity	—	—	—	—	—	—	—	—
Total	709	7,651	5,110	13,470	113	98,398	33	92,936
2021								
Interest rate	723	5,830	2,005	8,558	—	66,091	—	57,955
Exchange rate	2	—	3,144	3,146	—	38,369	—	39,202
Credit	—	—	14	14	—	154	—	343
Equity and commodity	—	—	—	—	—	—	—	—
Total	725	5,830	5,163	11,718	—	104,614	—	97,500

Credit risk – Net credit exposures for banking and trading activities

Asset quality (audited)

The table below shows the current and potential exposure by high-level asset class and asset quality. It represents total credit risk for assets held in the banking book in addition to counterparty credit risk for traded products. Refer to page 71 for a mapping of AQ band to probability of default range and indicative external credit rating.

2022	Cash & balances at central banks £m	Sovereign debt securities £m	Loans and other lending £m	Other debt securities £m	Collateralised rate risk management £m	Uncollateralised rate risk management £m	Repo and reverse repo £m	Off-balance sheet items £m	Leasing £m	Total £m
AQ1-AQ4	17,007	5,695	9,987	5,538	2,360	1,964	1,659	596	29	44,835
AQ5-AQ8	—	—	687	305	164	327	25	21	—	1,529
AQ9	—	—	23	—	2	13	—	—	—	38
AQ10	—	—	47	1	—	—	—	—	—	48
Current exposure	17,007	5,695	10,744	5,844	2,526	2,304	1,684	617	29	46,450
Potential exposure	17,007	5,695	24,235	5,844	11,488	4,749	2,206	1,715	29	72,968
2021										
AQ1-AQ4	16,645	5,176	6,998	3,060	2,355	1,520	510	669	49	36,982
AQ5-AQ8	—	—	534	238	327	428	10	29	—	1,566
AQ9	—	—	23	—	2	52	—	—	—	77
AQ10	—	—	21	1	—	2	—	—	—	24
Current exposure	16,645	5,176	7,576	3,299	2,684	2,002	520	698	49	38,649
Potential exposure	16,645	5,176	18,065	3,299	10,493	3,865	1,590	2,014	49	61,196

- Measured against NWM Group's asset quality scale, 96% (2021 – 96%) of total current exposure was rated in the AQ1-AQ4 bands, which in the context of external credit ratings was equivalent to an investment grade rating of BBB- or better.
- The increase in total current and potential credit exposure reflected increased business volumes.

Credit risk – Banking activities

Introduction

This section details the credit risk profile of NWM Group's banking activities. Refer to accounting policies note 2.3 and note 2.10 to the financial statements for policies and critical judgments relating to impairment loss determination.

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

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

Financial assets

	31 December 2022			31 December 2021		
	Gross	ECL	Net	Gross	ECL	Net
	£bn	£bn	£bn	£bn	£bn	£bn
Balance sheet total gross amortised cost and FVOCI	42.8			36.0		
In scope of IFRS 9 ECL framework	40.1			33.6		
% in scope	94%			93%		
Loans to customers - in scope - amortised cost	10.2	—	10.2	7.5	0.1	7.4
Loans to customers - in scope - FVOCI	0.1	—	0.1	0.1	—	0.1
Loans to banks - in scope - amortised cost	1.0	—	1.0	0.9	—	0.9
Total loans - in scope	11.3	—	11.3	8.5	0.1	8.4
Stage 1	10.8	—	10.8	8.3	—	8.3
Stage 2	0.5	—	0.5	0.1	—	0.1
Stage 3	—	—	—	0.1	0.1	—
Other financial assets - in scope - amortised cost	22.8	—	22.8	19.8	—	19.8
Other financial assets - in scope - FVOCI	6.0	—	6.0	5.3	—	5.3
Total other financial assets - in scope	28.8	—	28.8	25.1	—	25.1
Stage 1	28.8	—	28.8	25.0	—	25.0
Stage 2	—	—	—	0.1	—	0.1
Stage 3				—	—	—
Out of scope of IFRS 9 ECL framework	2.7	na	2.7	2.4	na	2.4
Loans to customers - out of scope - amortised cost	—	na	—	—	na	—
Loans to banks - out of scope - amortised cost	0.2	na	0.2	—	na	—
Other financial assets - out of scope - amortised cost	2.6	na	2.6	2.2	na	2.2
Other financial assets - out of scope - FVOCI	(0.1)	na	(0.1)	0.2	na	0.2

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 £2.7 billion (2021 – £2.2 billion). These were assessed as having no ECL unless there was evidence that they were defaulted.
- Equity shares of £0.1 billion (2021 – £0.1 billion) as not within the IFRS 9 ECL framework by definition.
- Fair value adjustments on loans and debt securities hedged by interest rate swaps, where the underlying loan was within the IFRS 9 ECL scope of £(0.2) billion (2021 – £0.1 billion).

In scope assets also include an additional £0.4 billion (2021 – £0.7 billion) of inter-Group assets not shown in the table above.

Contingent liabilities and commitments

In addition to contingent liabilities and commitments disclosed in Note 25 to the financial statements, reputationally-committed limits are also included in the scope of the IFRS 9 ECL framework. These were offset by £0.2 billion (2021 – £0.2 billion) out of scope balances primarily related to facilities that, if drawn, would not be classified as amortised cost or FVOCI, or undrawn limits relating to financial assets exclusions. Total contingent liabilities (including financial guarantees) and commitments within IFRS 9 ECL scope of £14.7 billion (2021 – £11.7 billion) comprised Stage 1 £13.3 billion (2021 – £11.4 billion); Stage 2 £1.4 billion (2021 – £0.3 billion); and Stage 3 nil (2021 – nil).

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

Credit risk – Banking activities continued

Portfolio summary (audited)

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

	2022 £m	2021 £m
Loans - amortised cost and FVOCI		
Stage 1	**10,791**	8,301
Stage 2	**497**	147
Stage 3	**49**	99
Of which: individual	***37***	*91*
Of which: collective	***12***	*8*
Inter-Group (1)	**434**	731
Total	**11,771**	9,278
ECL provisions		
Stage 1	**20**	6
Stage 2	**8**	3
Stage 3	**26**	75
Of which: individual	***15***	*68*
Of which: collective	***11***	*7*
Total	**54**	84
ECL provisions coverage (2)		
Stage 1 (%)	**0.19**	0.07
Stage 2 (%)	**1.61**	2.04
Stage 3 (%)	**53.06**	75.76
Total	**0.48**	0.98
Impairment (releases)/losses		
ECL (release)/charge		
Stage 1	**8**	(14)
Stage 2	**14**	(11)
Stage 3	**(14)**	(9)
Of which: individual	***(15)***	*(6)*
Of which: collective	***1***	*(3)*
Third party	**8**	(34)
Inter-Group	**—**	(1)
Total	**8**	(35)
Amounts written-off	**55**	67
Of which: individual	***55***	*43*

(1) NWM Group's intercompany assets were classified in Stage 1. The ECL for these loans was £0.4 million (2021 – £0.2 million).
(2) 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.
(3) 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 £17.0 billion (2021 – £16.6 billion) and debt securities of £11.8 billion (2021 – £8.4 billion).
(4) The stage allocation of the ECL charge was aligned to the stage transition approach that underpins the analysis in the Flow statement section.

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 by sector, asset quality and geographical region based on the country of operation of the customer. The tables below report only third-party exposures and related ECL provisions, charges and write-offs.

2022	Property £m	Corporate £m	FI (1) £m	Sovereign £m	Total £m
Loans by geography	201	853	9,913	370	11,337
- UK	48	239	3,564	72	3,923
- Other Europe	153	468	2,706	202	3,529
- RoW	—	146	3,643	96	3,885
Loans by stage	201	853	9,913	370	11,337
- Stage 1	35	592	9,797	367	10,791
- Stage 2	151	230	116	—	497
- Stage 3	15	31	—	3	49
of which: individual	12	22	—	3	37
of which: collective	3	9	—	—	12
Weighted average life*					
- ECL measurement (years)	2	3	3	—	3
Weighted average 12 months PDs*					
- IFRS 9 (%)	2.64	2.75	0.20	0.04	0.41
- Basel (%)	0.68	1.49	0.13	0.03	0.22
ECL provisions by geography	10	26	14	4	54
- UK	4	8	9	1	22
- Other Europe	6	9	2	—	17
- RoW	—	9	3	3	15
ECL provisions by stage	10	26	14	4	54
- Stage 1	1	5	12	2	20
- Stage 2	1	5	2	—	8
- Stage 3	8	16	—	2	26
of which: individual	5	8	—	2	15
of which: collective	3	8	—	—	11
ECL provisions coverage (%)	4.98	3.05	0.14	1.08	0.48
- Stage 1 (%)	2.86	0.84	0.12	0.54	0.19
- Stage 2 (%)	0.66	2.17	1.72	—	1.61
- Stage 3 (%)	53.33	51.61	—	66.67	53.06
ECL (release)/charge - Third party	(5)	5	7	1	8
Amounts written-off	—	55	—	—	55
Other financial assets by asset quality (2)	49	14	6,097	22,619	28,779
- AQ1-AQ4	—	—	5,777	22,619	28,396
- AQ5-AQ8	49	14	320	—	383
- AQ9	—	—	—	—	—
Off-balance sheet	204	7,204	7,067	59	14,534
- Loan commitments	190	7,180	6,481	59	13,910
- Financial guarantees	14	24	586	—	624
Off-balance sheet by asset quality (2)	204	7,204	7,067	59	14,534
- AQ1-AQ4	168	6,620	6,864	59	13,711
- AQ5-AQ8	34	582	203	—	819
- AQ9	—	—	—	—	—
- AQ10	2	2	—	—	4

*Not within audit scope.

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

Credit risk – Banking activities continued

Sector analysis – portfolio summary (audited)

2021	Property £m	Corporate £m	FI (1) £m	Sovereign £m	Total £m
Loans by geography	122	773	7,353	299	8,547
- UK	*43*	*172*	*2,780*	*54*	*3,049*
- Other Europe	*78*	*447*	*1,374*	*174*	*2,073*
- RoW	*1*	*154*	*3,199*	*71*	*3,425*
Loans by stage	122	773	7,353	299	8,547
- Stage 1	*107*	*614*	*7,284*	*296*	*8,301*
- Stage 2	—	*81*	*66*	—	*147*
- Stage 3	*15*	*78*	*3*	*3*	*99*
of which: individual	*12*	*73*	*3*	*3*	*91*
of which: collective	*3*	*5*	—	—	*8*
Weighted average life*					
- ECL measurement (years)	1	4	4	1	3
Weighted average 12 months PDs*					
- IFRS 9 (%)	0.20	0.97	0.12	0.02	0.18
- Basel (%)	0.66	1.83	0.15	0.02	0.28
ECL provisions by geography	9	65	7	3	84
- UK	*6*	*10*	*3*	*1*	*20*
- Other Europe	*3*	*5*	*2*	—	*10*
- RoW	—	*50*	*2*	*2*	*54*
ECL provisions by stage	9	65	7	3	84
- Stage 1	—	—	*5*	*1*	*6*
- Stage 2	—	*1*	*2*	—	*3*
- Stage 3	*9*	*64*	—	*2*	*75*
of which: individual	*7*	*59*	—	*2*	*68*
of which: collective	*2*	*5*	—	—	*7*
ECL provisions coverage (%)	7.38	8.41	0.10	1.00	0.98
- Stage 1 (%)	—	—	*0.07*	*0.34*	*0.07*
- Stage 2 (%)	—	*1.23*	*3.03*	—	*2.04*
- Stage 3 (%)	*60.00*	*82.05*	—	*66.67*	*75.76*
ECL (release)/charge - Third party	—	(8)	(25)	(1)	(34)
Amounts written-off	—	39	28	—	67
Other financial assets by asset quality (2)	55	—	3,563	21,465	25,083
- AQ1-AQ4	—	—	*3,181*	*21,465*	*24,646*
- AQ5-AQ8	*55*	—	*382*	—	*437*
- AQ9	—	—	—	—	—
Off-balance sheet	270	4,954	6,453	37	11,714
- Loan commitments	*251*	*4,857*	*5,864*	*37*	*11,009*
- Financial guarantees	*19*	*97*	*589*	—	*705*
Off-balance sheet by asset quality (2)	270	4,954	6,453	37	11,714
- AQ1-AQ4	*190*	*4,204*	*6,102*	*37*	*10,533*
- AQ5-AQ8	*78*	*737*	*348*	—	*1,163*
- AQ9	—	—	—	—	—
- AQ10	*2*	*13*	*3*	—	*18*

*Not within audit scope.

(1) Financial institutions (FI) include transactions, such as securitisations, where the underlying assets may be in other sectors.
(2) AQ bandings are based on Basel PDs and mapping is as follows:

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

Credit risk – Banking activities continued

Sector analysis – portfolio summary (audited)

The table below shows ECL by stage, for selected sectors of the Wholesale portfolios

	Loans - amortised cost and FVOCI				Off-balance sheet		ECL provisions			
	Stage 1	Stage 2	Stage 3	Total	Loan	Contingent	Stage 1	Stage 2	Stage 3	Total
2022	£m	£m	£m	£m	commitments	liabilities	£m	£m	£m	£m
Property*	35	151	15	201	190	14	1	1	8	10
Financial institutions	9,797	116	—	9,913	6,481	586	12	2	—	14
Sovereign	367	—	3	370	59	—	2	—	2	4
Corporate	592	230	31	853	7,180	24	5	5	16	26
Of which:										
*Agriculture**	—	2	—	2	1	—	—	—	—	—
*Airlines and aerospace**	—	22	1	23	412	—	—	1	1	2
*Automotive**	2	43	—	45	623	2	—	1	—	1
*Chemicals**	13	—	—	13	64	—	—	—	—	—
Health	41	2	1	44	—	—	—	—	1	1
*Industrials**	34	56	—	90	271	5	1	—	—	1
*Land transport and logistics**	18	53	—	71	314	1	—	1	—	1
*Leisure**	1	—	—	1	158	—	—	—	—	—
*Mining & metals**	—	—	3	3	—	—	—	—	3	3
*Oil and gas**	3	—	20	23	549	1	—	—	2	2
*Power Utilities**	118	—	—	118	2,595	2	1	—	—	1
*Retail**	9	—	—	9	518	4	—	—	—	—
*Shipping**	2	—	—	2	14	—	—	—	—	—
*Water & Waste**	32	—	—	32	256	—	—	—	—	—
Total	10,791	497	49	11,337	13,910	624	20	8	26	54
2021										
Property*	107	—	15	122	251	19	—	—	9	9
Financial institutions	7,284	66	3	7,353	5,864	589	5	2	—	7
Sovereign	296	—	3	299	37	—	1	—	2	3
Corporate	614	81	78	773	4,857	97	—	1	64	65
Of which:										
*Agriculture**	—	—	40	40	1	—	—	—	40	40
*Airlines and aerospace**	—	—	7	7	163	44	—	—	6	6
*Automotive**	10	39	—	49	686	—	—	1	—	1
*Chemicals**	—	—	—	—	62	—	—	—	—	—
Health	27	—	2	29	150	—	—	—	1	1
*Industrials**	5	—	—	5	229	34	—	—	—	—
*Land transport and logistics**	74	1	—	75	230	1	—	—	—	—
*Leisure**	—	3	—	3	304	—	—	—	—	—
*Mining & metals**	—	—	3	3	—	—	—	—	3	3
*Oil and gas**	252	—	17	269	39	1	—	—	4	4
*Power Utilities**	87	—	1	88	1,396	2	—	—	1	1
*Retail**	—	—	—	—	289	4	—	—	—	—
*Shipping**	—	—	—	—	—	1	—	—	—	—
*Water & Waste**	55	—	—	55	209	—	—	—	—	—
Total	8,301	147	99	8,547	11,009	705	6	3	75	84

(1) Financial institutions (FI) include transactions, such as securitisations, where the underlying assets may be in other sectors.

* Wholesale sectors marked with an asterisk contain an element of exposure classified as heightened climate-related risk – refer to the 2022 NWG Climate-related Disclosures Report for further information.

Credit risk – Banking activities continued

Sector analysis – portfolio summary (audited)

Forbearance

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

2022	FI £m	Property £m	Sovereign £m	Other corporate £m	Total £m
Forbearance (flow)	—	—	—	**20**	**20**
Forbearance (stock)	—	—	—	**45**	**45**
Heightened Monitoring and Risk of Credit Loss	—	—	—	**7**	**7**
2021					
Forbearance (flow)	1	5	—	5	11
Forbearance (stock)	1	5	—	62	68
Heightened Monitoring and Risk of Credit Loss	15	22	—	5	42

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	**17.0**	—	**17.0**	—	—	—	—	—	—	**17.0**	—
Loans - amortised cost (3)	**11.3**	—	**11.3**	—	**1.1**	—	—	**1.1**	—	**10.2**	—
Debt securities	**11.8**	—	**11.8**	—	—	—	—	—	—	**11.8**	—
Total financial assets	**40.1**	—	**40.1**	—	**1.1**	—	—	**1.1**	—	**39.0**	—
Contingent liabilities and commitments	**14.5**	—	**14.5**	—	**1.6**	**0.1**	—	**1.7**	—	**12.8**	—
Total off-balance sheet	**14.5**	—	**14.5**	—	**1.6**	**0.1**	—	**1.7**	—	**12.8**	—
Total exposure	**54.6**	—	**54.6**	—	**2.7**	**0.1**	—	**2.8**	—	**51.8**	—
2021											
Financial assets											
Cash and balances at central banks	16.6	—	16.6	—	—	—	—	—	—	16.6	—
Loans - amortised cost (3)	8.5	0.1	8.4	—	0.7	—	—	0.7	—	7.7	—
Debt securities	8.4	—	8.4	—	—	—	—	—	—	8.4	—
Total financial assets	33.5	0.1	33.4	—	0.7	—	—	0.7	—	32.7	—
Contingent liabilities and commitments	11.7	—	11.7	—	1.3	—	—	1.3	—	10.4	—
Total off-balance sheet	11.7	—	11.7	—	1.3	—	—	1.3	—	10.4	—
Total exposure	45.2	0.1	45.1	—	2.0	—	—	2.0	—	43.1	—

(1) Includes cash and securities collateral.
(2) Includes guarantees and charges over trade debtors.
(3) NWM Group holds collateral in respect of individual loans – amortised cost to banks and customers. This collateral includes mortgages over property; charges over business assets such as plant and equipment, inventories and trade debtors; and guarantees of lending from parties other than the borrower. NWM Group obtains collateral in the form of securities in reverse repurchase agreements. Collateral values are capped at the value of the loan.

Credit risk – Banking activities continued

Flow statement (audited)

The flow statement that follows shows the main ECL and related income statement movements. It also shows 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 impact. 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 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.

	Stage 1		Stage 2		Stage 3		Total	
	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL	Financial assets	ECL
NWM Group	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2022	33,383	6	197	3	95	75	33,675	84
Currency translation and other adjustments	1,632	—	12	—	3	1	1,647	1
Inter-Group transfers	65	—	—	—	—	—	65	—
Transfers from Stage 1 to Stage 2	(1,353)	(2)	1,353	2	—	—	—	—
Transfers from Stage 2 to Stage 1	824	7	(824)	(7)	—	—	—	—
Net re-measurement of ECL on stage transfer		(6)		12		—		6
Changes in risk parameters		7		1		—		8
Other changes in net exposure	5,324	8	(243)	1	11	1	5,092	10
Other (P&L only items)		(1)		—		(15)		(16)
Income statement (releases)/charges		8		14		(14)		8
Amounts written-off	—	—	(4)	(4)	(51)	(51)	(55)	(55)
At 31 December 2022	39,875	20	491	8	58	26	40,424	54
Net carrying amount	39,855		483		32		40,370	
At 1 January 2021	33,327	12	1,671	49	167	132	35,165	193
2021 movements	56	(6)	(1,474)	(46)	(72)	(57)	(1,490)	(109)
At 31 December 2021	33,383	6	197	3	95	75	33,675	84
Net carrying amount	33,377		194		20		33,591	

- Stage 1 and Stage 2 combined ECL increased due to business growth and economic outlook. Stage 3 declined due to write offs.

Pension risk

Definition

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

Sources of risk

NWM Group has exposure to pension risk through its defined benefit schemes worldwide. The two largest NWM Group schemes are the AA and the NatWest Markets sections of The NatWest Group Pension Fund with a combined £0.9 billion of assets and £0.6 billion of liabilities at 31 December 2022 (2021 – £1.4 billion of assets and £1.1 billion of liabilities). Refer to Note 5 to the financial statements, for further details on NWM Group's pension obligations, including sensitivities to the main risk factors.

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

Key developments in 2022

- There have been no material changes to NWM Group's exposure to pension risk during the year. Despite market volatility through the year, the AA and NatWest Markets sections remained resilient, primarily due to their interest rate and inflation hedging strategy, as well as limited exposure to equities. Furthermore, the AA and NatWest Markets sections held sufficient collateral through the year in relation to their liability hedging portfolios, without the need to sell assets to meet collateral requirements.

Governance

The Pension Committee, chaired by the Chief Financial Officer, reviews and monitors risk management, asset and liability strategy and financing issues on behalf of NWM Group. As part of its remit, the Committee:
- Considers the financial strategy, risk management and policy implications of NWM Group pension schemes.
- Reviews and recommends NWM Group pension risk appetite to the NWM Group Executive Risk Committee and the NWM Group Board Risk Committee.
- Reviews the pension impact on the capital plan for NWM Group and escalates any concerns to the NWM Group Assets & Liabilities Committee.

The performance of NatWest Group's material pension funds (including those sponsored by NWM Group) is reviewed by NatWest Group's Assets & Liabilities Committee.

For further information on governance, refer to page 35.

Risk appetite

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

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

Monitoring and measurement

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

Stress tests are carried out each year on NWM Group's material defined benefit pension schemes. These tests are also used to satisfy the requests of regulatory bodies such as the Bank of England.

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

Mitigation

Following risk mitigation measures taken by the Trustee in recent years, the AA and the NatWest Markets sections of the NatWest Group Pension Fund are now well protected against interest rate and inflation risks and are being run on a low investment risk basis with relatively small equity risk exposure. The AA and the NatWest Markets sections of the NatWest Group Pension Fund also use derivatives to manage the allocation of the portfolio to different asset classes and to manage risk within asset classes.

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

Compliance and conduct risk

Definition

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

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

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

Sources of risk

Compliance and conduct risks exist across all stages of NWM Group's relationships with its customers and arise from a variety of activities including product design, marketing and sales, complaint handling, staff training, and handling of confidential inside information.

As set out in Note 25 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 – which was established to provide an aggregated view of ring-fencing compliance and risk management – continues to work across business segments, functions and legal entities.
- From a conduct risk perspective, the focus on consumer protection increased significantly during 2022, given the cost-of-living challenges and their impact on customers in vulnerable situations. The FCA's increased expectations under its consumer duty initiative was also a key development, and the establishment of the consumer duty 'One Bank' programme will ensure continued focus upon the required 'paradigm shift' in the levels of consumer protection required.
- In December 2021, NatWest Markets Plc pled guilty to one count of wire fraud and one count of securities fraud, related to historical spoofing conduct by former employees in US Treasuries markets, between 2008 and 2014 and, separately, during approximately three months in 2018. In line with the plea agreement with DOJ, an independent monitor was appointed in 2022. The monitor will be engaged in working with NatWest Markets over a three-year period.
- More generally, work is also ongoing to further enhance the conduct and compliance risk framework so that it is aligned to a wider programme of work on the overall risk management framework.

Governance

NWM Group defines appropriate standards of compliance and conduct and ensures adherence to those standards through its risk management framework. Relevant compliance and conduct matters are escalated through 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 is conducted in accordance with legal and regulatory requirements. A suite of policies addressing compliance and conduct risks set appropriate standards across NWM Group including some NatWest Group policies and procedures. Ongoing monitoring and targeted assurance are carried out as appropriate.

Monitoring and measurement

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

Mitigation

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

Financial crime risk

Definition

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

Sources of risk

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

Key developments in 2022

- As part of customer due diligence remediation, priority cohorts were remediated in both NWM Group and NWM N.V. Group.
- The implementation of release five of the transaction monitoring system Quantexa Fusion, which brought trade and incoming payment data into scope of monitoring.
- The preparation and support for regulatory assessments and visits.
- The publication of refreshed global NWM Group financial crime standards, implementing the new requirements in the Group-wide L2 Standards, revised local uplifts and general enhancements.

Financial crime risk continued

Governance

The Financial Crime Risk Committee (FCRC), which is chaired by the Head of Compliance & Financial Crime, is NWM Group's principal financial crime risk management forum. The committee reviews and, where appropriate, escalates material financial crime risks and issues across NWM Group to the NWM Executive Risk Committee and NWM Board Risk Committee. Additionally, NWM Group is represented on NatWest Group's Financial Crime Executive Steering Group, which oversees financial crime risk management, operational performance, and transformation matters across NatWest Group.

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. NWM Group's systems and controls must be comprehensive and proportionate to the nature, scale and complexity of its businesses.

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

Monitoring and measurement

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

Mitigation

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

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

Climate risk

Definition

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

Sources of risk

Physical risks may arise from climate and weather-related events such as heatwaves, droughts, floods, storms and sea level rises. They can potentially result in financial losses, impairing asset values and the creditworthiness of borrowers. NWM Group could be exposed to physical risks directly by the effects on its asset values, operational costs and business models, 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 legislation, 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. NWM Group could be exposed to transition risks directly through the costs of adaptation within economic sectors and markets as well as supply chain disruption leading to financial impacts on it and its customers. Potential indirect effects include the erosion of NWM Group's competitiveness, profitability, reputational damage and liability risk.

Key developments in 2022

- The enhancement of scenario generation capability, building on that developed by NatWest Group and utilised in response to the PRA Climate Biennial Exploratory Exercise and utilised to improve the identification process for heightened climate risk sectors.
- Improved oversight of management of climate-related risk through more regular reporting and the introduction of key risk indicators.
- Completed the development and launch of qualitative climate risk scorecards, which now covers the majority of Wholesale exposures, with the exception of sovereign exposure, where the country climate change vulnerability index, to assess the level of climate risk, is applied.
- Climate change considerations further incorporated into NWM Group's product, reputational and non-financial risk assessment processes.
- 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.
- Contributed to the preparation of the initial iteration of the NatWest Group Climate Transition plan including identification and analysis of potential impacts associated with proposed actions.

Governance

The NWM Plc Board is responsible for monitoring and overseeing climate-related risk within NWM Group's overall business strategy and risk appetite. This includes progress towards delivering on NatWest Group's strategy, including climate ambitions and targets. The potential impact, likelihood and preparedness of climate-related risk are reported regularly to NatWest Group's Board Risk Committee and NatWest Group Board.

As part of the integrated cross-bank approach, the NWM Group CEO has been designated to support the NatWest Group CEO in discharging the Senior Management Function (SMF) 1 accountability for identifying and managing the risk and opportunities from climate change. The NWM Climate & Sustainability Committee (CSC) is the senior NWM Group forum which has the objective of assessing and managing climate-related risks and opportunities. This forum supports the NWM Group CEO to discharge the delegated SMF accountability.

Climate risk continued

A Climate Change Executive Steering Group is in place at NatWest Group and is responsible for overseeing the direction of and progress against climate-related commitments, including activities in NWM Group. 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 NatWest Group Climate Centre of Excellence supports the Executive Steering Group as it supervises strategic implementation and delivery, including within NWM Group.

Risk appetite

NatWest Group's climate 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. These have certain limitations when applied to NWM Group due to the nature and composition of its balance sheet, and may be supplemented by further key risk indicators and operational limits. NWM Group started to use a number of key risk indicators to provide CSC with regular base-level information on exposure to climate risk in 2022.

Monitoring and measurement

NWM 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 NWM 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.

NWM Group regularly considers existing and emerging regulatory requirements related to climate change. It continues to participate in several industry-wide initiatives to develop consistent risk measurement methodologies including the Partnership for Carbon Accounting Financials facilitated emissions working group.

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 NatWest Group property, information loss and the impact of natural, or man-made, disasters – as well as the threat of cyber-attacks – are sources of operational risk.

Operational risk can also arise from a failure to account for changes in law or regulations or to take appropriate measures to protect assets.

Key developments in 2022

- A review of the NatWest Group Risk Directory was completed, allowing greater risk visibility and improved risk reporting.
- The NatWest Group Impact Classification Matrix was updated to align to industry materiality, ensuring focus on the most material risks.
- An Early Event Escalation Process was implemented to ensure material events are escalated in a timely manner.
- A Risk & Control Self-Assessment approach was developed to identify risks across end-to-end processes, refocusing existing risk assessment, towards materiality.
- Included in the above, was an ongoing focus on the rationalisation and optimisation of controls, which will facilitate more rigorous testing of effectiveness and better management information.
- NWM Group continued to prioritise the development of more preventative and automated controls, specifically in the trading environment.
- Increased focus on more effective cross border controls reflected the rise in operational risk associated with the evolution of the NWM Group strategy.
- A payments review has been initiated by NatWest Group in late 2022 to assess control enhancements in response to manual payment risk.

Governance

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

The Operating Committee discusses operational risk matters relating to the control environment, NWM's implementation of the enterprise-wide risk management framework, risk identification and oversight of return-to-appetite plans. Significant issues are escalated to the Board Risk Committee.

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 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 their 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 Group Audit Committee and Board Risk Committee. They are also shared with external auditors.

Operational risk continued

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 NWM Group's Risk Directory. Risk assessments are refreshed at least annually to ensure they remain relevant and that they capture any emerging risks and also ensure that these 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 the identified risks.

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

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

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

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

Operational resilience

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

Event and loss data management

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

All financial impacts associated with an operational risk event are reported in NatWest Group's Annual Report and 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. NatWest Group purchases insurance against specific losses and to comply with statutory or contractual requirements.

Model risk

Definition

Model risk is the risk of inaccurate financial assessments or decisions made as a result of incorrect or misused model outputs and reports. 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

NWM Group uses a variety of models in the course of its business activities. Examples include the use of model outputs to support measuring and assessing risk exposures (including credit and market risk), as well as for valuation of positions and for calculating regulatory capital and liquidity requirements. The models used for stress-testing purposes also play a key role in ensuring NWM Group holds sufficient capital, even in stressed market scenarios.

Key developments in 2022

- NWM Group's 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 and operational limits 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.
- NWM Group breached a model risk appetite measure during 2022, primarily due to a deterioration in model predictive ability caused by volatile economic conditions. For further information on market risk back-testing exceptions, refer to the Traded market risk section page 43. The overall NWM Group model risk assessment is currently assessed as in-appetite but 'on-watch'.

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.

Model risk continued

Model risk matters are escalated to senior management through the NWM Group Model Risk Committee. The committee also considers whether a model can be approved for use. Models used for regulatory reporting may additionally require regulatory approval before implementation. Further escalation can also be made to the NatWest Group Model Risk Oversight Committee.

Risk appetite

Model risk appetite is set in order to limit the level of model risk that NWM Group is willing to accept in the course of its business activities. NWM Group has defined limits and triggers that align with the NatWest Group's model risk appetite statement. The first line is responsible for monitoring performance against appetite, reporting on the model population and carrying out any necessary remediation for positions 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 that is based on the model's materiality and validation rating. This approach provides the basis for model risk appetite measures and enables model risk to be robustly monitored and managed across NWM Group.

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

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 NatWest Group's values and the public agenda; and contagion (when NatWest Group'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 has been further embedded into the organisation, the results of which are reported to 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 NWM Group. The NWM 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

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

Monitoring and measurement

Relevant internal and external factors are monitored through regular reporting to NWM Group Reputational Risk Committee 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 material) as well as through the NatWest Group and business segment-level risk registers.

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:

Group structure

NatWest Markets Plc ('NWM Plc') is a wholly-owned subsidiary of NatWest Group plc ('NWG plc' or 'the holding company'). The NatWest Markets Group ('NWM Group') comprises NWM Plc and its subsidiary and associated undertakings. The term 'NatWest Group' comprises NWG plc and its subsidiary and associated undertakings. NWG plc is incorporated in the UK and has its registered office at 36 St Andrew Square, Edinburgh, EH2 2YB.

Details of NWM Plc's principal subsidiary undertakings and their activities are shown in Note 16 on the accounts. A full list of related undertakings of NWM Plc is shown in Note 33 on the accounts.

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

Activities

NWM Group offers debt financing, risk management and trading solutions to customers.

Results and dividends

The loss attributable to the ordinary shareholders of NWM Group for the year ended 31 December 2022 was £335 million compared with a loss of £593 million for the year ended 31 December 2021, as set out in the consolidated income statement on page 97.

Total dividends paid to NatWest Group plc during the year amounted to £430 million.

Employees

At 31 December 2022, NWM Group employed 1,600 people (excluding temporary staff). Details of all related costs are included in Note 3 to the consolidated accounts.

Corporate Governance statement

For the financial year ended 31 December 2022, the company has chosen to report against the Wates Corporate Governance Principles for Large Companies (the Wates Principles) and the disclosures below explain how the company 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 NWG plc Board, promoted across NatWest Group and cascaded to subsidiaries including NWM Group. Further information on NatWest Group's purpose can be found in the NatWest Group plc 2022 Annual Report and Accounts.

Strategy

NatWest Group's strategy is set and approved by the NWG plc Board. The NWM Plc Board ('the Board') reviews and sets the strategic direction of NWM Plc and, as appropriate, the strategies for each of its businesses within the parameters set by the NWG plc Board. It subsequently oversees the execution of the strategy and holds management to account for its delivery.

Culture

The NWG plc Board is supported in monitoring culture across NatWest Group by the Group Sustainable Banking Committee and the Group Board Risk Committee. NatWest Group is on a journey towards a generative risk culture whereby risk is simply part of the way people work and think.

Building a healthy culture that embodies Our Values is a core priority for NatWest Group.

Our Values, which guide the way NatWest Group identifies the right people to serve customers well, and how to manage, engage and reward colleagues, are at the heart of Our Code (the NatWest Group-wide Code of Conduct).

There is regular reporting to the Board on culture, so as to provide appropriate oversight of culture matters. More specifically, with regards to risk culture, continued progress has been made towards addressing historical conduct issues, including risk appetite enhancements and increased monitoring of conduct risk and surveillance remediation. This supports our ambition to create a positive culture and strengthen 'good conduct' outcomes for clients.

2. Board Composition

The Board

The Board has six directors comprising: the Chairman, two executive directors (being the Chief Executive Officer and Chief Financial Officer) and three independent non-executive directors. The size of the Board is considered appropriate, taking into account the size and scale of NWM Plc's business.

The 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 Chief Executive Officer who manages the business day-to-day. The Chairman is also a member of the NWG plc Board which provides an appropriate linkage to the wider NatWest Group and ensures alignment and awareness in respect of NatWest Group-wide matters.

Non-Executive Directors

The majority of the Board comprises independent non-executive Directors. Their role is to challenge and scrutinise the performance of management and to help develop proposals on strategy. They also review the performance of management in meeting agreed goals and objectives and monitor the firm's risk profile. The non-executive directors combine broad business and commercial expertise and bring experience from a wealth of areas including audit, banking, finance, human resources, technology, and telecommunications.

The Board periodically undertakes an independence assessment of the non-executive directors. With the exception of the Chairman, who is a member of the NWG plc Board, all non-executive directors are considered to be independent and there are no relationships or circumstances that are likely to affect their judgment.

Induction Training
All new directors undergo a formal induction programme upon joining the Board which is coordinated by the Company Secretary and tailored to their individual needs. This includes meetings with other directors, senior executives and business heads. Meetings with the external auditor, legal counsel and other key stakeholders are arranged as appropriate. Directors also receive comprehensive guidance from the Company Secretary on NWM Plc's corporate governance framework and associated policies, including their duties as directors.

Continuous Development
Non-executive directors discuss their professional development annually with the Chairman. Directors maintain their knowledge and familiarity with NWM Plc through regular meetings with senior management (including representatives of NatWest Group) and participate in scheduled Board training and other external sessions as appropriate.

During 2022, climate and teach-in sessions on the further integration of NatWest's purpose-led strategy as well as on Capital Markets, Trading and Technology amongst others were arranged for the directors. Directors may also request individual in-depth briefings from time to time on areas of particular interest.

Board Diversity
The Board is committed to promoting diversity and inclusion in the boardroom and aims to meet industry targets and recommendations wherever possible. The Board has agreed a Boardroom Inclusion Policy which aims to promote diversity and inclusion in the composition of the Board of Directors and in the nomination and appointment process. The Policy reflects the values of the wider NatWest Group, its Inclusion Policy and relevant legal, regulatory or best practice requirements.

Committees
The responsibilities of the Board are executed, in part, through its committees (namely, the Audit Committee, the Board Risk Committee, the Performance and Remuneration Committee and the Nominations and Governance Committee). All matters that the Board has specifically delegated to these committees are set out in their terms of reference (ToRs). All other matters, including responsibility for the day-to-day operation of NWM Plc (that are not specifically reserved for the Board or delegated to a committee) are delegated to the NWM Plc Chief Executive Officer (CEO) in accordance with such policies and directions as the Board determines appropriate, including the NWM Plc CEO's role profile.

Succession
The Board is responsible for ensuring that NWM Plc has in place succession plans for the Board and senior management so as to maintain an appropriate balance of skills and experience. The NatWest Group Nominations and Governance Committee is also required to approve all appointments to the Board, reflecting the company's position as a subsidiary of NatWest Group.

Board Effectiveness
The effectiveness of the Board, including the Chairman, individual directors and committees, is assessed periodically. The Board considers such assessments to play an important role in the identification of areas for further improvement, focus and for strengthening its overall performance.

The Company Secretary
In fulfilling its role, the Board is supported by the Company Secretary. The Company Secretary is responsible for ensuring good information flows between the Board and its committees and between senior management and non-executive directors, as well as facilitating induction and assisting with professional development of non-executive directors, as required. The directors may also seek independent, professional advice, where necessary, at NWM Plc's expense.

3. Director Responsibilities
Policy & Framework
NatWest Group has in place a Corporate Governance Framework, including a Corporate Governance Policy. All directors of NWM Plc are required to ensure that they are familiar with the Corporate Governance Framework and that NWM Plc complies with it. NWM Plc also produces and maintains a document called 'Our Governance' which sets out the high-level governance framework for NWM Plc at both regional and global levels.

The Board has a programme of seven scheduled meetings every year. The Board ToRs include a formal schedule of matters specifically reserved for the Board which are reviewed at least annually. Each director has a role profile which clearly articulates their responsibilities and accountabilities. Similarly, any additional regulatory responsibilities and accountabilities where any of the directors undertake a Senior Manager Function (as defined under the Prudential Regulation Authority's and Financial Conduct Authority's 'Senior Manager Regimes') are set out in their Statement of Responsibilities.

To support them in the discharge of their duties, all directors receive regular and timely information on all key aspects of the business including financial performance, strategy, key risks, and market conditions.

Conflicts of Interest
The Board follows NatWest Group's guidance relating to directors' conflicts of interest.

The Board has the power to authorise any actual or potential conflicts of interest in accordance with the Companies Act 2006 and NWM Plc's Articles of Association. The company maintains a register of directors' interests and appointments and there is discussion of directors' conflicts in Board meetings, as required. During the year, none of the directors declared any material interest, directly or indirectly, in any contract of significance with any company within NatWest Group.

All directors were reminded of their obligations in respect of transacting in NWM Plc securities (Personal Account Dealing) and all directors have confirmed that they have complied with their obligations.

Board Committees

In order to provide effective oversight and leadership, the Board has established a number of committees with particular responsibilities:

The Audit Committee comprises at least two independent non-executive directors, one of whom is the Chair of the Board Risk Committee. The Committee assists the Board in discharging its responsibilities for monitoring the integrity of the financial statements. It reviews the accounting policies, financial reporting and regulatory compliance practices of NWM Plc, its system and standards of internal controls, and monitors the processes for internal audit and external audit.

The Board Risk Committee comprises at least two independent non-executive directors, one of whom is the Chair of the Audit Committee and one of whom is a member of the NWM RemCo. The Committee provides oversight and advice to the Board in relation to current and potential future risk exposures and future risk profile, including determination of risk appetite, the effectiveness of the risk management framework and (in conjunction with the Audit Committee) internal controls required to manage risk. The Committee also reviews compliance with NatWest Group Policy Framework and reviews the performance of NWM Plc relative to risk appetite.

The Performance and Remuneration Committee (RemCo) comprises at least four independent non-executive directors and oversees the implementation of the Group-wide Remuneration Policy within NWM. It also considers and makes recommendations on remuneration arrangements for senior executives of NWM Plc.

The Nominations and Governance Committee comprises the Chair and at least two other 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 chairship of Board committees.

4. Opportunity and risk

The role of the Board is to promote the long-term success of NWM Plc and the delivery of sustainable value to its shareholder.

The Board reviews and approves risk appetite for strategic and material risks in accordance with NatWest Group's risk appetite framework; monitors performance against risk appetite for NWM Plc; and considers any material risks and approves (as appropriate) recommended actions escalated by the NWM Plc Board Risk Committee.

NWM Plc's risk strategy is informed and shaped by an understanding of the risk landscape including a range of significant risks and uncertainties in the external economic, political and regulatory environments.

NWM Plc complies with NatWest Group's risk appetite framework, which is approved annually by the NWG plc Board, in line with NatWest Group's risk appetite statements, frameworks and policies. NatWest Group risk appetite is set in line with overall strategy.

NatWest Group operates an integrated risk management framework, which is centred on the embedding of a strong risk culture. The framework ensures the tools and capability are in place to facilitate sound risk management and decision-making across the organisation.

NWM Plc also complies with the NatWest Group Policy Framework, the purpose of which is to ensure that NatWest Group establishes and maintains NatWest Group-wide policies that adequately address the risks inherent in its business activities.

Further information on NWM Plc's risk management framework including risk culture, risk governance, risk appetite, risk controls and limits, and risk identification and measurement can be found in the Risk and capital management section of this report.

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 the company. 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 Performance and Remuneration Committee (RemCo) reviews remuneration for executives of the company 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 at NWM Plc level.

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 financial and non-financial 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. This clarity and certainty on how pay is delivered is also helping to improve employees' 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 NatWest Group ensure employees performing the same role are paid fairly.

NatWest Group ensures colleagues have a common awareness of the financial and economic factors affecting its performance through quarterly 'Results Explained' communications and Workplace Live events with the Group Chief Executive Officer and Chief Financial Officer.

Further information on the remuneration policy, pay ratios and employee share plans can be found in the Directors' remuneration report (DRR) 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 along with the steps being taken to build an inclusive and engaged workforce.

6. Stakeholder relationships and engagement

NWM Plc is committed to managing the wider social, environmental and economic impacts of its operations which includes the way it deals with its customers and manages the sustainability of its supply chain.

The Board recognises the importance of engaging with stakeholders and discussions at Board meetings are focused around the impact that NWM Plc's activities may have on key stakeholder groups. A new Board reporting style has also been introduced with a specific section focussing on the stakeholder impacts to support decision-making.

For further details on the Board's engagement with employees, customers, suppliers and others, and how these stakeholders' interests have influenced one of the Board's principal decisions, see page 14 of the Strategic report.

Internal control over financial reporting

The internal controls over financial reporting for NWM Group are consistent with those at NatWest Group level. NWM Group has designed and assessed the effectiveness of its internal control over financial reporting as of 31 December 2022 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in the 2013 publication of 'Internal Control – Integrated Framework'. As part of the assessment, management have considered the additional activities required for its internal control over financial reporting during the year, such as oversight on controls performed on NWM Group's behalf, to better reflect the size, scale and overall materiality of the business profile compared to the NatWest Group framework. Any deficiencies identified are reported to NWM Group Audit Committee along with management's remediation plans.

Directors' interests

Where directors of NWM Plc are also directors of NWG plc, their interests in the shares of the ultimate holding company at 31 December 2022 are shown in the Annual report on remuneration section of the NatWest Group plc 2022 Annual Report and Accounts.

None of the directors held an interest in the loan capital of the ultimate holding company or in the shares or loan capital of NWM Plc or any of its subsidiaries, 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 NWM Plc's Executive Committee, individuals authorised by the PRA/FCA and certain directors and/or officers of NatWest Group's subsidiaries and all trustees of NatWest Group's pension scheme.

Going concern

NWM 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. The risk factors which could materially affect NWM Plc's future results are set out on pages 173 to 193. NWM 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 48 to 53. This section also describes NWM Plc's funding and liquidity profile, including changes in key metrics and the build-up of liquidity reserves.

Having reviewed NWM Plc's principal risks, forecasts, projections and other relevant evidence, the directors have a reasonable expectation that NWM Plc will continue in operational existence for a period of 12 months from the date of this report. Accordingly, the financial statements of NWM Plc have been prepared on a going concern basis.

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 NWM Plc's auditors are unaware; and
(b) the director has taken all the steps that they ought to have taken as a director to make himself/herself aware of any relevant audit information and to establish that NWM 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 the auditors and have indicated their willingness to continue in office. A resolution to re-appoint EY LLP as NWM Plc's auditors will be proposed at the forthcoming NatWest Group Annual General Meeting.

By order of the Board

Scott Gibson
Company Secretary
16 February 2023
NatWest Markets Plc
is registered in Scotland No. SC090312

Statement of directors' responsibilities

This statement should be read in conjunction with the responsibilities of the auditor set out in their report on pages 87 to 96.

The directors are responsible for the preparation of the Annual Report and Accounts. The directors are required to prepare Group financial statements, and as permitted by the Companies Act 2006 have elected to prepare company financial statements, for each financial year in accordance with UK adopted International Accounting Standards, International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board and IFRS as adopted by the European Union. They are responsible for preparing financial statements that present fairly the financial position, financial performance and cash flows of NWM Group and NWM Plc. In preparing those financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable, relevant and reliable; and
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements.
- prepare the financial statements on a going concern basis unless it is inappropriate to presume that the company and Group will continue in business

The directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of NWM Group and to enable them to ensure that the Annual Report and Accounts complies with the Companies Act 2006. They are also responsible for safeguarding the assets of NWM Plc and NWM Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Under applicable law and regulations, the directors are also responsible for preparing a Strategic report and Report of the directors, 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, IFRS as issued by the International Accounting Standards Board and IFRS as adopted by the European Union, give a true and fair view of the assets, liabilities, financial position and profit or loss of NWM Plc and the undertakings included in the consolidation taken as a whole; and
- the Strategic report and Report of the directors (incorporating the Financial review) includes a fair review of the development and performance of the business and the position of NWM Plc and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

By order of the Board

Frank Dangeard
Chairman

Robert Begbie
Chief Executive Officer

Simon Lowe
Chief Financial Officer

16 February 2023

Board of directors

Chairman
Frank Dangeard

Executive directors
Robert Begbie
Simon Lowe

Non-executive directors
Vivek Ahuja
Tamsin Rowe
Anne Simpson

Financial statements

Independent auditor's report to the members of NatWest Markets Plc

Opinion

In our opinion:

- The financial statements of NatWest Markets Plc (the 'Bank') and its subsidiaries (together, the 'Group') give a true and fair view of the state of the Group's and of the Bank's affairs as at 31 December 2022 and of the Group's loss for the year then ended;
- The Group financial statements have been properly prepared in accordance with UK adopted international accounting standards and International Financial Reporting Standards ('IFRS') as adopted by the European Union and IFRS as issued by the International Accounting Standards Board ('IASB');
- The Bank's financial statements have been properly prepared in accordance with UK adopted international accounting standards as applied in accordance with section 408 of the Companies Act 2006; and
- The financial statements of the Group have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements (see table below) of the Group and the Bank for the year ended 31 December 2022 which comprise:

Group	Bank
– Consolidated balance sheet as at 31 December 2022; – Consolidated income statement for the year then ended; – Consolidated statement of comprehensive income for the year then ended; – Consolidated statement of changes in equity for the year then ended; – Consolidated cash flow statement for the year then ended; – Accounting Policies; – Related Notes 1 to 33 to the financial statements; and – Risk and capital management sections identified as 'audited'.	– Balance sheet as at 31 December 2022; – Statement of changes in equity for the year then ended; – Cash flow statement for the year then ended; and – Related Notes 1 to 33 to the financial statements.

The financial reporting framework that has been applied in their preparation is applicable law and UK adopted international accounting standards and as regards to the Group financial statements, IFRS as adopted by the European Union and IFRS as issued by the IASB, and as regards the Bank's financial statements, as applied in accordance with section 408 of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group and 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 listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Bank and we remain independent of the Group and the Bank in conducting the audit.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate. Our evaluation of the directors' assessment of the Group and Bank's ability to continue to adopt the going concern basis of accounting included:

- In conjunction with our walkthrough of the Group's financial close process, we confirmed our understanding of the directors' going concern assessment process. We engaged with management early to determine if key factors were considered in the assessment.
- We evaluated the directors' going concern assessment which included reviewing their evaluation of business and strategic plans on future capital adequacy, liquidity and funding positions of the Group and Bank. Management also assessed these positions considering internal stress tests which included consideration of top and emerging risks. The Group's risk profile and risk management practices were considered including credit risk, market risk, climate risk, compliance and conduct risk, and operational risk.
- We evaluated management's assessment by considering the Group and Bank's ability to continue as a going concern under different scenarios including the impact of the Group's strategic plans, and the current uncertain geopolitical and economic outlook.
- We reviewed the Group's going concern disclosures included in the Annual Report and Accounts in order to assess that the disclosures were appropriate and in conformity with the reporting standards.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group and Bank's ability to continue as a going concern for a period of twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's or Bank's ability to continue as a going concern.

An overview of the scope of NatWest Markets Plc and Group audits

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each component within the Group. Taken together, this enables us to form an opinion on the consolidated financial statements. We take into account size, risk profile, the organisation of the Group and effectiveness of the Group wide controls, changes in the business environment, the potential impact of climate change and other factors such as the results from Internal audits when assessing the level of work to be performed at each component.

In assessing the risk of material misstatement to the Group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, we identified five components of the Group which represent the principal reporting legal entities within the Group and the Group's central functions.

Of the components listed below, we performed an audit of the complete financial information of two components ("full scope components") which were selected based on their size or risk characteristics. For the specific scope components we performed audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the significant accounts in the financial statements either because of the size of these accounts or their risk profile. We also performed specified procedures over certain aspects of selected accounts within certain components.

Component	Scope	Key locations
NatWest Markets Plc	Full	United Kingdom, India and Poland
NatWest Markets N.V.	Full	Netherlands, United Kingdom, India and Poland
NatWest Markets Securities Inc.	Specific	United States
NatWest Markets Securities Japan Limited	Specified procedures	Japan
Central Functions*	Specific/specified procedures	United Kingdom

*Central functions comprise EY functional component teams focused on the audit of specific balances and/or specific procedures across in scope legal entity components.

The table below illustrates the coverage obtained from the work performed by our audit teams. We considered total assets, total equity and the total income to verify we had appropriate overall coverage.

	Full scope	Specific scope	Specified procedures	Other procedures*	Total
Total assets	89%	10%	<1%	<1%	100%
Total equity	>99%	—	—	<1%	100%
Total income (absolute)	89%	7%	—	4%	100%

*Other procedures include analytical procedures.

Involvement with component teams

In establishing our overall approach to the Group audit, we determined the type of work that needed to be undertaken at each of the components by us, as the primary audit engagement team, or by component auditors from other EY global network firms operating under our instruction.

The primary audit engagement team interacted regularly with the component audit teams where appropriate throughout the course of the audit, which included holding planning meetings, maintaining regular communications on the status of the audit, reviewing key working papers and taking responsibility for the scope and direction of the audit process. The primary audit engagement team continued to follow a programme of planned visits that has been designed to ensure that the Senior Statutory Auditor, or another Group audit partner, visits all full scope and specific scope locations on a periodic basis. During the current year's audit cycle, visits were undertaken by the primary audit team to Poland, India, and the Netherlands. These visits involved meetings with local management, discussions with the component team on the audit approach and significant issues arising from their work. This, together with the additional procedures performed at Group level, gave us appropriate evidence for our opinion on the Group financial statements.

Climate change

Stakeholders are increasingly interested in how climate change will impact companies. The Group has determined that the most significant future impacts from climate change on its operations will be from credit risk, operational risk, reputational risk, conduct risk and regulatory compliance risk. These are explained in the Climate Risk section in the Strategic Report and in the Climate Risk section within the Risk and capital management section, which form part of the "Other information," rather than the audited financial statements. Our procedures on these disclosures consisted solely of considering whether they are materially inconsistent with the financial statements, or our knowledge obtained in the course of the audit or otherwise appear to be materially misstated, in line with our responsibilities on "Other information".

The Group has explained in the Accounting Policies 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, IFRS as adopted by the European Union and IFRS as issued by the IASB. The Group has also explained within the Accounting Policies note, their approach to quantifying the impact of climate transition policy and the limitations on the ability to make a reliable estimate for 2022 reporting.

Our audit effort in considering the impact of climate change on the financial statements was focused on evaluating the Group's assessment of the impact of climate risk, their climate commitments and the significant judgements and estimates disclosed in the Accounting Policies note, and whether these have been appropriately reflected in the asset values where these are impacted by future cashflows, and the nature and timing of future cash flows, and in the timing and nature of liabilities recognised following the requirements of UK adopted international accounting standards, IFRS as adopted by the European Union and IFRS as issued by the IASB. As part of this evaluation, we performed our own risk assessment 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 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, where relevant.

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
Valuation of financial instruments with higher risk characteristics including related income from trading activities	
As reported in Note 10 to the financial statements, as at 31 December 2022 the company held financial instruments with higher risk characteristics. This included (but is not limited to) reported level 3 assets of £1.7 billion (2021 - £2.0 billion) and level 3 liabilities of £1.0 billion (2021 - £0.6 billion) whose value is dependent upon unobservable inputs. The valuation of those financial instruments with higher risk characteristics can include both significant judgment and the risk of inappropriate revenue recognition through incorrect pricing as outlined below. The fair value of these instruments can involve complex valuation models and significant fair value adjustments, both of which may be reliant on inputs where there is limited market observability. Management's estimates which required significant judgment include: – Complex models - Complex model-dependent valuations of financial instruments, which include interest rate swaps linked to pre-payment behaviour and interest rate and foreign exchange options with exotic features; – Illiquid inputs - Pricing inputs and calibrations for illiquid instrument, including fair value loan exposures for which there is no active market. Additionally, derivative instruments whose valuation is dependent on discount rates associated with complex collateral arrangements; – Fair value adjustments - The appropriateness and completeness of fair value adjustments made to derivatives valuations including Funding Valuation Adjustments (FVA), Credit Valuation Adjustments (CVA), relating to derivative counterparties whose credit spread may not be observable, and material product and deal specific adjustments on long dated derivative portfolios; and – The manipulation of revenue recognition is most likely to arise through the inappropriate valuation of these instruments given the level of judgment involved.	Controls testing: We evaluated the design and operating effectiveness of controls relating to financial instrument valuation and related income statement measurement including independent price verification, valuation models governance, collateral management, income statement analysis, and the associated controls over relevant information technology systems. We also observed the Valuation Committees where valuation inputs, assumptions and adjustments were discussed and approved. We involved our financial instrument valuation and modelling specialists to assist us in performing procedures including the following: – Complex models: Testing complex model-dependent valuations by performing independent revaluation to assess the appropriateness of models and the adequacy of assumptions and inputs used by the Group; – Illiquid inputs: Independently re-pricing instruments that had been valued using illiquid pricing inputs, using alternative pricing sources where available, to evaluate management's valuation; – Fair value adjustments: Comparing fair value adjustment methodologies to current market practice and assessing the appropriateness and adequacy of the valuation adjustment framework in light of emerging market practice and changes in the risk profile of the underlying portfolio; and revaluing a sample of counterparty level FVA and CVA, comparing funding spreads to third party data, independently challenging illiquid CVA inputs, and testing material product and deal specific adjustments on the long-dated derivatives portfolio. Throughout our audit procedures we considered the current uncertain geopolitical and economic outlook, including market volatility and the impact of climate change on the valuation of financial instruments, particularly in relation to long-dated illiquid positions. In addition, we assessed whether there were any indicators of aggregate bias in financial instrument marking and methodology assumptions. We performed back-testing analysis of recent trade activity and asset disposals to evaluate the drivers of significant differences between book value and trade value to assess the impact on the fair value of similar instruments within the portfolio. We performed an analysis of significant collateral discrepancies with counterparties to assess the potential impact on the fair value of the underlying (and similar) financial instruments.

Key observations communicated to the Group Audit Committee

We are satisfied that the assumptions used by management to reflect the fair value of financial instruments with higher risk characteristics and the recognition of related income is reasonable and in accordance with IFRS. We highlighted the following matters to the Group Audit Committee:

- Complex model-dependent valuations were appropriate based on the output of our independent revaluations, analysis of trade activity, assessment of the output of the independent price verification process, inspection of collateral disagreements and peer benchmarking;
- The fair value estimates of hard-to-price financial instruments appropriately reflected pricing information available at 31 December 2022; and
- Valuation adjustments applied to derivative portfolios for credit, funding and other risks were recorded in accordance with the requirements of IFRS considering trade activity for positions with common risk characteristics, analysis of market data and peer benchmarking.

Relevant references in the Annual Report and Accounts

Accounting policies
Note 10 to the financial statements

<table>
<tr><th>Risk</th><th>Our response to the risk</th></tr>
<tr><td colspan="2">Expected Credit Losses ('ECL') provisions under IFRS 9</td></tr>
<tr><td>At 31 December 2022 the Group reported total gross loans of £11.8 billion (2021 - £9.3 billion) and £54 million of expected credit loss provisions under IFRS 9 (2021 - £84 million) as detailed in Note 14 of the financial statements.

Management's judgements and estimates are especially subjective due to significant uncertainty associated with the assumptions used. Uncertainty related to the current geopolitical and economic outlook and the impact of climate change was 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 using criteria in accordance with IFRS 9;
– Model estimations: 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 provision; and the measurement and completeness of post model adjustments to address model shortcomings.</td>
<td>Controls testing: We evaluated the design and operating effectiveness of controls across the processes relevant to ECL, including the judgements and estimates noted, involving specialists to assist us in performing our procedures where appropriate. These included, among others, controls 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; and
– credit monitoring.

In evaluating the governance process, we observed the Group Provisions Committee and Metrics Oversight Committee meetings where the inputs, assumptions and adjustments to ECL were discussed and approved among other procedures.

Overall assessment: We performed an overall assessment of the ECL provision levels by stage to determine if they were reasonable by considering the overall credit quality of the Group's portfolio, risk profile, credit risk management practices and the impact of the current uncertain geopolitical and economic outlook and climate change on customers.

Staging: We evaluated the criteria used to allocate a financial asset to stage 1, 2 or 3 in accordance with IFRS 9. We recalculated the assets in stage 1, 2 and 3, and assessed 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, focussing our testing on high risk industries. We also assessed whether the credit reviews performed by management appropriately considered risk factors by considering independent publicly available information.

Model estimations: We performed a risk assessment on all models used in the calculation of ECL to select a sample of models to test. We involved modelling specialists to assist us to test this sample of ECL models by testing the assumptions, inputs and formulae used. This included a combination of assessing the appropriateness of model design and formulae, alternative modelling techniques, recalculating the PD, LGD and EAD, and model implementation. We also considered the results of the internal model validation process. 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.</td></tr>
</table>

Key observations communicated to the Group Audit Committee

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 Group Audit Committee:

- Overall provision levels were reasonable which also considered available peer information and our understanding of the credit environment;
- Our testing of models and model assumptions did not highlight material differences; and
- The post-model adjustments recorded were within a reasonable range to reflect risk in the portfolios.

Relevant references in the Annual Report and Accounts

Credit Risk section of the Risk and capital management section
Accounting policies
Note 14 to the financial statements

Risk	Our response to the risk
Provisions for conduct, litigation and regulatory matters	
At 31 December 2022, the Group has reported £0.23 billion (2021 - £0.26 billion) of provisions for conduct, litigation and other regulatory matters, as detailed in Note 20 of the financial statements. Regulatory scrutiny and the continued litigious environment give rise to a high level of management judgement in determining the appropriate provision for each case. Management judgement is needed to determine whether a present obligation existed, and a provision should be recorded as at 31 December 2022 in accordance with the accounting criteria set out under IAS 37. Management's estimates which required significant judgement include: – IAS37 assessment: Determination of whether an outflow in respect of identified material conduct or legal matters is probable and can be estimated reliably; and – Assumptions: The selection and use of assumptions (such as expected claim rates, legal costs, and the timing of outflows) in the estimation of material provisions.	Controls testing: We evaluated the design and operating effectiveness of key controls over the identification, estimation and monitoring of provisions whilst considering the potential for management override. The controls tested included those designed and operated by management to identify and monitor claims, and to ensure the completeness and accuracy of data used to estimate provisions. IAS37 assessment: We examined relevant regulatory and legal correspondence to assess developments in certain cases. For cases which were settled during the period, we compared the actual outflows with the provision that had been recorded and considered whether further risk existed. For legal matters that we identified as having a higher likelihood of material misstatement, 'significant legal matters', we received confirmations from the Group's external legal counsel to assist us in evaluating the existence of an obligation and in assessing management's estimate of potential outflow at year-end. We also conducted inquiries with internal legal counsel in respect of the existence of any legal obligations and related provisions. We performed procedures to identify unrecorded provisions to determine if there were any cases not considered in the provision by assessing external legal confirmations, discussing with internal counsel and analysing legal costs. Testing of assumptions: For the provisions related to significant legal matters we understood and assessed the provisioning methodology. We tested the underlying data and assumptions used in the determination of the provisions recorded, legal costs, and the timing of outflows. We considered the accuracy of management's historical estimates by comparing the actual settlement to the provision and considered peer bank settlement in similar cases where appropriate. We assessed management's conclusion by evaluating the underlying information used in estimating the provisions including the consideration of alternate sources.
Key observations communicated to the Group Audit Committee	
We are satisfied that the provisions for conduct, litigation and other regulatory matters are reasonable and recognised in accordance with IFRS. We concur with the level of disclosure in the financial statements. We did not identify any material unrecorded provisions.	
Relevant references in the Annual Report and Accounts	
Report of the Group Audit Committee Accounting policies Notes 20 and 25 to the financial statements	

Risk	Our response to the risk
IT systems and controls impacting financial reporting	
The IT environment is complex and pervasive to the operations of the Group due to the large volume of transactions processed in numerous locations on a daily basis with extensive reliance on automated controls. 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. Appropriate IT controls are required to ensure that applications process data as expected and that changes are made in an appropriate manner. Such controls contribute to mitigating the risk of potential fraud or errors as a result of changes to applications and data. The Group has implemented user access management controls across IT applications, databases and operating systems. We have identified user access-related deficiencies in the past and whilst the number of deficiencies has reduced year over year, the risk of inappropriate access remains.	We evaluated the design and operating effectiveness of IT general controls over the applications, operating systems and databases that are relevant to financial reporting. Controls testing: We tested user access by assessing the controls in place for in-scope applications, in particular those pertaining to the addition and periodic recertification of users' access. We continued 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. 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 in the scope of our audit 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.

Key observations communicated to the Group Audit Committee

We are satisfied that IT controls impacting financial reporting are designed and operating effectively. The following matters were reported to the Group Audit Committee:

- Where issues were noted in relation to access management, these were remediated by year end or mitigated by compensating controls. We performed additional testing in response to deficiencies identified, where required.

Our application of materiality

We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

Materiality

The magnitude of an omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined materiality for the Group and Bank to be £66 million (2021 - £73 million), which is 1% (2021 - 1%) of shareholder's equity of the Bank.

Performance materiality

The application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

On the basis of our risk assessments, together with our assessment of the Group's overall control environment, our judgement was that performance materiality was 50% (2021 - 50%) of our planning materiality, namely £33 million (2021 - £36 million). We have set performance materiality at this percentage (which is at the lowest end of the acceptable range of our audit methodology) based on various considerations including the past history of misstatements, the effectiveness of the control environment and other factors affecting the entity and its financial reporting.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative scale and risk of the component to the Group as a whole and our assessment of the risk of misstatement at that component. In the current year, the range of performance materiality allocated to components was between £16 million and £33 million (2021 - £16 million and £36 million).

Reporting threshold

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

We agreed with the Group Audit Committee that we would report to them all uncorrected audit differences in excess of £3 million (2021 - £4 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, Financial Review, Report of the directors, Statement of directors' responsibilities, Risk Factors and Forward-looking statements and Non-IFRS financial measures) other than the financial statements and our auditor's report thereon. The directors are responsible for the other information contained within the annual report.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic report and the Report of the directors for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic report and Report of the directors have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the Group and the Bank and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic report or the Report of the directors.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the Group and the Bank, or returns adequate for our audit have not been received from branches not visited by us; or
- the Group's and Bank's financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit

Responsibilities of directors

As explained more fully in the Statement of directors' responsibilities, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group and Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Bank to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Explanation as to what extent the audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect irregularities, including fraud. The risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below. However, the primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the Group and the Bank, and management.

- We obtained an understanding of the legal and regulatory frameworks that are applicable to the Group and determined that the most significant are the regulations of the Prudential Regulation Authority (PRA), the Financial Conduct Authority (FCA) and the Companies Act 2006.
- We understood how the Group is complying with those frameworks by making inquiries of management, internal audit and those responsible for legal and compliance matters. We also reviewed correspondence between the Group and regulatory bodies; reviewed minutes of the Board and other key committees; and gained an understanding of the Group's governance framework.
- Conducted a review of correspondence with and reports from regulators, including the PRA and FCA.
- We assessed the susceptibility of the Group 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 and the appropriateness of sources used when performing confirmation testing on accounts such as cash. Our procedures over our key audit matters and other significant accounting estimates included challenging management on the assumptions made and judgements required in determining these estimates.
- We designed our audit procedures to identify non-compliance with laws and regulations. Our procedures involved inquiries of legal counsel, executive management and internal audit. We also tested controls and performed procedures to respond to the fraud risks as identified in our key audit matters. These procedures were performed by both the primary team and component teams with oversight from the primary team.
- Identified and tested journal entries, including those posted with certain descriptions or unusual characteristics, backdated journals or posted by infrequent and unexpected users.
- The Group operates in the banking industry which is a highly regulated environment. As such, the Senior Statutory Auditor considered the experience and expertise of the engagement team to ensure that the team had the appropriate competence and capabilities, involving specialists where appropriate.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at https://www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Other matters we are required to address

- Following the recommendation from the NatWest Group Audit Committee we were appointed by NatWest Group Plc at its annual general meeting on 4 May 2016 to audit the financial statements of the Group and the Bank for the year ended 31 December 2016 and subsequent financial periods.
- The period of total uninterrupted engagement including previous renewals and reappointments is seven years, covering periods from our appointment through 31 December 2022.
- The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Bank and we remain independent of the Group and the Bank in conducting the audit.
- The audit opinion is consistent with the additional report to the Group Audit Committee.

Use of our report

This report is made solely to the Group's and the Bank'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 Group's and the Bank'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 Group and the Bank, and the Group's and the Bank's members as a body, for our audit work, for this report, or for the opinions we have formed.

Manprit Dosanjh (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		**745**	343
Interest payable		**(654)**	(335)
Net interest income	1	**91**	8
Fees and commissions receivable		**349**	262
Fees and commissions payable		**(158)**	(104)
Income from trading activities		**389**	263
Other operating income		**18**	(28)
Non-interest income	2	**598**	393
Total income		**689**	401
Staff costs		**(400)**	(498)
Premises and equipment		**(60)**	(110)
Other administrative expenses		**(652)**	(522)
Depreciation and amortisation		**(16)**	(20)
Operating expenses	3	**(1,128)**	(1,150)
Loss before impairment losses/releases		**(439)**	(749)
Impairment (losses)/releases	14	**(8)**	35
Operating loss before tax		**(447)**	(714)
Tax credit	7	**183**	223
Loss for the year		**(264)**	(491)
Attributable to:			
Ordinary shareholders		**(335)**	(593)
Paid-in-equity holders		**70**	63
Non-controlling interests		**1**	39
		(264)	(491)

Consolidated statement of comprehensive income for the year ended 31 December 2022

	2022 £m	2021 £m
Loss for the year	**(264)**	(491)
Items that do not qualify for reclassification		
Remeasurement of retirement benefit schemes	**(68)**	36
Change in fair value of credit in financial liabilities designated as at FVTPL	**50**	(29)
FVOCI financial assets	**(2)**	2
Tax	**32**	(10)
	12	(1)
Items that do qualify for reclassification		
FVOCI financial assets	**(31)**	(2)
Cash flow hedges (1)	**(475)**	(206)
Currency translation	**245**	(124)
Tax	**142**	45
	(119)	(287)
Other comprehensive loss after tax	**(107)**	(288)
Total comprehensive loss for the year	**(371)**	(779)
Attributable to:		
Ordinary shareholders	**(442)**	(885)
Paid-in equity holders	**70**	63
Non-controlling interests	**1**	43
	(371)	(779)

(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 108 to 171, the accounting policies on pages 102 to 107 and the audited sections of the Financial review and Risk and capital management on pages 33 to 80 form an integral part of these financial statements.

Balance sheet as at 31 December 2022

		NWM Group		NWM Plc	
		2022	2021	2022	2021
	Note	£m	£m	£m	£m
Assets					
Cash and balances at central banks	9	**17,007**	16,645	**13,467**	12,294
Trading assets	12	**45,291**	59,101	**27,301**	41,222
Derivatives	13	**100,154**	105,550	**96,258**	103,042
Settlement balances	9	**2,558**	2,139	**1,686**	795
Loans to banks - amortised cost	9	**1,146**	962	**815**	712
Loans to customers - amortised cost	9	**10,171**	7,471	**9,154**	6,810
Amounts due from holding company and fellow subsidiaries	9	**740**	1,479	**6,665**	6,723
Other financial assets	15	**11,870**	8,786	**10,377**	7,743
Investments in group undertakings	16	**—**	—	**2,626**	2,481
Other assets	17	**832**	878	**712**	732
Total assets		**189,769**	203,011	**169,061**	182,554
Liabilities					
Bank deposits	9	**3,069**	1,808	**2,936**	1,808
Customer deposits	9	**3,614**	2,268	**2,665**	1,510
Amounts due to holding company and fellow subsidiaries	9	**6,217**	6,126	**12,867**	10,978
Settlement balances	9	**2,010**	2,068	**1,133**	1,028
Trading liabilities	12	**52,792**	64,482	**33,225**	47,119
Derivatives	13	**93,585**	98,497	**90,754**	95,096
Other financial liabilities	18	**21,103**	19,255	**18,396**	16,877
Other liabilities	20	**816**	1,055	**567**	789
Total liabilities		**183,206**	195,559	**162,543**	175,205
Owners' equity	21	**6,565**	7,455	**6,518**	7,349
Non-controlling interests		**(2)**	(3)	**—**	—
Total equity		**6,563**	7,452	**6,518**	7,349
Total liabilities and equity		**189,769**	203,011	**169,061**	182,554

Owners' equity of NWM Plc as at 31 December 2022 includes the loss for the year of £79 million (2021 loss - £527 million).

The accompanying notes on pages 108 to 171, the accounting policies on pages 102 to 107 and the audited sections of the Financial review and Risk and capital management on pages 33 to 80 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:

Frank Dangeard
Chairman

Robert Begbie
Chief Executive Officer

Simon Lowe
Chief Financial Officer

NatWest Markets Plc
Registration No. SC090312

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

	NWM Group		NWM Plc	
	2022 £m	2021 £m	2022 £m	2021 £m
Called-up share capital - at 1 January and 31 December	400	400	400	400
Share premium - at 1 January	1,946	1,759	1,946	1,759
Redemption of preference shares	—	187	—	187
At 31 December	1,946	1,946	1,946	1,946
Paid-in equity - at 1 January and 31 December	904	904	904	904
FVOCI reserve - at 1 January	33	34	18	14
Unrealised (losses)/gains	(44)	(1)	(27)	3
Realised gains/(losses)	5	1	(2)	2
Tax	9	(1)	9	(1)
At 31 December	3	33	(2)	18
Cash flow hedging reserve - at 1 January	47	201	46	201
Amount recognised in equity (2)	(424)	(207)	(406)	(208)
Amount transferred from equity to earnings	(51)	1	(58)	1
Tax	134	52	134	52
At 31 December	(294)	47	(284)	46
Foreign exchange reserve - at 1 January	(13)	121	(218)	(192)
Retranslation of net assets	325	(158)	151	(27)
Foreign currency (losses)/gains on hedges of net assets	(75)	20	(11)	1
Tax	—	(6)	—	—
Recycled to profit or loss on disposal of businesses	(5)	10	—	—
At 31 December	232	(13)	(78)	(218)
Retained earnings - at 1 January	4,138	5,969	4,253	6,066
Loss attributable to ordinary shareholders and other equity holders	(265)	(530)	(79)	(527)
Ordinary dividends paid	(430)	(1,000)	(430)	(1,000)
Paid-in equity dividends paid	(70)	(63)	(70)	(63)
Redemption of preference shares	—	(188)	—	(188)
Realised gains/(losses) on FVOCI equity shares				
- gross	6	—	6	(2)
- tax	10	—	10	—
Remeasurement of retirement benefit schemes				
- gross	(68)	36	(68)	35
- tax	23	(13)	23	(13)
Changes in fair value of credit in financial liabilities designated at FVTPL				
- gross	50	(29)	7	(11)
- tax	(2)	3	(2)	3
Share-based payments				
- gross	(18)	(51)	(18)	(51)
- tax	—	4	—	4
At 31 December	3,374	4,138	3,632	4,253
Owners' equity at 31 December	6,565	7,455	6,518	7,349
Non-controlling interests - at 1 January	(3)	(46)	—	—
Currency translation adjustments and other movements	—	4	—	—
Profit attributable to non-controlling interests	1	39	—	—
At 31 December	(2)	(3)	—	—
Total equity at 31 December	6,563	7,452	6,518	7,349
Attributable to:				
Ordinary shareholders	5,661	6,551	5,614	6,445
Paid-in equity holders	904	904	904	904
Non-controlling interests	(2)	(3)	—	—
	6,563	7,452	6,518	7,349

(1) The total distributable reserves for NWM Plc is £3,268 million (2021 – £4,035 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 108 to 171, the accounting policies on pages 102 to 107 and the audited sections of the Financial review and Risk and capital management on pages 33 to 80 form an integral part of these financial statements.

Cash flow statement for the year ended 31 December 2022

	NWM Group		NWM Plc	
	2022	2021	2022	2021
	£m	£m	£m	£m
Cash flows from operating activities				
Operating loss before tax	(447)	(714)	(264)	(702)
Adjustments for:				
Impairment losses/(releases)	8	(35)	(1)	(36)
Amortisation of discounts and premiums of other financial assets	18	4	18	4
Depreciation and amortisation	16	20	6	9
(Write-back)/write-down of investments in subsidiaries	—	—	(81)	95
Change in fair value taken to profit or loss of other financial assets	168	80	168	80
Change in fair value taken to profit or loss on other financial liabilities and subordinated liabilities	(251)	(180)	(169)	(147)
Elimination of foreign exchange differences	(458)	738	(177)	529
Other non-cash items	(82)	(1)	(60)	5
Income receivable on other financial assets	(236)	(130)	(252)	(146)
Loss on sale of other financial assets	11	2	4	—
Dividends receivable from subsidiaries	—	—	(53)	(65)
Profit on sale of subsidiaries and associates	—	—	(2)	—
Loss on sale of other assets and net assets/liabilities	—	—	—	5
Interest payable on MRELs and subordinated liabilities	227	204	210	166
Loss on redemption of own debt	74	26	4	26
Charges and release on provisions	15	(7)	15	43
Defined benefit pension schemes	2	4	2	4
Net cash flows from trading activities	(935)	11	(632)	(130)
Decrease in trading assets	14,994	7,664	14,482	8,117
Decrease in derivative assets	4,973	59,861	6,377	60,854
(Increase)/decrease in settlement balance assets	(419)	157	(891)	289
Decrease/(increase) in net loans to banks	4	(122)	29	(122)
(Increase)/decrease in net loans to customers	(2,703)	1,003	(2,336)	688
Decrease/(increase) in amounts due from holding company and subsidiaries	577	351	(105)	1,366
(Increase)/decrease in other financial assets	(62)	41	(35)	37
Increase in other assets	(85)	(10)	(80)	(14)
Increase in bank deposits	1,261	—	1,128	46
Increase/(decrease) in customer deposits	1,346	(350)	1,155	41
Increase/(decrease) in amounts due to holding company and fellow subsidiaries	719	(394)	2,517	(3,597)
(Decrease)/increase in settlement balance liabilities	(58)	(180)	105	424
Decrease in trading liabilities	(11,690)	(7,771)	(13,894)	(9,797)
Decrease in derivatives liabilities	(4,912)	(58,835)	(4,342)	(58,658)
Increase in other financial liabilities	2,395	1,199	1,799	1,597
Decrease in other liabilities	(47)	(154)	(26)	(141)
Changes in operating assets and liabilities	6,293	2,460	5,883	1,130
Income taxes received	135	28	144	55
Net cash flows from operating activities [1]	5,493	2,499	5,395	1,055

For notes to this table refer to the following page.

		NWM Group		NWM Plc	
		2022	2021	2022	2021
	Note	£m	£m	£m	£m
Cash flows from investing activities					
Sale and maturity of other financial assets		5,935	4,523	4,797	3,842
Purchase of other financial assets		(9,093)	(4,617)	(7,601)	(3,822)
Income received on other financial assets		236	130	252	146
(Purchase)/sale of investment in associates		(1)	4	(1)	4
Dividends received from subsidiaries		—	—	53	65
Sale of property, plant and equipment		20	1	—	(4)
Purchase of property, plant and equipment		(2)	(1)	—	—
Net cash flows from investing activities		(2,905)	40	(2,500)	231
Cash flows from financing activities					
Movement in MRELs		(1,027)	(1,234)	(1,027)	(1,234)
Movement in subordinated liabilities		(573)	(378)	(350)	(339)
Dividends paid		(500)	(1,063)	(500)	(1,063)
Net cash flows from financing activities	26	(2,100)	(2,675)	(1,877)	(2,636)
Effects of exchange rate on cash and cash equivalents		1,090	(994)	691	(721)
Net increase/(decrease) in cash and cash equivalents		1,578	(1,130)	1,709	(2,071)
Cash and cash equivalents at 1 January		25,250	26,380	19,214	21,285
Cash and cash equivalents at 31 December	27	26,828	25,250	20,923	19,214

(1) NWM Group includes interest received of £637 million (2021 - £419 million) and interest paid of £524 million (2021 - £330 million), and NWM Plc includes interest received of £677 million (2021 - £438 million) and interest paid of £557 million (2021 - £353 million).

The accompanying notes on pages 108 to 171, the accounting policies on pages 102 to 107 and the audited sections of the Financial review and Risk and capital management on pages 33 to 80 form an integral part of these financial statements.

Accounting policies

1. Presentation of financial statements

NatWest Markets Plc (NWM 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), International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), and IFRS as adopted by the European Union. 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.

Our consolidated financial statements incorporate the results of NWM Plc and the entities it controls. Control arises when we have the power to direct the activities of an entity so as to affect the return from the entity. Control is assessed by reference to our ability to enforce our will on the other entity, typically through voting rights. The consolidated financial statements are prepared under consistent accounting policies.

On acquisition of a subsidiary, the identifiable assets, liabilities and contingent liabilities are included in the consolidated financial statements at their fair value. A subsidiary is included in the consolidated financial statements from the date it is controlled by us until the date we cease to control it through a sale or a significant change in circumstances. Changes in our interest in a subsidiary that do not result in us ceasing to control that subsidiary are accounted for as equity transactions.

Transactions and balances between Group companies are eliminated in the consolidated financial statements to show only those transactions and balances external to us.

The judgments and assumptions involved in our accounting policies that are considered by the Board to be the most important to the portrayal of its financial condition are noted below. The use of estimates, assumptions or models that differ from those adopted by us would affect our reported results.

How Climate risk affects our accounting judgments and estimates

Business planning

Key financial estimates are based on management's latest five-year revenue and cost forecasts. The outputs from this forecast affect forward-looking accounting estimates. Measurement of deferred tax and expected credit losses are highly sensitive to reasonably possible changes in those anticipated conditions. In 2022, this exercise supports the development of NatWest Group's climate transition plan, including the assessment of climate-related risks and opportunities.

- changes in business operations, products and services to support customer decarbonisation;
- financial plans linked to business operations and strategy. During 2022, the financial planning process has been enhanced to incorporate climate related opportunities included in the climate transition plan; and
- development in UK Government policies, aligned with the Committee on Climate Change Sixth carbon Budget published in 2021. We also assume certain broader policy responses and technological innovation to enable the wider transition of the economy.
- There remains considerable uncertainty regarding this 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, technology development and customer behaviours.
- Our 'base case' economic assumptions are those we use for our determination of expected credit loss. The inclusion of climate factors may have greater effect in future periods. We do not at this point include new revenue opportunities nor do we assume unilateral commercial actions that are inconsistent with our purpose led strategy that would have material financial consequences.

Information used in other accounting estimates

We make use of reasonable and supportable information to make accounting judgments and estimates. This includes information about the observable effects of the physical and transition risks of climate change on the current creditworthiness of borrowers, asset values and market indicators. It also includes the effect on our competitiveness and profitability. Many of the effects arising from climate change will be longer term in nature, with an inherent level of uncertainty, and have limited effect on accounting judgments and estimates for the current period. Some physical and transition risks can manifest in the shorter term. The following items represent the most significant effects:

- The classification of financial instruments linked to climate, or other sustainability indicators: consideration is given to whether the effect of climate-related terms prevent the instrument cashflows being solely payments of principal and interest.
- The measurement of expected credit loss considers the ability of borrowers to make payments as they fall due. Future cashflows are discounted, so long dated cashflows are less likely to affect current expectations on credit loss. Our assessment of sector specific risks, and whether additional adjustments are required, include expectations of the ability of those sectors to meet their financing needs in the market. Changes in credit stewardship and credit risk appetite that stem from climate considerations, such as oil and gas, will directly affect our positions.
- The use of market indicators as inputs to fair value is assumed to include current information and knowledge regarding the effect of climate risk.

2. Critical accounting policies

The judgments and assumptions involved in our accounting policies that are considered by the Board to be the most important to the portrayal of our financial condition are noted below. The use of estimates, assumptions or models that differ from those adopted by us would affect our reported results. Management's consideration of uncertainty is outlined in the relevant sections of this document, including the ECL estimate in the Risk and capital management section.

Information used for significant estimate

Key financial estimates are based on management's latest five-year revenue and cost forecasts. Changes in judgments and assumptions could result in a material adjustment to those estimates in future reporting periods. Consideration of this source of estimate uncertainty has been set out in the notes below (as applicable).

Policy	Judgment	Estimate	Further information
Deferred tax	Determination of whether sufficient taxable profits will be generated in future years to recover DTA.	Our estimates are based on the five-year revenue and cost forecasts (which include inherent uncertainties).	Note 7
Fair value – financial instruments	Classification of a fair value instrument as level 3, where the valuation is driven by unobservable inputs.	Estimation of the fair value, where it is reasonably possible to have alternative assumptions in determining the FV.	Note 10
Loan impairment provisions	Definition of default against which to apply PD, LGD and EAD models. Criteria for a significant increase in credit risk. Identification of risks not captured by the models.	ECL estimates contain a number of measurement uncertainties (such as the selection of multiple economic scenarios) and disclosures include sensitivities to show impact on other reasonably possible scenarios.	Note 14
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 20

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 NatWest Group company or on NatWest Group companies in the same tax group that intend, in future periods, to settle current tax liabilities and assets on a net basis or on a gross basis simultaneously.

Deferred tax asset recoverability is based on the level of supporting offsetable deferred tax liabilities we have and of our future taxable profits. These future taxable profits are based on our five-year revenue and cost forecasts and the expectation of long-term economic growth beyond this period. The five-year forecast takes account of management's current expectations on competitiveness and profitability. The long-term growth rate reflects external indicators which will include market expectations on climate risk. We do not consider any additional adjustments to this indicator.

2.2. Fair value – financial instruments

Financial instruments classified as mandatory fair value through profit or loss; held-for-trading; designated fair value through profit or loss and fair value through other comprehensive income are recognised in the financial statements at fair value. All derivatives are measured at fair value.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. A fair value measurement considers the characteristics of the asset or liability and the assumptions that a market participant would consider when pricing the asset or liability.

We manage some portfolios of financial assets and financial liabilities based on our net exposure to either market or credit risk. In these cases, the fair value is derived from the net risk exposure of that portfolio with portfolio level adjustments applied to incorporate bid-offer spreads, counterparty credit risk, and funding costs (see 'Valuation Adjustments').

Where the market for a financial instrument is not active, fair value is established using a valuation technique. These valuation techniques involve a degree of estimation, the extent of which depends on the instrument's complexity and the availability of market-based data. The complexity and uncertainty in the financial instrument's fair value is categorised using the fair value hierarchy.

The use of market indicators as inputs to fair value is assumed to include current information and knowledge regarding the effect of climate risk.

2.3. Loan impairment provisions: expected credit losses (ECL)

At each balance sheet date each financial asset or portfolio of financial assets measured at amortised cost or at fair value through other comprehensive income, issued financial guarantee and loan commitment (other than those classified as held for trading) is assessed for impairment. Any change in impairment is reported in the income statement.

Loss allowances are forward-looking, based on 12-month ECL where there has not been a significant increase in credit risk rating, otherwise allowances are based on lifetime expected losses.

ECL are a probability-weighted estimate of credit losses. The probability is determined by the risk of default which is applied to the cash flow estimates. In the absence of a change in credit rating, allowances are recognised when there is a reduction in the net present value of expected cash flows. Following a significant increase in credit risk, ECL are adjusted from 12 months to lifetime. This will lead to a higher impairment charge.

The measurement of expected credit loss considers the ability of borrowers to make payments as they fall due. Future cashflows are discounted, so long dated cashflows are less likely to affect current expectations on credit loss. Our assessment of sector specific risks, and whether additional adjustments are required, include expectations 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.

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.

Business loans are generally written off within five years.

2.4. Provisions and contingent liabilities

We recognise a provision for a present obligation resulting from a past event when it is more likely than not that we will be required to pay to settle the obligation and the amount of the obligation can be estimated reliably.

Provision is made for restructuring costs, including the costs of redundancy, when we have a constructive obligation. An obligation exists when we have a detailed formal plan for the restructuring and have raised a valid expectation in those affected either by starting to implement the plan or by announcing its main features.

We recognise any onerous cost of the present obligation under a contract as a provision. An onerous cost is the unavoidable cost of meeting our contractual obligations that exceed the expected economic benefits. When we intend to vacate a leasehold property or right of use asset, the asset would be tested for impairment and a provision may be recognised for the ancillary contractual occupancy costs.

Contingent liabilities are possible obligations arising from past events, whose existence will be confirmed only by uncertain future events, or present obligations arising from past events that are not recognised because either an outflow of economic benefits is not probable, or the amount of the obligation cannot be reliably measured. Contingent liabilities are not recognised but information about them is disclosed unless the possibility of any outflow of economic benefits in settlement is remote.

3. Significant accounting policies

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 income from trading activities or other operating income as relevant. Fees in respect of services are recognised as the right to consideration accrues through the performance of each distinct service obligation to the customer. The arrangements are generally contractual and the cost of providing the service is incurred as the service is rendered. The price is usually fixed and always determinable.

3.2. Staff costs

Employee costs, such as salaries, paid absences, and other benefits are recognised over the period in which the employees provide the related services to us. Employees may receive variable compensation in cash, in deferred cash or debt instruments of NWM Group or in ordinary shares of NatWest Group plc subject to deferral, clawback and forfeiture criteria. We operate a number of share-based compensation schemes under which we grant awards of NatWest Group plc shares and share options to our employees. Such awards are subject to vesting conditions.

Variable compensation that is settled in cash or debt instruments is charged to the income statement on a straight-line basis over the period during which services are provided, taking account of forfeiture and clawback criteria. The value of employee services received in exchange for NatWest Group plc shares and share options is recognised as an expense over the vesting period, subject to deferral, clawback cancelation and forfeiture criteria with a corresponding increase in equity. The fair value of shares granted is the market price adjusted for the expected effect of dividends as employees are not entitled to dividends until shares are vested.

The fair value of options granted is determined using option pricing models to estimate the numbers of shares likely to vest. These consider the exercise price of the option, the current share price, the risk-free interest rate, the expected volatility of the share price over the life of the option and other relevant factors such as the dividend yield.

Defined contribution pension scheme

A scheme where we pay fixed contributions and there is no legal or constructive obligation to pay further contributions or benefits. Contributions are recognised in the income statement as employee service costs accrue.

Defined benefit pension scheme

A scheme that defines the benefit an employee will receive on retirement and is dependent on one or more factors such as age, salary, and years of service. The net of the recognisable scheme assets and obligations is reported on the balance sheet in other assets or other liabilities. The defined benefit obligation is measured on an actuarial basis. The charge to the income statement for pension costs (mainly the service cost and the net interest on the net defined benefit asset or liability) is recognised in operating expenses.

Actuarial gains and losses (i.e., gains and/or losses on re-measuring the net defined benefit asset or liability due to changes in actuarial measurement assumptions) are recognised in other comprehensive income in full in the period in which they arise, and not subject to recycling to the income statement.

The difference between scheme assets and scheme liabilities, the net defined benefit asset or liability, is recognised on the balance sheet if the criteria of the asset celling test are met. This requires the net defined benefit surplus to be limited to the present value of any economic benefits available to us in the form of refunds from the plan or reduced contributions to it.

We will recognise a liability where a minimum funding requirement exists for any of our defined benefit pension schemes. This reflects agreed minimum funding and the availability of a net surplus as determined as described above. When estimating the liability for minimum funding requirements we only include contributions that are substantively or contractually agreed and do not include contingent and discretionary features, including dividend-linked contributions or contributions subject to contingent events requiring future verification.

We will recognise a net defined benefit asset when the net defined benefit surplus can generate a benefit in the form of a refund or reduction in future contributions to the plan. The net benefit pension asset is recognised at the present value of the benefits that will be available to us excluding interest and the effect of the asset ceiling (if any, excluding interest). Changes in the present value of the net benefit pension asset are recognised immediately in other comprehensive income.

3.3. Foreign currencies

Foreign exchange differences arising on the settlement of foreign currency transactions and from the translation of monetary assets and liabilities are reported in income from trading activities except for differences arising on cash flow hedges and hedges of net investments in foreign operations.

Non-monetary items denominated in foreign currencies that are stated at fair value are translated into the functional currency at the foreign exchange rates ruling at the dates the values are determined. Translation differences are recognised in the income statement except for differences arising on non-monetary financial assets classified as fair value through other comprehensive income.

Income and expenses of foreign subsidiaries and branches are translated into sterling at average exchange rates unless these do not approximate the foreign exchange rates ruling at the dates of the transactions. Foreign exchange differences arising on the translation of a foreign operation are recognised in other comprehensive income. The amount accumulated in equity is reclassified from equity to the income statement on disposal of a foreign operation.

3.4. 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.

3.5. Financial instruments

Financial instruments are measured at fair value on initial recognition on the balance sheet.

Monetary financial assets are classified into one of the following subsequent measurement categories (subject to business model assessment and review of contractual cash flow for the purposes of sole payments of principal and interest where applicable):

- amortised cost measured at cost using the effective interest rate method, less any impairment allowance;
- fair value through other comprehensive income (FVOCI) measured at fair value, using the effective interest rate method and changes in fair value through other comprehensive income;
- mandatory fair value through profit or loss (MFVTPL) measured at fair value and changes in fair value reported in the income statement; or
- designated at fair value through profit or loss (DFV) measured at fair value and changes in fair value reported in the income statement.

Classification by business model reflects how we manage our financial assets to generate cash flows. A business model assessment helps to ascertain the measurement approach depending on whether cash flows result from holding financial assets to collect the contractual cash flows, from selling those financial assets, or both.

Business model assessment of assets is made at portfolio level, being the level at which they are managed to achieve a predefined business objective. This is expected to result in the most consistent classification of assets because it aligns with the stated objectives for the portfolio, its risk management, manager's remuneration and the ability to monitor sales of assets from a portfolio. When a significant change to our business is communicated to external parties, we reassess our business model for managing those financial assets. We reclassify financial assets if we have a significant change to the business model. A reclassification is applied prospectively from the reclassification date.

The contractual terms of a financial asset; any leverage features; prepayment and extension terms; and discounts or penalties to interest rates that are part of meeting environmental, social and governance targets as well as other contingent and leverage features, non-recourse arrangements and features that could modify the timing and/or amount of the contractual cash flows that might reset the effective rate of interest; are considered in determining whether cash flows are solely payments of principal and interest.

Certain financial assets may be designated at fair value through profit or loss (DFV) upon initial recognition if such designation eliminates, or significantly reduces, accounting mismatch.

Equity shares are measured at fair value through profit or loss unless specifically elected as at fair value through other comprehensive income (FVOCI).

Upon disposal, the cumulative gains or losses in fair value through other comprehensive income reserve are recycled to the income statement for monetary assets and for non-monetary assets (equity shares) the cumulative gains or losses are transferred directly to retained earnings.

Regular way purchases and sales of financial assets classified as amortised cost are recognised on the settlement date; all other regular way transactions in financial assets are recognised on the trade date.

Financial liabilities are classified into one of following measurement categories:

– amortised cost measured at cost using the effective interest rate method;
– held for trading measured at fair value and changes in fair value reported in 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 except changes in fair value attributable to the credit risk component recognised in other comprehensive income when no accounting mismatch occurs.

3.6. Financial guarantee contracts

Under a financial guarantee contract, we, in return for a fee, undertake to meet a customer's obligations under the terms of a debt instrument if the customer fails to do so. A financial guarantee is recognised as a liability; initially at fair value and, if not designated as at fair value through profit or loss, subsequently at the higher of its initial value less cumulative amortisation and any provision under the contract measured in accordance with our ECL accounting policy. Amortisation is calculated to recognise fees receivable in profit or loss over the period of the guarantee.

3.7. 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.

3.8. Netting

Financial assets and financial liabilities are offset, and the net amount presented on the balance sheet when, and only when, we currently have a legally enforceable right to set off the recognised amounts and we intend either to settle on a net basis or to realise the asset and settle the liability simultaneously. We are party to a number of arrangements, including master netting agreements, that give us the right to offset financial assets and financial liabilities, but where we do not intend to settle the amounts net or simultaneously, the assets and liabilities concerned are presented separately on the balance sheet.

3.9. 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.

3.10. Derivatives and hedging

Derivatives are reported on the balance sheet at fair value.

We use derivatives as part of our trading activities, to manage our own risk such as interest rate, foreign exchange, or credit risk or in certain customer transactions. Not all derivatives used to manage risk are in hedge accounting relationships (an IFRS method to reduce accounting mismatch from changes in the fair value of derivatives reported in the income statement).

Gains and losses arising from changes in the fair value of derivatives that are not in hedge relationships are recognised in the income statement in Income from trading activities except for gains and losses on those derivatives that are managed together with financial instruments designated at fair value; these gains and losses are included in Other operating income.

Hedge accounting

We enter into three types of hedge accounting relationships (see later). Hedge accounting relationships are designated and documented at inception in line with the requirements of IAS 39 Financial instruments – Recognition and Measurement. The documentation identifies the hedged item, the hedging instrument and details of the risk that is being hedged and the way in which effectiveness will be assessed at inception and during the period of the hedge. When designating a hedging relationship, we consider: the economic relationship between the hedged item (including the risk being hedged) and the hedging instrument; the nature of the risk; the risk management objective and strategy for undertaking the hedge; and the appropriateness of the method that will be used to assess hedge effectiveness.

Designated hedging relationships must be expected to be highly effective both on a prospective and retrospective basis. Hedge effectiveness is assessed by reference to the degree of offsetting between the changes in fair value or cash flows attributable to the hedged risk and the changes in fair value of the designated hedging derivatives.

Fair value hedge
The gain or loss on the hedging instrument and the hedged item attributable to the hedged risk is recognised in the income statement. Where the hedged item is measured at amortised cost, the balance sheet amount of the hedged item is also adjusted.

Cash flow hedge
The effective portion of the designated hedge relationship is recognised in other comprehensive income and the ineffective portion in the income statement. When the hedged item (forecasted cash flows) results in the recognition of a financial asset or financial liability, the cumulative gain or loss is reclassified from equity to the income statement in the same periods in which the hedged forecasted cash flows affect the income statement.

Hedge of net investment in a foreign operation
In the hedge of a net investment in a foreign operation, the effective portion of the designated hedge relationship is recognised in other comprehensive income. Any ineffective portion is recognised in profit or loss. Non-derivative financial liabilities as well as derivatives may be designated as a hedging instrument in a net investment hedge.

Discontinuation of hedge accounting
Hedge accounting is discontinued if the hedge no longer meets the criteria for hedge accounting i.e. the hedge is not highly effective in offsetting changes in fair value or cash flows attributable to the hedged risk, consistent with the documented risk management strategy; the hedging instrument expires or is sold, terminated or exercised; or if hedge designation is revoked.

For fair value hedging any cumulative adjustment is amortised to the income statement over the life of the hedged item. Where the hedge item is no longer on the balance sheet the adjustment to the hedged item is reported in the income statement.

For cash flow hedging the cumulative unrealised gain or loss is reclassified from equity to the income statement when the hedged cash flows occur or, if the forecast transaction results in the recognition of a financial asset or financial liability, when the hedged forecast cash flows affect the income statement. Where a forecast transaction is no longer expected to occur, the cumulative unrealised gain or loss is reclassified from equity to the income statement immediately.

For net investment hedging on disposal or partial disposal of a foreign operation, the amount accumulated in equity is reclassified from equity to the income statement.

3.11. Investment in Group undertakings
Our investments in Group undertakings (subsidiaries) are stated at cost less any impairment.

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).

Other new standards and amendments that are effective for annual periods beginning after 1 January 2024, with earlier application permitted, are set out below.

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	**198**	39
Loans to customers - amortised cost	**273**	207
Amounts due from holding company and fellow subsidiaries	**12**	14
Other financial assets	**262**	83
Interest receivable	**745**	343
Balances with banks	**72**	64
Customer deposits	**63**	7
Amounts due to holding company and fellow subsidiaries	**178**	169
Other financial liabilities	**341**	95
Interest payable	**654**	335
Net interest income	**91**	8

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 policies note 3.1.

2 Non-interest income

	2022 £m	2021 £m
Net fees and commissions	**191**	158
Income from trading activities		
Foreign exchange	**237**	191
Interest rate	**92**	(17)
Credit	**18**	83
Changes in fair value of own debt and derivative liabilities attributable to own credit risk		
- debt securities in issue and derivative liabilities	**42**	6
	389	263
Other operating income		
Loss on redemption of own debt	**(74)**	(26)
Operating lease and other rental income	**1**	2
Changes in fair value of financial assets and liabilities designated at fair value through profit or loss (1)	**16**	(8)
Hedge ineffectiveness	**(7)**	(10)
Profit on disposal of amortised cost assets	**87**	10
Loss on disposal of fair value through other comprehensive income assets	**(7)**	(1)
Dividend income	**6**	4
Other income	**(4)**	1
	18	(28)
Total	**598**	393

(1) Includes related derivatives.

For accounting policy information see Accounting policies note 3.1 and 3.3.

3 Operating expenses

	2022 £m	2021 £m
Wages, salaries and other staff costs	**244**	358
Temporary and contract costs	**5**	12
Social security costs	**40**	36
Bonus awards	**92**	72
Pension costs	**19**	20
- defined benefit schemes (see Note 5)	**2**	4
- defined contribution schemes	**17**	16
Staff costs	**400**	498
Premises and equipment	**60**	110
Depreciation and amortisation	**16**	20
Other administrative expenses (1,2)	**652**	522
Administrative expenses	**728**	652
	1,128	1,150

(1) Includes £552 million (2021 - £433 million) recharges from other NatWest Group entities, mainly NWB Plc which provides the majority of shared services (including technology) and operational processes.
(2) Includes litigation and other regulatory costs. Further details are provided in Note 20.

For accounting policy information see Accounting policies note 3.2.

The average number of persons employed, rounded to the nearest hundred, during the year, excluding temporary staff, was 1,600 (2021 – 1,900). The number of persons employed by NWM Group at 31 December 2022, excluding temporary staff, was as follows:

	2022	2021
UK	**900**	1,000
USA	**300**	300
Rest of the World	**400**	300
Total	**1,600**	1,600

Bonus awards

The following tables analyse NWM Group's bonus awards.

	2022 £m	2021 £m	Change %
Non-deferred cash awards (1)	**3**	3	—
Deferred cash awards	**70**	52	35%
Deferred share awards	**28**	22	27%
Total deferred bonus awards	**98**	74	32%
Total bonus awards (2)	**101**	77	31%

Reconciliation of bonus awards to income statement charge	2022 £m	2021 £m
Bonuses awarded	**101**	77
Less: deferral of charge for amounts awarded for current year	**(41)**	(30)
Income statement charge for amounts awarded in current year	**60**	47
Add: current year charge for amounts deferred from prior years	**35**	36
Less: forfeiture of amounts deferred from prior years	**(3)**	(11)
Income statement charge for amounts deferred from prior years	**32**	25
Income statement charge for bonus awards (2)	**92**	72

(1) Non-deferred cash awards are limited to £2,000 for all employees.
(2) Excludes other performance related compensation.

4 Segmental Analysis

Reportable operating segments

The reportable operating segments are as follows:

NatWest Markets

Offers its customers global market access, providing them with trading, risk management and financing solutions through its trading hubs in London, Amsterdam, Singapore and Stamford and sales offices across key locations in the UK, EU, US and Asia.

Central items & other

Includes corporate functions and other activity not managed in the NatWest Markets segment. In 2022 and 2021, this substantially comprised of litigation and conduct costs.

2022	NatWest Markets £m	Central items & other £m	Total £m
Interest receivable	745	—	745
Interest payable	(654)	—	(654)
Net fees and commissions	188	3	191
Other non-interest income	413	(6)	407
Total income	692	(3)	689
Depreciation and amortisation	(16)	—	(16)
Other operating expenses	(1,039)	(73)	(1,112)
Impairment losses	(8)	—	(8)
Operating loss	(371)	(76)	(447)

2021			
Interest receivable	343	—	343
Interest payable	(335)	—	(335)
Net fees and commissions	158	—	158
Other non-interest income	243	(8)	235
Total income	409	(8)	401
Depreciation and amortisation	(20)	—	(20)
Other operating expenses	(1,137)	7	(1,130)
Impairment releases	35	—	35
Operating loss	(713)	(1)	(714)

	Total revenue (1)					
	2022			2021		
	NatWest Markets £m	Central items & other £m	Total £m	NatWest Markets £m	Central items & other £m	Total £m
Total	1,507	(6)	1,501	848	(8)	840

(1) Total revenue comprises interest receivable, fees and commissions receivable, income from trading activities and other operating income.

Analysis of net fees and commissions	31 December 2022 £m	31 December 2021 £m
Fees and commissions receivable		
- Lending and financing	88	74
- Brokerage	44	41
- Underwriting fees	117	127
- Other	100	20
Total	349	262
Fees and commissions payable	(158)	(104)
Net fees and commissions	191	158

	2022			2021		
Total assets and liabilities	NatWest Markets £m	Central items & other £m	Total £m	NatWest Markets £m	Central items & other £m	Total £m
Assets	189,769	—	189,769	203,010	1	203,011
Liabilities	183,206	—	183,206	195,560	(1)	195,559

4 Segmental analysis continued

Geographical segments

The geographical analysis in the tables below has been compiled on the basis of location of office where the transactions are recorded.

2022	UK £m	USA £m	Europe £m	RoW £m	Total £m
Total revenue	**1,012**	**117**	**280**	**92**	**1,501**
Interest receivable	**614**	**37**	**85**	**9**	**745**
Interest payable	**(582)**	**(2)**	**(67)**	**(3)**	**(654)**
Fees and commissions receivable	**47**	**65**	**178**	**59**	**349**
Fees and commissions payable	**(120)**	**(21)**	**(17)**	**—**	**(158)**
Income from trading activities	**366**	**1**	**—**	**22**	**389**
Other operating income	**(15)**	**14**	**17**	**2**	**18**
Total income	**310**	**94**	**196**	**89**	**689**
Operating (loss)/profit before tax	**(474)**	**(46)**	**41**	**32**	**(447)**
Total assets	**130,145**	**25,977**	**30,679**	**2,968**	**189,769**
Total liabilities	**132,315**	**27,034**	**22,040**	**1,817**	**183,206**
Contingent liabilities and commitments	**7,036**	**—**	**7,544**	**17**	**14,597**

2021	UK £m	USA £m	Europe £m	RoW £m	Total £m
Total revenue	594	91	132	23	840
Interest receivable	262	20	56	5	343
Interest payable	(269)	(2)	(62)	(2)	(335)
Fees and commissions receivable	168	17	77	—	262
Fees and commissions payable	(236)	11	79	42	(104)
Income from trading activities	190	53	2	18	263
Other operating income	(27)	2	(3)	—	(28)
Total income	88	101	149	63	401
Operating (loss)/profit before tax	(802)	48	39	1	(714)
Total assets	158,100	21,823	20,668	2,420	203,011
Total liabilities	158,137	23,330	12,820	1,272	195,559
Contingent liabilities and commitments	6,482	—	5,450	18	11,950

5 Pensions

Defined contribution schemes

NWM Group sponsors a number of defined contribution pension schemes in different territories, which new employees are offered the opportunity to join.

Defined benefit schemes

NWM Group sponsors a number of pension schemes in the UK and overseas, including the AA and NatWest Markets (NWM) sections of the NatWest Group Pension Fund which operate under UK trust law and are managed and administered on behalf of their members in accordance with the terms of the trust deed, the scheme rules and UK legislation.

Pension fund trustees are appointed to operate each fund and ensure benefits are paid in accordance with the scheme rules and national law. The trustees are the legal owner of a scheme's assets and have a duty to act in the best interests of all scheme members.

The schemes generally provide a pension of one-sixtieth of final pensionable salary for each year of service prior to retirement up to a maximum of 40 years and are contributory for current members. These have been closed to new entrants for over ten years, although active members continue to build up additional pension benefits, currently subject to 2% maximum annual salary inflation, while they remain employed by NWM Group.

The corporate trustee is NatWest Pension Trustee Limited (the Trustee), a wholly owned subsidiary of NWB Plc. The Board of the Trustee comprises four-member trustee directors selected from eligible active staff, deferred and pensioner members who apply and six appointed by NatWest Group. Under UK legislation, a defined benefit pension scheme is required to meet the statutory funding objective of having sufficient and appropriate assets to cover its liabilities (the pensions that have been promised to members).

Investment strategy

The assets of the AA section, which is typical of other group schemes, represent 81% of all plan assets at 31 December 2022 (2021 – 78% of plan assets) and are invested as shown below.

The AA and NWM sections employ physical, derivative and non-derivative instruments to achieve a desired asset class exposure and to reduce the schemes' interest rate, inflation and currency risk. This means that the net funding positions are considerably less sensitive to changes in market conditions than the value of the assets or liabilities in isolation. In particular, the Trustee hedges movements in interest rates and inflation.

Over the year, increases in bond yields resulted in many pension schemes in the UK having to raise additional collateral to support Liability-driven investments positions held as part of their hedging strategies. Liability-driven investments (LDI) refer to assets that are expected to move broadly in line with liabilities on a specific basis. All of the Group's schemes affected by this were able to raise the collateral needed from existing assets, with no additional support from the Group. The Trustee of the Group Pension Fund takes a prudent approach to liquidity and collateral and holds sufficient collateral to withstand substantial rises in gilt yields.

Swaps have been executed at prevailing market rates and within standard market bid/offer spreads with a number of counterparty banks, including NWB Plc.

	2022			2021		
Major classes of plan assets as a percentage of total plan assets of the AA section	**Quoted %**	**Unquoted %**	**Total %**	Quoted %	Unquoted %	Total %
Equities	**—**	**2.1**	**2.1**	2.4	0.6	3.0
Index linked bonds	**30.8**	**—**	**30.8**	40.8	—	40.8
Government bonds	**16.5**	**—**	**16.5**	4.3	—	4.3
Corporate and other bonds	**20.2**	**6.4**	**26.6**	15.5	10.1	25.6
Real estate	**—**	**—**	**—**	—	2.0	2.0
Derivatives	**—**	**4.3**	**4.3**	—	6.5	6.5
Cash and other assets	**—**	**19.7**	**19.7**	—	17.8	17.8
	67.5	**32.5**	**100.0**	63.0	37.0	100.0

5 Pensions continued

The schemes do not invest directly in NWM Group but can have exposure to NWM Group. The trustees are responsible for ensuring that indirect investments in NWM Group do not exceed the 5% regulatory limit.

	AA section			All schemes (3)			
Changes in value of net pension asset/(liability)	Fair value of plan assets £m	Present value of defined benefit obligation (1) £m	Net pension asset/ (liability) £m	Fair value of plan assets £m	Present value of defined benefit obligation (1) £m	Asset ceiling/ minimum funding (2) £m	Net pension asset/ (liability) £m
At 1 January 2021	1,164	(906)	258	1,503	(1,219)	(83)	201
Currency translation and other adjustments	(1)	—	(1)	(11)	13	(2)	—
Income statement - operating expenses	16	(13)	3	21	(24)	(1)	(4)
Other comprehensive income	21	16	37	18	12	6	36
Contributions by employer	1	—	1	7	—	—	7
Contributions by plan participants and other scheme members	—	—	—	—	—	—	—
Benefits paid	(48)	48	—	(65)	65	—	—
Transfers to/from fellow subsidiaries	—	—	—	—	—	—	—
At 1 January 2022	1,153	(855)	298	1,473	(1,153)	(80)	240
Currency translation and other adjustments	—	—	—	—	—	—	—
Income statement - operating expenses							
Net interest expense	**20**	**(15)**	**5**	**26**	**(23)**	**(1)**	**2**
Gain on curtailments	**—**	**—**	**—**	**—**	**1**	**—**	**1**
Current service cost	**—**	**(1)**	**(1)**	**—**	**(5)**	**—**	**(5)**
	20	**(16)**	**4**	**26**	**(27)**	**(1)**	**(2)**
Other comprehensive income							
Return on plan assets excluding recognised interest income (4)	**(369)**	**—**	**(369)**	**(509)**	**—**	**—**	**(509)**
Experience gains and losses (4)	**—**	**(45)**	**(45)**	**—**	**(53)**	**—**	**(53)**
Effect of changes in actuarial financial assumptions (4)	**—**	**345**	**345**	**—**	**481**	**—**	**481**
Effect of changes in demographic assumptions	**—**	**—**	**—**	**—**	**1**	**—**	**1**
Asset ceiling adjustments	**—**	**—**	**—**	**—**		**12**	**12**
	(369)	**300**	**(69)**	**(509)**	**429**	**12**	**(68)**
Contributions by employer	**2**		**2**	**8**	**—**	**—**	**8**
Benefits paid	**(40)**	**40**	**—**	**(52)**	**52**	**—**	**—**
Assets and liabilities extinguished on settlements	**—**	**—**	**—**	**(4)**	**4**	**—**	**—**
Transfers to/from fellow subsidiaries	**—**	**—**	**—**	**(2)**	**2**	**—**	**—**
At 31 December 2022	**766**	**(531)**	**235**	**940**	**(693)**	**(69)**	**178**

(1) Defined benefit obligations are subject to annual valuation by independent actuaries.
(2) In recognising the net surplus or deficit of a pension scheme, the funded status of each scheme is adjusted to reflect any minimum funding requirement imposed on the sponsor and any ceiling on the amount that the sponsor has an unconditional right to recover from a scheme.
(3) Includes the NWM Section which has a net pension asset of £nil at 31 December 2022 (2021- net pension asset of £nil). This scheme has plan assets of £155 million, a defined benefit obligation of £86 million and an asset ceiling of £69 million (2021- £287 million, £208 million and £80 million respectively).
(4) Changes in market conditions during 2022 resulted in a particularly large increase in discount rate, which is the key driver of the effect of changes in actuarial financial assumptions. Given the level of hedging in place, there was a corresponding reduction in the value of plan assets over the period. The experience losses shown are mainly as a result of inflation over the year being higher than expected.
(5) NWM Group expects to make contributions to the AA section of £2.5 million and to the NWM section of £4.4 million in 2023.

	All schemes	
Amounts recognised on the balance sheet	**2022 £m**	2021 £m
Fund asset at fair value	**940**	1,473
Present value of fund liabilities	**(693)**	(1,153)
Funded status	**247**	320
Assets ceiling/minimum funding	**(69)**	(80)
	178	240

Net pension asset/(liability) comprises	**2022 £m**	2021 £m
Net assets of schemes in surplus (included in Other assets, Note 17)	**241**	306
Net liabilities of schemes in deficit (included in Other liabilities, Note 20)	**(63)**	(66)
	178	240

5 Pensions continued

Funding and contributions by NWM Group

In the UK, the trustees of defined benefit pension schemes are required to perform funding valuations at least every three years. The trustees and the sponsoring company, with the support of the Scheme Actuary, agree the assumptions used to value the liabilities and determine future funding requirements. The funding assumptions incorporate a margin for prudence over and above the expected cost of providing the benefits promised to members, taking into account the sponsor's covenant and the investment strategy of the scheme. Similar arrangements apply in the other territories where NWM Group sponsors defined benefit pension schemes.

The triennial funding valuation of the AA and NWM sections as at 31 December 2020 was completed during 2021. This determined the funding level to be 108% and 111% respectively, based on pension liabilities of £1,071 million and £267 million. No further deficit contributions are due.

The key assumptions used to determine the funding liabilities were the discount rate, which is determined based on a gilt yield curve plus 0.4% per annum, and mortality assumptions, which result in life expectancies of 28.3/30.1 years for males/females who are currently age 60 and 30.2/31.8 years from age 60 for males/females who are currently aged 40.

Accounting assumptions

Placing a value on NWM Group's defined benefit pension schemes' liabilities require NWM Group's management to make a number of assumptions, with the support of independent actuaries. The ultimate cost of the defined benefit obligations depends upon actual future events and the assumptions made are unlikely to be exactly borne out in practice, meaning the final cost may be higher or lower than expected.

The most significant assumptions used for the AA section are shown below:

	Principal IAS 19 actuarial assumptions	
	2022	2021
	%	%
Discount rate	**5.0**	1.8
Inflation assumption (RPI)	**3.2**	3.3
Rate of increase in salaries	**1.8**	1.8
Rate of increase in deferred pensions	**2.5**	2.9
Rate of increase in pensions in payment	**3.0**	2.9
Lump sum conversion rate at retirement	**18**	18
Longevity at age 60:	**years**	years
Current pensioners		
Males	**27.9**	27.9
Females	**29.8**	29.7
Future pensioners, currently aged 40		
Males	**29.5**	29.5
Females	**31.2**	31.1

The above financial assumptions are long term assumptions set with reference to the period over which the obligations are expected to be settled.

Discount rate

The IAS 19 valuation uses a single discount rate set by reference to the yield on a basket of 'high quality' sterling corporate bonds.

Significant judgment is required when setting the criteria for bonds to be included in the basket of bonds that determines the discount rate used in the IAS 19 valuations. The criteria include issue size, quality of pricing and the exclusion of outliers. Judgment is also required in determining the shape of the yield curve at long durations: a constant credit spread relative to gilts is assumed. Sensitivity to the main assumptions is presented below.

5 Pensions continued

The table below shows how the present value of the net pension asset of the AA section would change if the key assumptions used were changed independently. In practice the variables have a degree of correlation and do not move completely in isolation.

2022	(Decrease)/ increase in value of assets £m	(Decrease)/ increase in value of liabilities £m	Increase in net pension (obligations)/ assets £m
0.25% increase in interest rates/discount rate (1)	**(26)**	**(17)**	**(9)**
0.25% increase in inflation	**24**	**12**	**12**
0.25% increase in credit spreads	**—**	**(17)**	**17**
Longevity increase of one year	**—**	**17**	**(17)**
0.25% additional rate of increase in pensions in payment	**—**	**15**	**(15)**
Increase in equity values of 10% (2)	**2**	**—**	**2**
2021			
0.25% increase in interest rates/discount rate	(55)	(35)	(20)
0.25% increase in inflation	44	25	19
0.25% increase in credit spreads	—	(35)	35
Longevity increase of one year	—	37	(37)
0.25% additional rate of increase in pensions in payment	—	32	(32)
Increase in equity values of 10% (2)	4	—	4

(1) A 0.5% increase in interest rates/discount rate would lead to a decrease of £50.3m in the value of assets and a £34.1m decrease in the value of liabilities at 31 December 2022.
(2) Includes both quoted and private equity.

The funded status is most sensitive to movements in credit spreads and longevity. Note the longevity sensitivities quoted above reflect the impact of a one year increase to single life annuities. The table below shows the combined change in the funded status of the AA section as a result of larger movements in these assumptions, assuming no changes in other assumptions.

		Change in life expectancies				
		-2 years	-1 years	No change	+1 year	+2 years
2022		£m	£m	£m	£m	£m
Change in credit spreads	+50 bps	**66**	**50**	**34**	**19**	**4**
	No change	**34**	**17**	**—**	**(17)**	**(33)**
	-50 bps	**(3)**	**(21)**	**(39)**	**(57)**	**(74)**
2021						
Change in credit spreads	+50 bps	135	102	70	37	(4)
	No change	75	37	—	(37)	(76)
	-50 bps	4	(39)	(82)	(127)	(172)

The defined benefit obligation is attributable to the different classes of AA section members in the following proportions:

Membership category	2022 %	2021 %
Active members	**0.2**	0.2
Deferred members	**50.7**	56.2
Pensioners and dependants	**49.1**	43.6
	100.0	100.0

The experience history of the AA section is shown below:

History of defined benefit schemes	2022 £m	2021 £m
Fair value of plan assets	**766**	1,153
Present value of plan obligations	**(531)**	(855)
Net surplus	**235**	298
Experience losses on plan liabilities	**(45)**	(12)
Experience (losses)/gains on plan assets	**(369)**	21
Actual return on plan assets	**(349)**	37
Actual return on plan assets	**(30.3%)**	3.2%

6 Auditor's remuneration

Amounts payable to the NWM Group's auditors for statutory audit and other services are set out below:

	2022 £m	2021 £m
Fees payable for:		
- the audit of the NWM Group's annual accounts	**6.8**	6.4
- the audit of NWM Plc's subsidiaries	**3.1**	2.9
- audit-related assurance services	**—**	0.6
Total audit and audit-related assurance services fees	**9.9**	9.9
Corporate finance services	**0.2**	0.3
Total other services	**0.2**	0.3

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		
Credit for the year	**43**	171
Over provision in respect of prior years	**28**	1
	71	172
Deferred tax		
Credit for the year	**143**	17
UK tax rate change impact (1)	**25**	(21)
Net (decrease)/increase in the carrying value of deferred tax assets in respect of UK and Netherlands losses	**(53)**	39
(Under)/over provision in respect of prior years (2)	**(3)**	16
Tax credit for the year	**183**	223

(1) It was announced in the UK Government's budget on 27 October 2021 that the main UK banking surcharge will decrease from 8% to 3% from 1 April 2023. This legislative change was enacted on 24 February 2022.
(2) Prior year tax adjustments incorporate refinements to tax computations made on submission and agreement with the tax authorities and adjustments to provisions in respect of uncertain tax positions.

The actual tax credit differs from the expected tax credit, computed by applying the standard rate of UK corporation tax of 19% (2021 – 19%), as follows:

	2022 £m	2021 £m
Expected tax credit	**85**	136
Losses and temporary differences in year where no deferred tax asset recognised	**(18)**	(18)
Foreign profits taxed at other rates	**(5)**	(5)
Items not allowed for tax:		
- losses on disposal and write-downs	**(1)**	—
- UK bank levy	**(5)**	(3)
- regulatory and legal actions	**(13)**	(1)
- other disallowable items	**(6)**	(7)
Non-taxable RPI related uplift on index linked gilts (1)	**67**	—
Other non-taxable items	**3**	12
Unrecognised losses brought forward and utilised	**6**	8
(Decrease)/increase in the carrying value of deferred tax assets in respect of:		
- UK losses	**(53)**	(9)
- Netherlands losses	**—**	48
Banking surcharge	**59**	54
Tax on paid-in equity dividends	**14**	12
UK tax rate change impact	**25**	(21)
Adjustments in respect of prior years	**25**	17
Actual tax credit	**183**	223

(1) The tax impact of this adjustment (£135 million credit) is allocated across the Non-taxable RPI related uplift on index linked gilts, Adjustments in respect of prior years and Banking surcharge reconciling items.

For accounting policy information see Accounting policies Note 2.1.

Judgment: tax contingencies

NWM Group's corporate income tax credit and its provisions for corporate income taxes necessarily involve a significant degree of estimation and judgment. The tax treatment of some transactions is uncertain and tax computations are yet to be agreed with the tax authorities in a number of jurisdictions. NWM Group recognises anticipated tax liabilities based on all available evidence and, where appropriate, in the light of external advice. Any difference between the final outcome and the amounts provided will affect current and deferred corporate income tax charges in the period when the matter is resolved.

7 Tax continued
Deferred tax

	NWM Group 2022 £m	NWM Group 2021 £m	NWM Plc 2022 £m	NWM Plc 2021 £m
Deferred tax asset (included in Other assets, Note 17)	**(46)**	(48)	**—**	—
Deferred tax liability (included in Other liabilities, Note 20)	**101**	374	**92**	352
Net deferred tax liability	**55**	326	**92**	352

Net deferred tax liability/(asset) comprised:

NWM Group	Pension £m	Accelerated capital allowances £m	Expense provisions £m	Financial instruments (1) £m	Tax losses carried forward £m	Other £m	Total £m
At 1 January 2021	79	260	(23)	158	(62)	3	415
Charge/(credit) to income statement:	1	(1)	(2)	(5)	(43)	(1)	(51)
Charge/(credit) to other comprehensive income	18	—	(4)	(53)	—	—	(39)
Currency translation and other adjustments	—	—	—	—	1	—	1
At 31 December 2021	98	259	(29)	100	(104)	2	326
Charge/(credit) to income statement	**2**	**(151)**	**6**	**(27)**	**57**	**1**	**(112)**
Credit to other comprehensive income	**(18)**	**—**	**—**	**(139)**	**—**	**—**	**(157)**
Currency translation and other adjustments	**—**	**—**	**—**	**—**	**(2)**	**—**	**(2)**
At 31 December 2022	**82**	**108**	**(23)**	**(66)**	**(49)**	**3**	**55**

NWM Plc	Pension £m	Accelerated capital allowances £m	Expense provisions £m	Financial instruments (1) £m	Tax losses carried forward £m	Other £m	Total £m
At 1 January 2021	79	246	(23)	142	(62)	(4)	378
Charge/(credit) to income statement	1	4	(2)	2	6	2	13
Charge/(credit) to other comprehensive income	18	—	(4)	(53)	—	—	(39)
At 31 December 2021	98	250	(29)	91	(56)	(2)	352
Charge/(credit) to income statement	**2**	**(148)**	**6**	**(18)**	**53**	**3**	**(102)**
Credit to other comprehensive income	**(18)**	**—**	**—**	**(139)**	**—**	**(1)**	**(158)**
At 31 December 2022	**82**	**102**	**(23)**	**(66)**	**(3)**	**—**	**92**

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

Deferred tax assets in respect of unused tax losses are recognised if the losses can be used to offset probable future taxable profits after taking into account the expected reversal of other temporary differences. Recognised deferred tax assets in respect of tax losses are analysed below.

	2022 £m	2021 £m
UK tax losses carried forward		
- NWM Plc	**3**	56
Total	**3**	56
Overseas tax losses carried forward		
- NWM N.V.	**46**	48
	49	104

7 Tax continued

Critical accounting policy: Deferred tax

The deferred tax liability of £101 million at 31 December 2022 (2021 – liability of £374 million) includes a deferred tax asset on losses of £3 million. The deferred tax asset of £46 million as at 31 December 2022 (2021 - £48 million) comprises losses which arose in the Netherlands.

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. NWM Group's closing deferred tax assets and liabilities have therefore been recalculated taking into account this change of rate and the applicable period the deferred tax assets and liabilities are expected to crystallise.

Judgment - NWM Group has considered the carrying value of deferred tax assets and management considers that sufficient taxable profits will be generated in future years to recover the remaining deferred tax asset.

Estimate – These estimates are partly based on forecast performance. They have regard to inherent uncertainties, such as climate change. The deferred tax asset in NWM Plc is supported by way of future reversing taxable temporary differences on which deferred tax liabilities are recognised at 31 December 2022.

UK tax losses

Under UK tax rules, tax losses can be carried forward indefinitely. As the recognised tax losses in NWM Plc 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.

NWM Plc - A deferred tax asset of £3 million (2021 - £56 million) has been recognised in respect of losses of £12 million, and is now entirely supported by way of future reversing taxable temporary differences on which deferred tax liabilities are recognised at 31 December 2022. NWM Plc expects that the balance of recognised deferred tax asset at 31 December 2022 will be recovered by the end of 2027. Of the losses remaining, £5,538 million have not been recognised in the deferred tax balance at 31 December 2022.

Overseas tax losses

NWM N.V. – A deferred tax asset of £46 million (2021 - £48 million) has been recognised in respect of losses of £186 million of total losses of £2,914 million carried forward at 31 December 2022. NWM N.V. Group considers it to be probable, based on its 5 year budget forecast, that future taxable profit will be available against which the tax losses and tax credits can be partially utilised. The tax losses and the tax credits have no expiry date.

Unrecognised deferred tax

Deferred tax assets of £3,601 million (2021 - £3,340 million) have not been recognised in respect of tax losses and other deductible temporary differences carried forward of £13,045 million (2021 - £12,125 million) in jurisdictions where doubt exists over the availability of future taxable profits. Of these losses and other deductible temporary differences, £75 million expire within five years and £4,774 million thereafter. The balance of tax losses and other deductible temporary differences carried forward has no expiry date.

There are no unrecognised deferred tax liabilities in respect of retained earnings of overseas subsidiaries and held-over gains on the incorporation of certain overseas branches.

8 Profit/(loss) dealt with in the accounts of NWM Plc

As permitted by section 408(3) of the Companies Act 2006, no income statement for NWM Plc has been presented as a primary financial statement.

9 Financial instruments - classification

Judgment: classification of financial assets

Classification of financial assets between amortised cost and fair value through other comprehensive income requires a degree of judgment in respect of business models and contractual cashflows.

- The business model criteria are assessed at a portfolio level to determine whether assets are classified as held to collect or held to collect and sell. Information that is considered in determining the applicable business model includes the portfolio's policies and objectives, how the performance and risks of the portfolio are managed, evaluated and reported to management, and the frequency, volume and timing of sales in prior periods, sales expectation for future periods, and the reasons for sales.
- The contractual cash flow characteristics of financial assets are assessed with reference to whether the cash flows represent solely payments of principle and interest. A level of judgment is made in assessing terms that could change the contractual cash flows so that it would not meet the condition for solely payments of principle and interest, including contingent and leverage features, non-recourse arrangements and features that could modify the time value of money.

We originate loans that include features that change the contractual cash flows based on the borrower meeting certain contractually specified environmental, social and governance (ESG) targets. These are known as ESG-linked (or sustainability-linked) loans. As part of the terms of these loans, the contractual interest rate is reduced or increased if the borrower meets (fails to meet) specific targets linked to the activity of the borrower for example reducing carbon emissions, increase the level of diversity at Board level, sustainable supply chain, etc. ESG features are first assessed to ascertain whether the adjustment to the contractual cash flows results in a de minimis exposure to risks or volatility in those contractual cash flows. If this is the case the classification of the loan is not affected. If the effect of the ESG feature is assessed as being more than de minimis, we apply judgement to ensure that the ESG features do not generate compensation for risks that are not in line with a basic lending arrangement. This includes amongst other aspects a review of the consistency of the ESG targets with the asset or activity of the borrower, consideration of the targets within our risk appetite etc. Some of these loans are an integral part of NatWest Group's climate and sustainable funding and financing target.

For accounting policy information see Accounting policies notes 3.5, 3.7, 3.8 and 3.10.

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

	NWM Group				
			Amortised	Other	
	MFVTPL	FVOCI	cost	assets	Total
Assets	£m	£m	£m	£m	£m
Cash and balances at central banks			**17,007**		**17,007**
Trading assets	**45,291**				**45,291**
Derivatives (1)	**100,154**				**100,154**
Settlement balances			**2,558**		**2,558**
Loans to banks - amortised cost (2)			**1,146**		**1,146**
Loans to customers - amortised cost			**10,171**		**10,171**
Amounts due from holding company and fellow subsidiaries	**274**	**—**	**438**	**28**	**740**
Other financial assets	**80**	**6,040**	**5,750**		**11,870**
Other assets				**832**	**832**
31 December 2022	**145,799**	**6,040**	**37,070**	**860**	**189,769**
Cash and balances at central banks			16,645		16,645
Trading assets	59,101				59,101
Derivatives (1)	105,550				105,550
Settlement balances			2,139		2,139
Loans to banks - amortised cost (2)			962		962
Loans to customers - amortised cost			7,471		7,471
Amounts due from holding company and fellow subsidiaries	649	—	731	99	1,479
Other financial assets	80	5,590	3,116		8,786
Other assets				878	878
31 December 2021	165,380	5,590	31,064	977	203,011

9 Financial instruments – classification continued

	NWM Group				
	Held-for-trading	DFV	Amortised cost	Other liabilities	Total
Liabilities	£m	£m	£m	£m	£m
Bank deposits (3)			3,069		3,069
Customer deposits			3,614		3,614
Amounts due to holding company and fellow subsidiaries	1,129	—	4,884	204	6,217
Settlement balances			2,010		2,010
Trading liabilities	52,792				52,792
Derivatives (1)	93,585				93,585
Other financial liabilities		2,722	18,381		21,103
Other liabilities (4)			53	763	816
31 December 2022	147,506	2,722	32,011	967	183,206
Bank deposits (3)			1,808		1,808
Customer deposits			2,268		2,268
Amounts due to holding company and fellow subsidiaries	348	—	5,607	171	6,126
Settlement balances			2,068		2,068
Trading liabilities	64,482				64,482
Derivatives (1)	98,497				98,497
Other financial liabilities		2,374	16,881		19,255
Other liabilities (4)			57	998	1,055
31 December 2021	163,327	2,374	28,689	1,169	195,559

(1) Includes net hedging derivative assets of £122 million (2021 - £132 million) and net hedging derivative liabilities of £170 million (2021 - £119 million).
(2) Includes items in the course of collection from other banks of £156 million (2021 - £38 million).
(3) Includes items in the course of transmission to other banks of £236 million (2021 - £28 million).
(4) Includes lease liabilities of £47 million (2021 - £53 million) held at amortised cost.

9 Financial instruments – classification continued

Amounts due from/to holding company and fellow subsidiaries are as below:

	NWM Group					
	2022			2021		
	Holding company £m	Fellow subsidiaries £m	Total £m	Holding company £m	Fellow subsidiaries £m	Total £m
Assets						
Trading assets	—	274	274	252	397	649
Loans to banks - amortised cost	—	406	406	—	612	612
Loans to customers - amortised cost	18	12	30	113	6	119
Settlement balances	—	2	2	—	—	—
Other assets	—	28	28	—	99	99
Amounts due from holding company and fellow subsidiaries	18	722	740	365	1,114	1,479
Derivatives (1)	1,074	569	1,643	407	529	936
Liabilities						
Bank deposits - amortised cost	—	108	108	—	120	120
Customer deposits - amortised cost	—	51	51	—	155	155
Trading liabilities	811	318	1,129	—	348	348
Settlement balances	—	26	26	—	—	—
Other financial liabilities - subordinated liabilities	1,519	—	1,519	1,464	—	1,464
MREL instruments issued to NatWest Group plc	3,173	—	3,173	3,858	—	3,858
Other liabilities	16	195	211	—	181	181
Amounts due to holding company and fellow subsidiaries	5,519	698	6,217	5,322	804	6,126
Derivatives (1)	252	364	616	658	339	997

(1) Intercompany derivatives are included within derivative classification on the balance sheet.

9 Financial instruments - classification continued

The following tables show the bank's financial assets and financial liabilities in accordance with the categories of financial instruments in IFRS 9.

	NWM Plc				
	MFVTPL	FVOCI	Amortised cost	Other assets	Total
Assets	£m	£m	£m	£m	£m
Cash and balances at central banks			**13,467**		**13,467**
Trading assets	**27,301**				**27,301**
Derivatives (1)	**96,258**				**96,258**
Settlement balances			**1,686**		**1,686**
Loans to banks - amortised cost (2)			**815**		**815**
Loans to customers - amortised cost			**9,154**		**9,154**
Amounts due from holding company and fellow subsidiaries	**3,536**	**—**	**3,070**	**59**	**6,665**
Other financial assets	**79**	**4,870**	**5,428**		**10,377**
Investment in group undertakings				**2,626**	**2,626**
Other assets				**712**	**712**
31 December 2022	**127,174**	**4,870**	**33,620**	**3,397**	**169,061**
Cash and balances at central banks			12,294		12,294
Trading assets	41,222				41,222
Derivatives (1)	103,042				103,042
Settlement balances			795		795
Loans to banks - amortised cost (2)			712		712
Loans to customers - amortised cost			6,810		6,810
Amounts due from holding company and fellow subsidiaries	2,965	—	3,646	112	6,723
Other financial assets	79	4,650	3,014		7,743
Investment in group undertakings				2,481	2,481
Other assets				732	732
31 December 2021	147,308	4,650	27,271	3,325	182,554

	NWM Plc				
	Held-for-trading	DFV	Amortised cost	Other liabilities	Total
Liabilities	£m	£m	£m	£m	£m
Bank deposits (3)			**2,936**		**2,936**
Customer deposits			**2,665**		**2,665**
Amounts due to holding company and fellow subsidiaries	**6,024**	**—**	**6,626**	**217**	**12,867**
Settlement balances			**1,133**		**1,133**
Trading liabilities	**33,225**				**33,225**
Derivatives (1)	**90,754**				**90,754**
Other financial liabilities		**1,951**	**16,445**		**18,396**
Other liabilities (4)			**8**	**559**	**567**
31 December 2022	**130,003**	**1,951**	**29,813**	**776**	**162,543**
Bank deposits (3)			1,808		1,808
Customer deposits			1,510		1,510
Amounts due to holding company and fellow subsidiaries	3,335	—	7,471	172	10,978
Settlement balances			1,028		1,028
Trading liabilities	47,119				47,119
Derivatives (1)	95,096				95,096
Other financial liabilities		1,321	15,556		16,877
Other liabilities (4)			15	774	789
31 December 2021	145,550	1,321	27,388	946	175,205

(1) Includes net hedging derivative assets of £122 million (2021 - £132 million) and net hedging derivative liabilities of £170 million (2021 - £119 million).
(2) Includes items in the course of collection from other banks of £119 million (2021 - £23 million).
(3) Includes items in the course of transmission to other banks of £236 million (2021 - £28 million).
(4) Includes lease liabilities of £4 million (2021 - £10 million) held at amortised cost.

9 Financial instruments - classification continued

Amounts due from/to holding company and fellow subsidiaries are as below:

	NWM Plc							
	2022				2021			
	Holding company £m	Fellow subsidiaries £m	Subsidiaries £m	Total £m	Holding company £m	Fellow subsidiaries £m	Subsidiaries £m	Total £m
Assets								
Trading assets	—	274	3,262	3,536	252	397	2,316	2,965
Loans to banks - amortised cost	—	320	1,110	1,430	—	480	998	1,478
Loans to customers - amortised cost	—	—	892	892	—	5	1,121	1,126
Settlement balances	—	2	257	259	—	—	546	546
Other financial assets	—	—	489	489	—	—	496	496
Other assets	—	18	41	59	—	87	25	112
Amounts due from holding company and fellow subsidiaries	—	614	6,051	6,665	252	969	5,502	6,723
Derivatives (1)	1,074	568	3,381	5,023	407	529	1,845	2,781
Liabilities								
Bank deposits - amortised cost	—	108	493	601	—	119	51	170
Customer deposits - amortised cost	—	51	1,085	1,136	—	151	1,421	1,572
Trading liabilities	811	318	4,895	6,024	—	348	2,987	3,335
Settlement balances	—	26	167	193	—	—	397	397
Other financial liabilities - subordinated liabilities	1,519	—	—	1,519	1,464	—	—	1,464
MREL instruments issued to NatWest Group plc	3,173	—	—	3,173	3,858	—	—	3,858
Other liabilities	16	170	35	221	—	169	13	182
Amounts due to holding company and fellow subsidiaries	5,519	673	6,675	12,867	5,322	787	4,869	10,978
Derivatives (1)	252	364	3,677	4,293	658	339	2,240	3,237

(1) Intercompany derivatives are included within derivative classification on the balance sheet.

Interest rate benchmark reform

NWM Group continues to work on the transition of USD IBOR exposures to risk free rates in advance of the cessation date of 30 June 2023. Derivatives are expected to transition during April and May 2023 and other exposures in line with fallback provisions or deferred switches using widely accepted methodologies. The instruments yet to transition reflect an insignificant element of NWM Group's exposures. Instruments with exposures to other rates transitioned at the end of 2021, or at the first contractual reset date, or at a date agreed with the counterparty.

The level of exposures without explicit or agreed conversion provisions as of the preceding year were as follows:

	NWM Group			
	Rates subject to IBOR reform			
2021	GBP LIBOR £m	USD IBOR £m	Other IBOR £m	Total £m
Trading assets	62	90	—	152
Loans to banks - amortised cost	—	11	—	11
Loans to customers - amortised cost	36	1,390	—	1,426
Other financial assets	120	730	—	850
Bank deposits	—	37	—	37
Trading liabilities	31	166	—	197
Other financial liabilities	—	56	33	89
Amounts due to holding company and fellow subsidiaries	—	2,700	—	2,700
Loan commitments (1)	133	1,506	—	1,639
Derivatives notional (£bn)	3.6	1,141.0	—	1,144.6

(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.

9 Financial instruments - classification continued

Interest rate benchmark reform - continued

At 31 December 2021 NWM Group held certain currency swaps with both legs subject to IBOR reform, for which only the GBP LIBOR leg has an explicit or agreed conversion provisions as of 31 December 2021, but not the entire contract. These include currency swaps of GBP LIBOR of £8.4 billion, USD IBOR £7.9 billion and Other IBOR £0.5 billion; currency swaps of USD IBOR of £117.1 billion, GBP LIBOR £91.9 billion and Other IBOR £25.2 billion; currency swaps of EUR LIBOR of £0.1 billion and GBP LIBOR £0.1 billion; currency swaps of Other IBOR of £0.4 billion and USD IBOR £0.4 billion.

	NWM Plc			
	Rates subject to IBOR reform			
	GBP LIBOR	USD IBOR	Other IBOR	Total
2021	£m	£m	£m	£m
Trading assets	62	87	—	149
Loans to banks - amortised cost	—	11	—	11
Loans to customers - amortised cost	36	1,287	—	1,323
Other financial assets	120	730	—	850
Bank deposits	—	37	—	37
Trading liabilities	31	166	—	197
Other financial liabilities	—	56	33	89
Amounts due to holding company and fellow subsidiaries	—	2,700	—	2,700
Loan commitments (1)	28	1,448	—	1,476
Derivatives notional (£bn)	3.5	1,140.9	—	1,144.4

(1) Certain loan commitments are multi-currency facilities. Where these are fully undrawn, they are allocated to the principal currency of the facility. Where the facilities are partly drawn, the remaining loan commitment is allocated to the currency with the largest drawn amount.

At 31 December 2021 NWM Plc held certain currency swaps with both legs subject to IBOR reform, for which only the GBP LIBOR leg has an explicit or agreed conversion provisions as of 31 December 2021, but not the entire contract. These include currency swaps of GBP LIBOR of £8.6 billion, USD IBOR of £8.0 billion and Other IBOR of £0.6 billion; currency swaps of USD IBOR of £117.2 billion, GBP LIBOR of £91.9 billion and Other IBOR of £25.3 billion; currency swaps of EURIBOR of £0.2 billion with GBP LIBOR of £0.2 billion; currency swaps of Other IBOR of £0.3 billion with USD IBOR of £0.3 billion.

9 Financial instruments - classification continued
Financial instruments – financial assets and liabilities that can be offset

The tables below present information on financial assets and liabilities that are offset on the balance sheet under IFRS or subject to enforceable master netting agreements together with financial collateral received or given.

	NWM Group								
	Instruments which can be offset			Potential for offset not recognised by IFRS					
	Gross	IFRS offset	Balance sheet	Effect of master netting and similar agreements	Cash collateral	Securities collateral	Net amount after the effect of netting agreements and related collateral	Instruments outside netting agreements	Balance sheet total
2022	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**
Derivative assets	**102,003**	**(2,509)**	**99,494**	**(77,232)**	**(15,181)**	**(4,210)**	**2,871**	**660**	**100,154**
Derivative liabilities	**95,206**	**(2,509)**	**92,697**	**(77,232)**	**(9,584)**	**(1,185)**	**4,696**	**888**	**93,585**
Net position	**6,797**	**—**	**6,797**	**—**	**(5,597)**	**(3,025)**	**(1,825)**	**(228)**	**6,569**
Trading reverse repos	**35,612**	**(14,510)**	**21,102**	**(2,445)**	**—**	**(18,458)**	**199**	**435**	**21,537**
Trading repos	**33,767**	**(14,510)**	**19,257**	**(2,445)**	**—**	**(16,812)**	**—**	**4,483**	**23,740**
Net position	**1,845**	**—**	**1,845**	**—**	**—**	**(1,646)**	**199**	**(4,048)**	**(2,203)**
Non trading reverse repos	**801**	**(38)**	**763**	**—**	**—**	**(763)**	**—**	**98**	**861**
Non trading repos	**1,091**	**(38)**	**1,053**	**—**	**—**	**(1,053)**	**—**	**—**	**1,053**
Net position	**(290)**	**—**	**(290)**	**—**	**—**	**290**	**—**	**98**	**(192)**
2021									
Derivative assets	104,691	—	104,691	(84,226)	(15,282)	(2,428)	2,755	859	105,550
Derivative liabilities	97,733	—	97,733	(84,226)	(10,304)	(1,070)	2,133	764	98,497
Net position	6,958	—	6,958	—	(4,978)	(1,358)	622	95	7,053
Trading reverse repos	44,529	(24,422)	20,107	(900)	—	(19,136)	71	635	20,742
Trading repos	42,664	(24,422)	18,242	(900)	—	(17,341)	1	1,147	19,389
Net position	1,865	—	1,865	—	—	(1,795)	70	(512)	1,353
Non trading reverse repos	332	—	332	—	—	(331)	1	15	347
Non trading repos	522	—	522	—	—	(522)	—	—	522
Net position	(190)	—	(190)	—	—	191	1	15	(175)

9 Financial instruments - classification continued

	NWM Plc								
	Instruments which can be offset			Potential for offset not recognised by IFRS					
2022	Gross £m	IFRS offset £m	Balance sheet £m	Effect of master netting and similar agreements £m	Cash collateral £m	Securities collateral £m	Net amount after the effect of netting agreements and and related collateral £m	Instruments outside netting agreements £m	Balance sheet total £m
Derivative assets	**109,877**	**(14,187)**	**95,690**	**(77,254)**	**(12,274)**	**(3,636)**	**2,526**	**568**	**96,258**
Derivative liabilities	**103,312**	**(13,260)**	**90,052**	**(77,254)**	**(7,824)**	**(810)**	**4,164**	**702**	**90,754**
Net position (1)	**6,565**	**(927)**	**5,638**	**—**	**(4,450)**	**(2,826)**	**(1,638)**	**(134)**	**5,504**
Trading reverse repos	**12,545**	**(4,128)**	**8,417**	**(181)**	**—**	**(8,228)**	**8**	**142**	**8,559**
Trading repos	**8,361**	**(4,128)**	**4,233**	**(181)**	**—**	**(4,052)**	**—**	**4,483**	**8,716**
Net position	**4,184**	**—**	**4,184**	**—**	**—**	**(4,176)**	**8**	**(4,341)**	**(157)**
Non trading reverse repos	**801**	**(38)**	**763**	**—**	**—**	**(763)**	**—**	**98**	**861**
Non trading repos	**1,091**	**(38)**	**1,053**	**—**	**—**	**(1,053)**	**—**	**—**	**1,053**
Net position	**(290)**	**—**	**(290)**	**—**	**—**	**290**	**—**	**98**	**(192)**
2021									
Derivative assets	106,616	(4,361)	102,255	(83,716)	(14,121)	(1,979)	2,439	787	103,042
Derivative liabilities	100,191	(5,751)	94,440	(83,716)	(8,069)	(764)	1,891	656	95,096
Net position (1)	6,425	1,390	7,815	—	(6,052)	(1,215)	548	131	7,946
Trading reverse repos	21,970	(13,071)	8,899	(580)	—	(8,319)	—	347	9,246
Trading repos	16,865	(13,071)	3,794	(580)	—	(3,214)	—	1,146	4,940
Net position	5,105	—	5,105	—	—	(5,105)	—	(799)	4,306
Non trading reverse repos	332	—	332	—	—	(331)	1	15	347
Non trading repos	522	—	522	—	—	(522)	—	—	522
Net position	(190)	—	(190)	—	—	191	1	15	(175)

(1) The net IFRS offset balance of £927 million (2021 - £1,390 million) relates to variation margin netting reflected on other balance sheet lines.

10 Financial instruments - valuation

(D) = Descriptive; (T) = Table

Critical accounting policy: Fair value - financial instruments

Financial instruments classified as mandatory fair value through profit or loss; held-for-trading; designated fair value through profit or loss and fair value through other comprehensive income are recognised in the financial statements at fair value. All derivatives are measured at fair value.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. A fair value measurement considers the characteristics of the asset or liability and the assumptions that a market participant would consider when pricing the asset or liability.

NWM Group manages some portfolios of financial assets and financial liabilities based on its net exposure to either market or credit risk. In these cases, the fair value is derived from the net risk exposure of that portfolio with portfolio level adjustments applied to incorporate bid-offer spreads, counterparty credit risk, and funding costs (see 'Valuation Adjustments').

Where the market for a financial instrument is not active, fair value is established using a valuation technique. These valuation techniques involve a degree of estimation, the extent of which depends on the instrument's complexity and the availability of market-based data. The complexity and uncertainty in the financial instrument's fair value is categorised using the fair value hierarchy.

For accounting policy information see Accounting policies notes 3.5 and 3.10.

10 Financial instruments – valuation continued

Fair value hierarchy

Financial instruments carried at fair value have been classified under the fair value hierarchy. The classification ranges from level 1 to level 3, with more expert judgment and price uncertainty for those classified at level 3.

The determination of an instrument's level cannot be made at a global product level as a single product type can be in more than one level. For example, a single name corporate credit default swap could be in level 2 or level 3 depending on the level of market activity for the referenced entity.

Level 1 – instruments valued using unadjusted quoted prices in active and liquid markets, for identical financial instruments. Examples include government bonds, listed equity shares and certain exchange-traded derivatives.

Level 2 - instruments valued using valuation techniques that have observable inputs. Observable inputs are those that are readily available with limited adjustments required. Examples include most government agency securities, investment-grade corporate bonds, certain mortgage products - including CLOs, most bank loans, repos and reverse repos, state and municipal obligations, most notes issued, certain money market securities, loan commitments and most OTC derivatives.

Level 3 - instruments valued using a valuation technique where at least one input which could have a significant effect on the instrument's valuation, is not based on observable market data. Examples include non-derivative instruments which trade infrequently, certain syndicated and commercial mortgage loans, private equity, and derivatives with unobservable model inputs.

Valuation techniques

NWM Group derives the fair value of its instruments differently depending on whether the instrument is a non-modelled or a modelled product.

Non-modelled products are valued directly from a price input, typically on a position-by-position basis. Examples include equities and most debt securities.
Non-modelled products can fall into any fair value levelling hierarchy depending on the observable market activity, liquidity, and assessment of valuation uncertainty of the instruments. The assessment of fair value and the classification of the instrument to a fair value level is subject to the valuation controls discussed in the Valuation control section.

Modelled products valued using a pricing model range in complexity from comparatively vanilla products such as interest rate swaps and options (e.g., interest rate caps and floors) through to more complex derivatives (e.g., balance guaranteed swaps).

For modelled products the fair value is derived using the model and the appropriate model inputs or parameters, as opposed to a cash price equivalent. Model inputs are taken either directly or indirectly from available data, where some inputs are also modelled.

Fair value classification of modelled instruments is either level 2 or level 3, depending on the product/model combination, the observability and quality of input parameters and other factors. All these must be assessed to classify a position. The modelled product is assigned to the lowest fair value hierarchy level of any significant input used in that valuation.

Most derivative instruments, for example vanilla interest rate swaps, foreign exchange swaps and liquid single name credit derivatives, are classified as level 2. This is because they are vanilla products valued using standard market models and with observable inputs. Level 2 products range from vanilla to more complex products, where the more complex products remain classified as level 2 due to the low materiality of any unobservable inputs.

Inputs to valuation models

When using valuation techniques, the fair value can be significantly affected by the choice of valuation model and underlying assumptions. Factors considered include the cashflow amounts and timing of those cash flows, and application of appropriate discount rates, incorporating both funding and credit risk. Values between and beyond available data points are obtained by interpolation and extrapolation. The principal inputs to these valuation techniques are as follows:

Bond prices - quoted prices are generally available for government bonds, certain corporate securities, and some mortgage-related products.

Credit spreads - these express the return required over a benchmark rate or index to compensate for the referenced credit risk. Where available, these are derived from the price of credit default swaps or other credit-based instruments, such as debt securities. When direct prices are not available; credit spreads are determined with reference to available prices of entities with similar characteristics.

Interest rates - these are principally based on interest rate swap prices referencing benchmark interest rates. Benchmark rates include Interbank Offered Rates (IBOR) and the Overnight Index Swap (OIS) rate, including SONIA (Sterling Overnight Interbank Average Rate). Other quoted interest rates may also be used from both the bond, and futures markets.

Foreign currency exchange rates - there are observable prices both for spot and forward contracts and futures in the world's major currencies.

Equity and equity index prices - quoted prices are generally readily available for equity shares listed on the world's major stock exchanges and for major indices on such shares.

Price volatilities and correlations - volatility is a measure of the tendency of a price to change with time. Correlation measures the degree which two or more prices or variables are observed to move together. Variables that move in the same direction show positive correlation; those that move in opposite directions are negatively correlated.

Prepayment rates - rates used to reflect how fast a pool of assets prepay. The fair value of a financial instrument that can be prepaid by the issuer or borrower differs from that of an instrument that cannot be prepaid. When valuing prepayable instruments, the value of this prepayment option is considered.

Recovery rates/loss given default - these are used as an input to valuation models and reserves for asset-backed securities and other credit products as an indicator of severity of losses on default. Recovery rates are primarily sourced from market data providers or the value of the underlying collateral.

10 Financial instruments – valuation continued

Valuation control

NWM Group's control environment for the determination of the fair value of financial instruments includes formalised procedures for the review and validation of fair values. This review is performed by an independent price verification (IPV) team.

IPV is a key element of the control environment. Valuations are first performed by the business which entered into the transaction. These valuations are then reviewed by the IPV team, independent of those trading the financial instruments, in light of available pricing evidence.

Independent pricing data is collated from a range of sources. Each source is reviewed for quality and the independent data applied in the IPV processes using a formalised input quality hierarchy. Consensus services are one source of independent data and encompass interest rate, currency, credit, and bond markets, providing comprehensive coverage of vanilla products and a wide selection of exotic products.

Where measurement differences are identified through the IPV process these are grouped by the quality hierarchy of the independent data. If the size of the difference exceeds defined thresholds, an adjustment is made to bring the valuation to within the independently calculated fair value range.

IPV takes place at least monthly, for all fair value financial instruments. The IPV control includes formalised reporting and escalation of any valuation differences in breach of established thresholds.

The quality and completeness of the information gathered in the IPV process gives an indication as to the liquidity and valuation uncertainty of an instrument and forms part of the information considered when determining fair value hierarchy classifications.

Initial fair value level classification of a financial instrument is carried out by the IPV team. These initial classifications are subject to senior management review. Particular attention is paid to instruments transferring from one level to another, new instrument classes or products, instruments where the transaction price is significantly different from the fair value and instruments where valuation uncertainty is high.

Valuation Committees are made up of valuation specialists and senior business representatives from various functions and oversee pricing, reserving and valuations issues. These committees meet monthly to review and ratify any methodology changes. The Executive Valuation Committee meets quarterly to address key material and subjective valuation issues, to review items escalated by Valuation Committees and to discuss other relevant industry matters.

The Group model risk policy sets the policy for model documentation, testing and review. Governance of the model risk policy is carried out by the Group model risk oversight committee, which comprises model risk owners and independent model experts. All models are required to be independently validated in accordance with the Model Risk Policy.

Key areas of judgment

Over the years the business has simplified, with most products classified as level 1 or 2 of the fair value hierarchy. However, the diverse range of products historically traded by NWM Group means some products remain classified as level 3. Level 3 indicates a significant level of pricing uncertainty, where expert judgment is used. As such, extra disclosures are required in respect of level 3 instruments.

In general, the degree of expert judgment used and hence valuation uncertainty depends on the degree of liquidity of an instrument or input.

Where markets are liquid, little judgment is required. However, when the information regarding the liquidity in a particular market is not clear, a judgment may need to be made. For example, for an equity traded on an exchange, daily volumes of trading can be seen, but for an over the counter (OTC) derivative, assessing the liquidity of the market with no central exchange is more challenging.

A key related matter is where a market moves from liquid to illiquid or vice versa. Where this movement is considered temporary, the fair value level is not changed. For example, if there is little market trading in a product on a reporting date but at the previous reporting date and during the intervening period the market has been liquid. In this case, the instrument will continue to be classified at the same level in the hierarchy.

This is to provide consistency so that transfers between levels are driven by genuine changes in market liquidity and do not reflect short term or seasonal effects. Material movements between levels are reviewed quarterly by the Business and IPV. The breadth and depth of the IPV data allows for a rules-based quality assessment to be made of market activity, liquidity, and pricing uncertainty, which assists with the process of allocation to an appropriate level. Where suitable independent pricing information is not readily available, the quality assessment will result in the instrument being assessed as level 3.

10 Financial instruments – valuation continued

The table below shows the assets and liabilities held by NWM Group split by fair value hierarchy level. Level 1 are considered the most liquid instruments, and level 3 the most illiquid, valued using expert judgment and hence carry the most significant price uncertainty.

	NWM Group							
	2022				2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
	£m	£m	£m	£m	£m	£m	£m	£m
Assets								
Trading assets								
Loans	—	34,974	395	35,369	—	33,425	721	34,146
Securities	7,463	2,458	1	9,922	19,563	5,371	21	24,955
Derivatives	5	99,126	1,023	100,154	—	104,484	1,066	105,550
Amounts due from holding company and fellow subsidiaries	—	274	—	274	—	649	—	649
Other financial assets								
Loans	—	34	160	194	—	19	118	137
Securities	4,958	891	77	5,926	4,507	988	38	5,533
Total financial assets held at fair value	12,426	137,757	1,656	151,839	24,070	144,936	1,964	170,970
As a % of total fair value assets	8%	91%	1%		14%	85%	1%	
Liabilities								
Amounts due to holding company and fellow subsidiaries	—	1,129	—	1,129	—	348	—	348
Trading liabilities								
Deposits	—	42,470	1	42,471	—	38,542	2	38,544
Debt securities in issue	—	797	—	797	—	974	—	974
Short positions	7,462	2,062	—	9,524	20,508	4,455	1	24,964
Derivatives	2	92,584	999	93,585	—	97,883	614	98,497
Other financial liabilities								
Deposits	—	1,050	—	1,050	—	568	—	568
Debt securities in issue	—	1,327	—	1,327	—	1,103	—	1,103
Subordinated liabilities	—	345	—	345	—	703	—	703
Total financial liabilities held at fair value	7,464	141,764	1,000	150,228	20,508	144,576	617	165,701
As a % of total fair value liabilities	5%	94%	1%		12%	88%	0%	

10 Financial instruments – valuation continued

	NWM Plc							
	2022				2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
	£m	£m	£m	£m	£m	£m	£m	£m
Assets								
Trading assets								
Loans	—	19,618	347	19,965	—	19,115	652	19,767
Securities	5,025	2,310	1	7,336	16,272	5,165	18	21,455
Derivatives	—	95,270	988	96,258	—	102,052	990	103,042
Amounts due from holding company and fellow subsidiaries	—	3,536	—	3,536	—	2,965	—	2,965
Other financial assets								
Loans	—	34	133	167	—	19	118	137
Securities	4,082	628	72	4,782	3,942	614	36	4,592
Total financial assets held at fair value	9,107	121,396	1,541	132,044	20,214	129,930	1,814	151,958
As a % of total fair value assets	7%	92%	1%		13%	86%	1%	
Liabilities								
Amounts due to holding company and fellow subsidiaries	—	6,024	—	6,024	—	3,335	—	3,335
Trading liabilities								
Deposits	—	24,337	1	24,338	—	22,856	2	22,858
Debt securities in issue	—	797	—	797	—	974	—	974
Short positions	6,113	1,977	—	8,090	18,908	4,378	1	23,287
Derivatives	—	89,897	857	90,754	—	94,513	583	95,096
Other financial liabilities								
Deposits	—	770	—	770	—	75	—	75
Debt securities in issue	—	1,059	—	1,059	—	875	—	875
Subordinated liabilities	—	122	—	122	—	371	—	371
Total financial liabilities held at fair value	6,113	124,983	858	131,954	18,908	127,377	586	146,871
As a % of total fair value liabilities	5%	94%	1%		13%	87%	0%	

(1) Transfers between levels are deemed to have occurred at the beginning of the quarter in which the instrument was transferred.
(2) For an analysis of debt securities held at mandatory fair value through profit or loss by issuer as well as ratings and derivatives, by type and contract, refer to Risk and capital management – Credit risk.

10 Financial instruments – valuation continued

Valuation adjustments

When valuing financial instruments in the trading book, adjustments are made to mid-market valuations to cover bid-offer spread, funding and credit risk. These adjustments are presented in the table below:

NWM Group	2022 £m	2021 £m
Funding – FVA	7	59
Credit – CVA	300	389
Bid – Offer	103	81
Product and deal specific	140	120
	550	649

NWM Plc	2022 £m	2021 £m
Funding – FVA	21	75
Credit – CVA	181	283
Bid – Offer	93	79
Product and deal specific	145	120
	440	557

The decrease in CVA and FVA were driven by a reduction in exposures, primarily due to increases in interest rates and trade exit activity, partially offset by the net impact of credit spreads widening and specific counterparty activity. Credit spreads widening and specific counterparty activity were also the drivers of the increase in product and deal specific. The increase in bid-offer was driven by the net impact of risk changes, wider bid-offer spreads and an increase in the estimated costs of exiting certain less liquid risks.

Funding valuation adjustments (FVA)

FVA represents an estimate of the adjustment that a market participant would make to incorporate funding costs and benefits that arise in relation to derivative exposures. FVA is calculated as a portfolio level adjustment and can result in either a funding charge (positive) or funding benefit (negative).

Funding levels are applied to estimated potential future exposures. For uncollateralised derivatives, the exposure reflects the future valuation of the derivative. For collateralised derivatives, the exposure reflects the difference between the future valuation of the derivative and the level of collateral posted.

Credit valuation adjustments (CVA)

CVA represents an estimate of the adjustment to fair value that is made to incorporate the counterparty credit risk inherent in derivative exposures. CVA is actively managed by a credit and market risk hedging process, and therefore movements in CVA are partially offset by trading revenue on the hedges.

The CVA is calculated on a portfolio basis reflecting an estimate of the amount a third party would charge to assume the credit risk.

Collateral held under a credit support agreement is factored into the CVA calculation. In such cases where NWM Group holds collateral against counterparty exposures, CVA is held to the extent that residual risk remains.

Bid-offer

Fair value positions are required to be marked to exit levels, represented by bid (long positions) or offer (short positions) levels. Non-derivative positions are typically marked directly to bid or offer prices. However derivative exposures are adjusted to exit levels by taking bid-offer reserves calculated on a portfolio basis. The bid-offer approach is based on current market spreads and standard market bucketing of risk.

Bid-offer spreads vary by maturity and risk type to reflect different spreads in the market. For positions where there is no observable quote, the bid-offer spreads are widened in comparison to proxies to reflect reduced liquidity or observability.

Netting is applied on a portfolio basis to reflect the value at which NWM Group believes it could exit the net risk of the portfolio, rather than the sum of exit costs for each of the portfolio's individual trades. This is applied where the asset and liability positions are managed as a portfolio for risk and reporting purposes.

Product and deal specific

On initial recognition of financial assets and liabilities valued using valuation techniques which have a significant dependence on information other than observable market data, any difference between the transaction price and that derived from the valuation technique is deferred. Such amounts are recognised in the income statement over the life of the transaction; when market data becomes observable; or when the transaction matures or is closed out as appropriate. On 31 December 2022, net gains of £74 million (2021 - £71 million) were carried forward. During the year, net gains of £97 million (2021 - £103 million) were deferred and £94 million (2021 - £94 million) were recognised in the income statement.

Where system generated valuations do not accurately reflect market prices, manual valuation adjustments are applied either at a position or portfolio level. Manual adjustments are subject to the scrutiny of independent control teams and are subject to monthly review by senior management.

Own Credit

NWM Group considers the effect of its own credit standing when valuing financial liabilities recorded at fair value. Own credit spread adjustments are made when valuing issued debt held at fair value, including issued structured notes. An own credit adjustment is applied to positions where it is believed that counterparties would consider NWM Group's creditworthiness when pricing trades.

10 Financial instruments – valuation continued

Level 3 additional information

For illiquid assets and liabilities, classified as level 3, additional information is provided on the valuation techniques used and price sensitivity of the products to those inputs. This is to enable the reader to gauge the level of uncertainty that arises from positions with significant unobservable inputs or modelling parameters.

Level 3 ranges of unobservable inputs

The table below provides additional information on level 3 instruments and inputs. This shows the valuation technique used for the fair value calculation, the unobservable inputs and input range.

NWM Group							
				2022		2021	
Financial instrument	Valuation technique	Unobservable inputs	Units	Low	High	Low	High
Trading assets and Other financial assets							
Loans	Price-based	Price	%	—	113	—	106
	Discount cash flow	Credit spreads	bps	56	114	40	102
	Discount cash flow	Discount margin	bps	—	—	46	55
Debt securities	Price-based	Price	%	—	255	—	240
Equity Shares	Price-based	Price	GBP	—	34,027	—	30,378
		Price	%	—	—	—	7
	Net asset valuation	Fund NAV	%	80	120	80	120
Derivative assets and liabilities							
Credit derivatives	Credit derivative pricing	Credit spreads	bps	7	530	6	635
	Option pricing	Correlation	%	(15)	95	(15)	95
		Volatility	%	30	80	30	108
		Upfront points	%	—	99	—	100
		Recovery rate	%	—	60	—	60
Interest rate & FX derivatives	Option pricing	Correlation	%	(50)	100	(50)	100
		Volatility	%	30	127	17	77
		Constant prepayment rate	%	2	21	2	16
		Mean reversion	%	—	92	—	92
		Inflation volatility	%	1	2	1	2
		Inflation rate	%	2	3	2	3

(1) Valuation: for private equity investments, values may be estimated by looking at past prices of similar stocks and from valuation statements where valuations are usually derived from earnings measures such as EBITDA or net asset value (NAV). Similarly for equity or bond fund investments, prices may be estimated from valuation or credit statements using NAV or similar measures.

(2) NWM Group does not have any material liabilities measured at fair value that are issued with an inseparable third party credit enhancement.

10 Financial instruments – valuation continued

NWM Plc

				2022		2021	
Financial instrument	Valuation technique	Unobservable inputs	Units	Low	High	Low	High
Trading assets and Other financial assets							
Loans	Price-based	Price	%	—	113	—	106
	Discount cash flow	Credit spreads	bps	56	114	40	102
	Discount cash flow	Discount margin	bps	—	—	46	55
Debt securities	Price-based	Price	%	—	255	—	240
Equity Shares	Price-based	Price	GBP	—	5369	—	4,793
		Price	%	—	—	—	7
Derivative assets and liabilities							
Credit derivatives	Credit derivative pricing	Credit spreads	bps	7	530	6	635
	Option pricing	Correlation	%	(15)	95	(15)	95
		Volatility	%	30	80	30	108
		Upfront points	%	—	99	—	100
		Recovery rate	%	—	60	—	60
Interest rate & FX derivatives	Option pricing	Correlation	%	(50)	100	(50)	100
		Volatility	%	30	127	17	77
		Constant prepayment rate	%	2	21	2	16
		Mean reversion	%	—	92	—	92
		Inflation volatility	%	1	2	1	2
		Inflation rate	%	2	3	2	3

(1) Valuation: for private equity investments, values may be estimated by looking at past prices of similar stocks and from valuation statements where valuations are usually derived from earnings measures such as EBITDA or net asset value (NAV). Similarly for equity or bond fund investments, prices may be estimated from valuation or credit statements using NAV or similar measures.

(2) NWM Plc does not have any material liabilities measured at fair value that are issued with an inseparable third party credit enhancement.

10 Financial instruments – valuation continued

Level 3 sensitivities

The level 3 sensitivities presented below are calculated at a trade or low-level portfolio basis rather than an overall portfolio basis. As individual sensitivities are aggregated with no reflection of the correlated nature between instruments, the overall portfolio sensitivity may not be accurately reflected. For example, some portfolios may be negatively correlated to others, where a downwards movement in one asset would produce an upwards movement in another. However, due to the additive presentation of the above figures this correlation impact cannot be displayed. As such, the actual potential downside sensitivity of the total portfolio may be less than the non-correlated sum of the additive figures as shown in the below table.

Alternative assumptions

Reasonably plausible alternative assumptions of unobservable inputs are determined based on a specified target level of certainty of 90%.

Alternative assumptions are determined with reference to all available evidence including consideration of the following: quality of independent pricing information considering consistency between different sources, variation over time, perceived tradability or otherwise of available quotes; consensus service dispersion ranges; volume of trading activity and market bias (e.g. one-way inventory); day 1 profit or loss arising on new trades; number and nature of market participants; market conditions; modelling consistency in the market; size and nature of risk; length of holding of position; and market intelligence.

Other considerations

Whilst certain inputs used to calculate CVA, FVA and own credit adjustments are not based on observable market data, the uncertainty of these inputs is not considered to have a significant effect on the net valuation of the related derivative portfolios and issued debt.

As such, the fair value levelling of the derivative portfolios and issued debt is not determined by CVA, FVA or own credit inputs. In addition, any fair value sensitivity driven by these inputs is not included in the level 3 sensitivities presented.

The table below shows the high and low range of fair value of the level 3 assets and liabilities. This range incorporates the range of fair value inputs as described in the previous table.

	NWM Group					
	2022			2021		
	Level 3 £m	Favourable £m	Unfavourable £m	Level 3 £m	Favourable £m	Unfavourable £m
Assets						
Trading assets						
Loans	395	10	(10)	721	10	(10)
Securities	1	—	—	21	—	—
Derivatives	1,023	50	(50)	1,066	90	(110)
Other financial assets						
Loans	160	—	—	118	10	(10)
Securities	77	10	(10)	38	—	—
	1,656	70	(70)	1,964	110	(130)
Liabilities						
Trading liabilities						
Deposits	1	—	—	2	—	—
Short positions	—	—	—	1	—	—
Derivatives	999	30	(30)	614	30	(30)
	1,000	30	(30)	617	30	(30)

	NWM Plc					
	2022			2021		
	Level 3 £m	Favourable £m	Unfavourable £m	Level 3 £m	Favourable £m	Unfavourable £m
Assets						
Trading assets						
Loans	347	—	—	652	10	(10)
Securities	1	—	—	18	—	—
Derivatives	988	50	(50)	990	80	(110)
Other financial assets						
Loans	133	—	—	118	10	(10)
Securities	72	10	(10)	36	—	—
	1,541	60	(60)	1,814	100	(130)
Liabilities						
Trading liabilities						
Deposits	1	—	—	2	—	—
Short positions	—	—	—	1	—	—
Derivatives	857	30	(30)	583	30	(30)
	858	30	(30)	586	30	(30)

10 Financial instruments – valuation continued

Movement in Level 3 assets and liabilities over the reporting period

The following table shows the movement in level 3 assets and liabilities in the year.

	NWM Group							
	2022				2021			
	Trading assets (2) £m	Other financial assets (3) £m	Total assets £m	Total liabilities £m	Trading assets (2) £m	Other financial assets (3) £m	Total assets £m	Total liabilities £m
At 1 January	**1,808**	**156**	**1,964**	**617**	1,629	91	1,720	955
Amounts recorded in the income statement (1)	**56**	**(6)**	**50**	**398**	(184)	(28)	(212)	(117)
Amounts recorded in the statement of comprehensive income	**—**	**(41)**	**(41)**	**—**	—	11	11	—
Level 3 transfers in	**194**	**34**	**228**	**81**	125	—	125	20
Level 3 transfers out	**(269)**	**(35)**	**(304)**	**(64)**	(104)	—	(104)	(168)
Purchases/originations	**629**	**130**	**759**	**388**	966	449	1,415	305
Settlements/other decreases	**(115)**	**—**	**(115)**	**(41)**	(48)	(363)	(411)	(28)
Sales	**(890)**	**(2)**	**(892)**	**(385)**	(574)	(4)	(578)	(347)
Foreign exchange and other	**6**	**1**	**7**	**6**	(2)	—	(2)	(3)
At 31 December	**1,419**	**237**	**1,656**	**1,000**	1,808	156	1,964	617
Amounts recorded in the income statement in respect of balances held at year end:								
- unrealised	**56**	**(6)**	**50**	**398**	(184)	(28)	(212)	(117)

	NWM Plc							
	2022				2021			
	Trading assets (2) £m	Other financial assets (3) £m	Total assets £m	Total liabilities £m	Trading assets (2) £m	Other financial assets (3) £m	Total assets £m	Total liabilities £m
At 1 January	**1,660**	**154**	**1,814**	**586**	1,512	84	1,596	922
Amounts recorded in the income statement (1)	**81**	**(6)**	**75**	**319**	(189)	(23)	(212)	(111)
Amounts recorded in the statement of comprehensive income	**—**	**(38)**	**(38)**	**—**	—	12	12	—
Level 3 transfers in	**194**	**34**	**228**	**79**	119	—	119	20
Level 3 transfers out	**(268)**	**(34)**	**(302)**	**(62)**	(102)	—	(102)	(162)
Purchases/originations	**513**	**98**	**611**	**347**	912	412	1,324	280
Settlements/other decreases	**(92)**	**(1)**	**(93)**	**(36)**	(38)	(328)	(366)	(26)
Sales	**(752)**	**(2)**	**(754)**	**(375)**	(554)	(3)	(557)	(337)
Foreign exchange and other	**—**	**—**	**—**	**—**	—	—	—	—
At 31 December	**1,336**	**205**	**1,541**	**858**	1,660	154	1,814	586
Amounts recorded in the income statement in respect of balances held at year end:								
- unrealised	**81**	**(6)**	**75**	**319**	(189)	(23)	(212)	(111)

(1) For NWM Group, net losses on trading assets and liabilities of £342 million (2021 – £67 million losses) were recorded in income from trading activities. Net losses on other instruments of £6 million (2021 – £28 million losses) were recorded in other operating income and interest income as appropriate. For NWM Plc, net losses on trading assets and liabilities of £238 million (2021 – £78 million losses) were recorded in income from trading activities. Net losses on other instruments of £6 million (2021 – £23 million losses) were recorded in other operating income and interest income as appropriate.
(2) Trading assets comprise assets held at fair value in trading portfolios.
(3) Other financial assets comprise fair value through other comprehensive income, designated as at fair value through profit or loss and other fair value through profit or loss.

10 Financial instruments – valuation continued

Fair value of financial instruments measured at amortised cost on the balance sheet

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

	NWM Group					NWM Plc				
	Items where fair value approximates carrying value	Carrying value	Fair value	Fair value hierarchy level		Items where fair value approximates carrying value	Carrying value	Fair value	Fair value hierarchy level	
				Level 2	Level 3				Level 2	Level 3
2022	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn
Financial assets										
Cash and balances at central banks	17.0					13.5				
Settlement balances	2.6					1.7				
Loans to banks	0.1	1.0	1.0	0.5	0.5	0.1	0.7	0.7	0.3	0.4
Loans to customers		10.2	10.1	0.9	9.2		9.2	9.1	0.9	8.2
Amounts due from holding company and fellow subsidiaries	0.1	0.3	0.3	—	0.3	0.7	2.4	2.4	—	2.4
Other financial assets - securities		5.8	5.7	—	5.7		5.4	5.3	—	5.3
2021										
Financial assets										
Cash and balances at central banks	16.6					12.3				
Settlement balances	2.1					0.8				
Loans to banks	0.1	0.9	0.9	0.4	0.5	—	0.7	0.7	0.3	0.4
Loans to customers		7.5	7.5	0.4	7.1		6.8	6.8	0.3	6.5
Amounts due from holding company and fellow subsidiaries	—	0.7	0.7	—	0.7	—	3.6	3.6	—	3.6
Other financial assets - securities		3.1	3.1	—	3.1		3.0	3.0	—	3.0

	NWM Group					NWM Plc				
	Items where fair value approximates carrying value	Carrying value	Fair value	Fair value hierarchy level		Items where fair value approximates carrying value	Carrying value	Fair value	Fair value hierarchy level	
				Level 2	Level 3				Level 2	Level 3
2022	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn
Financial liabilities										
Bank deposits	0.3	2.8	2.8	0.8	2.0	0.2	2.7	2.7	0.8	1.9
Customer deposits	0.1	3.5	3.5	0.3	3.2	0.1	2.6	2.6	0.3	2.3
Amounts due to holding company and fellow subsidiaries	0.2	4.7	4.6	4.6	—	1.0	5.6	5.6	4.7	0.9
Settlement balances	2.0					1.1				
Other financial liabilities										
Debt securities in issue		18.4	17.6	14.8	2.8		16.4	15.8	13.8	2.0
Subordinated liabilities		0.1	0.1	0.1	—		—	—	—	—
2021										
Financial liabilities										
Bank deposits	—	1.8	1.8	—	1.8	—	1.8	1.8	—	1.8
Customer deposits	—	2.2	2.2	—	2.2	—	1.5	1.5	—	1.5
Amounts due to holding company and fellow subsidiaries	—	5.6	5.7	5.4	0.3	0.1	7.4	7.5	5.4	2.1
Settlement balances	2.1					1.0				
Other financial liabilities										
Debt securities in issue		16.6	16.8	13.9	2.9		15.5	15.7	13.2	2.5
Subordinated liabilities		0.3	0.4	0.4	—		—	—	—	—

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, including but not limited to; cash and balances at central banks, settlement balances, loans with short-term maturities and customer demand deposits, 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, NWM Group's loans are segregated into appropriate portfolios reflecting the characteristics of the constituent loans. Loans are valued using contractual cashflows that 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.

Debt securities and subordinated liabilities

Most debt securities are valued using quoted prices in active markets or from quoted prices of similar financial instruments. The remaining population is valued using discounted cashflows at current offer rates.

Bank and customer deposits

Fair values of deposits are estimated using contractual cashflows using a market discount rate incorporating the current spread.

11 Financial instruments - maturity analysis

Remaining maturity

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

	NWM Group					
	2022			2021		
	Less than 12 months £m	More than 12 months £m	Total £m	Less than 12 months £m	More than 12 months £m	Total £m
Assets						
Cash and balances at central banks	17,007	—	17,007	16,645	—	16,645
Trading assets	35,658	9,633	45,291	40,206	18,895	59,101
Derivatives	38,174	61,980	100,154	34,423	71,127	105,550
Settlement balances	2,558	—	2,558	2,139	—	2,139
Loans to banks - amortised cost	1,129	17	1,146	714	248	962
Loans to customers - amortised cost	4,282	5,889	10,171	3,707	3,764	7,471
Amounts due from holding company and fellow subsidiaries (1)	615	97	712	705	675	1,380
Other financial assets	3,955	7,915	11,870	3,848	4,938	8,786
Liabilities						
Bank deposits	2,427	642	3,069	1,244	564	1,808
Customer deposits	3,353	261	3,614	2,161	107	2,268
Amounts due to holding company and fellow subsidiaries (2)	3,519	2,494	6,013	1,571	4,384	5,955
Settlement balances	2,010	—	2,010	2,068	—	2,068
Trading liabilities	42,744	10,048	52,792	41,548	22,934	64,482
Derivatives	39,166	54,419	93,585	34,606	63,891	98,497
Other financial liabilities	6,129	14,974	21,103	8,715	10,540	19,255
Lease liabilities	8	39	47	13	40	53

	NWM Plc					
	2022			2021		
	Less than 12 months £m	More than 12 months £m	Total £m	Less than 12 months £m	More than 12 months £m	Total £m
Assets						
Cash and balances at central banks	13,467	—	13,467	12,294	—	12,294
Trading assets	20,085	7,216	27,301	22,355	18,867	41,222
Derivatives	38,402	57,856	96,258	34,259	68,783	103,042
Settlement balances	1,686	—	1,686	795	—	795
Loans to banks - amortised cost	798	17	815	464	248	712
Loans to customers - amortised cost	4,062	5,092	9,154	3,641	3,169	6,810
Amounts due from holding company and fellow subsidiaries (1)	4,068	2,538	6,606	3,862	2,749	6,611
Other financial assets	2,727	7,650	10,377	3,092	4,651	7,743
Liabilities						
Bank deposits	2,338	598	2,936	1,244	564	1,808
Customer deposits	2,411	254	2,665	1,448	62	1,510
Amounts due to holding company and fellow subsidiaries (2)	9,808	2,842	12,650	5,407	5,399	10,806
Settlement balances	1,133	—	1,133	1,028	—	1,028
Trading liabilities	24,230	8,995	33,225	24,204	22,915	47,119
Derivatives	39,380	51,374	90,754	34,547	60,549	95,096
Other financial liabilities	4,419	13,977	18,396	7,109	9,768	16,877
Lease liabilities	2	2	4	7	3	10

(1) Amounts due from holding company and fellow subsidiaries relating to non-financial instruments of £28 million (2021 – £99 million) for NWM Group and £59 million (2021 - £112 million) for NWM Plc have been excluded from the tables.
(2) Amounts due to holding company and fellow subsidiaries relating to non-financial instruments of £204 million (2021 - £171 million) for NWM Group and £217 million (2021 - £172 million) for NWM Plc have been excluded from the tables.

11 Financial instruments - maturity analysis continued

Assets and liabilities by contractual cash flows up to 20 years

The tables below show the contractual undiscounted cash flows receivable and payable, up to a period of 20 years, including future receipts and payments of interest of financial assets and liabilities by contractual maturity. The balances in the following tables do not agree directly with the consolidated balance sheet, as the tables include all cash flows relating to principal and future coupon payments, presented on an undiscounted basis. The tables have been prepared on the following basis:

Financial assets have been reflected in the time band of the latest date on which they could be repaid, unless earlier repayment can be demanded by NWM Group. 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 asset is included in the time band that contains the latest date on which it can be repaid, regardless of early repayment. The liability is included in the time band that contains the earliest possible date on which the conditions could be fulfilled, without considering the probability of the conditions being met. For example, if a structured note is automatically prepaid 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.

The settlement date of debt securities in issue, issued by certain securitisation vehicles consolidated by NWM Group depends on when cash flows are received from the securitised assets. Where these assets are prepayable, the timing of the cash outflow relating to securities assumes that each asset will be prepaid at the earliest possible date. As the repayments of assets and liabilities are linked, the repayment of assets in securitisations is shown on the earliest date that the asset can be prepaid, as this is the basis used for liabilities.

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 NWM Group's liquidity position.

MFVTPL assets of £146 billion (2021 - £165 billion) for NWM Group, £127 billion (2021 - £147 billion) for NWM Plc, HFT liabilities of £147 billion (2021 - £163 billion) for NWM Group and £130 billion (2021 - £145 billion) for NWM Plc have been excluded from the following tables.

11 Financial instruments - maturity analysis continued

	NWM Group					
	0-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years
2022	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**
Assets by contractual maturity up to 20 years						
Cash and balances at central banks	**17,007**	—	—	—	—	—
Derivatives held for hedging	**2**	**13**	**46**	**13**	**7**	**1**
Settlement balances	**2,558**	—	—	—	—	—
Loans to banks - amortised cost	**1,128**	**2**	**17**	—	—	—
Loans to customers - amortised cost	**1,623**	**3,183**	**3,253**	**1,787**	**1,451**	**146**
Amounts due from holding company and fellow subsidiaries (1)	**328**	**10**	—	**1**	**9**	**68**
Other financial assets (2)	**1,700**	**2,648**	**2,744**	**1,501**	**1,952**	**1,417**
Finance lease	—	—	**1**	—	—	—
	24,346	**5,856**	**6,061**	**3,302**	**3,419**	**1,632**
2022						
Liabilities by contractual maturity up to 20 years						
Bank deposits	**1,302**	**1,135**	**643**	—	—	—
Customer deposits	**2,286**	**1,339**	**21**	**1**	**2**	**20**
Amounts due to holding company and fellow subsidiaries (3)	**190**	**2,199**	**1,805**	—	**190**	—
Settlement balances	**2,010**	—	—	—	—	—
Derivatives held for hedging	**17**	**76**	**202**	**53**	**21**	**-**
Other financial liabilities	**1,600**	**4,345**	**9,113**	**5,271**	**401**	**437**
Lease liabilities	**1**	**7**	**12**	**10**	**17**	—
	7,406	**9,101**	**11,796**	**5,335**	**631**	**457**
Guarantees and commitments notional amount						
Guarantees (4)	**594**	—	—	—	—	—
Commitments (5)	**12,873**	—	—	—	—	—
	13,467	—	—	—	—	—

	NWM Group					
	0-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years
2021	£m	£m	£m	£m	£m	£m
Assets by contractual maturity up to 20 years						
Cash and balances at central banks	16,645	—	—	—	—	—
Derivatives held for hedging	60	7	63	1	3	—
Settlement balances	2,139	—	—	—	—	—
Loans to banks - amortised cost	691	23	12	—	—	—
Loans to customers - amortised cost	1,689	2,094	2,830	660	327	70
Amounts due from holding company and fellow subsidiaries (1)	459	3	24	7	14	100
Other financial assets (2)	1,872	1,986	2,885	335	560	732
Finance lease	2	8	9	4	12	24
	23,557	4,121	5,823	1,007	916	926
2021						
Liabilities by contractual maturity up to 20 years						
Bank deposits	825	421	566	—	—	—
Customer deposits	1,279	876	36	69	1	19
Amounts due to holding company and fellow subsidiaries (3)	1,057	166	3,743	—	195	—
Settlement balances	2,068	—	—	—	—	—
Derivatives held for hedging	—	10	93	26	—	—
Other financial liabilities	2,948	5,541	5,405	4,368	345	546
Other liabilities- notes in circulation	4	10	12	9	18	—
Lease liabilities	8,181	7,024	9,855	4,472	559	565
Guarantees and commitments notional amount	595	—	—	—	—	—
Guarantees (4)	9,921	—	—	—	—	—
Commitments (5)	10,516	—	—	—	—	—

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

11 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
	NWM Plc					
Assets by contractual maturity up to 20 years						
Cash and balances at central banks	13,467	—	—	—	—	—
Derivatives held for hedging	4	11	47	13	7	1
Settlement balances	1,686	—	—	—	—	—
Loans to banks - amortised cost	796	2	17	—	—	—
Loans to customers - amortised cost	1,537	3,007	2,696	1,609	1,329	146
Amounts due from holding company and fellow subsidiaries (1)	1,148	349	931	345	226	68
Other financial assets (2)	1,449	1,982	2,515	1,415	1,846	1,321
Finance lease	—	—	—	—	—	—
	20,087	5,351	6,206	3,382	3,408	1,536
2022						
Liabilities by contractual maturity up to 20 years						
Bank deposits	1,302	1,045	599	—	—	—
Customer deposits	1,689	987	21	1	2	3
Amounts due to holding company and fellow subsidiaries (3)	1,582	2,199	2,153	—	190	—
Settlement balances	1,133	—	—	—	—	—
Derivatives held for hedging	18	76	201	53	21	—
Other financial liabilities	743	3,478	8,512	5,164	401	161
Lease liabilities	1	1	2	—	—	—
	6,468	7,786	11,488	5,218	614	164
Guarantees and commitments notional amount						
Guarantees (4)	144	—	—	—	—	—
Commitments (5)	6,956	—	—	—	—	—
	7,100	—	—	—	—	—

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
	NWM Plc					
Assets by contractual maturity up to 20 years						
Cash and balances at central banks	12,294	—	—	—	—	—
Derivatives held for hedging	60	7	63	1	3	—
Settlement balances	795	—	—	—	—	—
Loans to banks - amortised cost	452	12	11	—	—	—
Loans to customers - amortised cost	1,630	2,087	2,478	454	323	70
Amounts due from holding company and fellow subsidiaries (1)	1,396	72	1,327	549	222	80
Other financial assets (2)	1,790	1,556	2,640	247	530	696
Finance lease	1	4	—	—	—	—
	18,418	3,738	6,519	1,251	1,078	846
2021						
Liabilities by contractual maturity up to 20 years						
Bank deposits	825	421	566	—	—	—
Customer deposits	826	619	11	55	1	3
Amounts due to holding company and fellow subsidiaries (3)	2,367	197	4,047	—	416	—
Settlement balances	1,028	—	—	—	—	—
Derivatives held for hedging	—	10	93	26	—	—
Other financial liabilities	2,522	4,365	5,291	4,364	189	148
Lease liabilities	2	6	2	—	—	—
	7,570	5,618	10,010	4,445	606	151
Guarantees and commitments notional amount						
Guarantees (4)	197	—	—	—	—	—
Commitments (5)	6,152	—	—	—	—	—
	6,349	—	—	—	—	—

(1) Amounts due from holding company and fellow subsidiaries relating to non-financial instruments have been excluded from the tables.
(2) Other financial assets excludes equity shares.
(3) Amounts due to holding company and fellow subsidiaries relating to non-financial instruments have been excluded from the tables.
(4) NWM Group is only called upon to satisfy a guarantee when the guaranteed party fails to meet its obligations. NWM Group expects most guarantees it provides to expire unused.
(5) NWM Group has given commitments to provide funds to customers under undrawn formal facilities, credit lines and other commitments to lend subject to certain conditions being met by the counterparty. NWM Group does not expect all facilities to be drawn, and some may lapse before drawdown.

12 Trading assets and liabilities

Trading assets and liabilities comprise assets and liabilities held at fair value in trading portfolios.

	NWM Group		NWM Plc	
	2022	2021	2022	2021
Assets	£m	£m	£m	£m
Loans				
Reverse repos	21,537	20,742	8,559	9,246
Collateral given	12,719	11,990	10,468	9,332
Other loans	1,113	1,414	938	1,189
Total loans	35,369	34,146	19,965	19,767
Securities				
Central and local government				
- UK	2,205	6,919	2,204	6,919
- US	2,345	3,329	41	145
- Other	2,799	10,929	2,799	10,929
Financial institutions and Corporate	2,573	3,778	2,292	3,462
Total securities	9,922	24,955	7,336	21,455
Total	45,291	59,101	27,301	41,222
Liabilities				
Deposits				
Repos	23,740	19,389	8,716	4,940
Collateral received	17,663	17,619	14,556	16,386
Other deposits	1,068	1,536	1,066	1,532
Total deposits	42,471	38,544	24,338	22,858
Debt securities in issue	797	974	797	974
Short positions	9,524	24,964	8,090	23,287
Total	52,792	64,482	33,225	47,119

For accounting policy information see Accounting policies note 3.5.

13 Derivatives

NWM Group uses derivatives as part of its trading activities or to manage its own risk such as interest rate, foreign exchange, or credit risk.

	NWM Group					
	2022			2021		
	Notional £bn	Assets £m	Liabilities £m	Notional £bn	Assets £m	Liabilities £m
Exchange rate contracts	**3,145**	**45,821**	**44,938**	3,162	38,546	39,275
Interest rate contracts	**10,356**	**54,097**	**48,372**	8,601	66,850	58,879
Credit derivatives	**15**	**236**	**275**	14	154	343
Equity and commodity contracts	**—**	**—**	**—**	—	—	—
		100,154	**93,585**		105,550	98,497

	NWM Plc					
	2022			2021		
	Notional £bn	Assets £m	Liabilities £m	Notional £bn	Assets £m	Liabilities £m
Exchange rate contracts	**3,178**	**46,528**	**45,592**	3,169	38,692	39,427
Interest rate contracts	**8,840**	**49,496**	**44,890**	7,383	64,196	55,335
Credit derivatives	**15**	**234**	**272**	14	154	334
Equity and commodity contracts	**—**	**—**	**—**	—	—	—
		96,258	**90,754**		103,042	95,096

For accounting policy information see Accounting policies notes 3.5 and 3.10.

Refer to Note 9 for amounts due from/to fellow NatWest Group subsidiaries.

NWM Group applies hedge accounting to reduce the accounting mismatch caused in the income statement by using derivatives to hedge the following risks: interest rate, foreign exchange and the foreign exchange risk associated with net investment in foreign operations.

NWM Group's interest rate hedging relates to the management of NWM Group's non-trading structural interest rate risk, caused by the mismatch between fixed interest rates and floating interest rates on its financial instruments. NWM Group manages this risk within approved limits. Residual risk positions are hedged with derivatives, principally interest rate swaps.

Suitable larger fixed rate financial instruments are subject to fair value hedging in line with documented risk management strategies.

Cash flow hedges of interest rate risk relate to exposures to the variability in future interest payments and receipts due to the movement of benchmark interest rates on forecast transactions and on financial assets and financial liabilities. This variability in cash flows is hedged by interest rate swaps, which convert variable cash flows into fixed. For these cash flow hedge relationships, the hedged items are actual and forecast variable interest rate cash flows arising from financial assets and financial liabilities with interest rates linked to the relevant benchmark rates, most notably USD LIBOR, SOFR, EURIBOR, SONIA and the Bank of England Official Bank Rate. The variability in cash flows due to movements in the relevant benchmark rate is hedged; this risk component is identified using the risk management systems of NWM Group and encompasses the majority of cash flow variability risk.

Fair value hedges of interest rate risk involve interest rate swaps transforming the fixed interest rate risk in financial assets and financial liabilities to floating. The hedged risk is the risk of changes in the hedged item's fair value attributable to changes in the benchmark interest rate risk component of the hedged item. The significant benchmarks identified as risk components are USD LIBOR, SOFR, EURIBOR and SONIA. These risk components are identified using the risk management systems of NWM Group and encompass the majority of the hedged item's fair value risk.

NWM Group hedges the exchange rate risk of its net investment in foreign currency denominated operations with currency borrowings and forward foreign exchange contracts. NWM Group reviews the value of the investments' net assets, executing hedges where appropriate to reduce the sensitivity of capital ratios to foreign exchange rate movement. Hedge accounting relationships will be designated where required. Exchange rate risk also arises in NWM Group where payments are denominated in currencies other than the functional currency. Residual risk positions are hedged with forward foreign exchange contracts, fixing the exchange rate the payments will be settled in. The derivatives are documented as cash flow hedges.

For all cash flow hedging and fair value hedge relationships NWM Group determines that there is an adequate level of offsetting between the hedged item and hedging instrument at inception and on an ongoing basis. This is achieved by comparing movements in the fair value of the expected highly probable forecast cash flows/fair value of the hedged item attributable to the hedged risk with movements in the fair value of the expected changes in cash flows from the hedging instruments. 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.

NWM Group uses either the actual ratio between the hedged item and hedging instrument(s) or one that minimises hedge ineffectiveness to establish the hedge ratio for hedge accounting. Hedge ineffectiveness is measured in line with the requirements of IAS39 and recognised in the income statement as it arises.

13 Derivatives continued

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

	NWM Group							
	2022				2021			
	Notional £bn	Assets £m	Liabilities £m	Change in fair value used for hedge ineffectiveness (1) £m	Notional £bn	Assets £m	Liabilities £m	Change in fair value used for hedge ineffectiveness (1) £m
Fair value hedging								
Interest rate contracts	**20.6**	**215**	**917**	**(647)**	15.9	179	156	(173)
Cash flow hedging								
Interest rate contracts	**5.8**	**1**	**492**	**(436)**	4.8	36	59	(188)
Exchange rate contracts	**5.0**	**121**	**109**	**(10)**	1.1	1	109	1
Net investment hedging								
Exchange rate contracts	**0.3**	**1**	**5**	**4**	0.3	6	—	—
	31.7	**338**	**1,523**	**(1,089)**	22.1	222	324	(360)
IFRS netting/Clearing house settlements		**(216)**	**(1,353)**			(90)	(205)	
		122	**170**			132	119	

	NWM Plc							
	2022				2021			
	Notional £bn	Assets £m	Liabilities £m	Change in fair value used for hedge ineffectiveness (1) £m	Notional £bn	Assets £m	Liabilities £m	Change in fair value used for hedge ineffectiveness (1) £m
Fair value hedging								
Interest rate contracts	**20.2**	**213**	**915**	**(642)**	15.8	174	156	(170)
Exchange rate contracts	**0.2**	**—**	**5**	**5**	—	—	—	—
Cash flow hedging								
Interest rate contracts	**4.2**	**—**	**483**	**(427)**	4.8	36	59	(188)
Exchange rate contracts	**5.0**	**121**	**109**	**(10)**	1.1	1	109	1
Net investment hedging								
Exchange rate contracts	**0.1**	**1**	**—**	**(1)**	0.3	6	—	—
	29.7	**335**	**1,512**	**(1,075)**	22.0	217	324	(357)
IFRS netting/Clearing house settlements		**(213)**	**(1,342)**			(85)	(205)	
		122	**170**			132	119	

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

13 Derivatives continued

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

	NWM Group							
	0-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years	20+ years	Total
2022	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn
Fair value hedging								
Hedging assets - interest rate risk	**0.5**	**1.5**	**1.0**	**0.9**	**0.1**	**—**	**0.2**	**4.2**
Hedging liabilities - interest rate risk	**0.1**	**3.1**	**8.1**	**3.7**	**1.2**	**0.2**	**—**	**16.4**
Cash flow hedging								
Hedging assets - interest rate risk	**—**	**0.5**	**2.3**	**1.0**	**2.0**	**—**	**—**	**5.8**
Average fixed interest rate (%)	***1.75***	***1.28***	***1.52***	***1.43***	***1.54***	**—**	**—**	***1.50***
Hedging assets - exchange rate risk	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Hedging liabilities - exchange rate risk	**—**	**0.9**	**2.8**	**1.1**	**0.2**	**—**	**—**	**5.0**
Net investment hedging								
Exchange rate risk	**0.3**	**—**	**—**	**—**	**—**	**—**	**—**	**0.3**
2021								
Fair value hedging								
Hedging assets - interest rate risk	0.1	0.7	2.1	0.2	—	0.1	0.1	3.3
Hedging liabilities - interest rate risk	1.5	1.6	5.5	2.8	1.0	0.2	—	12.6
Cash flow hedging								
Hedging assets - interest rate risk	0.4	0.5	1.0	1.6	1.3	—	—	4.8
Average fixed interest rate (%)	*2.64*	*0.26*	*0.95*	*0.87*	*0.66*	—	—	*0.91*
Hedging assets - exchange rate risk	—	—	—	—	—	—	—	—
Hedging liabilities - exchange rate risk	—	—	0.9	0.2	—	—	—	1.1
Net investment hedging								
Exchange rate risk	0.3	—	—	—	—	—	—	0.3

	NWM Plc							
	0-3 months	3-12 months	1-3 years	3-5 years	5-10 years	10-20 years	20+ years	Total
2022	£bn	£bn	£bn	£bn	£bn	£bn	£bn	£bn
Fair value hedging								
Hedging assets - interest rate risk	**0.4**	**1.5**	**1.0**	**0.9**	**0.1**	**—**	**0.2**	**4.1**
Hedging liabilities - interest rate risk	**—**	**3.1**	**7.8**	**3.8**	**1.2**	**0.2**	**—**	**16.1**
Hedging assets - exchange rate risk	**0.2**	**—**	**—**	**—**	**—**	**—**	**—**	**0.2**
Cash flow hedging								
Hedging assets - interest rate risk	**—**	**0.3**	**1.8**	**0.6**	**1.5**	**—**	**—**	**4.2**
Average fixed interest rate (%)	**—**	***0.56***	***1.21***	***0.65***	***1.13***	**—**	**—**	***1.06***
Hedging assets - exchange rate risk	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Hedging liabilities - exchange rate risk	**—**	**0.9**	**2.8**	**1.1**	**0.2**	**—**	**0.0**	**5.0**
Net investment hedging								
Exchange rate risk	**0.1**	**—**	**—**	**—**	**—**	**—**	**—**	**0.1**
2021								
Fair value hedging								
Hedging assets - interest rate risk	0.1	0.7	2.1	0.2	—	0.1	0.1	3.3
Hedging liabilities - interest rate risk	1.5	1.6	5.4	2.8	1.0	0.2	—	12.5
Cash flow hedging								
Hedging assets - interest rate risk	0.4	0.5	1.0	1.6	1.3	—	—	4.8
Average fixed interest rate (%)	*2.64*	*0.26*	*0.95*	*0.87*	*0.66*	—	—	*0.91*
Hedging assets - exchange rate risk	—	—	—	—	—	—	—	—
Hedging liabilities - exchange rate risk	—	—	0.9	0.2	—	—	—	1.1
Net investment hedging								
Exchange rate risk	0.3	—	—	—	—	—	—	0.3

For cash flow hedging of exchange rate risk, the average foreign exchange rates applicable across the relationships were USD/GBP 1.24 (2021 - 1.22), JPY/GBP 132.89 (2021 - 132.93), JPY/USD: 128.29 (2021 - n/a), NOK/GBP: 9.21 (2021 - n/a) and CNH/GBP: n/a (2021 - 8.74) for the main currencies hedged.

For net investment hedging of exchange risk, the average foreign exchange rates applicable were AED/USD 4.42 (2021 - 3.67) and USD/GBP 1.20 (2021 - 1.32) for the main currencies hedged.

13 Derivatives continued

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

	2022			2021		
NWM Group	Carrying value (CV) of hedged assets and liabilities £m	Impact on hedged items included in CV £m	Change in fair value used as a basis to determine ineffectiveness (1) £m	Carrying value (CV) of hedged assets and liabilities £m	Impact on hedged items included in CV £m	Change in fair value used as a basis to determine ineffectiveness (1) £m
Fair value hedging - interest rate						
Loans to banks and customers – amortised cost	—	—	—	33	—	—
Other financial assets - securities	4,086	(161)	(230)	3,353	92	(61)
Total	4,086	(161)	(230)	3,386	92	(61)
Bank and customer deposits	565	(3)	3			
Other financial liabilities - debt securities in issue	15,570	(786)	801	14,604	55	231
Subordinated liabilities	1,113	(56)	69	102	2	3
Total	17,248	(845)	873	14,706	57	234
Cash flow hedge - interest rate						
Loans to banks and customers – amortised cost	5,756		427	4,648		172
Other financial assets - securities	85		6	159		6
Total	5,841		433	4,807		178
Cash flow hedge - exchange rate						
Loans to banks and customers – amortised cost	—		—	21		—
Other financial assets - securities	—		—	2		—
Total	—		—	23		—
Other financial liabilities - debt securities in issue	3,096		10	1,036		(1)
Total	3,096		10	1,036		(1)
NWM Plc						
Fair value hedging - interest rate						
Loans to banks and customers – amortised cost	—	—	—	33	—	—
Other financial assets - securities	4,086	(161)	(229)	3,353	92	(61)
Total	4,086	(161)	(229)	3,386	92	(61)
Bank and customer deposits	565	(3)	3	—	—	—
Other financial liabilities - Debt securities in issue	15,295	(784)	798	14,604	55	231
Subordinated liabilities	1,039	(55)	66	—	—	—
Total	16,899	(842)	867	14,604	55	231
Fair value hedging - Exchange rate						
Other	173	26	(5)	—		—
Total	173	26	(5)	—		—
Cash flow hedge - interest rate						
Loans to banks and customers – amortised cost	4,117		418	4,648		172
Other financial assets - securities	85		6	159		6
Total	4,202		424	4,807		178
Cash flow hedge - exchange rate						
Loans to banks and customers – amortised cost	—		—	21		—
Other financial assets - securities	—		—	2		—
Total	—		—	23		—
Other financial liabilities - debt securities in issue	3,096		10	1,036		(1)
Total	3,096		10	1,036		(1)

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

13 Derivatives continued

The following table shows a pre-tax analysis of the cash flow hedge reserve and foreign exchange hedge reserve:

	NWM Group			
	2022		2021	
	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m
Continuing				
Interest rate risk	(468)	—	(37)	—
Foreign exchange risk	—	(29)	(4)	8
De-designated				
Interest rate risk	64	—	111	—
Foreign exchange risk	—	(173)	—	(141)
Total	(404)	(202)	70	(133)

	NWM Plc			
	2022		2021	
	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m
Continuing				
Interest rate risk	(459)	—	(37)	—
Foreign exchange risk	—	(1)	(4)	1
De-designated				
Interest rate risk	64	—	111	—
Foreign exchange risk	—	24	—	33
Total	(395)	23	70	34

13 Derivatives continued

	NWM Group			
	2022		2021	
	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m
Amount recognised in equity				
Interest rate risk	(440)	(64)	(207)	—
Foreign exchange risk	16	(11)	—	20
Total	(424)	(75)	(207)	20
Amounts transferred from equity to earnings				
Interest rate risk to net interest income	(40)	—	1	—
Foreign exchange risk to net interest income	(11)	—	—	—
Foreign exchange risk to non-interest income	—	7	—	—
Total	(51)	7	1	—

	NWM Plc			
	2022		2021	
	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m	Cash flow hedge reserve £m	Foreign exchange hedge reserve £m
Amount recognised in equity				
Interest rate risk	(422)	—	(208)	—
Foreign exchange risk	16	(11)	—	1
Total	(406)	(11)	(208)	1
Amounts transferred from equity to earnings				
Interest rate risk to net interest income	(47)	—	1	—
Foreign exchange risk to net interest income	(11)	—	—	—
Total	(58)	—	1	—

Hedge ineffectiveness recognised in other operating income in continuing operations comprised:

	NWM Group	
	2022 £m	2021 £m
Fair value hedging		
Gain on the hedged items attributable to the hedged risk	643	173
Loss on the hedging instruments	(647)	(173)
Fair value hedging ineffectiveness	(4)	—
Cash flow hedging		
Interest rate risk	(3)	(10)
Cash flow hedging ineffectiveness	(3)	(10)
Total	(7)	(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).

14 Loan impairment provisions

Loan exposure and impairment metrics

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

	NWM Group		NWM Plc	
	31 December 2022 £m	31 December 2021 £m	31 December 2022 £m	31 December 2021 £m
Loans - amortised cost				
- Stage 1	10,791	8,301	9,713	7,444
- Stage 2	497	147	228	104
- Stage 3	49	99	49	61
Of which: individual	*37*	*91*	*37*	*53*
Of which: collective	*12*	*8*	*12*	*8*
- Inter-Group	434	731	2,324	2,605
Total	11,771	9,278	12,314	10,214
ECL provisions (1)				
- Stage 1	20	6	15	6
- Stage 2	8	3	3	2
- Stage 3	26	75	26	36
Of which: individual	*15*	*68*	*15*	*29*
Of which: collective	*11*	*7*	*11*	*7*
- Inter-Group	—	—	4	1
Total	54	84	48	45
ECL provision coverage (2)				
- Stage 1 (%)	0.19	0.07	0.15	0.08
- Stage 2 (%)	1.61	2.04	1.32	1.92
- Stage 3 (%)	53.06	75.76	53.06	59.02
- Inter-Group (%)	—	—	0.17	0.04
Total	0.48	0.98	0.44	0.58
Impairment (releases)/losses				
ECL (release)/charge				
- Stage 1	8	(14)	7	(11)
- Stage 2	14	(11)	3	—
- Stage 3	(14)	(9)	(14)	(11)
Of which: individual	*(15)*	*(6)*	*(15)*	*(8)*
Of which: collective	*1*	*(3)*	*1*	*(3)*
- Third party	8	(34)	(4)	(22)
- Inter-Group	—	(1)	—	(1)
Total	8	(35)	(4)	(23)
Amounts written off	55	67	14	13
Of which: individual	*55*	*43*	*14*	*10*

(1) NWM Group's intercompany assets were classified as Stage 1. The ECL for these loans was £0.4 million at 31 December 2022.
(2) ECL provisions coverage is calculated as total ECL provisions divided by third party loans – amortised cost and FVOCI.
(3) The table shows gross loans only and excludes amounts that are outside the scope of the ECL framework. Refer to page 68 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 £17.0 billion (2021 – £16.6 billion) and debt securities of £11.8 billion (2021 – £8.4 billion).

14 Loan impairment provisions continued

Credit risk enhancement and mitigation

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

Critical accounting policy: Loan impairment provisions

Accounting policies Note 2.3 sets out how the expected loss approach is applied. At 31 December 2022, customer loan impairment provisions amounted to £54 million (2021 - £84 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.

15 Other financial assets

	NWM Group							
	Debt securities							
	Central and local government							
	UK	US	Other	Other debt	Total	Equity shares	Loans	Total
2022	£m	£m	£m	£m	£m	£m	£m	£m
Mandatory fair value through profit or loss	**—**	**—**	**—**	**2**	**2**	**1**	**77**	**80**
Fair value through other comprehensive income	**—**	**3,920**	**1,213**	**700**	**5,833**	**90**	**117**	**6,040**
Amortised cost	**—**	**—**	**—**	**5,750**	**5,750**	**—**	**—**	**5,750**
Total	**—**	**3,920**	**1,213**	**6,452**	**11,585**	**91**	**194**	**11,870**
2021								
Mandatory fair value through profit or loss	—	—	—	1	1	1	78	80
Fair value through other comprehensive income	360	3,357	884	794	5,395	136	59	5,590
Amortised cost	—	—	—	3,116	3,116	—	—	3,116
Total	360	3,357	884	3,911	8,512	137	137	8,786

	NWM Plc							
	Debt securities							
	Central and local government							
	UK	US	Other	Other debt	Total	Equity shares	Loans	Total
2022	£m	£m	£m	£m	£m	£m	£m	£m
Mandatory fair value through profit or loss	**—**	**—**	**—**	**2**	**2**	**—**	**77**	**79**
Fair value through other comprehensive income	**—**	**3,714**	**559**	**465**	**4,738**	**42**	**90**	**4,870**
Amortised cost	**—**	**—**	**—**	**5,428**	**5,428**	**—**	**—**	**5,428**
Total	**—**	**3,714**	**559**	**5,895**	**10,168**	**42**	**167**	**10,377**
2021								
Mandatory fair value through profit or loss	—	—	—	1	1	—	78	79
Fair value through other comprehensive income	86	3,209	794	459	4,548	43	59	4,650
Amortised cost	—	—	—	3,014	3,014	—	—	3,014
Total	86	3,209	794	3,474	7,563	43	137	7,743

NWM Group disposed of equity shares in UBS Equity Funds of £69 million. There were no significant disposals in the prior year. There are no significant dividends on equity shares held at FVOCI in either year.

16 Investments in Group undertakings

Investments in group undertakings are carried at cost less impairment losses. Movements during the year were as follows:

	NWM Plc	
	2022	2021
	£m	£m
At 1 January	**2,481**	2,600
Currency translation and other adjustments	**64**	(20)
Additional investments in Group undertakings	**—**	(4)
Net reversal/(impairment) of investments	**81**	(95)
At 31 December	**2,626**	2,481

The 2022 net reversal of impairments of investments consists primarily of the reversal of impairment of NWM Plc's investments in RBS Holdings NV due to a change in its net asset value. The impairment of investments in 2021 was related mainly to RBS Asia Financial Services Limited and RBS Holdings NV.

NWM Plc's subsidiaries are assessed for potential impairment of investment based on net asset value. Fair value measurement for this purpose was categorised as Level 3 of the fair value hierarchy.

The principal subsidiary undertakings of the company are shown below. Their capital consists of ordinary shares and additional Tier 1 notes which are unlisted. All of these subsidiaries are included in NWM Group's consolidated financial statements and have an accounting reference date of 31 December.

	Nature of business	Country of incorporation and principal area of operation	Group interest
NatWest Markets Securities Inc.	Broker dealer	US	100%
NatWest Markets N.V.	Banking	Netherlands	100%

For accounting policy information see Accounting policies Note 3.11.

Full information on all related undertakings is included in Note 33.

17 Other assets

	NWM Group		NWM Plc	
	2022	2021	2022	2021
	£m	£m	£m	£m
Property, plant and equipment	**59**	66	**8**	13
Pension schemes in net surplus (Note 5)	**241**	306	**241**	306
Assets of disposal groups	**—**	20	**—**	—
Accrued income	**111**	34	**101**	27
Tax recoverable	**294**	332	**295**	330
Deferred tax (Note 7)	**46**	48	**—**	—
Other assets	**81**	72	**67**	56
Total	**832**	878	**712**	732

18 Other financial liabilities

	NWM Group		NWM Plc	
	2022	2021	2022	2021
	£m	£m	£m	£m
Customer deposits - designated as at fair value through profit or loss	**1,050**	568	**770**	75
Debt securities in issue				
Medium term notes	**16,418**	12,430	**15,553**	12,202
Commercial paper and certificates of deposit	**3,169**	5,294	**1,931**	4,185
Subordinated liabilities				
Designated as at fair value through profit or loss	**345**	703	**122**	371
Amortised cost	**121**	260	**20**	44
Total	**21,103**	19,255	**18,396**	16,877

For accounting policy information see Accounting policies Notes 3.5 and 3.9.

19 Subordinated liabilities

	NWM Group		NWM Plc	
	2022 £m	2021 £m	2022 £m	2021 £m
Dated loan capital	**446**	919	**122**	371
Undated loan capital	**20**	44	**20**	44
Total	**466**	963	**142**	415

(1) Excludes amounts due to holding company and fellow subsidiaries of £1,519 million (2021: £1,464 million) for NWM Group and NWM Plc.

The following tables analyse third party subordinated liabilities:

Dated loan capital		First call date	Maturity date	Capital treatment	2022 £m	2021 £m
€300 million	Floating rate notes	—	Jun-2022	Tier 2	—	252
€145.6 million	Floating rate notes	—	Apr-2023	Tier 2	**122**	119
					122	371
Undated loan capital						
£31 million	7.38% notes	—	—	Not applicable	**2**	1
£21 million	6.20% notes	Mar-2022	—	Tier 2	—	22
£19 million	5.63% notes	Jun-2032	—	Tier 2	—	1
£16 million	5.63% notes	Sep-2026	—	Not applicable	**18**	20
					20	44

The following tables analyse intercompany subordinated liabilities:

	NWM Group and Bank	
	2022 £m	2021 £m
Dated loan capital	**1,020**	1,019
Undated loan capital	**499**	445
Total	**1,519**	1,464

Dated loan capital		First call date	Maturity date	Capital treatment	2022 £m	2021 £m
€950 million	3.28% notes	—	Mar-2024	Tier 2	**830**	823
$250 million	4.96% notes	—	Jan-2034	Tier 2	**190**	196
					1,020	1,019
Undated loan capital						
$600 million	Floating rate notes	Jun-2013	—	Tier 2	**499**	445
					499	445

20 Other liabilities

	NWM Group 2022 £m	NWM Group 2021 £m	NWM Plc 2022 £m	NWM Plc 2021 £m
Lease liabilities	**47**	53	**4**	10
Provisions for liabilities and charges	**274**	342	**161**	220
Retirement benefit liabilities (Note 5)	**63**	66	**55**	57
Accruals	**224**	123	**178**	92
Deferred income	**35**	22	**24**	16
Current tax	**21**	11	**12**	2
Deferred tax (Note 7)	**101**	374	**92**	352
Other liabilities	**51**	64	**41**	40
	816	1,055	**567**	789

Provisions for liabilities and charges	NWM Group Litigation and other regulatory £m	Other (1) £m	Total £m
At 1 January 2022	**262**	**80**	**342**
Currency translation and other movements	**20**	**5**	**25**
Charge to income statement	**33**	**2**	**35**
Release to income statement	**(13)**	**(7)**	**(20)**
Provisions utilised	**(77)**	**(31)**	**(108)**
At 31 December 2022	**225**	**49**	**274**

Provisions for liabilities and charges	NWM Plc Litigation and other regulatory £m	Other (1) £m	Total £m
At 1 January 2022	**166**	**54**	**220**
Currency translation and other movements	**12**	**2**	**14**
Charge to income statement	**30**	**2**	**32**
Release to income statement	**(11)**	**(6)**	**(17)**
Provisions utilised	**(65)**	**(23)**	**(88)**
At 31 December 2022	**132**	**29**	**161**

(1) Materially comprises provisions relating to restructuring costs.

Provisions are liabilities of uncertain timing or amount and are recognised when there is a present obligation as a result of a past event, the outflow of economic benefit is probable and the outflow can be estimated reliably. Any difference between the final outcome and the amounts provided will affect the reported results in the period when the matter is resolved.

For accounting policy information see Accounting policies note 6.

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 NWM Group can look to another party such as an insurer to pay some or all of the expenditure required to settle a provision, any reimbursement is recognised when, and only when, it is virtually certain that it will be received.

Estimates - Provisions are liabilities of uncertain timing or amount and are recognised when there is a present obligation as a result of a past event, the outflow of economic benefit is probable, and the outflow can be estimated reliably. Any difference between the final outcome and the amounts provided will affect the reported results in the period when the matter is resolved.

- Litigation and other regulatory: NWM Group is engaged in various legal proceedings, both in the UK and in overseas jurisdictions, including the US. For further information in relation to legal proceedings and discussion of the associated uncertainties, refer to Note 25.
- Other provisions: These materially comprise provisions for onerous contracts and restructuring costs. Onerous contract provisions comprise an estimate of the costs involved in fulfilling the terms and conditions of contracts net of any expected benefits to be received. Redundancy and restructuring provisions comprise the estimated cost of restructuring, including redundancy costs where an obligation exists.

21 Share capital and reserves

	2022	2021	Number of shares 2022	2021
Allotted, called up and fully paid	£m	£m	000s	000s
Ordinary shares of £1	**400**	400	**399,517**	399,517

Ordinary shares
In 2022, NWM Plc paid ordinary dividends of £430 million (2021 – £1 billion).

Paid-in equity
Comprises equity instruments issued by NWM Plc other than those legally constituted as shares.

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

	2022 £m	2021 £m
Additional Tier 1 instruments		
US$950 million 7.9604% instruments callable August 2025	**749**	749
US$200 million 5.540% instruments callable August 2025	**155**	155
	904	904

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

Reserves
NWM Plc optimises capital efficiency by maintaining reserves in subsidiaries, including regulated entities. Certain preference shares and subordinated debt are also included within regulatory capital. The remittance of reserves to the parent or the redemption of shares or subordinated capital by regulated entities may be subject to maintaining the capital resources required by the relevant regulator.

For accounting policy information see Accounting policies Note 3.9.

22 Structured entities

A structured entity (SE) is an entity that has been designed such that voting or similar rights are not the dominant factor in deciding who controls the entity, for example when any voting rights relate to administrative tasks only and the relevant activities are directed by means of contractual arrangements. SEs are usually established for a specific, limited purpose, they do not carry out a business or trade and typically have no employees.

Securitisations

In a securitisation, assets, or interests in a pool of assets, are transferred to a SE which then issues liabilities to third party investors.

NWM Group's involvement in client securitisations takes a number of forms. It may provide secured finance to, or purchase asset-backed notes from, client sponsored SEs secured on assets transferred by the client entity; purchase asset backed securities issued by client sponsored SEs in the primary or secondary markets; or provide liquidity facilities to client sponsored SEs. In addition, NWM Group arranges or acts as lead manager or placement agent in client primary markets securitisations. NWM Group provides portfolio structured derivative hedging solutions to clients.

Covered debt programme

NWM Group has assigned certain loans to customers and other debt instruments to bankruptcy remote limited liability partnerships to provide security for issues of debt securities by NWM Group. NWM Group retains all of the risks and rewards of these assets and continues to recognise them. The partnerships are consolidated by the NWM Group, and the related covered debt included within other financial liabilities. At 31 December 2022, £1,164 million (2021 - £698 million) of loans and other debt instruments provided security for £1,290 million (2021 – £626 million) debt securities in issue and other borrowing by NWM Plc and NWM Group.

Lending of own issued securities

NWM Plc has issued, retained, and lent debt securities under securities lending arrangements. Under standard terms in the UK and US markets, the recipient has an unrestricted right to sell or re-pledge collateral, subject to returning equivalent securities on maturity of the transaction. NWM Plc retains all of the risks and rewards of own issued liabilities lent under such arrangements and does not recognise them. At 31 December 2022, £2,419 million (2021 - £1,494 million) of secured own issued liabilities have been retained and lent under securities lending arrangements. At 31 December 2022, £2,244 million (2021 - £1,564 million) of loans and other debt instruments provided security for secured own issued liabilities that have been retained and lent under securities lending arrangements.

Unconsolidated structured entities

NWM Group's interests in unconsolidated structured entities are analysed below.

	2022			2021		
	Asset backed securitisation vehicles £m	**Investment funds and other £m**	**Total £m**	Asset backed securitisation vehicles £m	Investment funds and other £m	Total £m
Trading assets and derivatives						
Trading assets	**616**	**137**	**753**	490	117	607
Derivative assets	**343**	**—**	**343**	251	18	269
Derivative liabilities	**(388)**	**(22)**	**(410)**	(170)	(1)	(171)
Total	**571**	**115**	**686**	571	134	705
Non trading assets						
Loans to customers	**2,395**	**273**	**2,668**	1,680	24	1,704
Other financial assets	**4,932**	**849**	**5,781**	2,681	379	3,060
Total	**7,327**	**1,122**	**8,449**	4,361	403	4,764
Liquidity facilities/loan commitments	**1,474**	**236**	**1,710**	1,402	73	1,475
Guarantees	**—**	**93**	**93**	—	—	—
Maximum exposure	**9,372**	**1,566**	**10,938**	6,334	610	6,944

23 Asset transfers

Transfers that do not qualify for derecognition

NWM Group enters into securities financing, reverse repurchase and total return agreements in accordance with normal market practice which includes the provision of additional collateral if necessary. Under standard terms in the UK and US markets, the recipient has an unrestricted right to sell or repledge collateral, subject to returning equivalent securities on maturity of the transaction.

Securities sold under repurchase transactions and transactions with the substance of securities repurchase agreements are not derecognised if the NWM Group retains substantially all the risks and rewards of ownership. The fair value (and carrying value) of securities transferred under such transactions included on the balance sheet, are set out below. All of these securities could be sold or repledged by the holder.

For accounting policy information see Accounting policies Note 3.10.

	NWM Group		NWM Plc	
	2022	2021	2022	2021
The following assets have failed derecognition (1)	£m	£m	£m	£m
Trading assets	6,668	13,084	4,413	9,034
Other financial assets	761	677	761	552
Total	7,429	13,761	5,174	9,586

(1) Associated liabilities were £7,364 million for the NWM Group (2021 - £13,706 million) and £5,116 million for NWM Plc (2021 - £9,523 million).

Assets pledged as collateral

NWM Group pledges collateral with its counterparties in respect of derivative liabilities and bank and stock borrowings.

	NWM Group		NWM Plc	
	2022	2021	2022	2021
Assets pledged against liabilities	£m	£m	£m	£m
Trading assets	14,776	23,544	12,017	20,886
Other financial assets (1)	2,938	1,252	2,565	601
	17,714	24,796	14,582	21,487

(1) Includes pledges for stock borrowing.

The following table analyses assets that have been transferred but have failed the derecognition rules under IFRS 9 and therefore continue to be recognised on NWM Plc's balance sheet.

	2022	2021
Asset type	£m	£m
Loans and other debt instruments - covered debt programme (1)	1,164	698
Loans and other debt instruments - own issued retained lent securities (2)	2,244	1,564

(1) The associated liabilities for covered debt programme were £1,290 million (2021 - £626 million).
(2) The associated own issued securities that were retained and lent under securities lending arrangements were £2,419 million (2021 - £1,494 million).

24 Capital resources

Regulatory capital for NWM Plc legal entity is assessed against minimum requirements that are set out under the Capital Requirements Regulation. Transitional arrangements on the phasing in of end-point capital resources are set by the PRA.

The capital resources under the PRA transitional basis for NWM Plc are set out below.

	2022 £m	2021 £m
Shareholders' equity		
Shareholders' equity	**6,518**	7,349
Other equity instruments	**(904)**	(904)
	5,614	6,445
Regulatory adjustments and deductions		
Own credit	**11**	47
Defined benefit pension fund adjustment	**(159)**	(202)
Cash flow hedging reserve	**284**	(46)
Prudential valuation adjustments	**(197)**	(227)
Expected losses less impairments	**(3)**	(11)
Instruments of financial sector entities where the institution has a significant investment	**(1,869)**	(1,685)
Adjustments under IFRS 9 transitional arrangements	**1**	1
Foreseeable ordinary dividends	**—**	(250)
	(1,932)	(2,373)
CET1 capital	**3,682**	4,072
Additional Tier 1 (AT1) capital		
Qualifying instruments and related share premium	**904**	904
Qualifying instruments and related share premium subject to phase out	**—**	—
	904	904
Tier 1 deductions		
Instruments of financial sector entities where the institution has a significant investment	**(225)**	(221)
Tier 1 capital	**4,361**	4,755
Qualifying Tier 2 capital		
Qualifying instruments and related share premium	**1,555**	1,490
Tier 2 deductions		
Instruments of financial sector entities where the institution has a significant investment	**(441)**	(401)
Other regulatory adjustments	**27**	26
	(414)	(375)
Tier 2 capital	**1,141**	1,115
Total regulatory capital	**5,502**	5,870

In the management of capital resources, NWM Plc is governed by NatWest Group's policy to maintain a strong capital base 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%. NWM Plc has complied with the PRA's capital requirements throughout the year. NWM Plc is also subject to a Pillar 2 requirement.

Subsidiaries and sub-groups within NWM 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 is subject to restrictions such as local regulatory or legal requirements, the availability of reserves and financial and operating performance.

25 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 the NWM Group is exposed to credit risk in the event of a customer's failure to meet its obligations, the amounts shown do not, and are not intended to, provide any indication of NWM Group's expectation of future losses.
For accounting policy information see Accounting policies Note 2.4.

	NWM Group		NWM Plc	
	2022 £m	2021 £m	2022 £m	2021 £m
Contingent liabilities and commitments				
Guarantees and assets pledged as collateral security	**594**	595	**144**	197
Other contingent liabilities	**30**	110	**30**	109
Standby facilities, credit lines and other commitments	**13,973**	11,245	**7,967**	7,363
	14,597	11,950	**8,141**	7,669

(1) In the normal course of business, NWM Plc guarantees specified third party liabilities of certain subsidiaries; it also gives undertakings that individual subsidiaries will fulfil their obligations to third parties under contractual or other arrangements which are excluded from the table above.

Banking commitments and contingent obligations, which have been entered into on behalf of customers and for which there are corresponding obligations from customers, are not included in assets and liabilities. NWM Group's maximum exposure to credit loss, in the event of its obligation crystallising and all counterclaims, collateral or security proving valueless, is represented by the contractual nominal amount of these instruments included in the table above. These commitments and contingent obligations are subject to NWM Group's normal credit approval processes.
Guarantees - NWM Group gives guarantees on behalf of customers. A financial guarantee represents an irrevocable undertaking that NWM Group will meet a customer's specified obligations to a third party if the customer fails to do so. The maximum amount that NWM Group could be required to pay under a guarantee is its principal amount as in the table above. NWM Group expects most guarantees it provides to expire unused.
Other contingent liabilities - these include standby letters of credit, supporting customer debt issues and contingent liabilities relating to customer trading activities such as those arising from performance and customs bonds, warranties and indemnities.
Standby facilities and credit lines - under a loan commitment NWM Group agrees to make funds available to a customer in the future. Loan commitments, which are usually for a specified term may be unconditionally cancellable or may persist, provided all conditions in the loan facility are satisfied or waived. Commitments to lend include commercial standby facilities and credit lines, liquidity facilities to commercial paper conduits and unutilised overdraft facilities.
Other commitments - these include documentary credits, which are commercial letters of credit providing for payment by NWM Group to a named beneficiary against presentation of specified documents, forward asset purchases, forward deposits placed and undrawn note issuance and revolving underwriting facilities, and other short-term trade related transactions.

Risk-sharing arrangements

During 2019 NWM Plc and NWM N.V. established limited risk-sharing arrangements that facilitated the smooth provision of services to NatWest Markets' customers. The arrangements include:
- The provision of a funded guarantee of up to £1.0 billion by NWM Plc to NWM N.V. that limits NWM N.V.'s exposure to large individual customer credits to 10% of NWM N.V.'s capital. Funding is provided by NWM Plc deposits placed with NWM N.V. of not less than the guaranteed amount. At 31 December 2022, the deposits amounted to £0.8 billion and the guaranteed fees in the year were £4.4 million.
- The provision of funded and unfunded guarantees by NWM Plc in respect of NWM N.V.'s Legacy portfolio. At 31 December 2022 the exposure at default covered by the guarantees was approximately £0.2 billion (of which £35 million was cash collateralised). Fees of £1.4 million in relation to the guarantees were recognised in the year.

Indemnity deed

- In April 2019, NWM Plc and NWB Plc entered into a cross indemnity agreement for losses incurred within the entities in relation to business transferred to or from the ring-fenced bank under the NatWest Group's structural re-organisation. Under the agreement, NWM Plc is indemnified by NWB Plc against losses relating to the NWB Plc transferring businesses and ring-fenced bank obligations and NWB Plc is indemnified by NWM Plc against losses relating to NWM Plc transferring businesses and non-ring-fenced bank obligations with effect from the relevant transfer date.

25 Memorandum items continued

Litigation and regulatory matters

NWM Plc and its subsidiary and associated undertakings (NWM 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.

NWM 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 NWM 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. NWM 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 NWM 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 NWM 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 NWM Group has recognised. Where (and as far as) liability cannot be reasonably estimated, no provision has been recognised. NWM 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 20 for information on material provisions.

Matters which are, or could be material, having regard to NWM Group, considered as a whole, in which NWM Group is currently involved are set out below. We have provided information on the procedural history of certain Matters, where we believe appropriate, to aid the understanding of the Matter.

For a discussion of certain risks associated with NWM Group's litigation and regulatory matters, see the Risk Factors relating to legal, regulatory and governmental actions and investigations set out on pages 191-192.

Litigation

Residential mortgage-backed securities (RMBS) litigation in the US

NatWest Markets Securities Inc. (NWMSI) and certain affiliates continue to defend RMBS-related claims in the US in which the plaintiff, the Federal Deposit Insurance Corporation (FDIC), alleges that certain disclosures made in connection with the relevant offerings of RMBS contained materially false or misleading statements and/or omissions regarding the underwriting standards pursuant to which the mortgage loans underlying the RMBS were issued.

London Interbank Offered Rate (LIBOR) and other rates litigation

NWM Plc and certain other members of NatWest Group, including NatWest Group plc, are defendants in a number of class actions and individual claims pending in the United States District Court for the Southern District of New York (SDNY) with respect to the setting of LIBOR and certain other benchmark interest rates. The complaints allege that the NWM Group defendants and other panel banks violated various federal laws, including the US commodities and antitrust laws, and state statutory and common law, as well as contracts, by manipulating LIBOR and prices of LIBOR-based derivatives in various markets through various means.

Several purported class actions relating to USD LIBOR, as well as more than two dozen non-class actions concerning USD LIBOR, are part of a co-ordinated proceeding in the SDNY. The class actions include claims on behalf of persons who purchased LIBOR-linked instruments from defendants, bonds issued by defendants, persons who transacted futures and options on exchanges, and lenders who made LIBOR-based loans. The coordinated proceeding is currently in the discovery phase. In March 2020, NatWest Group companies finalised a settlement resolving the class action on behalf of bondholder plaintiffs (those who held bonds issued by non-defendants on which interest was paid from 2007 to 2010 at a rate expressly tied to USD LIBOR). The amount of the settlement (which was covered by an existing provision) was paid into escrow pending court approval of the settlement.

The non-class claims filed in the SDNY include claims that the FDIC is asserting on behalf of certain failed US banks. In July 2017, the FDIC, on behalf of 39 of those failed US banks, commenced substantially similar claims against NWM Plc, NatWest Group plc and others in the High Court of Justice of England and Wales. The action alleges collusion with regard to the setting of USD LIBOR and that the defendants breached UK and European competition law, as well as asserting common law claims of fraud under US law. The defendant banks consented to a request by the FDIC for discontinuance of the claim in respect of 20 failed US banks, leaving 19 failed US banks as claimants. The trial is currently anticipated to take place in Q4 2025.

In addition to the USD LIBOR cases described above, there are two class actions relating to JPY LIBOR and Euroyen TIBOR that remain outstanding. The first class action, which relates to Euroyen TIBOR futures contracts, was dismissed by the SDNY in September 2020 on jurisdictional and other grounds, and that decision was affirmed by the US Court of Appeals in October 2022. The plaintiffs have petitioned the court for a rehearing of their appeal. The second class action, which relates to other derivatives allegedly tied to JPY LIBOR and Euroyen TIBOR, was dismissed by the SDNY in relation to NWM Plc and other NWM Group companies in September 2021. That dismissal may be the subject of a future appeal.

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Two other IBOR-related class actions, concerning alleged manipulation of Euribor and Pound Sterling LIBOR, were previously dismissed by the SDNY for various reasons. The plaintiffs' appeals in those two cases remain pending.

In June 2021, NWM Plc and the plaintiffs in the Swiss Franc LIBOR class action finalised a settlement resolving that case. The amount of that settlement has been paid into escrow pending final court approval of the settlement.

Settlements in the class action relating to the Singapore Interbank Offered Rate and Singapore Swap Offer Rate and the class action relating to the Australian Bank Bill Swap Reference Rate received court approval in 2022, such that the settlements became final and the amounts previously paid into escrow were released to the plaintiffs.

In August 2020, a complaint was filed in the United States District Court for the Northern District of California by several United States retail borrowers against the USD ICE LIBOR panel banks and their affiliates (including NatWest Group plc, NWM Plc, NWMSI and NWB Plc), alleging (i) that the very process of setting USD ICE LIBOR amounts to illegal price-fixing; and (ii) that banks in the United States have illegally agreed to use LIBOR as a component of price in variable retail loans. In September 2022, the district court dismissed the complaint, subject to re-pleading by the plaintiffs. The plaintiffs filed an amended complaint in October 2022, which the defendants are again seeking to have dismissed.

NWM Plc is also named as a defendant in a motion to certify a class action relating to LIBOR in the Tel Aviv District Court in Israel. NWM Plc filed a motion for cancellation of service outside the jurisdiction, which was granted in July 2020. The claimants appealed that decision and in November 2020 the appeal was refused and the claim dismissed by the Appellate Court. The claim could in future be recommenced depending on the outcome of an appeal to Israel's Supreme Court in respect of the dismissal of the substantive case against banks that had a presence in Israel.

FX litigation

NWM Plc, NWMSI and/or NatWest Group plc are defendants in several cases relating to NWM Plc's foreign exchange (FX) business. In 2015, NWM Plc paid US$255 million to settle the consolidated antitrust class action filed in the SDNY on behalf of persons who entered into over-the-counter FX transactions with defendants or who traded FX instruments on exchanges. In 2018, some members of the settlement class who opted out of that class action settlement filed their own non-class complaint in the SDNY asserting antitrust claims against NWM Plc, NWMSI and other banks.

In April 2019, some of the claimants in the opt-out case described above, as well as others, served proceedings in the High Court of Justice of England and Wales, asserting competition claims against NWM Plc and several other banks. The claim was transferred from the High Court of Justice of England and Wales in December 2021 and registered in the UK Competition Appeal Tribunal (CAT) in January 2022. In December 2022, NWM Plc reached an agreement in principle, subject to documentation, to resolve both the SDNY and CAT cases. The settlement amount to be paid by NWM Plc is covered by an existing provision.

An FX-related class action, on behalf of 'consumers and end-user businesses', is proceeding in the SDNY against NWM Plc and others. In March 2022, the SDNY denied the plaintiffs' motion for class certification. Plaintiffs sought an immediate appeal of the decision but the appellate court declined to review the decision. As a result, the case is proceeding on an individual, non-class basis, and the defendants are seeking summary judgment dismissing the individual claims.

In May 2019, a cartel class action was filed in the Federal Court of Australia against NWM Plc and four other banks on behalf of persons who bought or sold currency through FX spots or forwards between 1 January 2008 and 15 October 2013 with a total transaction value exceeding AUD $0.5 million. The claimant has alleged that the banks, including NWM Plc, contravened Australian competition law by sharing information, coordinating conduct, widening spreads and manipulating FX rates for certain currency pairs during this period. NatWest Group plc and NWMSI have been named in the action as 'other cartel participants', but are not respondents. The claim was served in June 2019 and NWM Plc filed its defence in March 2022.

In July and December 2019, two separate applications seeking opt-out collective proceedings orders were filed in the CAT against NatWest Group plc, NWM Plc and other banks. Both applications were brought on behalf of persons who, between 18 December 2007 and 31 January 2013, entered into a relevant FX spot or outright forward transaction in the EEA with a relevant financial institution or on an electronic communications network. In March 2022, the CAT declined to certify as collective proceedings either of the applications. In October 2022, the CAT granted permission for the applicants to appeal that decision to the Court of Appeal. Separately, the applicants have served judicial review proceedings, which are due to be heard together with the appeal to the Court of Appeal in April 2023.

Two motions to certify FX-related class actions were filed in the Tel Aviv District Court in Israel in September and October 2018, and were subsequently consolidated into one motion. The consolidated motion to certify, which names The Royal Bank of Scotland plc (now NWM Plc) and several other banks as defendants, was served on NWM Plc in May 2020. The applicants have sought the court's permission to amend their motions to certify the class actions. NWM Plc has filed a motion challenging the permission granted by the court for the applicants to serve the consolidated motion outside the Israeli jurisdiction. That NWM Plc motion remains pending.

In December 2021, a claim was issued in the Netherlands against NatWest Group plc, NWM Plc and NWM N.V. by Stichting FX Claims, seeking a declaration from the court that anti-competitive FX market conduct described in decisions of the European Commission (EC) of 16 May 2019 is unlawful, along with unspecified damages. The claimant has amended its claim to also refer to a December 2021 decision by the EC, which also described anti-competitive FX market conduct. The defendants are contesting the jurisdiction of the Dutch court.

Certain other foreign exchange transaction related claims have been or may be threatened. NWM Group cannot predict whether all or any of these claims will be pursued.

Government securities antitrust litigation

NWMSI and certain other US broker-dealers are defendants in a consolidated antitrust class action in the SDNY on behalf of persons who transacted in US Treasury securities or derivatives based on such instruments, including futures and options. The plaintiffs allege that the defendants rigged the US Treasury securities auction bidding process to deflate prices at which they bought such securities and colluded to increase the prices at which they sold such securities to the plaintiffs. In March 2022, the SDNY dismissed the complaint, without leave to re-plead. The plaintiffs are appealing the dismissal.

Class action antitrust claims commenced in March 2019 are pending in the SDNY against NWM Plc, NWMSI and other banks

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in respect of Euro-denominated bonds issued by European central banks (EGBs). The complaint alleges a conspiracy among dealers of EGBs to widen the bid-ask spreads they quoted to customers, thereby increasing the prices customers paid for the EGBs or decreasing the prices at which customers sold the bonds. The class consists of those who purchased or sold EGBs in the US between 2007 and 2012. In March 2022, the SDNY dismissed the claims against NWM Plc and NWMSI on the ground that the complaint's conspiracy allegations are insufficient. The plaintiffs have filed a motion for permission to file an amended complaint.

Swaps antitrust litigation

NWM Plc, NWMSI and NatWest Group plc, as well as a number of other interest rate swap dealers, are defendants in several cases pending in the SDNY alleging violations of the US antitrust laws in the market for interest rate swaps. There is a consolidated class action complaint on behalf of persons who entered into interest rate swaps with the defendants, as well as non-class action claims by three swap execution facilities (TeraExchange, Javelin, and trueEx). The plaintiffs allege that the swap execution facilities would have successfully established exchange-like trading of interest rate swaps if the defendants had not unlawfully conspired to prevent that from happening through boycotts and other means. Discovery in these cases is complete, and the plaintiffs' motion for class certification remains pending.

In June 2021, a class action antitrust complaint was filed against a number of credit default swap dealers in New Mexico federal court on behalf of persons who, from 2005 onwards, settled credit default swaps in the United States by reference to the ISDA credit default swap auction protocol. The complaint alleges that the defendants conspired to manipulate that benchmark through various means in violation of the antitrust laws and the Commodity Exchange Act. The defendants include several NatWest Group companies, including NatWest Group plc. Defendants are seeking dismissal.

Odd lot corporate bond trading antitrust litigation

In October 2021, the SDNY granted the defendants' motion to dismiss the class action antitrust complaint alleging that from August 2006 onwards various securities dealers, including NWMSI, conspired artificially to widen spreads for odd lots of corporate bonds bought or sold in the United States secondary market and to boycott electronic trading platforms that would have allegedly promoted pricing competition in the market for such bonds. The plaintiffs have filed an appeal.

Spoofing litigation

In December 2021, three substantially similar class actions complaints were filed in federal court in the United States against NWM Plc and NWMSI alleging Commodity Exchange Act and common law unjust enrichment claims arising from manipulative trading known as spoofing. The complaints refer to NWM Plc's December 2021 spoofing-related guilty plea (described below under "US investigations relating to fixed-income securities") and purport to assert claims on behalf of those who transacted in US Treasury securities and futures and options on US Treasury securities between 2008 and 2018. In July 2022, defendants filed a motion to dismiss these claims, which have been consolidated into one matter in the United States District Court for the Northern District of Illinois.

Madoff

NWM N.V. was named as a defendant in two actions filed by the trustee for the bankrupt estates of Bernard L. Madoff and Bernard L. Madoff Investment Securities LLC, in bankruptcy court in New York, which together seek to clawback more than US$298 million that NWM N.V. allegedly received from certain Madoff feeder funds and certain swap counterparties. The claims were previously dismissed, but as a result of an August 2021 decision by the US Court of Appeals, they will now proceed in the bankruptcy court, where they have now been consolidated into one action, subject to NWM N.V.'s legal and factual defences. In May 2022, NWM N.V. filed a motion to dismiss the amended complaint in the consolidated action.

EUA trading litigation

NWM Plc was a named defendant in civil proceedings before the High Court of Justice of England and Wales brought in 2015 by ten companies (all in liquidation) (the 'Liquidated Companies') and their respective liquidators (together, 'the Claimants'). The Liquidated Companies previously traded in European Union Allowances (EUAs) in 2009 and were alleged to be VAT defaulting traders within (or otherwise connected to) EUA supply chains of which NWM Plc was a party. In March 2020, the court held that NWM Plc and Mercuria Energy Europe Trading Limited ('Mercuria') were liable for dishonestly assisting and knowingly being a party to fraudulent trading during a seven business day period in 2009.

In October 2020, the High Court quantified total damages against NWM Plc and Mercuria at £45 million plus interest and costs, and permitted the defendants to appeal to the Court of Appeal. In May 2021 the Court of Appeal set aside the High Court's judgment and ordered that a retrial take place before a different High Court judge. The claimants have been denied permission by the Supreme Court to appeal that decision and the retrial will therefore proceed on a date to be scheduled. Mercuria has also been denied permission by the Supreme Court to appeal the High Court's finding that NWM Plc and Mercuria were both vicariously liable.

US Anti-Terrorism Act litigation

NWM N.V. and certain other financial institutions are defendants in several actions filed by a number of US nationals (or their estates, survivors, or heirs), most of whom are or were US military personnel, who were killed or injured in attacks in Iraq between 2003 and 2011. NWM Plc is also a defendant in some of these cases.

According to the plaintiffs' allegations, the defendants are liable for damages arising from the attacks because they allegedly conspired with Iran and certain Iranian banks to assist Iran in transferring money to Hezbollah and the Iraqi terror cells that committed the attacks, in violation of the US Anti-Terrorism Act, by agreeing to engage in 'stripping' of transactions initiated by the Iranian banks so that the Iranian nexus to the transactions would not be detected.

The first of these actions was filed in the United States District Court for the Eastern District of New York in November 2014. In September 2019, the district court dismissed the case, finding that the claims were deficient for several reasons, including lack of sufficient allegations as to the alleged conspiracy and causation. On 5 January 2023, the US Court of Appeals affirmed the district court's dismissal of this case. Another action, filed in the SDNY in 2017, was dismissed by the SDNY in March 2019 on similar grounds as the first case, but remains subject to appeal to the US Court of Appeals. Other follow-on actions that are substantially similar to the two that have now been dismissed are pending in the same courts.

1MDB litigation

A Malaysian court claim was served in Switzerland in November 2022 by 1MDB, a Sovereign Wealth Fund, in which Coutts & Co Ltd was named, along with six others, as a defendant in respect of losses allegedly incurred by 1MDB. It is claimed that Coutts & Co Ltd is liable as a constructive

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trustee for having dishonestly assisted the directors of 1MDB in the breach of their fiduciary duties by failing (amongst other alleged claims) to undertake due diligence in relation to a customer of Coutts & Co Ltd, through which funds totalling c.US$1 billion were received and paid out between 2009 and 2011. The claimant seeks the return of that amount plus interest. Coutts & Co Ltd filed an application in January 2023 challenging the validity of service and the Malaysian court's jurisdiction to hear the claim. Coutts & Co Ltd is a company registered in Switzerland and is in wind-down following the announced sale of its business assets in 2015.

Regulatory matters (including investigations)

NWM Group's financial condition can be affected by the actions of various governmental and regulatory authorities in the UK, the US, the EU and elsewhere. NWM Group companies have engaged, and will continue to engage, in discussions with relevant governmental and regulatory authorities, including in the UK, the US, the EU and elsewhere, on an ongoing and regular basis, and in response to informal and formal inquiries or investigations, regarding operational, systems and control evaluations and issues including those related to compliance with applicable laws and regulations, including consumer protection, investment advice, business conduct, competition/anti-trust, VAT recovery, anti-bribery, anti-money laundering and sanctions regimes.

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 NWM Group, remediation of systems and controls, public or private censure, restriction of NWM 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 NWM Group, its business, authorisations and licences, reputation, results of operations or the price of securities issued by it, or lead to material additional provisions being taken.

NWM Group is co-operating fully with the matters described below.

US investigations relating to fixed-income securities

In December 2021, NWM Plc pled guilty in the United States District Court for the District of Connecticut to one count of wire fraud and one count of securities fraud in connection with historical spoofing conduct by former employees in US Treasuries markets between January 2008 and May 2014 and, separately, during approximately three months in 2018. The 2018 trading occurred during the term of a non-prosecution agreement (NPA) between NWMSI and the United States Attorney's Office for the District of Connecticut (USAO CT), under which non-prosecution was conditioned on NWMSI and affiliated companies not engaging in criminal conduct during the term of the NPA. The relevant trading in 2018 was conducted by two NWM traders in Singapore and breached that NPA. The plea agreement reached with the US Department of Justice and the USAO CT resolved both the spoofing conduct and the breach of the NPA.

As required by the resolution and sentence imposed by the court, NWM Plc is subject to a three-year period of probation. The plea agreement also imposes an independent corporate monitor. In addition, NWM Plc has committed to compliance programme reviews and improvements and agreed to reporting and co-operation obligations.

Other material adverse collateral consequences may occur as a result of this matter, as further described in the Risk Factors relating to legal, regulatory and governmental actions and investigations set out on pages 191 to 192.

26 Analysis of changes in financing during the year

	NWM Group					
	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	3,250	3,063	2,427	2,858	3,857	5,181
Redemption of subordinated liabilities			(481)	(316)		
Interest on subordinated liabilities			(92)	(62)		
Issue of MRELs					986	—
Maturity/redemption of MRELs					(1,862)	(1,082)
Interest on MRELs					(151)	(152)
Net cash flows from financing activities	—	—	(573)	(378)	(1,027)	(1,234)
Effects of foreign exchange	—	—	154	(78)	304	(115)
Changes in fair value of subordinated liabilities and MRELs			(153)	(61)	(98)	(119)
Interest on subordinated liabilities and MRELs			90	60	137	144
Loss on redemption of own debt			74	26	—	—
Redemption of preference shares	—	187				
Other	—	—	(34)	—	—	—
At 31 December	3,250	3,250	1,985	2,427	3,173	3,857

	NWM Plc					
	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	3,250	3,063	1,879	2,269	3,857	5,181
Redemption of subordinated liabilities			(277)	(315)		
Interest on subordinated liabilities			(73)	(24)		
Issue of MRELs					986	—
Maturity/redemption of MRELs					(1,862)	(1,082)
Interest on MRELs					(151)	(152)
Net cash flows from financing activities	—	—	(350)	(339)	(1,027)	(1,234)
Effects of foreign exchange	—	—	126	(71)	304	(115)
Changes in fair value of subordinated liabilities and MRELs			(71)	(28)	(98)	(119)
Interest on subordinated liabilities and MRELs			73	22	137	144
Loss on redemption of own debt			4	26	—	—
Redemption of preference shares	—	187				
At 31 December	3,250	3,250	1,661	1,879	3,173	3,857

(1) Subordinated liabilities includes intercompany subordinated liabilities.
(2) MRELs balances are included in amounts due to holding company and fellow subsidiaries.

27 Analysis of cash and cash equivalents

In the cash flow statement, cash and cash equivalents comprises cash, loans to banks and treasury bills 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.

	NWM Group		NWM Plc	
	2022 £m	2021 £m	2022 £m	2021 £m
At 1 January	25,250	26,380	19,214	21,285
Net increase/(decrease) in cash and cash equivalents	1,578	(1,130)	1,709	(2,071)
At 31 December	26,828	25,250	20,923	19,214
Comprising:				
Cash and balances at central banks	17,007	16,645	13,467	12,294
Trading assets	8,318	7,130	5,272	4,711
Other financial assets	19	16	19	16
Loans to banks including intragroup balances(1)	1,484	1,459	2,165	2,193
Cash and cash equivalents	26,828	25,250	20,923	19,214

(1) NWM Group includes cash collateral posted with bank counterparties in respect of derivative liabilities of £4,661 million (2021 - £4,286 million), and NWM Plc includes cash collateral posted with bank counterparties in respect of derivative liabilities of £3,934 million (2021 - £3,561 million).

Certain members of NatWest Group are required by law or regulation to maintain balances with the central banks in the jurisdictions in which they operate. NatWest Markets N.V. had mandatory reserve deposits with De Nederlandsche Bank N.V of €64 million (2021 - €60 million).

28 Directors' and key management remuneration

Directors' remuneration	**2022 £000**	2021 £000
Non-executive directors emoluments	**315**	394
Chairman and executive directors emoluments	**2,481**	2,268
	2,796	2,662
Amounts receivable under LTIPs, share option and other plans	**249**	271
Total	**3,045**	2,933

The total emoluments and amounts receivable under long-term incentive plans and share option plans of the highest paid director were £1,946,000 (2021 - £1,662,000).

The executive directors may participate in NatWest Group's long-term incentive plans, executive share option and share save schemes. Where directors of the Bank are also directors of NatWest Group, details of their share interests can be found in the 2022 Annual Report and Accounts of the NatWest Group, in line with regulations applying to NatWest Group as a premium listed company.

Compensation of key management

The aggregate remuneration of directors and other members of key management during the year was as follows:

	2022 £000	2021 £000
Short term benefits	**14,532**	14,756
Post employment benefits	**557**	573
Share-based payments	**4,729**	3,892
	19,818	19,221

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.

29 Transactions with directors and key management

At 31 December 2022, amounts outstanding in relation to transactions, arrangements and agreements entered into by authorised institutions in NatWest Group, as defined in UK legislation, were £350,982 in respect of loans to one director of the company at any time during the financial period (2021 - £493,712).

For the purposes of IAS 24 Related party disclosures, key management comprises directors of the company and members of the 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	**351**	494
Customer deposits	**2,501**	1,743

Key management has banking relationships with NatWest Group entities which are entered into in the normal course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with other persons of a similar standing or, where applicable, with other employees. These transactions did not involve more than the normal risk of repayment or present other unfavourable features. Key management had no reportable transactions or balances with the holding company.

30 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%.

NWM Group enters into transactions with many of these bodies. Transactions include the payment of: taxes principally UK corporation tax (refer to Note 7) and value added tax; national insurance contributions; local authority rates; and regulatory fees and levy; together with banking transactions such as loans and deposits undertaken in the normal course of banker-customer relationships.

Bank of England facilities

NWM Group may participate in a number of schemes operated by the Bank of England in the normal course of business.

Members of NWM Group that are UK authorised institutions are required to maintain non-interest bearing (cash ratio) deposits with the Bank of England amounting to 0.403% of their average eligible liabilities in excess of £600 million. They also have access to Bank of England reserve accounts: sterling current accounts that earn interest at the Bank of England base rate.

Holding company and fellow subsidiaries

Other related parties

(a) In their roles as providers of finance, NWM Group companies provide development and other types of capital support to businesses.
(b) To further strategic partnerships, NWM Group may seek to invest in third parties or allow third parties to hold a minority interest in a subsidiary of NWM Group. We disclose as related parties where stakes of 10 per cent or more are held. Ongoing business transactions with these entities are on normal commercial terms.
(c) In accordance with IAS 24, transactions, or balances between NWM Group entities that have been eliminated on consolidation are not reported.
(d) NWM Group is recharged from other NatWest Group entities, mainly NWB Plc which provides the majority of shared services (including technology) and operational processes.
(e) The primary financial statements include transactions and balances with its subsidiaries which have been further disclosed in the relevant parent company notes.

Transactions NWM Group enters with its holding company and fellow subsidiaries also meet the definition of related party transactions. The table below discloses transactions between NWM Group and fellow subsidiaries of NatWest Group.

	2022 £m	2021 £m
Interest receivable	**12**	14
Interest payable	**(178)**	(169)
Fees and commissions receivable	**85**	16
Fees and commissions payable	**(49)**	(1)
Other administrative expenses (1)	**(575)**	(466)
	(705)	(606)

(1) Includes internal service recharges of £552m

Amounts due from/to holding company and fellow subsidiaries are shown in Note 9.

NWM N.V. loan purchases via NWM Plc

In 2022 NWM N.V. continued purchasing loans from market participants via NWM Plc onto the banking book as part of a larger initiative to increase the size and diversity of its banking book portfolio. As at 31 December 2022, the balance of these loans purchased from market participants with assistance from NWM Plc amounted to €208 million (31 December 2021 - €24 million).

31 Ultimate holding company

NWM Group's ultimate holding company is NatWest Group plc which is incorporated in the United Kingdom and registered in Scotland.

As at 31 December 2022, NatWest Group plc heads the largest group in which NWM Group 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 NatWest Group plc and was therefore the NWM Group's ultimate controlling party.

32 Post balance sheet events

On 13 January 2023, NWM Plc issued a total of €1.5 billion of notes under the EMTN programme in benchmark transactions maturing in 2026 and 2028. There has been no adjustment to the 31 December 2022 statutory financial statements.

Other than as disclosed in the accounts, 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.

33 Related undertakings

Legal entities and activities at 31 December 2022

In accordance with the Companies Act 2006, NWM Plc's related undertakings and the accounting treatment for each are listed below. All undertakings are wholly owned by NWM Plc or subsidiaries of NWM Plc and are consolidated by reason of contractual control (Section 1162(2) CA 2006), unless otherwise indicated. NWM Group interest refers to ordinary shares of equal values and voting rights unless further analysis is provided in the notes. Activities are classified in accordance with Annex I to the Capital Requirements Directive ("CRD V") and the definitions in Article 4 of the UK Capital Requirements Regulation.

The following table details active related undertakings incorporated in the UK which are 100% owned by NWM Group and fully consolidated for accounting purposes

Entity name	Activity	Regulatory treatment	Notes
280 Bishopsgate Finance Ltd	INV	FC	(1)
Care Homes 1 Ltd	BF	FC	(1)
Care Homes 2 Ltd	BF	FC	(1)
Care Homes 3 Ltd	BF	FC	(1)
Care Homes Holdings Ltd	BF	FC	(1)
Churchill Management Ltd	BF	FC	(1)
Desertlands Entertainment Ltd	BF	FC	(1)
Distant Planet Productions Ltd	BF	FC	(1)
Lombard Corporate Finance (6) Ltd	BF	FC	(1)
Lombard Corporate Finance (7) Ltd	BF	FC	(1)
Lombard Corporate Finance (11) Ltd	BF	FC	(1)
NatWest Markets Secretarial Services Ltd	SC	FC	(1)
NatWest Markets Secured Funding LLP	BF	FC	(9)
P of A Productions Ltd	BF	FC	(1)
Patalex Productions Ltd	BF	FC	(1)
Patalex V Productions Ltd	BF	FC	(1)
Price Productions Ltd	BF	FC	(1)
Priority Sites Ltd	INV	DE	(1)
Property Venture Partners Ltd	INV	FC	(2)
R.B. Equipment Leasing Ltd	BF	FC	(1)
R.B. Leasing (April) Ltd	BF	FC	(1)
R.B. Leasing Company Ltd	BF	FC	(2)
R.B.S. Special Investments Ltd	BF	FC	(1)
RB Investments 3 Ltd	OTH	FC	(1)
RBOS (UK) Ltd	BF	FC	(1)
RBS Management Services (UK) Ltd	SC	FC	(1)
RBS Mezzanine Ltd	BF	FC	(2)
RBS Property Developments Ltd	INV	FC	(23)
RBS Property Ventures Investments Ltd	BF	FC	(2)
RBSM Capital Ltd	BF	FC	(2)
RoboScot Equity Ltd	BF	FC	(2)
Royal Bank Investments Ltd	BF	FC	(2)
Royal Bank Ventures Investments Ltd	BF	FC	(2)
West Register (Hotels Number 3) Ltd	INV	DE	(2)
West Register (Property Investments) Ltd	BF	DE	(2)
West Register (Realisations) Ltd	INV	DE	(2)
Winchcombe Finance Ltd	BF	FC	(1)

The following table details active related undertakings incorporated outside the UK which are 100% owned by NWM Group and fully consolidated for accounting purposes

Entity name	Activity	Regulatory treatment	Notes
Alcover A.G.	BF	DE	(19)
Alternative Investment Fund B.V.	BF	FC	(6)
Candlelight Acquisition LLC	BF	FC	(3)
Coutts & Co Ltd	CI	FC	(18)
Coutts General Partner (Cayman) V Ltd	BF	FC	(16)
Financial Asset Securities Corp.	BF	FC	(3)
KEB Investors, L.P.	BF	FC	(15)
Maja Finance S.R.L.	BF	FC	(14)
NatWest Markets Group Holdings Corporation	BF	FC	(3)
NatWest Markets N.V.	CI	FC	(6)
NatWest Markets Securities Inc.	INV	FC	(3)
NatWest Markets Securities Japan Ltd	INV	FC	(24)
NatWest Services Inc.	SC	FC	(3)
R.B. Leasing BDA One Ltd	BF	FC	(21)
Random Properties Acquisition Corp. III	INV	FC	(3)
RBS Acceptance Inc.	BF	FC	(3)
RBS Americas Property Corp.	SC	FC	(3)
RBS Assessoria Ltd	SC	FC	(12)
RBS Commercial Funding Inc.	BF	FC	(3)
RBS Employment (Guernsey) Ltd	SC	FC	(17)
RBS Financial Products Inc.	BF	FC	(3)
RBS Group (Australia) Pty Ltd	BF	FC	(10)
RBS Holdings III (Australia) Pty Ltd	BF	FC	(10)
RBS Holdings N.V.	BF	FC	(6)
RBS Holdings USA Inc.	BF	FC	(3)
RBS Hollandsche N.V.	BF	FC	(6)
RBS Investments (Ireland) Ltd	BF	FC	(4)
RBS Netherlands Holdings B.V.	BF	FC	(6)
RBS Nominees (Hong Kong) Ltd	BF	FC	(7)
RBS Nominees (Ireland) Ltd	BF	FC	(4)
RBS Nominees (Netherlands) B.V.	BF	FC	(6)

The following table details active related undertakings incorporated in the UK where NWM Group ownership is less than 100%

Entity name	Activity	Accounting treatment	Regulatory treatment	Group %	Notes
NatWest Markets Secured Funding (LM) Ltd	BF	FC	PC	20	(9)
RBS Sempra Commodities LLP	BF	FC	FC	51	(2)

33 Related undertakings continued

The following table details active related undertakings incorporated outside the UK where NWM Group ownership is less than 100%

Entity name	Activity	Accounting treatment	Regulatory treatment	Group %	Notes
Eris Finance S.R.L.	BF	IA	PC	45	(14)
Herge Holding B.V.	BF	IA	PC	63	(20)
Lunar Funding VIII Ltd	BF	FC	FC	0	(5)
Lunar Luxembourg SA	BF	FC	DE	0	(22)
Lunar Luxembourg Series 2019- 04	BF	FC	DE	0	(22)
Lunar Luxembourg Series 2019- 05	BF	FC	DE	0	(22)
Lunar Luxembourg Series 2019- 06	BF	FC	DE	0	(22)
Lunar Luxembourg Series 2020- 01	BF	FC	DE	0	(22)
Lunar Luxembourg Series 2020- 02	BF	FC	DE	0	(22)
Lunar Luxembourg Series 2022-01	BF	FC	DE	0	(22)
Natwest Secured Funding DAC	BF	FC	FC	0	(13)
Sempra Energy Trading LLC	BF	FC	FC	51	(3)
Solar Funding II Ltd	BF	FC	DE	0	(25)
Thames Asset Global Securitization No.1 Inc.	BF	FC	FC	0	(11)

The following table details related undertakings that are not active (actively being dissolved)

Entity name	Accounting treatment	Regulatory treatment	Group %	Notes
AA Merchant Banking B.V.	FC	FC	100	(6)
Marigold Nominees Ltd	FC	FC	100	(1)
Priority Sites Investments Ltd	FC	DE	100	(1)

The following table details related undertakings that are dormant

Entity name	Accounting treatment	Regulatory treatment	Group %	Notes
Atlas Nominees Ltd	FC	FC	100	(7)
Buchanan Holdings Ltd	FC	FC	100	(1)
Mulcaster Street Nominees Ltd	FC	FC	100	(8)
N.C. Head Office Nominees Ltd	FC	FC	100	(2)
Project & Export Finance (Nominees) Ltd	FC	FC	100	(1)
RBOS Nominees Ltd	FC	FC	100	(1)
Sixty Seven Nominees Ltd	FC	FC	100	(1)
The Royal Bank of Scotland (1727) Ltd	FC	FC	100	(2)

The following table details the overseas branches of NWM Group

Subsidiary	Geographic location
NatWest Markets N.V.	France, Germany, Italy Republic of Ireland, Sweden United Kingdom
NatWest Markets Plc	Germany, Hong Kong, India, Japan, Singapore, Turkey, United Arab Emirates

33 Related undertakings continued

Key:
BF Banking and financial institution
CI Credit institution
INV Investment (shares or property) holding company
SC Service company
TR Trustee
OTH Other
DE Deconsolidated
FC Full consolidation
PC Pro-rata consolidation
AHC Associate held at cost
EAJV Equity accounting – joint venture
IA Investment accounting
NC Not consolidated

Notes	Registered addresses	Country of incorporation
(1)	250 Bishopsgate, London, EC2M 4AA, England	UK
(2)	RBS Gogarburn, 175 Glasgow Road, Edinburgh, EH12 1HQ, Scotland	UK
(3)	251, Little Falls Drive, Wilmington, DE, 19808	USA
(4)	Ulster Bank Head Office, Block B Central Park, Leopardstown, Dublin 18, D18 N153	RoI
(5)	Grand Pavilion Commercial Centre, 802 West Bay Road, P.O. Box 31119,	Cayman Islands
(6)	Claude Debussylaan 94, Amsterdam, 1082 MD, Netherlands	Netherlands
(7)	Level 54, Hopewell Centre, 183 Queen's Road East	Hong Kong
(8)	Royal Bank House, 71 Bath Street, St Helier, JE4 8PJ, Jersey	Jersey
(9)	1 Bartholomew Lane, London EC2N 2AX, England	UK
(10)	Ashurst L26, 181 William Street, Melbourne, VIC, 3000	Australia
(11)	114 West 47th Street, New York, 10036	USA
(12)	254, 13th Floor, Rua Boa Vista, Sao Paulo, 01014-907	Brazil
(13)	5 Harbourmaster Place, Dublin 1, D01 E7E8	RoI
(14)	Via Vittorio Alfieri 1, Conegliano TV, IT-TN 31015	Italy
(15)	Clarendon House, Two Church Street, Suite 104, Reid Street, Hamilton, HM 11	Bermuda
(16)	c/o Maples Corporate Services Ltd, PO Box 309, 121 South Church Street, George Town, Grand Cayman, KY1-1104	Cayman Islands
(17)	Regency Court, Glategny Esplanade, St Peter Port, GY1 3AP	Guernsey
(18)	Schuetzengassse 4, CH-8001 Zurich, Switzerland	Switzerland
(19)	Tirolerweg 8, Zug, CH- 6300	Switzerland
(20)	Verlengde Poolseweg 16, Breda, 4818CL, Netherlands	Netherlands
(21)	Victoria Place, 5th Floor, 31 Victoria Street, Hamilton, HM 10	Bermuda
(22)	46A Avenue J.F. Kennedy 1855	Luxembourg
(23)	36 St Andrew Square, Edinburgh, Scotland, EH2 2YB	UK
(24)	5/F Manulife Place 348 Kwun Tong Road, Kowloon	Hong Kong
(25)	IFC5 St Helier, JE1 1ST	Jersey

Non-IFRS measures

NWM Group prepares its financial statements in accordance with generally accepted accounting principles (GAAP). This document contains a number of adjusted or alternative performance measures, also known as non-GAAP or non-IFRS performance measures. These measures are adjusted for certain items which management believe are not representative of the underlying performance of the business and which distort period-on-period comparison. These non-IFRS measures are not measures within the scope of IFRS and are not a substitute for IFRS measures. These measures include:

- Management analysis of operating expenses shows litigation and conduct costs on a separate line on page 30. These amounts are included within staff costs and other administrative expenses in the statutory analysis. Other operating expenses excludes litigation and conduct costs which are more volatile and may distort comparisons with prior periods.
- Funded assets are defined as total assets less derivative assets. This measure allows review of balance sheet trends exclusive of the volatility associated with derivative fair values.
- Management view of income by business including shared revenue and before asset disposals/strategic risk reduction and own credit adjustments. This measure is used to show underlying income generation in NatWest Markets excluding the impact of disposal losses and own credit adjustments.
- Revenue share refers to income generated by NatWest Markets products from customers that have their primary relationship with other NatWest Group subsidiaries, a proportion of which is shared between NatWest Markets and those subsidiaries.
- Asset disposals/strategic risk reduction includes the costs of exiting positions, which includes changes in carrying value to align to the expected exit valuation, and the impact of risk reduction transactions entered into as part of the optimisation of the entity's capital usage.
- Own credit adjustments are applied to positions where it is believed that the counterparties would consider NWM Group's creditworthiness when pricing trades. The fair value of certain issued debt securities, including structured notes, is adjusted to reflect the changes in own credit spreads and the resulting gain or loss recognised in income.

Operating expenses analysis
Non-statutory analysis

	Year ended					
	31 December 2022			31 December 2021		
Operating expenses	**Litigation and conduct costs**	**Other operating expenses**	**Statutory operating expenses**	Litigation and conduct costs	Other operating expenses	Statutory operating expenses
Staff expenses	**5**	**395**	**400**		498	498
Premises and equipment	**—**	**60**	**60**		110	110
Depreciation and amortisation	**—**	**16**	**16**		20	20
Other administrative expenses	**75**	**577**	**652**	(17)	539	522
Total	**80**	**1,048**	**1,128**	(17)	1,167	1,150

Risk Factors

Principal Risks and Uncertainties

Set out below are certain risk factors that could adversely affect NWM Group's future results, its financial condition and/or prospects and cause them to be materially different from what is forecast or expected, and directly or indirectly impact the value of its securities. These risk factors are broadly categorised and should be read in conjunction with other sections of this annual report, including the forward-looking statements section, the strategic report and the risk and capital management section. They should not be regarded as a complete and comprehensive statement of all potential risks and uncertainties facing NWM Group.

Economic and political risk

NWM Group, its customers and its counterparties face continued economic and political risks and uncertainties in the UK and global markets, including as a result of high inflation and rising interest rates, supply chain disruption, and the Russian invasion of Ukraine.

NWM Group is affected by global economic and market conditions. Uncertain and volatile economic conditions can create a challenging operating environment for financial services companies such as NWM Group. The outlook for the global economy has many uncertainties including: falling economic activity, high inflation, rising interest rates, elevated energy prices and higher cost-of-living, supply chain disruption, changes to monetary and fiscal policy, and the impact of armed conflict (in particular the Russian invasion of Ukraine).

These conditions, including the current cost-of-living crisis, could be worsened by a number of factors including: instability in the global financial system, market volatility and change, fluctuations in the value of the pound sterling, new or extended economic sanctions, the ongoing effects of the COVID-19 pandemic, economic volatility in emerging markets, volatility in commodity prices or concerns regarding sovereign debt or sovereign credit ratings. Economic conditions may also be affected by the changing demographics in the markets that NWM Group serves, increasing social and other inequalities, or rapid changes to the economic environment due to the adoption of technology, automation and artificial intelligence, or due to climate change, environmental degradation, biodiversity loss and/or other sustainability risks.

NWM Group is also exposed to risks arising out of geopolitical events or political developments, such as exchange controls and other measures taken by sovereign governments that may hinder economic or financial activity levels. Unfavourable political, military or diplomatic events, increasing geopolitical tensions leading to armed conflict, protectionist policies or trade barriers, secession movements or the exit of other member states from the EU, changes to monetary and fiscal policy, new and widespread public health crises (including any epidemics or pandemics), state and privately sponsored cyber and terrorist acts or threats, and the responses to each of the above economic, political or other scenarios by various governments and markets, could negatively affect the business and performance of NWM Group, including as a result of the indirect impact on regional or global trade and/or NWM Group's customers and counterparties.

The UK experienced significant political uncertainty in 2022 that may persist into the foreseeable future. This could lead to a loss of confidence in the UK, that could in turn, negatively impact companies operating in the UK. NatWest Group also faces political uncertainty in Scotland as a result of a possible second Scottish independence referendum. Independence may adversely affect NWM Group both in relation to NatWest Group entities incorporated in Scotland and in other jurisdictions. Any changes to Scotland's relationship with the UK or the EU may adversely affect the environment in which NatWest Group and its subsidiaries operate and may require further changes to NatWest Group (including NWM Group's structure), independently or in conjunction with other mandatory or strategic structural and organisational changes, any of which could adversely affect NWM Group.

The COVID-19 pandemic prompted many changes that may prove to be permanent shifts in customer behaviour and economic activity, such as changes in spending patterns and significantly more people working in a more flexible manner. These changes may affect asset prices, the economic environment, and NatWest Group's customers' and counterparties' financial performance and needs. In response to the COVID-19 pandemic, central banks, governments, regulators, and legislatures in the UK and elsewhere offered unprecedented levels of support and various schemes to assist businesses and individuals, many of which have since been curtailed or withdrawn. However, risks remain as to whether these loans will be repaid.

The value of NWM Group's own and other securities may be materially affected by market risk, including as a result of market fluctuations. Market volatility, illiquid market conditions and disruptions in the credit markets may make it extremely difficult to value certain of NWM Group's own and other securities, particularly during periods of market displacement. This could cause a decline in the value of NWM Group's own and other securities, which may have an adverse effect on NWM Group's results of operations in future periods or inaccurate carrying values for certain financial instruments. Similarly, NWM Group trades a considerable amount of financial instruments (including derivatives) and volatile market conditions could result in a significant decline in NWM Group's net trading income or result in a trading loss.

In addition, financial markets are susceptible to severe events evidenced by rapid depreciation in asset values, which may be accompanied by a reduction in asset liquidity. Under these conditions, hedging and other risk management strategies may not be as effective at mitigating losses as they would be under more normal market conditions. Moreover, under these conditions, market participants are particularly exposed to trading strategies employed by many market participants simultaneously and on a large scale, increasing NWM Group's counterparty risk. NWM Group's risk management and monitoring processes seek to quantify and mitigate NWM Group's exposure to extreme market moves. However, market events have historically been difficult to predict, and NWM Group, its customers and its counterparties could realise significant losses if extreme market events were to occur.

Any of the above may adversely affect NWM Group.

Fluctuations in currency exchange rates may adversely affect NWM Group's results and financial condition.

Decisions of central banks (including the Bank of England, the European Central Bank and the US Federal Reserve) and political or market events which are outside NWM Group's control, may lead to sharp and sudden fluctuations in currency exchange rates.

Although NWM Group is principally a UK focused banking group, it is subject to structural foreign exchange risk from capital deployed in NWM Group's foreign subsidiaries and branches. NWM Group also issues instruments in non-sterling currencies that assist in meeting NWM Group's MREL. NWM Group conducts banking activity in non-sterling currencies (for example, loans, deposits and dealing activity) which affect its revenue and also use service providers based outside of the United Kingdom for certain services and as a result certain operating expenses are sensitive to fluctuations in currency exchange rates.

NWM Group maintains policies and procedures designed to manage the impact of exposures to fluctuations in currency exchange rates. Nevertheless, changes in currency exchange rates, particularly in the sterling-US dollar and euro-sterling rates, may adversely affect, for example, the value of assets, liabilities (including the total amount of MREL-eligible instruments), income and expenses, RWAs and hence the future results, financial condition and/or prospects of NWM Group.

Changes in interest rates have affected, and will continue to affect, NWM Group's business and results.

NWM Group's performance is affected by changes in interest rates. Benchmark overnight interest rates, such as the UK base rate, increased in 2022 and are expected to continue to rise in the short-term accompanied by quantitative tightening. However, forward rates at 31 December 2022 suggested interest rates may fall again in the medium-term.

Stable interest rates support predictable income flow and less volatility in asset and liability valuations, although persistently low and negative interest rates, such as those experienced during the COVID-19 pandemic, are generally expected to be less favourable for banks. For NWM Group, persistently low interest rates may, for example, reduce the yield on its equity structural hedge.

Volatility in interest rates may also result in unexpected outcomes both for interest income and asset and liability valuations which may adversely affect NWM Group. For example, unexpected movements in spreads between key benchmark rates such as sovereign and swap rates in turn affect liquidity portfolio valuations. Sharp unexpected rises in rates may also have negative impacts on some asset and derivative valuations, for example. Finally, changes in interest rates and inflation may adversely affect the income from NWM Group's dealing activity. Any of the above could adversely affect NWM Group's future results, financial condition and/or prospects.

Movements in interest rates also influence and reflect the macro-economic situation more broadly, affecting factors such as business and consumer confidence, property prices, default rates on loans and other indicators that may indirectly affect NWM Group and may adversely affect its future results, financial condition and/or prospects.

Continuing uncertainty regarding the effects and extent of the UK's post Brexit divergence from EU laws and regulation, and NWM Group's post Brexit EU operating model may adversely affect NWM Group and its operating environment.

The UK ceased to be a member of the EU and the European Economic Area ('EEA') on 31 January 2020 ('Brexit') and the 2020 EU-UK Trade and Cooperation Agreement ('TCA') ended the transition period on 31 December 2020. The TCA was accompanied by a Joint Declaration on financial services, which sets out an intention for the EU and UK to cooperate on matters of financial regulation and to agree a Memorandum of Understanding ('MoU'), which remains unsigned. Certain aspects of the services provided by NatWest Group are therefore subject to obtaining local licences or are subject to individual equivalence decisions (temporary or otherwise) by relevant regulators. The EU's equivalence regime does not cover most lending and deposit taking, and determinations in respect of non-EU countries have not, to date, covered the provision of most financial investment services. In addition, equivalence determinations do not guarantee permanent access rights and can be withdrawn with short notice. In late 2021 the European Commission proposed legislation that would require non-EU firms to establish a branch or subsidiary in the EU before providing 'banking services' in the EU. If these proposals become law all 'banking services' will be licensable activities in each EU member state and member states will not be permitted to offer bilateral permissions to financial institutions outside the EU allowing them to provide 'banking services' in the EU. Uncertainty remains as to whether 'banking services' will also include investment products. Furthermore, failure to extend existing equivalence determinations, exemptions and derogations in relation to regulations such as margin and clearing regulations or capital regulations, may have a negative impact on customer engagement and/or may significantly negatively impact the operating model and business operations of NWM Group.

NatWest Group continues to evaluate its post Brexit EU operating model, making adaptations as necessary. NatWest Group also continues to assess where NatWest Group companies can obtain bilateral regulatory permissions to facilitate intragroup transactions and/or to permit business to continue from its UK entities, transferring what cannot be continued to be rendered from the UK to an EEA subsidiary or branch, where permitted or commercially reasonable to do so. Where these regulatory permissions are temporary or are withdrawn, a different approach may need to be taken or may result in a change in operating model or some business being ceased. Not all NatWest Group entities have applied for bilateral regulatory permissions and instead conduct EEA business through an EEA licensed subsidiary or branch. Certain permissions are required in order to maintain the ability to clear euro payments. Other permissions, including the ability to have two intermediate EU parent undertakings, may need to be obtained, and structural changes may need to be made, to allow NWM Group to continue to serve EEA customers from both the ring-fenced and non-ring-fenced banking entities. Any failure to obtain such permissions or make such structural changes, in a timely manner, or at all, could adversely affect NWM Group and the EEA customers it serves. As described in *'NWM Group has been in a period of significant structural and other change, including as a result of NatWest Group's purpose-led strategy and NatWest Group's recent creation of its C&I business segment (of which NWM Group forms part) and may continue to be subject to significant* structural and other change', NWM Group expects that NatWest Group's Western European corporate portfolio (principally consisting of term funding and revolving credit facilities) ('Transfer Business') may be: (i) transferred from the ring-fenced subgroup of NatWest Group to NWM Group, and/or (ii) transferred to the ring-fenced subgroup of NatWest Group from NWM Group, subject to regulatory and customer requirements. Furthermore, transferring business to an EEA based subsidiary is a complex exercise and involves legal, regulatory and execution risks, and could result in a loss of business and/or customers or higher than anticipated costs. The changes to NatWest Group's and NWM Group's operating model have been costly and failure to receive the requested regulatory permissions and/or further changes to its business operations, product offering and customer engagement could result in further costs and/or regulatory sanction. Any of the above could, in turn, negatively impact NWM Group.

The long-term effects of Brexit and the uncertainty regarding NWM Group's EU operating model may adversely affect NWM Group and its customers and counterparties who are themselves dependent on trading with the EU or personnel from the EU. The long-term effects of Brexit may also be exacerbated by wider UK and global macro-economic trends and events.

Uncertainties remain as to the extent to which EU/EEA laws will diverge from UK law. For example, bank regulation in the UK may diverge from European bank regulation if the Financial Services and Markets Bill ('FSM') is enacted into law. The UK government has also proposed legislation to introduce automatic 'sunset' clauses for retained EU law by the end of 2023 (the Retained EU Law (Revocation and Reform) Bill 2022), which if enacted could potentially cause market disruption and require additional resources to manage the legal and regulatory consequences. NWM Group may not be able to respond to these changes effectively, in a timely manner, or at all. The actions taken by regulators in response to any new or revised bank regulation and other rules affecting financial services, may adversely affect NWM Group, including its business, non-UK operations, group structure, compliance costs, intragroup arrangements and capital requirements.

HM Treasury (or UKGI on its behalf) could exercise a significant degree of influence over NatWest Group and NWM Group is controlled by NatWest Group.

In its March 2021 Budget, the UK Government announced its intention to carry out a programme of sales of NatWest Group plc ordinary shares with the objective of selling all of its remaining shares in NatWest Group plc by 2026. NatWest Group plc has:(i) carried out directed buybacks of NatWest Group plc ordinary shares from UK Government Investments Limited ('UKGI') in March 2021 and in March 2022, (ii) carried out sales of NatWest Group plc shares by UKGI by accelerated bookbuild in May 2021, and (iii) made purchases under NatWest Group plc's directed and on-market buyback programmes announced in July 2021 and in March 2022. As at 17 January 2023, the UK Government held 44.98% of the ordinary share capital with voting rights of NatWest Group plc. NatWest Group may participate in similar directed or on-market buybacks in the near- and medium-term future. The precise timing and extent of further UKGI's sell-downs is uncertain, which could result in a prolonged period of price volatility for NatWest Group plc's ordinary shares and other securities.

HM Treasury has indicated that it intends to respect the commercial decisions of NatWest Group and that NatWest Group entities (including NWM Group) will continue to have its own independent board of directors and management team determining their own strategy. However, for as long as HM Treasury remains NatWest Group plc's largest single shareholder, HM Treasury and UKGI (as manager of HM Treasury's shareholding) could exercise a significant degree of influence over NatWest Group (including NWM Group) including: the election of directors and appointment of senior management, NatWest Group's (including NWM Group's) capital strategy, dividend policy, remuneration policy or the conduct of NatWest Group's operations. HM Treasury or UKGI's approach depends on government policy, which could change. The manner in which HM Treasury or UKGI exercises HM Treasury's rights as NatWest Groups plc's largest single shareholder could give rise to conflicts between the interests of HM Treasury and the interests of other shareholders, including as a result of a change in government policy, which may in turn adversely affect NatWest Group (including NWM Group). The exertion of such influence over NatWest Group could in turn adversely affect the governance or business strategy of NWM Group.

In addition, NWM Plc is a wholly owned subsidiary of NatWest Group plc, and NatWest Group plc therefore controls NWM Group's board of directors, corporate policies and strategic direction. The interests of NatWest Group plc (as an equity holder and as NWM Group's parent) and the interests of the C&I business segment may differ from the interests of NWM Group or of potential investors in NWM Group's securities. See also, *'NWM Group has been in a period of significant structural and other change, including as a result of NatWest Group's purpose-led strategy and NatWest Group's recent creation of its C&I business segment (of which NWM Group forms part) and may continue to be subject to significant structural and other change.'*

Strategic risk

NWM Group has been in a period of significant structural and other change, including as a result of NatWest Group's purpose-led strategy and NatWest Group's recent creation of its C&I business segment (of which NWM Group forms part) and may continue to be subject to significant structural and other change.

In February 2020, NatWest Group announced its strategy to focus on becoming a purpose-led business designed to champion potential, and to help individuals, families and businesses to thrive. As part of NatWest Group's strategy, NWM Group's own strategy has evolved to focus on serving NatWest Group's corporate and institutional customer base, first via the 'NWM Refocusing' programme (which required simplification of its operating model and technological platform as well as reducing its cost base and capital requirements) and then via the creation of NatWest Group's C&I business segment (which combined NatWest Group's Commercial, NatWest Markets and RBS International businesses). NatWest Group plc has been reporting its results under the C&I operating segment structure since the quarter ended 30 March 2022, although NWM Plc continues to also report on a standalone legal entity basis. The C&I business segment is intended to allow closer operational and strategic alignment to support NatWest Group growth, with increased levels of services being provided between NatWest Group entities, with the potential increased risk of breach of the UK ring-fencing regime without effective or enhanced conflicts of interest policies. As a result of further focusing on NatWest Group's core C&I customers, NWM Group's prospects have become further dependent on the success and strategy of NatWest Group.

NWM Group's ability to serve its customers may be diminished by its changing business strategy and customer reactions to the changing nature of NWM Group's business model may be more adverse than expected. Previously anticipated revenue and profitability levels may not be achieved including in relation to: income from the Rates business, the ability to support customer transactions whilst meeting NWM Group capital targets, and changes to the availability of risk capital, in the timescales envisaged or at all. An adverse macro-economic environment, political and regulatory uncertainty, market volatility and change and/or strong market competition may require NWM Group to adjust aspects of its strategy or the timeframe for its implementation. It is anticipated that NWM Plc will continue to generate operating losses in the short-term and as a result its capital levels may decline.

NWM Group's strategy requires it to meet cost-reduction targets. A significant proportion of the cost savings are dependent on simplification of the IT systems and therefore may not be realised if IT capabilities are not delivered in line with assumptions. In addition, the scale of changes that have been concurrently implemented require the implementation and application of robust governance and controls frameworks and robust IT systems. There is a risk that NWM Group may not be successful in

maintaining such governance and control frameworks and IT systems.
As part of NWM Group's strategy, NWM Group has set a number of financial, capital and operational targets and expectations, which are expected to require further reductions to its wider cost base. The financial, operational and capital targets and expectations envisaged by NWM's strategy may not be met or maintained in the timeframes expected or at all. In addition, targets and expectations for NWM Group are based on management plans, projections and models, and are subject to a number of key assumptions and judgments, any of which may prove to be inaccurate.
In addition, to improve efficiencies and best serve customers following Brexit, NWM Group expects that certain assets, liabilities, transactions and activities of NatWest Group's Transfer Business, may be: (i) transferred from the ring-fenced subgroup of NatWest Group to NWM Group, and/or (ii) transferred to the ring-fenced subgroup of NatWest Group from NWM Group , subject to regulatory and customer requirements. The timing, success and quantum of any of these transfers remain uncertain as is the impact of these transactions on its go-forward results of operations. As a result, NWM Group's future results, financial condition and/or prospects may be adversely affected.

NWM Group has implemented a shared services model and entered into revenue share agreements with some entities within NatWest Group's ring-fenced sub-group (including NatWest Bank Plc and The Royal Bank of Scotland Plc). NWM Group therefore relies directly or indirectly on NatWest Group entities to provide services to itself and its clients. This reliance has recently increased as a result of NWM Group joining NatWest Group's C&I business segment. A failure of NWM Group to receive these services may result in operational risk. See, *'Operational risks (including reliance on third party suppliers and outsourcing of certain activities) are inherent in NWM Group's businesses.'* In addition, any change to the cost and/or scope of services provided by NatWest Group may impact NWM Group's competitive position and its ability to meet its other targets.

NWM's strategy entails legal, execution, operational and regulatory (including compliance with the UK ring-fencing regime), conflicts, IT system, culture, people, conduct, business and financial risks to NWM Group. As a result, NWM Group may not be able to successfully implement some or all aspects of its strategy or may not meet any or all of the related strategic targets or expectations. Each of the risks identified above, individually or collectively, could adversely affect NWM Group's products and services offering or office locations, competitive position, ability to meet targets and commitments, reputation with customers or business model and may result in higher-than-expected costs, all of which could adversely affect NWM Group and its ability to deliver its strategy. There is a risk that the intended benefits of NatWest Group's and NWM Group's strategies may not be realised in the timelines or in the manner currently contemplated, or at all. Various aspects of NWM Group's strategy may not be successful, may not be completed as planned, or at all, or could be phased or could progress in a manner other than currently expected. This could lead to additional management actions by NatWest Group (or NWM Group), regulatory action or reduced liquidity and/or funding opportunities. Any of the above may lead to NWM Group not being viable, competitive or profitable.

Financial resilience risk

NWM Group may not meet the targets it communicates, generate returns or implement its strategy effectively.

As part of NWM Group's strategy, NWM Group has set a number of financial, capital and operational targets including in respect of: balance sheet and cost-reduction measures, CET1 ratio targets (for NWM Plc and NWM N.V.), MREL targets, leverage ratio targets (for NWM Plc and NWM N.V.), targets in relation to local regulation, funding plans and requirements, employee engagement, diversity and inclusion as well as ESG (including climate and sustainable funding and financing targets) and customer satisfaction targets.

NWM Group's ability to meet its targets, including its CET1 ratio target, and make discretionary capital distributions and to successfully fulfil its strategy is subject to various internal and external factors and risks. These include but are not limited to: UK and global macro-economic, political, market and regulatory uncertainties, operational risks and risks relating to NWM Group's business model and strategy (including risks associated with climate, ESG and other sustainability-related issues). See also, '*NWM Group, its customers and its counterparties face continued economic and political risks and uncertainties in the UK and global markets, including as a result of high inflation and rising interest rates, supply chain disruption, and the Russian invasion of Ukraine.'*

A number of factors, including macro-economic factors, may impact NWM Plc and NWM N.V.'s ability to maintain their current CET1 ratio targets, including impairments, the extent of organic capital generation or the reduction of RWA and the receipt and payment of dividends.
NWM Plc may incur disposal losses as part of the process of exiting positions to reduce RWAs. Some of these losses may be recognised ahead of the actual disposals and the losses overall may be higher than currently anticipated.

NWM Group's ability to meet its planned reductions in annual costs may vary considerably from year to year. Furthermore, the focus on maintaining balance sheet and cost-reduction targets may result in limited investment in other areas which could affect NWM Group's long-term product offering or competitive position and its ability to meet its other targets, including those related to customer satisfaction.

In addition, challenging trading conditions may adversely affect NWM Group's business and its ability to achieve its targets and execute its strategy.
NWM Group's strategy may not be successfully executed, it may not meet its targets and expectations, and it may not be a viable, competitive or profitable banking business.

NWM Plc and/or its regulated subsidiaries may not meet the prudential regulatory requirements for regulatory capital.

NWM Group is required by regulators in the UK, the EU and other jurisdictions in which it undertakes regulated activities to maintain adequate financial resources. Adequate capital provides NWM Group with financial flexibility in the face of turbulence and uncertainty in the global economy and specifically in its core UK operations.

NWM Plc's and NWM N.V.'s target CET1 ratios are based on regulatory requirements, internal modelling and risk appetite (including under stress). As at 31 December 2022, NWM Plc's solo CET1 ratio was 17.2%. NWM Plc's current capital strategy is based on the management of RWAs and other capital management initiatives (including the reduction of RWAs and the periodic payment of dividends to NatWest Group plc, NWM Plc's parent company).

Other factors that could influence NWM Plc and NWM N.V.'s CET1 ratios include:
- a depletion of NWM Plc or NWM N.V.'s capital resources through reduced profits (which would in turn impact retained earnings) and may result from revenue attrition or increased liabilities, sustained periods of low interest rates, reduced asset values resulting in write-downs or reserve adjustments, impairments, changes in accounting policy, accounting charges or foreign exchange movements;

- a change in the quantum of NWM Plc's or NWM N.V.'s RWAs, stemming from exceeding target RWA levels, the NWM Refocusing, regulatory adjustments (for example, from additional market risk backtesting exceptions), foreign exchange movements or a failure in internal controls or procedures to accurately measure and report RWAs. An increase in RWAs would lead to a reduction in the CET1 ratio (and increase the amount of internal MREL for NWM Plc);
- changes in prudential regulatory requirements including the Total Capital Requirement for NWM Plc (as regulated by the Prudential Regulation Authority ('PRA')) or NWM N.V. (as regulated by the De Nederlandsche Bank ('DNB')), including Pillar 2 requirements and regulatory buffers as well as any applicable scalars;
- further developments of prudential regulation (for example, finalisation of Basel 3 standards), which will impact various areas including the approach to calculating credit risk, market risk, leverage ratio, capital floors and operational risk RWAs, as well as continued regulatory uncertainty on the details thereto;
- further losses (including as a result of extreme one-off incidents such as cyberattack, fraud or conduct issues) would deplete capital resources and place downward pressure on the CET1 ratio; or
- the timing of planned liquidation, disposal and/or capital releases of capital optimisation activity or legacy entities owned by NWM Plc and NWM N.V..

See also *'NWM Group has been in a period of significant structural and other change, including as a result of NatWest Group's purpose-led strategy and NatWest Group's recent creation of its C&I business segment (of which NWM Group forms part) and may continue to be subject to significant structural and other change.'*

Management actions taken under a stress scenario may affect, among other things, NWM Group's product offering, its credit ratings, its ability to operate its businesses and pursue its current strategies and strategic opportunities, any of which may negatively impact investor confidence and the value of NWM Group's securities. See also, *'NWM Plc and/or its regulated subsidiaries may not manage their capital, liquidity or funding effectively which could trigger the execution of certain management actions or recovery options,'* and *'NatWest Group (including NWM Group) may become subject to the application of UK statutory stabilisation or resolution powers which may result in, for example, the write-down or conversion of NWM Group entities' Eligible Liabilities.'*

NWM Group is reliant on access to the capital markets to meet its funding requirements, both directly through wholesale markets, and indirectly through its parent (NatWest Group) for the subscription to its internal capital and MREL. The inability to do so may adversely affect NWM Group.

NatWest Markets Plc's funding plan currently anticipates that in 2023, it will issue £3-5 billion debt refinancing and funding requirements, based on its current and anticipated business activities. NWM Group therefore has significant anticipated funding requirements and is reliant on frequent access to the capital markets for funding, at a cost that can be passed through to its customers. This access entails execution risk, regulatory risk, risk of reduced commercial activity, risk of loss of market confidence in NWM Group if it cannot finance its activities and risk of a ratings downgrade, which could be impeded by a number of internal or external factors, including, those summarised in these risk factors.

In addition, NWM Plc receives capital and funding from NatWest Group plc. NWM Plc has set target levels for different tiers of capital and for the internal minimum requirements for own funds and eligible liabilities ('MREL'), as percentages of its RWAs. The level of capital and funding required for NWM Plc to meet its internal targets is therefore a function of the level of RWAs and its leverage exposure in NWM Plc and this may vary over time.

NWM Plc's internal MREL comprises the regulatory value of capital instruments and loss-absorbing senior funding issued by NWM Plc to its parent, NatWest Group plc, in all cases with a residual maturity of at least one year. The Bank of England has identified that the preferred resolution strategy for NatWest Group is as a single point-of-entry. As a result, only NatWest Group plc is the only entity able to issue Group MREL eligible liabilities to third-party investors, using the proceeds to fund the internal capital and MREL targets and/or requirements of its operating entities, including NWM Plc. NWM Plc is therefore dependent not only on NatWest Group plc to fund its internal capital targets, but also on NatWest Group plc's ability to source appropriate funding. NWM Plc is also dependent on NatWest Group plc to continue to fund NWM Plc's internal MREL targets over time and its ability to issue and maintain sufficient amounts of external MREL liabilities to support this. In turn, NWM Plc is required to fund the internal capital requirements and MREL of its subsidiaries.

Any inability of NWM Group to adequately access the capital markets, to manage its balance sheet in line with assumptions in its funding plans, or to issue internal capital and MREL may adversely affect NWM Group, such that NWM Group may not constitute a viable banking business and/or NWM Plc or NWM N.V. may fail to meet their respective regulatory capital and/or MREL (at present, NWM N.V. does not have its own MREL).

NWM Group may not be able to adequately access sources of liquidity and funding.

NWM Group is required to access sources of liquidity and funding through deposits and wholesale funding, including debt capital markets and trading liabilities such as repurchase agreements. As at 31 December 2022, NWM Group held £6.7 billion in deposits from banks and customers. The level of deposits and wholesale funding may fluctuate due to factors outside NWM Group's control. These factors include: loss of clients, loss of investor confidence (including in individual NWM Group entities or the UK banking sector or the banking sector as a whole), changes in interest rates, government support, increasing competitive pressures for bank funding or the reduction or cessation of deposits and other funding by counterparties, any of which could result in a significant outflow of deposits or reduction in wholesale funding within a short period of time. See also, '*NWM Group has significant exposure to counterparty and borrower risk*'.

An inability to grow, roll-over, or any material decrease in, NWM Group's deposits, short-term wholesale funding and short-term liability financing could, particularly if accompanied by one of the other factors described above, materially affect NWM Group's ability to satisfy its liquidity needs.

NWM Group engages from time to time in 'fee based borrow' transactions whereby collateral (such as government bonds) is borrowed from counterparties on an unsecured basis in return for a fee. This borrowed collateral may be used by NWM Group to finance parts of its balance sheet, either in its repo financing business, derivatives portfolio or more generally across its balance sheet. If such 'fee based borrow' transactions are unwound whilst used to support the financing of parts of NWM Group balance sheet, then unsecured funding from other sources would be required to replace such financing. There is a risk that NWM Group would be unable to replace such financing on acceptable terms or at all, which could adversely affect its liquidity position and have an adverse effect on NWM Group. In addition, because 'fee base borrow' transactions are conducted off-balance sheet (due to the collateral being borrowed) investors may find it more difficult to gauge NWM Group's creditworthiness, which may be affected if these transactions were to be unwound in a stress scenario. Any lack of or perceived lack of creditworthiness may adversely affect NWM Group.

Current UK and global macro-economic and political uncertainties and any significant market volatility and change, could affect NWM Group's ability to access sources of liquidity and funding, which may result in higher funding costs and failure to comply with regulatory capital, funding and leverage requirements. As a result, NWM plc and its subsidiaries could be required to adapt their funding plans or change their operations. For example, impairments or other losses as well as increases to capital deductions may result in a decrease to NWM Plc's capital base, and/or that of its subsidiaries. If NatWest Group plc is unable to issue securities externally as planned, this may have a negative impact on NWM Plc's current and forecasted MREL position, particularly if NatWest Group plc is unable to downstream capital and/or funding to NWM Plc. This could exacerbate funding and liquidity risk, which may adversely affect NWM Group.

As at 31 December 2022, NWM Group reported a liquidity coverage ratio of 253%. If its liquidity position were to come under stress and if NWM Group is unable to raise funds through deposits or wholesale funding sources on acceptable terms or at all, its liquidity position could be adversely affected. This would mean that NWM Group might be unable to: meet deposit withdrawals on demand or satisfy buy back requests, repay borrowings as they mature, meet its obligations under committed financing facilities, comply with regulatory funding requirements, undertake certain capital and/or debt management activities, or fund new loans, investments and businesses. NWM Group may need to liquidate assets to meet its liabilities, including disposals of assets not previously identified for disposal to reduce its funding or payment commitments or trigger the execution of certain management actions or recovery options. This could also lead to higher funding costs and/or changes to NWM Group's funding plans or its operations. In a time of reduced liquidity or market stress, NWM Group may be unable to sell some of its assets or may need to sell assets at depressed prices, which in either case may adversely affect NWM Group's future results, financial condition and/or prospects.

NWM Group entities independently manage liquidity risk on a stand-alone basis, including through holding their own liquidity portfolios. They have restricted access to liquidity or funding from other NatWest Group entities. NWM Group entities' management of their own liquidity portfolios and the structure of capital support are subject to operational and execution risk.

Continuing market volatility may impact capital and RWAs and NWM Group and its subsidiaries may be required to adapt their funding plans or change their operations in order to satisfy their respective capital and funding requirements, which may have a negative impact on NWM Group. Market volatility may also result in increases to leverage exposure.

NWM Plc and/or its regulated subsidiaries may not manage their capital, liquidity or funding effectively which could trigger the execution of certain management actions or recovery options.

Under the EU Bank Recovery and Resolution Directives I and II ('BRRD'), as implemented in the UK, NatWest Group must maintain a recovery plan acceptable to its regulator, such that a breach of NWM Plc's applicable capital or leverage, liquidity or funding requirements would trigger consideration of NWM Plc's recovery plan, and in turn may prompt consideration of NatWest Group's recovery plan. If, under stressed conditions, the liquidity, capital or leverage ratio were to decline, there are a range of recovery management actions (focused on risk reduction and mitigation) that NWM Plc could undertake that may or may not be sufficient to restore adequate liquidity, capital and leverage ratios. Additional management options relating to existing capital issuances, asset or business disposals, capital payments and dividends from NWM Plc to its parent, could also be undertaken to support NWM Plc's capital and leverage requirements.

NatWest Group may also address a shortage of capital in NWM Plc by providing parental support to NWM Plc. NatWest Group's (and NWM Plc's) regulator may also request that NWM Group carry out additional capital management actions. The Bank of England has identified single point-of-entry at NatWest Group plc, as the preferred resolution strategy for NatWest Group. However, under certain conditions set forth in the BRRD, as the UK resolution authority, the Bank of England also has the power to execute the 'bail-in' of certain securities of NWM Group without further action at NatWest Group level.

Any capital management actions taken under a stress scenario may, in turn affect factors including: NWM Group's product offering, credit ratings, ability to operate its businesses and pursue its current strategies and strategic opportunities as well as negatively impacting investor confidence and the value of NWM Group's securities. See also, '*— NatWest Group (including NWM Group) may become subject to the application of UK statutory stabilisation or resolution powers which may result in, for example, the write-down or conversion of NWM Group entities' Eligible Liabilities.'* In addition, if NWM Plc or NWM N.V.'s liquidity position were to be adversely affected, this may require assets to be liquidated or may result in higher funding costs, which may adversely affect NWM Group's operating performance.

Any reduction in the credit rating and/or outlooks assigned to NatWest Group plc, any of its subsidiaries (including NWM Plc or NWM Group subsidiaries) or any of their respective debt securities could adversely affect the availability of funding for NWM Group, reduce NWM Group's liquidity position and increase the cost of funding.

Rating agencies regularly review NatWest Group plc, NWM Plc and other NatWest Group entity credit ratings and outlooks. In September, Moody's upgraded the credit rating of NWM Plc from A2 (positive outlook) to A1 (stable outlook). NWM Group entity credit ratings and outlooks, could be negatively affected (directly or indirectly) by a number of factors that can change over time, including: credit rating agencies' assessment of NWM Group's strategy and management's capability; its financial condition including in respect of profitability, asset quality, capital, funding and liquidity; the level of political support for the industries and regions in which NWM Group operates; the implementation of structural reform; the legal and regulatory frameworks applicable to NWM Group's legal structure; business activities and the rights of its creditors; changes in rating methodologies; changes in the relative size of the loss-absorbing buffers protecting bondholders and depositors; the competitive environment, political and economic conditions in NWM Group's key markets (including rising interest rates and higher inflation, supply chain disruptions and the outcome of any further Scottish independence referendum); any reduction of the UK's sovereign credit rating (currently on negative outlook by Moody's, S&P and Fitch) and market uncertainty. In addition, credit ratings agencies are increasingly taking into account sustainability-related factors, including climate, environmental, social and governance related risk, as part of the credit ratings analysis, as are investors in their investment decisions. See also *'A reduction in the ESG ratings of NatWest Group (including NWM Group) or NWM Group could have a negative impact on NatWest Group (including NWM Group)'s or NWM Group's reputation and on investors' risk appetite and customers' willingness to deal with NatWest Group (including NWM Group) or NWM Group.'* Any reductions in the credit ratings of NatWest Group plc, NWM Plc or of certain other NatWest Group entities, including, in particular, downgrades below investment grade, or a deterioration in the capital markets' perception of NWM Group's financial resilience could significantly affect NWM Group's access to capital markets, reduce the size of its deposit base and trigger additional collateral or other requirements in its funding arrangements or the need to amend such arrangements, which could adversely affect NWM Group's (and, in particular, NWM Plc's) cost of funding and its access to capital markets which could limit the range of counterparties willing to enter into transactions with NWM Group (and, in particular, with NWM Plc). This may in turn adversely affect NWM Group's competitive position and threaten its prospects in the short to medium-term.

NWM Group operates in markets that are highly competitive, with increasing competitive pressures and technology disruption.

The markets within which NWM Group operates are highly competitive, and NWM Group expects such competition to continue and intensify in response to various changes. These include: evolving customer behaviour, technological changes (including digital currencies and other instruments, stablecoins and the growth of digital banking, such as from fintech entrants), competitor behaviour, new entrants to the market, industry trends resulting in increased disaggregation or unbundling of financial services, the impact of regulatory actions and other factors. Innovations such as biometrics, artificial intelligence, automation, the cloud, blockchain, cryptocurrencies and quantum computing may rapidly facilitate industry transformation.

Increasingly, many of the products and services offered by NWM Group are, and will become, more technology intensive, including through digitalisation, automation and the use of artificial intelligence. NWM Group's ability to develop or acquire such services (which also comply with applicable and evolving regulations) has become increasingly important to retaining and growing NWM Group's client businesses across its geographical footprint. There can be no certainty that NWM Group's innovation strategy (which includes investment in its IT capability intended to improve its core infrastructure and client interface capabilities as well as investments and partnerships with third party technology providers) will be successful or that it will allow NWM Group to continue to maintain or grow such services in the future.

Certain of NWM Group's current or future competitors may be more successful in implementing innovative technologies for delivering products or services to their clients. These competitors may be better able to attract and retain clients and key employees, may have more advanced IT systems, and may have access to lower cost funding and/or be able to attract deposits or provide investment-banking services on more favourable terms than NWM Group. Although NWM Group invests in new technologies and participates in industry and research-led initiatives aimed at developing new technologies, such investments may be insufficient or ineffective, especially given NWM Group's focus on cost savings targets. This may limit additional investment in areas such as financial innovation and could affect NWM Group's offering of innovative products or technologies for delivering products or services to clients and its competitive position. NWM Group may also fail to identify future opportunities or derive benefits from disruptive technologies in the context of rapid technological innovation, changing customer behaviour and growing regulatory demands. Furthermore, the development of innovative products depends on NWM Group's ability to produce underlying high-quality data, failing which its ability to offer innovative products may be compromised.

If NWM Group is unable to offer competitive, attractive and innovative products that are also profitable and timely, it will lose share, incur losses on some or all of its initiatives and lose opportunities for growth. In this context, NWM Group is investing in the automation of certain solutions and interactions within its customer-facing businesses, including through automation and artificial intelligence. Such initiatives may result in operational, reputational and conduct risks if the technology used is defective, inadequate or is not fully integrated into NWM Group's current solutions. There can be no certainty that such initiatives will deliver the expected cost savings and investment in automated processes will likely also result in increased short-term costs for NWM Group.

In addition, NatWest Group's purpose-led strategy, as well as employee remuneration constraints, may also have an impact on NWM Group's ability to compete effectively and intensified competition from incumbents, challengers and new entrants could affect NWM Group's ability to maintain satisfactory returns. Moreover, activist investors have increasingly become engaged and interventionist in recent years, which may pose a threat to NatWest Group's (and NWM Group's) strategic initiatives. Furthermore, continued consolidation or technological or other developments in certain sectors of the financial services industry could result in NWM Group's remaining competitors gaining greater capital and other resources, including the ability to offer a broader range of products and services and geographic diversity, or the emergence of new competitors. Any of the above may adversely affect NWM Group's future results, financial condition and/or prospects.

NWM Group may be adversely affected if NatWest Group fails to meet the requirements of regulatory stress tests.

NatWest Group is subject to annual stress tests by its regulator in the UK. Stress tests are designed to assess the resilience of banks to potential adverse economic or financial developments and ensure that they have robust, forward-looking capital planning processes that account for the risks associated with their business profile. If the stress tests reveal that a bank's existing regulatory capital buffers are not sufficient to absorb the impact of the stress, then it is possible that NatWest Group and/or NWM Group may need to take action to strengthen their capital positions.

Failure by NatWest Group to meet its quantitative and qualitative requirements of the stress tests set forth by its UK regulators may result in: NatWest Group's regulators requiring NatWest Group to generate additional capital, reputational damage, increased supervision and/or regulatory sanctions and/or loss of investor confidence, all of which may adversely affect NatWest Group's (and NWM Group's) future results, financial condition and/or prospects.

NWM Group has significant exposure to counterparty and borrower risk.

Credit risk may arise from a variety of business activities, including, but not limited to: extending credit to clients through various lending commitments; entering into swap or other derivative contracts under which counterparties have obligations to make payments to NWM Group (including un-collateralised derivatives); providing short or long-term funding that is secured by physical or financial collateral whose value may at times be insufficient to fully cover the loan repayment amount; posting margin and/or collateral and other commitments to clearing houses, clearing agencies, exchanges, banks, securities firms and other financial counterparties; and investing and trading in securities and loan pools, whereby the value of these assets may fluctuate based on realised or expected defaults on the underlying obligations or loans. See also, '*Risk and capital management — Credit Risk*'. Any negative developments in the activities listed above may negatively impact NWM Group's clients and credit exposures, which may, in turn, adversely affect NWM Group's profitability.

NWM N.V., a subsidiary of NWM Plc, has a portfolio of loans and loan commitments to Western European corporate customers. As a result, through the NWM N.V. business and NWM Group's other activities, NWM Group has exposure to many different industries, customers and counterparties, and risks arising from actual or perceived changes in credit quality and the recoverability of monies due from borrowers and other counterparties are inherent in a wide range of NWM Group's businesses. These risks may be concentrated for those businesses for which client income is heavily weighted towards a specific geographic region, industry or client base. Furthermore, these risks are likely to increase due to a potential transfer of NatWest Group's Transfer Business: (i) from the ring-fenced subgroup of NatWest Group to NWM Group, and/or (ii) to the ring-fenced subgroup of NatWest Group from NWM Group (see *'NWM Group has been in a period of significant structural and other change, including as a result of NatWest Group's purpose-led strategy and NatWest Group's recent creation of its C&I business segment (of which NWM Group forms part) and may continue to be subject to significant structural and other change').*

The credit quality of NWM Group's borrowers and other counterparties may be affected by the recent UK and global macro-economic and political uncertainties and a further deterioration in prevailing economic and market conditions (including a resurgence of the COVID-19 pandemic or other new health crises) and by changes in the legal and regulatory landscape in the UK and countries where NWM Group is exposed to credit risk. Any further deterioration in these conditions or changes to legal or regulatory landscapes could worsen borrower and counterparty credit quality or impact the enforcement of contractual rights over security, increasing credit risk.

NWM Group is exposed to the financial industry, including sovereign debt securities, banks, financial intermediation providers (including providing facilities to financial sponsors and funds, backed by assets or investor commitments) and securitised products (typically senior lending to special purpose vehicles backed by pools of financial assets). Concerns about, or a default by, a financial institution could lead to significant liquidity problems and losses or defaults by other financial institutions, since the commercial and financial soundness of many financial institutions is closely related and interdependent as a result of credit, trading, clearing and other relationships. Any perceived lack of creditworthiness of a counterparty or borrower may lead to market-wide liquidity problems and losses for NWM Group. In addition, the value of collateral may be correlated with the probability of default by the relevant counterparty ('wrong way risk'), which would increase NWM Group's potential loss. This systemic risk may also adversely affect financial intermediaries, such as clearing agencies, clearing houses, banks, securities firms and exchanges with which NWM Group interacts on a daily basis. See also, '*NWM Group is reliant on access to the capital markets to meet its funding requirements, both directly through wholesale markets, and indirectly through its parent (NatWest Group) for the subscription to its internal capital and MREL. The inability to do so may adversely affect NWM Group.'*

As a result, adverse changes in borrower and counterparty credit risk may cause accelerated impairment charges under IFRS 9, increased repurchase demands, higher costs, additional write-downs and losses for NWM Group and an inability to engage in routine funding transactions.

NWM Group has applied an internal analysis of multiple economic scenarios (MES) together with the determination of specific overlay adjustments to inform its IFRS 9 ECL (Expected Credit Loss). The recognition and measurement of ECL is complex and involves the use of significant judgment and estimation. This includes the formulation and incorporation of multiple forward-looking economic scenarios into ECL to meet the measurement objective of IFRS 9. The ECL provision is sensitive to the model inputs and economic assumptions underlying the estimate. Going forward, NWM Group anticipates observable credit deterioration of a proportion of assets resulting in a systematic uplift in defaults, which is mitigated by those economic assumption scenarios being reflected in the Stage 2 ECL across portfolios, along with a combination of post model overlays in both wholesale and retail portfolios reflecting the uncertainty of credit outcomes. See also, '*Risk and capital management – Credit risk*'. A credit deterioration would also lead to RWA increases. Furthermore, the assumptions and judgments used in the MES and ECL assessment at 31 December 2022 may not prove to be adequate resulting in incremental ECL provisions for NWM Group.

Due to NWM Group's exposure to the financial industry, it also has exposure to shadow banking entities (i.e., entities which carry out activities of a similar nature to banks but not regulated like banks). NWM Group is required to identify and monitor its exposure to shadow banking entities, implement and maintain an internal framework for the identification, management, control and mitigation of the risks associated with exposure to shadow banking entities, and ensure effective reporting and governance in respect of such exposure. If NWM Group is unable to properly identify and monitor its shadow banking exposure, maintain an adequate framework, or ensure effective reporting and governance in respect of shadow banking exposure, this may adversely affect the future results, financial condition and/or prospects of NWM Group.

NWM Group could incur losses or be required to maintain higher levels of capital as a result of limitations or failure of various models.

Given the complexity of NWM Group's business, strategy and capital requirements, NWM Group relies on analytical and other models for a wide range of purposes, including to manage its business, assess the value of its assets and its risk exposure, as well as to anticipate capital and funding requirements (including to facilitate NatWest Group's mandated stress testing). Uncertainties relating to the COVID-19 pandemic have made reliance on analytical models and planning and forecasting for NWM Group more complex, and may result in uncertainty impacting the risk profile of NWM Group and/or that of the wider banking industry. In addition, NWM Group utilises models for valuations, credit approvals, calculation of loan impairment charges on an IFRS 9 basis, financial reporting and for financial crime (criminal activities in the form of money laundering, terrorist financing, bribery and corruption, tax evasion and sanctions as well as fraud risk management (collectively, 'financial crime')). NWM Group's models, and the parameters and assumptions on which they are based, are periodically reviewed.

As models analyse scenarios based on assumed inputs and a conceptual approach, model outputs therefore remain uncertain. Failure of models (including due to errors in model design) or new data inputs (including non-representative data sets), for example, to accurately reflect changes in the micro and macro-economic environment in which NWM Group operates (for example to account for high inflation), to capture risks and exposures at the subsidiary level, and to update for changes to NWM Group's current business model or operations, or for findings of deficiencies by NatWest Group (and in particular, NWM Group's) regulators (including as part of NatWest Group's mandated stress testing) may render some business lines uneconomic, result in increased capital requirements, may require management action or may subject NWM Group to regulatory sanction. NWM Group may also face adverse consequences as a result of actions based on models that are poorly developed, implemented or used, models that are based on inaccurate or compromised data or as a result of the modelled outcome being misunderstood, or by such information being used for purposes for which it was not designed.

NWM Group's financial statements are sensitive to underlying accounting policies, judgments, estimates and assumptions.

The preparation of financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, income, expenses, exposures and RWAs. While estimates, judgments and assumptions take into account historical experience and other factors (including market practice and expectations of future events that are believed to be reasonable under the circumstances), actual results may differ due to the inherent uncertainty in making estimates, judgments and assumptions (particularly those involving the use of complex models). Further, accounting policy and financial statement reporting requirements are likely to increasingly require management to adjust existing judgments, estimates and assumptions for the effects of climate-related, sustainability and other matters that are inherently uncertain and for which there is little historical experience which may affect the comparability of NWM Group's future financial results with its historical results. Actual results may differ due to the inherent uncertainty in making climate-related and sustainability estimates, judgments and assumptions.

Accounting policies deemed critical to NWM Group's results and financial position, based upon materiality and significant judgments and estimates, involve a high degree of uncertainty and may have a material impact on its results. For 2022, these include loan impairments, fair value, deferred tax and conduct and litigation provisions. These are set out in the section '*Critical accounting policies and sources of estimation uncertainty*'.

Changes in accounting standards may materially impact NWM Group's financial results.

NWM Group prepares its consolidated financial statements in conformity with the requirements of the Companies Act 2006 and in accordance with IFRS as issued by the International Accounting Standards Board. Changes in accounting standards or guidance by accounting bodies or in the timing of their implementation, whether immediate or foreseeable, could result in NWM Group having to recognise additional liabilities on its balance sheet, or in further write-downs or impairments to its assets and may also adversely affect the future results, financial condition and/or prospects of NWM Group.

NWM Group's trading assets amounted to £45.3 billion as at 31 December 2022. The valuation of financial instruments, including derivatives, measured at fair value can be subjective, in particular where models are used which include unobservable inputs. Generally, to establish the fair value of these instruments, NWM Group relies on quoted market prices or, where the market for a financial instrument is not sufficiently credible, internal valuation models that utilise observable market data. In certain circumstances, the data for individual financial instruments or classes of financial instruments utilised by such valuation models may not be available or may become unavailable due to prevailing market conditions. In these circumstances, NWM Group's internal valuation models require NWM Group to make assumptions, judgments and estimates to establish fair value, which are complex and often relate to matters that are inherently uncertain. Any of these factors could require NWM Group to recognise fair value losses which may have an adverse effect on NWM Group's income generation and financial position.

From time to time, the International Accounting Standards Board may issue new accounting standards or interpretations that could materially impact how NWM Group calculates, reports and discloses its financial results and financial condition, and which may affect NWM Group capital ratios, including the CET1 ratio. New accounting standards and interpretations that have been issued by the International Accounting Standards Board but which have not yet been adopted by NWM Group are discussed in '*Future accounting developments*'.

NatWest Group is subject to Bank of England and PRA oversight in respect of resolution, and NatWest Group could be adversely affected should the Bank of England in the future deem NatWest Group's preparations to be inadequate.

NatWest Group is subject to regulatory oversight by the Bank of England and the PRA and is required (under the PRA rulebook) to carry out an assessment of its preparations for resolution, submit a report of the assessment to the PRA, and disclose a summary of this report. NatWest Group has dedicated significant resources towards the preparation of NatWest Group for a potential resolution scenario. In June 2022 the Bank of England communicated its assessment of NatWest Group's preparations and did not identify any shortcomings, deficiencies or substantive impediments although two areas were highlighted as requiring further enhancements. NatWest Group could be adversely affected should future Bank of England assessments deem NatWest Group's preparations to be inadequate.

If future Bank of England assessments identify a significant gap in NatWest Group's ability to achieve the resolvability outcomes or reveals that NatWest Group is not adequately prepared to be resolved, or did not have adequate plans in place to meet resolvability requirements, NatWest Group may be required to take action to enhance its preparations to be resolvable, resulting in additional costs and the dedication of additional resources. Such a scenario may have an impact on NatWest Group (and NWM Group) as, depending on the Bank of England's assessment, potential action may include, but is not limited to, restrictions on NatWest Group's maximum individual and aggregate exposures, a requirement to dispose of specified assets, a requirement to change legal or operational structure, a requirement to cease carrying out certain activities and/or maintaining a specified amount of MREL, consequently impacting NatWest Group's (and NWM Group's) strategic plans and may adversely affect its financial condition and/or reputation of NWM Group or lead to a loss of investor confidence.

NatWest Group (including NWM Group) may become subject to the application of UK statutory stabilisation or resolution powers which may result in, for example, the write-down or conversion of NWM Group entities' Eligible Liabilities.

HM Treasury, the Bank of England and the PRA and FCA (together, the 'Authorities') are granted substantial powers to resolve and stabilise UK-incorporated financial institutions. Five stabilisation options exist: (i) transfer of all of the business of a relevant entity or the shares of the relevant entity to a private sector purchaser; (ii) transfer of all or part of the business of the relevant entity to a 'bridge bank' wholly-owned by the Bank of England; (iii) transfer of part of the assets, rights or liabilities of the relevant entity to one or more asset management vehicles for management of the transferor's assets, rights or liabilities; (iv) the write-down, conversion, transfer, modification, or suspension of the relevant entity's equity, capital instruments and liabilities; and (v) temporary public ownership of the relevant entity. These tools may be applied to NatWest Group plc as the parent company or to NWM Group, as an affiliate, where certain conditions are met (such as, whether the firm is failing or likely to fail, or whether it is reasonably likely that action will be taken (outside of resolution) that will result in the firm no longer failing or being likely to fail). Moreover, there are modified insolvency and administration procedures for relevant entities, and the Authorities have the power to modify or override certain contractual arrangements in certain circumstances and amend the law for the purpose of enabling their powers to be used effectively and may promulgate provisions with retrospective applicability. Similar powers may also be exercised with respect to NWM N.V., in the Netherlands by the relevant Dutch regulatory authorities.

Under the UK Banking Act, the Authorities are generally required to have regard to specified objectives in exercising the powers provided for by the Banking Act. One of the objectives (which is required to be balanced as appropriate with the other specified objectives) refers to the protection and enhancement of the stability of the financial system of the UK. Moreover, the 'no creditor worse off' safeguard contained in the Banking Act may not apply in relation to an application of the separate write-down and conversion power relating to capital instruments under the Banking Act, in circumstances where a stabilisation power is not also used. Holders of debt instruments which are subject to the power may, however, have ordinary shares transferred to or issued to them by way of compensation.

Uncertainty exists as to how the Authorities may exercise their powers including the determination of actions undertaken in relation to the ordinary shares and other securities issued by NatWest Group (including NWM Group), which may depend on factors outside of NWM Group's control. Moreover, the Banking Act provisions remain largely untested in practice, particularly in respect of resolutions of large financial institutions and groups.
If NatWest Group is at or is approaching the point of non-viability such that regulatory intervention is required, there may correspondingly be an adverse effect on the future results, financial condition and/or prospects of NWM Group.

Climate and sustainability-related risks

NWM Group and its customers, suppliers and counterparties face significant climate and sustainability-related risks, which may adversely affect NWM Group.

Climate-related risks represent a source of systemic risk in the global financial system. The financial impacts of climate-related risks are expected to be widespread, exacerbating already existing financial vulnerabilities and may disrupt the proper functioning of financial markets and institutions, including NWM Group.

Financial and non-financial risks from climate change and sustainability related risks can arise through physical and transition risks. In addition, physical and transition risks can trigger further losses, stemming directly or indirectly from legal claims, litigation and conduct liability (referred to as 'liability risk'). See also, '*NWM Group may be subject to potential climate, environmental, human rights and other sustainability-related litigation, enforcement proceedings, investigations and conduct risk*'.

There are significant uncertainties as to the location, extent and timing of the manifestation of the physical risks of climate change, such as more severe and frequent extreme weather events (storms, flooding, subsidence, heat waves, droughts and wildfires), rising sea levels, nature and biodiversity loss, declining food yields, destruction of critical infrastructure, supply chain disruption and resource scarcity. Damage to NWM Group customers', suppliers' and counterparties' properties and operations could disrupt business, impair asset values and negatively impact the creditworthiness of customers leading to increased default rates, delinquencies, write-offs and impairment charges in NWM Group's portfolios. In addition, NWM Group premises and operations, or those of its critical outsourced functions may experience damage or disruption leading to increased costs and adversely affect NWM Group's reputation, future results, financial condition and/or prospects.

In October 2021, the UK Government published its Net Zero Strategy which sets out how the UK will deliver on its commitment to reach net-zero emissions by 2050 (defined as the point at which greenhouse gas emissions from sources are equal to removals by sinks as set out in Article 4 of the 2015 Paris Agreement). An independent review of the government's approach to delivering its net zero target to ensure it is pro-business and pro-growth was published in January 2023. The timing, content and implementation of the specific policies and proposals remain uncertain and are subject to continuous changes and developments. The transition to a net-zero economy across all sectors of the economy and markets in which NWM Group operates will be required to meet the goals of the UN Framework Convention on Climate Change (1994), the 2015 Paris Agreement, the UK's Net Zero Strategy and the European Green Deal initiatives. The impacts of the extensive social, commercial, technological, policy and regulatory changes required to achieve transition remain uncertain but are expected to be significant, subject to continuous changes and developments and may be disruptive across the global economy and markets, especially if these changes do not occur in an orderly or timely manner or are not effective in reducing emissions sufficiently. Some sectors such as property, energy (including the oil and gas industry), mobility (including land transport, aviation, and shipping industries and the related manufacturing and infrastructure industry) and food (including the agriculture industry) are expected to be particularly impacted. The timing and pace of the transition to a net-zero economy is also uncertain, will depend on many factors and uncertainties and may be near term, gradual and orderly, or delayed, rapid and disorderly, or a combination of these. There is also growing attention on the need for a '*just transition*' and '*energy justice*' – in recognition that the transition to net zero should not disproportionally affect the most disadvantaged members of society.

In addition, NWM Group and its customers, suppliers and counterparties may face economic, financial and non-financial risks arising from broader sustainability issues such as: (i) risks relating to degradation of the environment, such as air, water and land pollution, water stress, nature and biodiversity loss and deforestation which may include for instance loss and/or decline of the state of nature (including the state of biodiversity); (ii) social matter-related risks (including violent conflicts, geopolitical implications, impacts on indigenous people, migration, human rights, diversity, equality and inclusion, the living wage, fair taxation and value chains); and (iii) governance-related risks (including board diversity, ethics, executive compensation and management structure).

Financial institutions, including NWM Group, are directly and indirectly exposed to multiple types of environmental risks (including nature and biodiversity related risks) through their activities, including through the risk of default by clients. In addition to safeguards and interventions that focus on reducing negative impacts on the environment (including nature and biodiversity), there is also a growing need to implement solutions that focus on increasing positive impacts on environment (including nature and biodiversity) through nature-based solutions. In 2021, NatWest Group (including NWM Group) classified 'Biodiversity and Nature Loss' as an emerging risk for NatWest Group (including NWM Group) within its Risk Management Framework.

The Taskforce on Nature-Related Financial Disclosures (TNFD) is a global, market-led initiative with the mission to develop and deliver a risk management and disclosure framework for organisations to report and act on evolving nature-related risks and opportunities, with the ultimate aim of supporting a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes. NatWest Group (including NWM Group) is a member of the Informal Working Group 2020 of TNFD and is a Forum Member since 2021.

Measuring the environmental related financial impacts (including impacts on nature and biodiversity related financial impacts) as a result of funding and financing activities as well as reporting on these is an evolving and complex area for the financial services industry which requires collaborative approaches with partners, stakeholders, peers and public sector bodies to help measure and mitigate the negative impacts of the activities which NatWest Group (including NWM Group) finances on the environment (including nature and biodiversity), as well as supporting the growing sector of nature-based solutions and habitat restoration and biodiversity markets. NatWest Group (including NWM Group) is in the early stages of developing its approach to assess, manage and mitigate environmental risks and by using emerging industry guidance such as the TNFD beta framework, NatWest Group (including NWM Group) is seeking to further its understanding of how NatWest Group's (including NWM Group's) business activities impact nature, the dependencies NWM Group and its customers have on nature, and the risks and opportunities nature can generate.

There is also increased scrutiny from NWM Group's employees, investors, customers, counterparties (including its suppliers), communities, regulators and other stakeholders regarding how businesses address social issues, including tackling inequality, working conditions, workplace health, safety and wellbeing, diversity and inclusion, data protection and management, workforce management, human rights and supply chain management which may impact NWM Group's employees, suppliers, customers, and their business activities or the communities in which they operate. These climate and sustainability-related risks may:

- adversely affect economic activity, asset pricing and valuations of financial instruments and, in turn, the wider financial system;
- impact economic activities directly (for example through lower corporate profitability or the devaluation of assets) or indirectly (for example through macro-financial changes);
- also affect the viability or resilience of business models over the medium to longer term, particularly those business models most vulnerable to climate and sustainability-related risks;
- trigger further losses stemming directly or indirectly from legal claims (liability risks) and reputational damage as a result of the public, customers, counterparties, suppliers and/or investors associating NWM Group or its customers with adverse climate and sustainability-related issues;
- intersect with and add further complexity and challenge to contributing to achieving NatWest Group's purpose-led strategy including climate ambitions and targets;
- be drivers of several different risk categories simultaneously and may exacerbate existing risks, including credit risk, operational risk (including business continuity), market risk (both traded and non-traded), liquidity and funding risk (for example, net cash outflows or depletion of liquidity buffers), pension risk and conduct risk; and
- if combined, may have a greater adverse effect on NWM Group's reputation, future results, financial condition and/or prospects.

If NWM Group fails in a timely manner to identify and address climate and sustainability-related risks and opportunities and changing regulatory and market expectations, or to appropriately identify, measure, manage and mitigate climate and sustainability-related physical, transition and liability risks and opportunities that NWM Group, its customers, counterparties and suppliers face, this may adversely affect NWM Group's reputation, future results, financial condition and/or prospects.

NatWest Group's climate change related strategy, ambitions, targets and transition plan entail significant execution and reputational risk and are unlikely to be achieved without significant and timely government policy, technology and customer behavioural changes.

In February 2020, NatWest Group announced its ambition to become a leading bank in the UK helping to address the climate challenge. As part of the implementation of its climate ambitions, at NatWest Group's Annual General Meeting in April 2022, ordinary shareholders passed an advisory 'Say on Climate' resolution endorsing NatWest Group's previously announced strategy to address climate change including its ambitions to at least halve the climate impact of its financing activity by 2030, achieve alignment with the 2015 Paris Agreement and reach net zero by 2050 across its financed emissions, assets under management and operational value chain.

Furthermore, as part of its efforts to support the transition to a net-zero economy, NatWest Group has announced its plans to (i) stop lending and underwriting to companies with more than 15% of activities related to thermal and lignite coal, unless they had a Credible Transition Plan in line with the 2015 Paris Agreement in place by end of 2021; phase out of thermal and lignite coal for UK and non-UK customers who have UK coal production, coal-fired generation and coal-related infrastructure by 1 October 2024, with a full global phase out by 1 January 2030; (ii) to stop lending and underwriting to major oil and gas producers unless they had a Credible Transition Plan aligned with the 2015 Paris Agreement in place by the end of 2021; (iii) from February 2023 stop providing reserve based lending specifically for the purpose of financing oil and gas exploration, extraction and production for new customers, and, after the 31 December 2025 not to renew, refinance or extend existing reserve- based lending specifically for the purpose of financing oil and gas exploration, extraction and production; and (iv) stop providing reserve-based lending and borrowing base financing to upstream Oil and Gas companies specifically for the purpose of financing upstream assets located in Arctic or Antarctic Waters.

In December 2022, NatWest Group published its science based targets validated by Science Based Target Initiative (SBTi) for its own operational footprint and for 79% of its loans and investments (debt securities and equity shares) on its 2019 balance sheet, at sector level. NatWest Group has also announced and in the future it may also announce other climate ambitions and targets which support its overarching strategy to address climate change.

Making the changes necessary to contribute to achieving NatWest Group's strategy on addressing climate change, including achieving NatWest Group's climate ambitions and targets and executing its transition plan, may adversely affect NWM Group's business and operations and will require reductions to its financed emissions and to its exposure to customers that do not align with a transition to net zero or do not have a credible transition plan in place. Increases in lending and financing activities may wholly or partially offset some or all these reductions, which may increase the extent of changes and reductions necessary. It is anticipated that achieving these reductions, together with the active management of climate and sustainability-related risks and other regulatory, policy and market changes, is likely to necessitate material and accelerated changes to NWM Group's business, operating model, its existing exposures and the products and services NWM Group provides to its customers (potentially on accelerated timescales) which may adversely affect NWM Group's ability to achieve its financial targets and generate sustainable returns.

NatWest Group (including NWM Group) also needs to ensure that its strategy and business model adapt to changing national and international standards, industry and scientific practices, regulatory requirements and market expectations regarding climate change, which remain under continuous development and are subject to different interpretations. There can be no assurance that these standards, practices, requirements and expectations will not be interpreted differently than what was the understanding of NatWest Group (including NWM Group) when defining its climate-related ambitions and targets or change in a manner that substantially increases the cost or effort for NatWest Group (including NWM Group) to achieve such ambitions and targets. In addition, NatWest Group's ambitions and targets may prove to be considerably more difficult or even impossible to achieve under such changing circumstances. This may be exacerbated if NatWest Group (including NWM Group) chooses or is required to accelerate its climate-related ambitions or targets as a result of (among other things) UK or international regulatory developments or stakeholder expectations.

NWM Group's ability to contribute to achieving NatWest Group's strategy to address climate change, including achieving its climate ambitions and targets, will depend to a large extent on many factors and uncertainties beyond NatWest Group's (including NWM Group's) control. These include the extent and pace of climate change, including the timing and manifestation of physical and transition risks, the macro-economic environment, the timely implementation and integration of adequate government policies, the effectiveness of actions of governments, legislators, regulators, businesses, investors, customers and other stakeholders to mitigate the impact of climate and sustainability-related risks, changes in customer behaviour and demand, changes in the available technology for mitigation, the roll-out of low carbon infrastructure and the availability of accurate, verifiable, reliable, consistent and comparable data. See also, '*There are significant challenges in accessing reliable, verifiable and comparable climate and other sustainability-related data due to availability, quality and other limitations, which contribute to the substantial uncertainties in accurately modelling and reporting on climate and sustainability information, as well as making appropriate important internal decisions*'.

These external factors and other uncertainties will make it challenging for NatWest Group to meet its climate ambitions and targets and for NWM Group to contribute to them and there is a significant risk that all or some of these will not be achieved.

Any delay or failure by NWM Group to contribute to setting, making progress against or meeting NatWest Group's climate-related ambitions and targets may adversely affect NWM Group, its reputation, future results, financial condition and/or prospects and may increase the climate and sustainability-related risks NWM Group faces.

There are significant limitations related to accessing reliable, verifiable and comparable climate and other sustainability-related data, including as a result of lack of standardisation, consistency and completeness which, alongside other factors, contribute to substantial uncertainties in accurately modelling and reporting on climate and sustainability information, as well as making appropriate important internal decisions.

Meaningful reporting of climate and sustainability-related risks and opportunities and their potential impacts and related metrics depends on access to accurate, reliable, consistent and comparable climate and sustainability-related data from counterparties or customers. Data may not be generally available or, if available, may not be accurate, verifiable, auditable, reliable, consistent, or comparable. Any failure of NWM Group to incorporate climate and/or sustainability-related factors into its counterparty and customer data sourcing and accompanying analytics, or to collect or develop accurate, verifiable, auditable, reliable, consistent and comparable counterparty and customer data, may adversely affect NWM Group's ability to prepare meaningful reporting of climate and sustainability-related risks and opportunities, and it may adversely affect NWM Group's regulatory compliance, reputation, business and its competitive position.

In the absence of other sources, reporting of financed emissions by financial institutions, including NWM Group, is necessarily based on aggregated information developed by third parties that may be prepared in an inconsistent way using different methodologies, interpretations, or assumptions. NWM Group's climate and sustainability-related disclosures use a greater number and level of assumptions and estimates than many of its financial disclosures. These assumptions and estimates are highly likely to change over time, and, when coupled with the longer timeframes used in these climate and sustainability-related disclosures, make any assessment of materiality inherently uncertain.

In particular, in the absence of actual emissions monitoring and measurement, emissions estimates are based on industry and other assumptions that may not be accurate for a given counterparty or customer. There may also be data gaps that are filled using proxy data, such as sectoral averages, again developed in different ways. As a result, NWM Group's climate and sustainability-related disclosures may be amended, updated or restated in the future as the quality and completeness of NWM Group's data and methodologies continue to improve. These data quality challenges, gaps and limitations could have a material impact on NWM Group's ability to make effective business decisions about climate risks and opportunities, including risk management decisions, to comply with disclosure requirements and to monitor and report progress in meeting ambitions and targets

Significant risks, uncertainties and variables are inherent in the assessment, measurement and mitigation of climate-related risks. These include data quality gaps and limitations mentioned above, as well as the pace at which climate science, greenhouse gas accounting standards and various emissions reduction solutions develop. In addition, there is significant uncertainty about how climate change and the transition to a net-zero economy will unfold over the coming years and decades and how and when climate-related risks will manifest. These timeframes are considerably longer than NWM Group's historical strategic, financial, resilience and investment planning horizons.

As a result, it is very difficult to predict and model the impact of climate-related risks into precise financial and economic outcomes and impacts. Climate-related risks present significant methodological challenges due to their forward-looking nature, the lack and/or quality of historical testing capabilities, lack of standardisation and incompleteness of emissions and other climate and sub-sector related data and the immature nature of risk measurement and modelling methodologies. The evaluation of climate-related risk exposure and the development of associated potential risk mitigation techniques largely depend on the choice of climate scenario modelling methodology and the assumptions made which involves a number of risks and uncertainties, for example:

- climate scenarios are not predictions of what is likely to happen or what NatWest Group would like to happen, rather they explore the possible implications of different judgments and assumptions by considering a series of scenarios;
- climate scenarios do not provide a comprehensive description of all possible future outcomes;
- lack of specialist expertise in banks such that NWM Group needs to rely on third party advice, modelling, and data which is also subject to many limitations and uncertainties;
- immaturity of modelling of and data on climate-related risks on financial assets which will evolve rapidly in the coming years;
- the number of variables and forward-looking nature of climate scenarios which makes them challenging to back test and benchmark;
- the significant uncertainty as to how the climate will evolve over time, how and when governments, regulators, businesses, investors and customers respond and how those responses impact the economy, asset valuations, land systems, energy systems, technology, policy and wider society;
- the assumptions will be continually evolving with more data/information which may affect the baselines for comparability across reporting periods and impact internal and external verification processes; and
- the pace of the development of the methodologies across different sectors may be different and therefore it may be challenging to report on the whole balance sheet with regard to emissions.

Accordingly, these risks and uncertainties coupled with significantly longer timeframes make the outputs of climate-related risk modelling, including emission reduction targets and pathways, inherently more uncertain than outputs modelled for traditional financial planning cycles based on historical financial information. Furthermore, there is a lack of scientific, industry and regulatory consensus regarding the appropriate metrics, methodologies, modelling and standardised reporting to enable the assessment of the location, acuteness, and severity of environmental risks (including nature and biodiversity-related risks) and the monitoring and mitigation of these risks in the economy and financial system.

Capabilities within NWM Group to appropriately assess, model, report and manage climate and sustainability-related risks and impacts and the suitability of the assumptions required to model and manage climate and sustainability-related risks appropriately are developing. The development of NWM Group's capabilities to assess, model, report and manage the impacts of climate change and broader environmental risk (including nature and biodiversity related risks) is in its early stages. Even when those capabilities are developed, the high level of uncertainty regarding any assumptions modelled, the highly subjective nature of risk measurement and mitigation techniques, incorrect or inadequate assumptions and judgments and data quality gaps and limitations may lead to inadequate risk management information and frameworks, or ineffective business adaptation or mitigation strategies, which may adversely affect NWM Group's regulatory compliance, reputation, future results, financial condition and/or prospects.

A failure to implement effective climate change resilient governance, procedures, systems and controls in compliance with legal and regulatory expectations to manage climate and sustainability-related risks and opportunities could adversely affect NWM Group's ability to manage those risks.

The prudential regulation of climate-related risks is an important driver in how NWM Group develops its risk appetite for financing activities or engaging with counterparties. Legislative and regulatory authorities are publishing expectations as to how banks should prudently manage and transparently disclose climate-related and environmental risks under prudential rules.

In April 2019, the PRA published a supervisory statement ('SS 3/19') with particular focus on the management of financial risks from climate change with respect to governance, risk management, scenario analysis and disclosures. In response to the PRA's SS 3/19, following the submission of initial plans in October 2019, on 8 October 2020 NatWest Group provided the PRA with an update to its original plan, noting that the COVID-19 pandemic had disrupted some elements of its original plan and, as a result, the updated plan would require additional operating cycles reaching into 2022 and beyond to prove embedding. Throughout 2022, NatWest Group provided the PRA with updates on how it had addressed the commitments made in its October 2020 plan, noting the delivery of a first generation, largely qualitative in nature, approach to the supervisory requirements. In 2022, the PRA has also started actively supervising firms against their supervisory expectations, and it issued another 'Dear CEO letter' providing a summary of capabilities, which the PRA would expect firms to be able to demonstrate, setting out thematic observations on firms' levels of embeddedness, and providing examples of effective practices identified.

In June 2021, the Bank of England launched its 2021 Biennial Exploratory Scenario ('2021 CBES') to stress test the resilience of the current business models of the largest banks, insurers and the financial system to the physical and transition risks from climate change under three climate scenarios. NatWest Group delivered its first 2021 CBES submission to the PRA in October 2021 and its submission to the second phase of the 2021 CBES exercise in the first quarter of 2022. In May 2022, the PRA published the results of the 2021 CBES which has shown that UK banks, including NatWest Group (including NWM Group), need to do more to understand and manage their exposure to climate risks and that the lack of available data on corporates' current emissions and future transition plans is a collective issue affecting all participating firms. In July 2022, the participating banks in the 2021 CBES exercise were invited to discuss methodologies and challenges with regards to climate risk scenario analysis.

In October 2022, the Bank of England and the PRA held a conference to facilitate discussion on the complex issues associated with adjusting the capital framework to take account of climate-related financial risks with the aim of providing more guidance on its approach to climate and capital by the end of 2022. The Bank of England does not think capital frameworks should be used to address the causes of climate change. However, as set out in the PRA's Climate Change Adaptation Report 2021, and, as with any other risk, it does think the capital framework could be a useful tool within the broader regulatory frameworks to ensure that PRA-regulated firms are resilient to climate risks.

Any failure of NatWest Group (including NWM Group) to fully and timely embed climate-related risks into its risk management practices and framework to appropriately identify, measure, manage and mitigate the various climate-related physical and transition risks and apply the appropriate product governance in line with applicable legal and regulatory requirements and expectations, may adversely affect NWM Group's regulatory compliance, prudential capital requirements, liquidity position, reputation, future results, financial condition and/or prospects.

Climate and sustainability-related disclosures are a rapidly evolving area and increasingly expose NWM Group to risk in the face of legal and regulatory expectations, regulatory enforcement and class action risk. NatWest Group and its subsidiaries currently are and, in the future, will be subject to increasing entity-wide climate-related and other non-financial disclosure requirements, including pursuant to the recommendations of the Task Force on Climate-related Financial Disclosure ('TCFD'), the proposed SEC Climate Disclosure Rules and ISSB sustainability reporting requirements and under other regimes. As from February 2022, NatWest Group is required to provide enhanced climate-related disclosures consistent with the TCFD recommendations to comply with the FCA Policy Statement on 'Proposals to enhance climate-related disclosures by listed issuers and clarification of existing disclosure obligations' (PS 20/17) which introduced new Listing Rules that require commercial companies with a UK premium listing – such as NatWest Group - to make climate-related disclosures, consistent with TCFD, on a 'comply or explain' basis. By its Policy Statement "Enhancing climate-related disclosures by standard listed companies" (PS 21/23), the FCA has confirmed its final policy position set forth in PS 20/17, extended the scope of issuers that are subject to the new Listing Rules and added guidance provisions on transition plan disclosure (for issuers in scope of both the PS 20/17 and the new PS 21/23 rules). NWM is currently not in scope of the FCA Policy Statement (PS 20/17) or Policy Statement (PS 21/23) and therefore, it is not required to publish climate-related disclosures consistent with the TCFD at the company level. As required by the FCA Policy Statement (PS 20/17) and Policy Statement (PS 21/23), NatWest Group publishes climate related disclosures that it believes are consistent with the TCFD for the consolidated group, including NWM Group.

In addition, as of 5 April 2022, NatWest Group is also required to prepare mandatory climate-related financial disclosures pursuant to The Companies (Strategic Report) (Climate-related Financial Disclosure) Regulations 2022. NWM Plc, being a subsidiary of NatWest Group, falls under the subsidiary exemption of The Companies (Strategic Report) (Climate-related Financial Disclosure) Regulations 2022. Therefore, NWM Plc to date is not required to produce any separate, standalone climate-related disclosures.

Furthermore, in October 2022, the FCA published a Consultation Paper on 'Sustainability Disclosure Requirements (SDR) and investment labels' (CP 22/20) which proposes that the FCA will require all regulated firms to ensure that from June 2023 the naming and marketing of financial products and services in the UK is clear, fair and not misleading, and consistent with the sustainability profile of the products or services, i.e. proportionate and not exaggerated.

Misrepresenting or over-emphasising the extent to which an investment, strategy or other type of product takes into account environmentally friendly, sustainable or ethical features and concerns, using misleading labels and language in relation to such products and/or omitting material information about NWM Group's contribution to the climate crisis (including its direct or indirect contribution to greenhouse gas emissions), or other sustainability related issues could potentially result in complaints, regulatory intervention, claims and/or litigation and reputational damage.

Any failure of NWM Group to implement robust and effective climate and sustainability-related disclosure governance and to embed appropriate product governance policies, procedures and controls to make accurate public statements and claims about how environmentally friendly, sustainable or ethical NWM Group's products and services are and to apply these in line with applicable legal and regulatory requirements and expectations, may adversely affect NWM Group's regulatory compliance and reputation and could give rise to litigation.

Increasing levels of climate, environmental, human rights and other sustainability-related laws, regulation and oversight which are constantly evolving may adversely affect NWM Group.

There is an increasing number of EU, UK and other regulatory and legislative initiatives to address issues around climate change (including promoting the transition to a net-zero economy), environment (including nature and biodiversity), human rights and other sustainability-related risks and opportunities. As a result, an increasing number of laws, regulations and legislative actions, including proposals, guidance, policy and regulatory initiatives many of which have been introduced or amended recently and are subject to further changes, is likely to affect the financial sector and the wider economy.

Many of these initiatives are focused on developing standardised definitions and criteria for green and sustainable criteria of assets and liabilities, integrating climate change and sustainability into decision-making and customers' access to green and sustainable financial products and services which may have a significant impact on the services provided by NWM Group and its subsidiaries, and its associated credit, market and financial risk profile. They could also impact NWM Group's recognition of its climate and sustainable funding and financing activity and may adversely affect NWM Group's ability to achieve its strategy and climate and sustainable funding and financing ambitions.

In addition, NWM Group's EU and other non-UK subsidiaries and branches are and will continue to be subject to an increasing array of the EU/EEA and US climate and sustainability-related legal and regulatory requirements. These requirements (potentially including the EU Corporate Sustainability Due Diligence Directive or the EU Corporate Sustainability Reporting Directive) may be applicable to UK businesses such as NWM Group, or used as the basis for UK laws and regulations (such as the UK Green Taxonomy and the FCA's Consultation Paper on 'Sustainability Disclosure Requirements (SDR) and investment labels' (CP 22/20)), or be regarded by investors and regulators as best practice standards whether or not they apply to UK businesses (such as the EU Green Bond Standard). Any divergence between UK, EU/EEA and US climate and sustainability-related legal and regulatory requirements and their interpretation may result in NWM Group, or any of its subsidiaries, not meeting regulatory requirements, investors' expectations, may increase the cost of doing business (including increased operating costs) and contentious regulatory and litigation risk) and may restrict access of NWM Group's UK business to the EU/EEA and US market.

NatWest Group (including NWM Group) is also participating in various voluntary carbon reporting and other standard setting initiatives for disclosing climate and sustainability-related information, many of which have differing objectives and methodologies and are at different stages of development in terms of how they apply to financial institutions.

Compliance with these developing and evolving climate and sustainability-related legal and regulatory requirements is likely to require NWM Group to implement significant changes to its business models, products and other governance, internal controls over financial reporting, disclosure controls and procedures, modelling capability and risk management systems, which may increase the cost of doing business, and entail additional change risk and increased compliance, regulatory sanctions and litigation (including settlements) costs. Failure to implement and comply with these legal and regulatory requirements or emerging best practice expectations may have a material adverse effect on NWM Group's regulatory compliance and may result in regulatory sanctions, reputational damage and investor disapproval each of which may adversely affect NWM Group's future results, financial condition and/or prospects.

NWM Group may be subject to potential climate, environmental, human rights and other sustainability-related litigation, enforcement proceedings, investigations and conduct risk.

Due to increasing new climate and sustainability-related jurisprudence, laws and regulations in the UK and other jurisdictions, growing demand from investors and customers for environmentally sustainable products and services, and regulatory scrutiny, financial institutions, including NWM Group, may through their business activities, face increasing litigation, conduct, enforcement and contract liability risks related to climate change, environmental degradation, human rights violations and other social, governance and sustainability-related issues.

These risks may arise, for example, from claims pertaining to: (i) failure to meet obligations, targets or commitments relating to, or to disclose accurately, or provide updates on material climate and/or sustainability-related risks, or otherwise provide fair, balanced and appropriate disclosure to investors, customers, counterparties and other stakeholders; (ii) conduct, mis-selling and customer protection claims, including claims which may relate to alleged insufficient product understanding, unsuitable product offering and /or reliance upon information provided by NWM Group or claims alleging unfair pricing of climate-related products, for example in relation to products where limited liquidity or reliable market data exists for benchmarking purposes or which may be impacted by future climate policy uncertainty or other factors; (iii) marketing that portrays products, securities, activities or policies as having positive climate, environmental or sustainable outcomes to an extent that may not be the case, or may not adequately be qualified and/or omits material information about NWM Group's contribution to the climate crisis and/or its direct / indirect contribution to greenhouse gas emissions or other sustainability-related issues; (iv) damages claims under various tort theories, including common law public nuisance claims, or negligent mismanagement of physical and/or transition risks; (v) alleged violations of officers', directors' and other fiduciaries' duties, for example by financing various carbon-intensive, environmentally harmful or otherwise highly exposed assets, companies, and industries; (vi) changes in the understanding of what constitutes positive climate, environmental or sustainable outcomes as a result of developing climate science, leading to discrepancy between current product offerings and investor and/or market and/or broader stakeholder expectations; (vii) any weaknesses or failures in specific systems or processes associated particularly with climate, environmental or sustainability linked products, and/or human rights due diligence, including any failure in the timely implementation, onboarding and/or updating of such systems or processes; or (viii) counterparties, collaborators, customers to whom NatWest Group (including NWM Group) provides services and third parties in NWM Group's value chain who act, or fail to act, or undertake due diligence, or apply appropriate risk management and product governance in a manner that may adversely affect NatWest Group's (including NWM Group)'s reputation or sustainability credentials.

Furthermore, there is a risk that shareholders, campaign groups, customers and special interest groups could seek to take legal action against NWM Group for financing or contributing to climate change, environmental degradation and human rights violations and for not supporting the principles of 'just transition' (i.e. maximising the social benefits of the transition, mitigating the social risks of the transition, empowering those affected by the change, anticipating future shifts to address issues up front and mobilising investments from the public and private sectors).

There is a risk that as environmental and climate science develop and societal understanding of these issues increases and deepens, courts, regulators and enforcement authorities may apply the then current understandings of environmental, climate and broader sustainability-related matters retrospectively when assessing claims about historical conduct or dealings of financial institutions, including NWM Group. See also, *'NWM Group is exposed to the risk of various litigation matters, regulatory and governmental actions and investigations as well as remedial undertakings, the outcomes of which are inherently difficult to predict, and which could have an adverse effect on NWM Group.'*

These potential litigation, conduct, enforcement and contract liability risks may have a material adverse effect on NatWest Group's ability to achieve its strategy, including its climate ambition, and may adversely affect NWM Group's reputation, future results, financial condition and/or prospects.

A reduction in the ESG ratings of NatWest Group (including NWM Group) or NWM Group could have a negative impact on NatWest Group's (including NWM Group's) or NWM Group's reputation and on investors' risk appetite and customers' willingness to deal with NatWest Group (including NWM Group) or NWM Group.

ESG ratings from agencies and data providers which rate how NatWest Group (including NWM Group) or NWM Group manage environmental, social and governance risks are increasingly influencing investment decisions pertaining to NatWest Group's and/or their subsidiaries' securities or being used as a basis to label financial products and services as environmentally friendly or sustainable. ESG ratings are (i) unsolicited; (ii) subject to the assessment and interpretation by the ESG rating agencies; (iii) provided without warranty; (iv) not a sponsorship, endorsement, or promotion of NatWest Group (including NWM Group) or NWM Group by the relevant rating agency; and (v) may depend on many factors some of which are beyond NatWest Group's and NWM Group's control (e.g. any change in rating methodology). In addition, NWM Group offers and sells products and services to customers and counterparties based exclusively or largely on a rating by an unregulated ESG rating agency. ESG rating agencies, at this stage, are not subject to any specific regulatory or other regime or oversight (although there are proposals by regulators in different jurisdictions to regulate rating agencies and data providers). Regulators have expressed concern that harm may arise from potential conflicts of interest within

ESG rating and review or opinion providers and there is a lack of transparency in methodologies and data points, which renders ratings and reviews incomparable between agencies or providers. There is currently no market consensus on what precise attributes are required for a particular asset to be classified as 'ESG'. Any reduction in the ESG ratings of NatWest Group (including NWM Group) or NWM Group, or a regulatory sanction or enforcement action involving an ESG rating agency used by a NatWest Group and/orNWM Group entity, could have a negative impact on NWM Group's reputation, could influence investors' risk appetite for NWM Group's and/or its subsidiaries' securities, particularly ESG securities, could increase the cost of issuing securities for NWM Group and/or its subsidiaries and could affect a customer's willingness to deal with NWM Group.

Operational and IT resilience risk

Operational risks (including reliance on third party suppliers and outsourcing of certain activities) are inherent in NWM Group's businesses.

Operational risk is the risk of loss or disruption resulting from inadequate or failed internal processes, procedures, people or systems, or from external events, including legal and regulatory risks. NWM Group operates in a number of countries, offering a diverse range of products and services supported directly or indirectly by third party suppliers. As a result, operational risks or losses can arise from a number of internal or external factors (including for example, payment errors or financial crime and fraud), for which there is continued scrutiny by third parties on NWM Group's compliance with financial crime requirements; see '*NWM Group is exposed to the risk of various litigation matters, regulatory and governmental actions and investigations as well as remedial undertakings, the outcomes of which are inherently difficult to predict, and which could have an adverse effect on NWM Group.'* These risks are also present when NWM Group relies on critical service providers (suppliers) or vendors to provide services to it or its clients, as is increasingly the case as NWM Group outsources certain activities, including with respect to the implementation of technologies, innovation and responding to regulatory and market changes.

Operational risks continue to be heightened as a result of the implementation of NatWest Group's purpose-led strategy, and the organisational and operational changes involved, including NatWest Group's current cost-controlling measures, the NWM Refocusing, the creation of the C&I business segment of which NWM forms part, the progression towards working as One Bank across NatWest Group to serve customers and conditions affecting the financial services industry generally (including macro-economic and other geo-political developments) as well as the legal and regulatory uncertainty resulting therefrom. It is unclear as to how the future ways of working may evolve, including in respect of how working practices may develop, or how NWM Group will evolve to best serve its customers. Any of the above may exacerbate operational risks including NWM Group's ability to maintain effective internal controls and governance frameworks.

In recent years, NWM Group has materially increased its dependence on NatWest Bank Plc and other NatWest Group entities for numerous critical services and operations, including without limitation, property, finance, accounting, treasury, risk, regulatory compliance and reporting, human resources, and certain other support and administrative functions. A failure by NatWest Bank Plc or other NatWest Group entities to adequately supply these services may expose NWM Group to critical business failure risk, increased costs and other liabilities. These and any increases in the cost of these services may adversely affect NWM Group's future results, financial condition and/or prospects.

The effective management of operational risks is critical to meeting customer service expectations and retaining and attracting client business. Although NWM Group has implemented risk controls and mitigation actions, with resources and planning having been devoted to mitigate operational risk, such measures may not be effective in controlling each of the operational risks faced by NWM Group. Ineffective management of such risks may adversely affect NWM Group's future results, financial condition and/or prospects.

NWM Group is subject to increasingly sophisticated and frequent cyberattacks.

NWM Group experiences a constant threat from cyberattacks across the entire NatWest Group (including NWM Group) and against NatWest Group and NWM Group's supply chain, reinforcing the importance of due diligence of close working relationship with, the third parties on which NWM Group relies. NWM Group is reliant on technology, against which there is a constantly evolving series of attacks, that are increasing in terms of frequency, sophistication, impact and severity. As cyberattacks evolve and become more sophisticated, NWM Group is required to continue to invest in additional capability designed to defend against emerging threats. In 2022, NWM Group and its supply chain were subjected to a small number of Distributed Denial of Service ('DDOS') and ransomware attacks, which are a pervasive and significant threat to the financial services industry. The focus is to manage the impact of the attacks and sustain availability of services for NWM Group's customers. NWM Group continues to invest significant resources in the development and evolution of cyber security controls that are designed to minimise the potential effect of such attacks. Hostile attempts are made by third parties to gain access to, introduce malware (including ransomware) into and exploit vulnerabilities of NWM Group's IT systems. NWM Group has information and cyber security controls in place to seek to minimise the impacts of any such attacks, which are subject to review on a continuing basis, but given the nature of the threat, there can be no assurance that such measures will prevent the potential negative impact of any such attacks from occurring. See also, '*NWM Group's operations are highly dependent on its complex IT systems and any IT failure could adversely affect NWM Group.'*

Any failure in NWM Group's cybersecurity policies, procedures or controls, may result in significant financial losses, major business disruption, inability to deliver customer services, or loss of data or systems or other sensitive information (including as a result of an outage) and may cause associated reputational damage. Any of these factors could increase costs (including costs relating to notification of, or compensation for clients and credit monitoring), result in regulatory investigations or sanctions being imposed or may affect NWM Group's ability to retain and attract clients. Regulators in the UK, US, Europe and Asia continue to recognise cybersecurity as an important systemic risk to the financial sector and have highlighted the need for financial institutions to improve their monitoring and control of, and resilience (particularly of critical services) to cyberattacks, and to provide timely reporting or notification of them, as appropriate. Cyberattacks on NWM Group's counterparties may also damage NWM Group's operations.

Additionally, third parties may also fraudulently attempt to induce employees, customers, third party providers or other users who have access to NWM Group's systems to disclose sensitive information in order to gain access to NWM Group's data or systems or that of NWM Group's clients or employees. Cybersecurity and information security events can derive from groups or factors such as: internal or external threat actors, human error, fraud or malice on the part of NWM Group's employees or third parties, including third party providers, or may result from technological failure. Any of the above may have an adverse effect on NWM Group's reputation, future results, financial condition and/or prospects.

NWM Group expects greater regulatory engagement, supervision and enforcement to continue at a high level in relation to its overall resilience to withstand IT and IT-related disruption, either through a cyberattack or some other disruptive event. Such increased regulatory engagement, supervision and enforcement is uncertain in relation to the scope, cost, consequence and the pace of change, which may adversely affect NWM Group's future results, financial condition and/or prospects. Due to NWM Group's reliance on technology and the increasing sophistication, frequency and impact of cyberattacks, such attacks may have an adverse effect on NWM Group.

In accordance with the Data Protection Act 2018 and the European Union Withdrawal Act 2018, the Data Protection, Privacy and Electronic Communications (Amendments Etc.) (EU Exit) Regulations 2019, as amended by the Data Protection, Privacy and Electronic Communications (Amendments Etc.) (EU Exit) Regulations 2020 ('UK Data Protection Framework') and European Banking Authority ('EBA') Guidelines on ICT and Security Risk Management, NWM Group is required to ensure it implements timely appropriate and effective organisational and technological safeguards against unauthorised or unlawful access to the data of NWM Group, its clients and its employees. In order to meet this requirement, NWM Group relies on the effectiveness of its internal policies, controls and procedures to protect the confidentiality, integrity and availability of information held on its IT systems, networks and devices as well as with third parties with whom NWM Group interacts. A failure to monitor and manage data in accordance with the UK Data Protection Framework and EBA requirements of the applicable legislation may result in financial losses, regulatory fines and investigations and associated reputational damage.

NWM Group operations and strategy are highly dependent on the accuracy and effective use of data.

NWM Group relies on the effective use of accurate data to support, monitor, evaluate, manage and enhance its operations and deliver its strategy. Investment is being made in data tools and analytics, including raising awareness around data ethics usage and privacy across NWM Group. The availability and accessibility of current, complete, detailed, accurate and, wherever possible, machine-readable customer segment and sub-sector data, together with appropriate governance and accountability for data, is fast becoming a critical strategic asset, which is subject to increased regulatory focus. Failure to have or be able to access that data or the ineffective use or governance of that data could result in a failure to manage and report important risks and opportunities or satisfy customers' expectations including the inability to deliver products and services. This could also result in a failure to deliver NWM Group's strategy and could place NWM Group at a competitive disadvantage by increasing its costs, inhibiting its efforts to reduce costs or its ability to improve its systems, controls and processes which could result in a failure to deliver NWM Group's strategy. These data weaknesses and limitations, or the unethical or inappropriate use of data, and/or non-compliance with data protection laws could give rise to conduct and litigation risks and may increase the risk of operational challenges, losses, reputational damage or other adverse consequences due to inappropriate models, systems, processes, decisions or other actions.

NWM Group relies on attracting, retaining, developing and remunerating diverse senior management and skilled personnel (such as market trading specialists), and is required to maintain good employee relations.

NWM Group's success depends on its ability to attract, retain, through creating an inclusive environment, and develop and remunerate highly skilled and qualified diverse personnel, including senior management, directors, market trading specialists and key employees, especially for technology and data focused roles, in a highly competitive market, in an era of strategic change and under internal cost-reduction pressures.

The inability to compensate employees competitively and/or any reduction of compensation, the perception that NWM Group may not be a viable or competitive business, heightened regulatory oversight of banks and the increasing scrutiny of, and (in some cases) restrictions placed upon, employee compensation arrangements (in particular those of banks in receipt of government support such as NatWest Group, negative economic developments or other factors, could have an adverse effect on NWM Group's ability to hire, retain and engage well qualified employees, especially at a senior level, which could adversely affect NWM Group's future results, financial condition and/or prospects.

This increases the cost of hiring, training and retaining diverse skilled personnel. In addition, certain economic, market and regulatory conditions and political developments may reduce the pool of candidates for key management and non-executive roles, including non-executive directors with the right skills, knowledge and experience, or increase the number of departures of existing employees. Moreover, a failure to foster a diverse and inclusive workforce may adversely affect NWM Group's employee engagement and the formulation and execution of its strategy, and could also have a negative effect on its reputation with customers, investors and regulators. The NWM Refocusing has also reduced NWM Group's ability to engage in succession planning for critical roles given the recent reduction in headcount. This has placed increased risk on employee turnover within revenue generating areas.

Some of NWM Group's employees are represented by employee representative bodies, including trade unions and works councils. Engagement with its employees and such bodies is important to NWM Group in maintaining good employee relations. Any breakdown of these relationships may adversely affect NWM Group.

NWM Group's operations are highly dependent on its complex IT systems and any IT failure could adversely affect NWM Group.

NWM Group's operations are highly dependent on the ability to process a very large number of transactions efficiently and accurately while complying with applicable laws and regulations. The proper functioning of NatWest Group's (including NWM Group's) transactional and payment systems, financial crime, fraud systems and controls, risk management, credit analysis and reporting, accounting, customer service and other IT systems (some of which are owned and operated by other entities in NatWest Group or third parties), is critical to NWM Group's operations.

Individually or collectively, any critical system failure, material loss of service availability or material breach of data security could cause significant damage to (i) important business services across NWM Group and (ii) NWM Group's ability to provide services to its clients, which could result in reputational damage, significant compensation costs and regulatory sanctions (including fines resulting from regulatory investigations) or a breach of applicable regulations and could affect NWM Group's regulatory approvals, competitive position, business and brands, which could undermine its ability to attract and retain customers.

NWM Group outsources certain functions as it innovates and offers new digital solutions to its customers to meet the demand for online and mobile banking. Outsourcing, alongside hybrid working patterns of NWM Group employees, heighten the above risks.

NWM Group uses IT systems that enable remote working interface with third-party systems, and NWM Group could experience service denials or disruptions if such systems exceed capacity or if a third-party system fails or experiences any interruptions, all of which could result in business and customer interruption and related reputational damage, significant compensation costs, regulatory sanctions and/or a breach of applicable regulations.

In 2022, NWM Group continued to make considerable investments to further simplify, upgrade and improve its IT and technology capabilities (including migration of certain services to cloud platforms). NWM Group also continues to develop and enhance digital services for its customers and seeks to improve its competitive position through enhancing controls and procedures and strengthening the resilience of services including cyber security. Any failure of these investment and rationalisation initiatives to achieve the expected results, due to cost challenges or otherwise, may adversely affect NWM Group's operations, its reputation and ability to retain or grow its client business or adversely affect its competitive position, thereby negatively impacting NWM Group. See also, *'NWM Group has been in a period of significant structural and other change, including as a result of NatWest Group's purpose-led strategy and NatWest Group's recent creation of its C&I business segment (of which NWM Group forms part) and may continue to be subject to significant structural and other change.'*

A failure in NWM Group's risk management framework could adversely affect NWM Group, including its ability to achieve its strategic objectives.

A failure in design, or adherence to, NatWest Group's risk management framework could adversely affect NWM Group, including its ability to achieve its strategic objectives. Risk management is an integral part of all of NWM Group's activities and integral to the delivery its long-term strategy. NatWest Group's Enterprise-Wide Risk Management Framework sets out NWM Group's approach for managing risk within NWM Group including in relation to risk governance and risk appetite. A failure to adhere to this framework, or any material weaknesses or deficiencies in the framework's controls and procedures, could adversely affect NWM Group's financial condition and strategic delivery including in relation to operating within agreed risk appetite statements and accurate reporting on risk exposures.

Financial risk management is highly dependent on the use and effectiveness of internal stress tests and models and ineffective risk management may arise from a wide variety of factors, including lack of transparency or incomplete risk reporting, manual processes and controls, inaccurate data, inadequate IT systems, unidentified conflicts or misaligned incentives, lack of accountability control and governance, incomplete risk monitoring (including trade surveillance) and failures of systems to properly process all relevant data, risks related to unanticipated behaviour or performance in algorithmic trading and management or insufficient challenges or assurance processes or a failure to timely complete risk remediation projects. Failure to manage risks effectively, or within regulatory expectations, could adversely affect NWM Group's reputation or its relationship with its regulators, clients, shareholders or other stakeholders.

In addition, financial crime risk management is dependent on the use and effectiveness of financial crime assessment, systems and controls. Weak or ineffective financial crime processes and controls may risk NWM Group inadvertently facilitating financial crime which may result in regulatory investigation, sanction, litigation, fines and reputational damage. Financial crime continues to evolve, whether through fraud, scams, cyber-attacks or other criminal activity. NatWest Group (and NWM Group) has made and continues to make significant, multi-year investments to strengthen and improve its overall financial crime control framework with prevention systems and capabilities. As part of its ongoing programme of investment, there is current and future investment planned to further strengthen financial crime controls over the coming years, including investment in new technologies and capabilities to further enhance customer due diligence, transaction monitoring, sanctions and anti-bribery and corruption systems. A number of NWM Group's financial crime controls are operated by NatWest Group on behalf of NWM Group.

NWM Group's operations are inherently exposed to conduct risks, which include business decisions, actions or reward mechanisms that are not responsive to or aligned with NWM Group's regulatory obligations, client needs or do not reflect NWM Group's customer-focused strategy, ineffective product management, unethical or inappropriate use of data, information asymmetry, implementation and utilisation of new technologies, outsourcing of customer service and product delivery, the possibility of mis-selling of financial products and mishandling of customer complaints. Some of these risks have materialised in the past and ineffective management and oversight of conduct risks may lead to further remediation and regulatory intervention or enforcement.

NWM Group's businesses are also exposed to risks from employee misconduct including non-compliance with policies and regulations, negligence or fraud (including financial crimes and fraud), any of which could result in regulatory fines or sanctions and serious reputational or financial harm to NWM Group. Remote working arrangements for NWM Group employees continues to place heavy reliance on the IT systems that enable remote working and may place additional pressure on NWM Group's ability to maintain effective internal controls and governance frameworks. Remote working arrangements are also subject to regulatory scrutiny to ensure adequate recording, surveillance and supervision of regulated activities and compliance with regulatory requirements and expectations, including requirements to: meet threshold conditions for regulated activities; ensure the ability to oversee functions (including any outsourced functions); ensure no detriment is caused to customers; and ensure no increased risk of financial crime.

NWM Group has been seeking to embed a strong risk culture across the organisation and has implemented policies and allocated new resources across all levels of the organisation to manage and mitigate conduct risk and expects to continue to invest in risk management, including the ongoing development of a NatWest Group risk management strategy in line with regulatory expectations. However, such efforts may not insulate NWM Group from future instances of misconduct and no assurance can be given that NWM Group's strategy and control framework will be effective. See also, *'NWM Group has been in a period of significant structural and other change, including as a result of NatWest Group's purpose-led strategy and NatWest Group's recent creation of its C&I business segment (of which NWM Group forms part) and may continue to be subject to significant structural and other change.'*

Any failure in NWM Group's risk management framework may adversely affect NWM Group and its financial condition through reputational and financial harm and may result in the inability to achieve its strategic objectives for its clients, employees and wider stakeholders.

NWM Group's operations are subject to inherent reputational risk.
Reputational risk relates to stakeholder and public perceptions of NWM Group arising from an actual or perceived failure to meet stakeholder or the public's expectations, including with respect to NatWest Group's purpose-led strategy and related targets, NWM Group's strategy, the creation of the C&I business segment, the progression towards working as One Bank across the NatWest Group to serve customers, or due to any events, behaviour, action or inaction by NWM Group, its employees or those with whom NWM Group is associated. See also, *'NWM Group's businesses are subject to substantial regulation and oversight, which are constantly evolving and may adversely affect NWM Group.'*

This includes harm to its brand, which may be detrimental to NWM Group's business, including its ability to build or sustain business relationships with clients, and may cause low employee morale, regulatory censure or reduced access to, or an increase in the cost of, funding.

Reputational risk may arise whenever there is, or there is perceived to be, a material lapse in standards of integrity, compliance, customer or operating efficiency and may adversely affect NWM Group's ability to attract and retain clients. In particular, NWM Group's ability to attract and retain clients may be adversely affected by factors including: negative public opinion resulting from the actual or perceived manner in which NWM Group or any other member of NatWest Group conducts or modifies its business activities and operations, media coverage (whether accurate or otherwise), employee misconduct, NWM Group's financial performance, IT systems failures or cyberattacks, data breaches, financial crime and fraud, the level of direct and indirect government support for NatWest Group plc, or the actual or perceived practices in the banking and financial industry in general, or a wide variety of other factors.

Modern technologies, in particular online social networks and other broadcast tools that facilitate communication with large audiences in short timeframes and with minimal costs, may also significantly increase and accelerate the impact of damaging information and allegations. Although NWM Group has implemented a Reputational Risk Policy to monitor the identification, assessment and management of customers and clients, transactions, products and issues, which represent a reputational risk, NWM Group cannot be certain that it will be successful in avoiding damage to its business from reputational risk.

Legal, regulatory and conduct risk

NWM Group's businesses are subject to substantial regulation and oversight, which are constantly evolving and may adversely affect NWM Group.
NWM Group is subject to extensive laws, regulations, guidelines, corporate governance practice and disclosure requirements, administrative actions and policies in each jurisdiction in which it operates, which represents ongoing compliance and conduct risks. Many of these have been introduced or amended recently and are subject to further material changes, which may increase compliance and conduct risks, particularly as EU/EEA and UK laws diverge as a result of Brexit. NWM Group expects government and regulatory intervention in the financial services industry to remain high for the foreseeable future.
In recent years, regulators and governments have focused on reforming the prudential regulation of the financial services industry and the manner in which the business of financial services is conducted. Measures have included: enhanced capital, liquidity and funding requirements, implementation of the UK ring-fencing regime, implementation and strengthening of the recovery and resolution framework applicable to financial institutions in the UK, the EU and the US, financial industry reforms (including in respect of MiFID II), corporate governance requirements, restrictions on the compensation of senior management and other employees, enhanced data protection and IT resilience requirements, financial market infrastructure reforms (including enhanced data protection and IT resilience requirements), enhanced regulations in respect of the provision of 'investment services and activities', and increased regulatory focus in certain areas, including conduct, consumer protection, competition and disputes regimes, anti-money laundering, anti-corruption, anti-bribery, anti-tax evasion, payment systems, sanctions and anti-terrorism laws and regulations.

In addition, there is significant oversight by competition authorities of the jurisdictions in which NWM Group operates. The competitive landscape for banks and other financial institutions in the UK, EU/EEA, Asia and the US is rapidly changing. Recent regulatory and legal changes have and may continue to result in new market participants and changed competitive dynamics in certain key areas. Regulatory and competition authorities, including the CMA, are currently also looking at and focusing more on how they can support competition and innovation in digital and other markets. Recent regulatory changes, proposed (such as US proposals to increase regulation around cybersecurity) or future developments and heightened levels of public and regulatory scrutiny in the UK, the EU and the US have resulted in increased capital, funding and liquidity requirements, changes in the competitive landscape, changes in other regulatory requirements and increased operating costs, and have impacted, and will continue to impact, product offerings and business models.

Other areas in which, and examples of where, governmental policies, regulatory and accounting changes and increased public and regulatory scrutiny could have an adverse effect (some of which could be material) on NWM Group include, but are not limited to, the following:

- general changes in government, central bank, regulatory or competition policy, or changes in regulatory regimes that may influence investor decisions in the jurisdictions in which NWM Group operates;
- rules relating to foreign ownership, expropriation, nationalisation and confiscation of assets;
- new or increased regulations relating to customer data protection as well as IT controls and resilience, such as the proposed UK Data Protection and Digital Information Bill and in India, the Digital Personal Data Protection Bill;
- the introduction of, and changes to, taxes, levies or fees applicable to NWM Group's operations, such as the imposition of a financial transaction tax, introduction of global minimum tax rules, changes in tax rates, changes in the scope and administration of the Bank Levy, increases in the bank corporation tax surcharge in the UK, restrictions on the tax deductibility of interest payments or further restrictions imposed on the treatment of carry-forward tax losses that reduce the value of deferred tax assets and require increased payments of tax;
- increased regulatory focus on customer protection (such as the FCA's Consumer Duty policy statement and final rules and guidance) in retail or other financial markets;
- the potential introduction by the Bank of England of a Central Bank Digital Currency which could result in deposit outflows, higher funding costs, and/or other implications for UK banks including NWM Group; and
- regulatory enforcement in the form of PRA imposed financial penalties for

failings in banks' regulatory reporting governance and controls, and regulatory scrutiny following the 2019 PRA 'Dear CEO letter' regarding PRA's ongoing focus on: the integrity of regulatory reporting, which the PRA considers has equal standing with financial reporting; the PRA's thematic reviews of the governance, controls and processes for preparing regulatory returns of selected UK banks, including NatWest Group; the publication of the PRA's common findings from those reviews in September 2021; and NatWest Group's programme of improvements to meet PRA expectations.

These and other recent regulatory changes, proposed or future developments and heightened levels of public and regulatory scrutiny in the UK, the EU and the US have resulted in increased capital, funding and liquidity requirements, changes in the competitive landscape, changes in other regulatory requirements and increased operating costs, and have impacted, and will continue to impact, product offerings and business models. Any of these developments (including any failure to comply with new rules and regulations) could also have a significant impact on NWM Group's authorisations and licences, the products and services that NWM Group may offer, its reputation and the value of its assets, NWM Group's operations or legal entity structure, and the manner in which NWM Group conducts its business. Material consequences could arise should NWM Group be found to be non-compliant with these regulatory requirements. Regulatory developments may also result in an increased number of regulatory investigations and proceedings and have increased the risks relating to NWM Group's ability to comply with the applicable body of rules and regulations in the manner and within the timeframes required.

Changes in laws, rules or regulations, or in their interpretation or enforcement, or the implementation of new laws, rules or regulations, including contradictory or conflicting laws, rules or regulations by key regulators or policymakers in different jurisdictions, or failure by NWM Group to comply with such laws, rules and regulations, may adversely affect NWM Group's business, results of operations and outlook. In addition, uncertainty and insufficient international regulatory coordination as enhanced supervisory standards are developed and implemented may adversely affect NWM Group's ability to engage in effective business, capital and risk management planning.

NWM Group is exposed to the risk of various litigation matters, regulatory and governmental actions and investigations as well as remedial undertakings, the outcomes of which are inherently difficult to predict, and which could have an adverse effect on NWM Group.

NWM Group's operations are diverse and complex and it operates in legal and regulatory environments that expose it to potentially significant civil actions (including those following on from regulatory sanction), as well as criminal, regulatory and governmental proceedings. NWM Group has resolved a number of legal and regulatory actions over the past several years but continues to be, and may in the future be, involved in such actions in the US, the UK, Europe and other jurisdictions.

NWM Group is currently, has recently been and will likely be involved in a number of significant legal and regulatory actions, including investigations, proceedings and ongoing reviews (both formal and informal) by governmental law enforcement and other agencies and litigation proceedings, including in relation to the offering of securities, conduct in the foreign exchange market, the setting of benchmark rates such as LIBOR and related derivatives trading, the issuance, underwriting, and sales and trading of fixed-income securities (including government securities), product mis-selling, customer mistreatment, anti-money laundering, antitrust, VAT recovery and various other issues. There is also an increasing risk of new class action claims being brought against NWM Group in the Competition Appeal Tribunal for breaches of competition law. Legal and regulatory actions are subject to many uncertainties, and their outcomes, including the timing, amount of fines, damages or settlements or the form of any settlements, which may be material and in excess of any related provisions, are often difficult to predict, particularly in the early stages of a case or investigation.

NWM Group's expectation for resolution may change and substantial additional provisions and costs may be recognised in respect of any matter.

The resolution of significant investigations include: NWM Plc's December 2021 spoofing-related guilty plea in the United States, which involves a three-year period of probation, an independent corporate monitor, and commitments to compliance programme reviews and improvements and reporting obligations. For additional information relating to this and other legal and regulatory proceedings and matters to which NWM Group is currently exposed, see '*Litigation and regulatory matters*' at Note 25 to the consolidated accounts.

The 2021 guilty plea, other recently resolved matters or adverse outcomes or resolution of current or future legal or regulatory actions, could increase the risk of greater regulatory and third-party scrutiny and could have material collateral consequences for NWM Group's business and result in restrictions or limitations on NWM Group's operations.

These may include the effective or actual disqualification from carrying on certain regulated activities and consequences resulting from the need to reapply for various important licences or obtain waivers to conduct certain existing activities of NWM Group, particularly but not solely in the US, which may take a significant period of time and the results and implications of which are uncertain.

Disqualification from carrying on any activities, whether automatically as a result of the resolution of a particular matter or as a result of the failure to obtain such licences or waivers could adversely affect NWM Group's business, in particular in the US. This in turn and/or any fines, settlement payments or penalties may adversely affect NWM Group's reputation, future results, financial condition and/or prospects. Similar consequences could result from legal or regulatory actions relating to other parts of NatWest Group.

Failure to comply with undertakings made by NWM Group to its regulators, or the conditions of probation resulting from the spoofing-related guilty plea, may result in additional measures or penalties being taken against NWM Group. In addition, any failure to administer conduct redress processes adequately, or to handle individual complaints fairly or appropriately, could result in further claims as well as the imposition of additional measures or limitations on NWM Group's operations, additional supervision by NWM Group's regulators, and loss of investor confidence.

NWM Group may not effectively manage the transition of LIBOR and other IBOR rates to replacement risk-free rates.

UK and international regulators are driving the transition from the use of interbank offer rates ('IBORs'), to replacement rates generally referred to as 'risk-free rates' ('RFRs'). As of 31 December 2021, LIBOR, as currently determined, has ceased for all tenors of GBP, JPY, CHF, EUR, and for the 1 week and 2-month tenors for USD. The remaining USD LIBOR tenors, as currently determined, are due to cease after 30

June 2023. The FCA has used its powers under the UK Benchmarks Regulation ('UK BMR') to require, for a limited period of time after 31 December 2021, the ongoing publication of the 1-, 3-, and 6-month GBP and JPY LIBOR tenors using a changed methodology (i.e., 'Art23A LIBOR' on a synthetic basis). The UK has passed the Critical Benchmarks (References and Administrators' Liability) Act 2021 ('Critical Benchmarks Act') which establishes a framework that allows the ongoing use of Art23A LIBOR under certain circumstances where contracts have not pro-actively transitioned onto the replacement rates. These concessions provided under UK BMR and the Critical Benchmarks Act are temporary. The FCA confirmed that Art23A will no longer be available from: (i) the end of 2022 for JPY, (ii) March 2023 for 1- and 6-month GBP LIBOR and (iii) March 2024 for 3-month GBP LIBOR. The transition away from these temporary concessions may expose NatWest Group, its customers and the financial services industry more widely to various risks, including: (i) the FCA further restricting use of Art23A LIBOR resulting in proactive transition of contracts; and (ii) mis-matches between positions in cleared derivatives and the exposures they are hedging where those exposures are permitted to make use of Art23A LIBOR. Although the formal cessation date for the remaining USD LIBOR tenors (as currently determined) is not until the end of June 2023, US and UK regulators have clarified that this is only to support the rundown of existing USD LIBOR exposures. No new contracts should reference these USD LIBOR tenors after 31 December 2021, other than in a very limited range of circumstances. NatWest Group will continue to have ongoing exposure to the remaining USD LIBOR tenors until cessation in June 2023.

Natwest Group has held significant exposures to various IBORs and has actively sought to transition away from these during 2021 and 2022, in accordance with regulatory expectations and milestones. Transition measures have included the pro-active development of new products using the replacement rates, restructuring existing LIBOR exposures to reference these replacement rates and embedding RFR transition language into relevant contracts. Central Counterparty Clearing houses (CCPs) conducted mass conversion exercises in December 2021 covering GBP, JPY, CHF and EUR LIBOR, transitioning derivatives to the relevant RFR, conversion exercises for USD are scheduled for May 2023, NWG entities, along with many of their major counterparties, have adhered to the ISDA IBOR fall-backs protocol which establishes a contractual process to transition from IBORs to RFRs for bilateral derivative products.

These transition efforts have involved extensive engagement with customers, industry working groups and regulators, to seek to deliver transition in a transparent and economically appropriate manner. These changes coincide with the recognition that market liquidity is lower than it has been and whilst it will be dependent on various factors including: the establishment of deep and liquid RFR markets, the establishment of clear and consistent market conventions for all replacement products, as well as counterparties' willingness to accept, and transition to, these conventions. Furthermore, certain IBOR obligations may not be able to be pro-actively changed which could, depending on any over-arching legislative transition frameworks, potentially result in fundamentally different economic outcomes than originally intended. The uncertainties around the manner of transition to RFRs, and the ongoing broader acceptance and use of RFRs across the market, expose NWM Group, its clients and the financial services industry more widely to risks.

Examples of these risks include: (i) legal (including litigation) risks relating to documentation for new and the majority of existing transactions (including, changes, lack of changes, unclear contractual provisions, and disputes in respect of these); (ii) financial risks from any changes in valuation of financial instruments linked to relevant IBORs, including cost of funds and relevant risk management related financial models; (iii) changes to benchmark rates could impact pricing, interest rate or settlement mechanisms for certain instruments; (iv) operational risks linked to the adaptation of IT systems, trade reporting infrastructure and operational processes, as well as ensuring compliance with restrictions on new USD LIBOR usage after December 2021; (v) conduct risks arising from communication of the potential impact on customers, engagement with customers during and after the transition period, or non-acceptance by customers of replacement rates; and (vi) different legislative provisions in different jurisdictions, for example, unlike certain US states and the EU, the UK has not provided a clear and robust safe harbour to protect against litigation and potential liability arising out of the switch to 'synthetic LIBOR'.

Notwithstanding all efforts to date, until the transition away from LIBOR onto replacement rates has been fully completed and there is greater experience of how RFRs are adopted across different products and customer groups, there is some uncertainty as to the impact of the transition, or the potential costs of implementing any relevant remedial action including in the event that the transition is not completed in a timely manner, or at all. The implementation of any replacement RFRs may be impossible or impracticable under the existing terms of certain financial instruments and may have an adverse effect on their value, or return and therefore on NWM Group's future results.

Changes in tax legislation or failure to generate future taxable profits may impact the recoverability of certain deferred tax assets recognised by NWM Group.

In accordance with the accounting policies set out in the section '*Critical accounting policies and key sources of estimation uncertainty*', NWM Group has recognised deferred tax assets on losses available to relieve future profits from tax only to the extent it is probable that they will be recovered. The deferred tax assets are quantified on the basis of current tax legislation and accounting standards and are subject to change in respect of the future rates of tax or the rules for computing taxable profits and offsetting allowable losses.

Failure to generate sufficient future taxable profits or further changes in tax legislation (including with respect to rates of tax) or accounting standards may reduce the recoverable amount of the recognised tax loss deferred tax assets, amounting to £46 million as at 31 December 2022. Changes to the treatment of certain deferred tax assets may impact NWM Group's capital position. In addition, NWM Group's interpretation or application of relevant tax laws may differ from those of the relevant tax authorities and provisions are made for potential tax liabilities that may arise on the basis of the amounts expected to be paid to tax authorities. The amounts ultimately paid may differ materially from the amounts provided depending on the ultimate resolution of such matters.

Forward-looking statements

Cautionary statement regarding forward-looking statements

Certain sections in this document contain 'forward-looking statements' as that term is defined in the United States Private Securities Litigation Reform Act of 1995, such as statements that include the words 'expect', 'estimate', 'project', 'anticipate', 'commit', 'believe', 'should', 'intend', 'will', 'plan', 'could', 'probability', 'risk', 'Value-at-Risk (VaR)', 'target', 'goal', 'objective', 'may', 'endeavour', 'outlook', 'optimistic', 'prospects' and similar expressions or variations on these expressions. In particular, this document includes forward-looking targets and guidance relating to financial performance measures, such as income growth, operating expense, cost reductions, impairment loss rates, balance sheet reduction, including the reduction of RWAs, CET1 ratio (and key drivers of the CET1 ratio, including timing, impact and details), Pillar 2 and other regulatory buffer requirements and MREL and non-financial performance measures, such as climate and ESG-related performance ambitions, targets and metrics, including in relation to initiatives to transition to a net zero economy, Climate and Sustainable Funding and Financing (CSFF) and financed emissions. In addition, this document includes forward-looking statements relating, but not limited to: planned cost reductions, disposal losses and strategic costs; implementation of NatWest Group's, NWM Group's strategy and other strategic priorities (including in relation to investment programmes relating to digital transformation of their operations and services and inorganic opportunities); the timing and outcome of litigation and government and regulatory investigations; funding plans and credit risk profile; managing its capital position; liquidity ratio; portfolios; net interest margin; and drivers related thereto; lending and income growth, product share and growth in target segments; impairments and write-downs; restructuring and remediation costs and charges; NWM Group's exposure to political risk, economic assumptions and risk, climate, environmental and sustainability risk, operational risk, conduct risk, financial crime risk, cyber, data and IT risk and credit rating risk and to various types of market risk, including interest rate risk, foreign exchange rate risk and commodity and equity price risk; customer experience, including our Net Promotor Score (NPS); employee engagement and gender balance in leadership positions.

Limitations inherent to forward-looking statements

These statements are based on current plans, expectations, estimates, targets and projections, and are subject to significant inherent risks, uncertainties and other factors, both external and relating to NatWest Group's and NWM Group's strategy or operations, which may result in NWM Group being unable to achieve the current plans, expectations, estimates, targets, projections and other anticipated outcomes expressed or implied by such forward-looking statements. In addition, certain of these disclosures are dependent on choices relying on key model characteristics and assumptions and are subject to various limitations, including assumptions and estimates made by management. By their nature, certain of these disclosures are only estimates and, as a result, actual future results, gains or losses could differ materially from those that have been estimated. Accordingly, undue reliance should not be placed on these statements. The forward-looking statements contained in this document speak only as of the date we make them and we expressly disclaim any obligation or undertaking to update or revise any forward-looking statements contained herein, whether to reflect any change in our expectations with regard thereto, any change in events, conditions or circumstances on which any such statement is based, or otherwise, except to the extent legally required.

Important factors that could affect the actual outcome of the forward-looking statements

We caution you that a large number of important factors could adversely affect our results or our ability to implement our strategy, cause us to fail to meet our targets, predictions, expectations and other anticipated outcomes or affect the accuracy of forward-looking statements described in this document. These factors include, but are not limited to, those set forth in the risk factors and the other uncertainties described in NatWest Markets Plc's Annual Report and its other public filings. The principal risks and uncertainties that could adversely NWM Group's future results, its financial condition and/or prospects and cause them to be materially different from what is forecast or expected, include, but are not limited to: economic and political risk (including in respect of: economic and political risks and uncertainties in the UK and global markets, including as a result of high inflation and rising interest rates, supply chain disruption, and the Russian invasion of Ukraine; uncertainty regarding the effects of Brexit; changes in interest rates and foreign currency exchange rates; and HM Treasury's ownership of NatWest Group plc); strategic risk (including in respect of: NatWest Group's purpose-led strategy and NatWest Group's recent creation of its Commercial & Institutional segment (of which NWM Group forms part); financial resilience risk (including in respect of: NWM Group's ability to meet targets; prudential regulatory requirements for capital and MREL; funding and liquidity risk; changes in the credit ratings; the competitive environment; the requirements of regulatory stress tests; counterparty risk; model risk; sensitivity to accounting policies, judgments, assumptions and estimates; changes in applicable accounting standards; the application of UK statutory stabilisation or resolution powers; and the adequacy of NatWest Group's resolution plans); climate and sustainability risk (including in respect of: risks relating to climate change and the transitioning to a net zero economy; the implementation of NatWest Group's and NWM Group's climate change strategy and climate change resilient systems, controls and procedures; climate-related data and model risk; the failure to adapt to emerging climate, environmental and sustainability risks and opportunities; changes in ESG ratings; increasing levels of climate, environmental and sustainability related regulation and oversight; and climate, environmental and sustainability related litigation, enforcement proceedings and investigations); operational and IT resilience risk (including in respect of: operational risks (including reliance on third party suppliers); cyberattacks; the accuracy and effective use of data; complex IT systems; attracting, retaining and developing senior management and skilled personnel; NWM Group's risk management framework; and reputational risk); and legal, regulatory and conduct risk (including in respect of: the impact of substantial regulation and oversight; compliance with regulatory requirements; the outcome of legal, regulatory and governmental actions and investigations; the transition of LIBOR other IBOR rates to replacement risk-free rates;) and changes in tax legislation or failure to generate future taxable profits).

Forward-looking statements

Climate and ESG disclosures

Climate and ESG disclosures in this document are not measures within the scope of International Financial Reporting Standards ('IFRS'), use a greater number and level of judgements, assumptions and estimates, including with respect to the classification of climate and sustainable funding and financing activities, than our reporting of historical financial information in accordance with IFRS. These judgements, assumptions and estimates are highly likely to change over time, and, when coupled with the longer time frames used in these disclosures, make any assessment of materiality inherently uncertain. In addition, our climate risk analysis, net zero strategy, including the implementation of our climate transition plan, remain under development, and the data underlying our analysis and strategy remain subject to evolution over time. The process we have adopted to define, gather and report data on our performance on climate and ESG measures is not subject to the formal processes adopted for financial reporting in accordance with IFRS and there are currently limited industry standards or globally recognised established practices for measuring and defining climate and ESG related metrics. As a result, we expect that certain climate and ESG disclosures made in this document are likely to be amended, updated, recalculated or restated in the future. Please also refer to the cautionary statement in the section entitled 'Climate-related and other forward-looking statements and metrics' of the NatWest Group 2022 Climate-related Disclosures Report.

Cautionary statement regarding Non-IFRS financial measures and APMs

NWM Group prepares its financial statements in accordance with generally accepted accounting principles (GAAP). This document may contain financial measures and ratios not specifically defined under GAAP or IFRS ('Non-IFRS') and/or alternative performance measures ('APMs') as defined in European Securities and Markets Authority ('ESMA') guidelines. APMs are adjusted for notable and other defined items which management believes are not representative of the underlying performance of the business and which distort period-on-period comparison. Non-IFRS measures provide users of the financial statements with a consistent basis for comparing business performance between financial periods and information on elements of performance that are one-off in nature. Any Non-IFRS measures and/or APMs included in this document, are not measures within the scope of IFRS, are based on a number of assumptions that are subject to uncertainties and change, and are not a substitute for IFRS measures.

The information, statements and opinions contained in this document do not constitute a public offer under any applicable legislation or an offer to sell or a solicitation of an offer to buy any securities or financial instruments or any advice or recommendation with respect to such securities or other financial instruments.

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