NatWest Group
2022 Pillar 3 Report

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Contents

Contents continued

Forward-looking statements

This document may include forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995, such as statements that include, without limitation, the words ‘expect’, ‘estimate’, ‘project’, ‘anticipate’, ‘commit’, ‘believe’, ‘should’, ‘intend’, ‘will’, ‘plan’, ‘could’, ‘probability’, ‘risk’, ‘Value-at-Risk (VaR)’, ‘target’, ‘goal’, ‘objective’, ‘may’, ‘endeavour’, ‘outlook’, ‘optimistic’, ‘prospects’ and similar expressions or variations on these expressions. These statements concern or may affect future matters, such as NatWest Group's future economic results, business plans and strategies. In particular, this document may include forward-looking statements relating to NatWest Group plc in respect of, but not limited to: its economic and political risks, its regulatory capital position and related requirements, its financial position, profitability and financial performance (including financial, capital, cost savings and operational targets), the implementation of its purpose-led strategy, its environmental, social and governance and climate related targets, its access to adequate sources of liquidity and funding, increasing competition from new incumbents and disruptive technologies, its exposure to third party risks, its ongoing compliance with the UK ring-fencing regime and ensuring operational continuity in resolution, its impairment losses and credit exposures under certain specified scenarios, substantial regulation and oversight, ongoing legal, regulatory and governmental actions and investigations, the transition of LIBOR and IBOR rates to replacement risk free rates and NatWest Group’s exposure to operational risk, conduct risk, cyber, data and IT risk, financial crime risk, key person risk and credit rating risk. Forward-looking statements are subject to a number of risks and uncertainties that might cause actual results and performance to differ materially from any expected future results or performance expressed or implied by the forward-looking statements. Factors that could cause or contribute to differences in current expectations include, but are not limited to, future growth initiatives (including acquisitions, joint ventures and strategic partnerships), the outcome of legal, regulatory and governmental actions and investigations, the level and extent of future impairments and write-downs, legislative, political, fiscal and regulatory developments, accounting standards, competitive conditions, technological developments, interest and exchange rate fluctuations, general economic and political conditions and the impact of climate-related risks and the transitioning to a net zero economy. These and other factors, risks and uncertainties that may impact any forward-looking statement or NatWest Group plc's actual results are discussed in NatWest Group plc's UK 2022 Annual Report and Accounts (ARA) and its other public filings. The forward-looking statements contained in this document speak only as of the date of this document and NatWest Group plc does not assume or undertake any obligation or responsibility to update any of the forward-looking statements contained in this document, whether as a result of new information, future events or otherwise, except to the extent legally required.

Attestation statement

We confirm that the 2022 Pillar 3 Report meets the relevant requirements for Pillar 3 disclosures and has been prepared in line with internal controls agreed by the Board.

As set out in the Compliance report of the 2022 Annual Report and Accounts, the Board is responsible for the system of internal controls that is designed to maintain effective and efficient operations, compliant with applicable laws and regulations. The system of internal control is designed to manage risk or mitigate it to an acceptable residual level rather than eliminate it entirely. Systems of internal control can only provide reasonable and not absolute assurance against misstatement, fraud or loss.

The 2022 Pillar 3 Report was approved by the Board on 16 February 2023.

Katie Murray
Group Chief Financial Officer
Executive Director, NatWest Group Board

Bruce Fletcher
Group Chief Risk Officer
Member, Executive Committee

Disclosure framework

As of the date of this report, NatWest Group plc is regulated under the UK Capital Requirements Regulation (CRR) and the associated onshored binding technical standards that were created by the European Union (Withdrawal) Act 2018. The CRR was subsequently amended by a number of statutory instruments and is currently split across primary legislation and the PRA rulebook.

The Pillar 3 disclosures made by NatWest Group plc and its consolidated subsidiaries (together NatWest Group) are designed to comply with the Disclosure (CRR) Part of the PRA Rulebook. Where applicable, additional disclosures are made in accordance with supervisory expectations relating to the following: a) IFRS9 transitional relief in respect to ECL provisions and b) MREL requirements.

Under the PRA disclosure framework, large subsidiaries of NatWest Group plc are also required to complete a reduced set of disclosures depending on their listed/non-listed status. NatWest Group plc primarily determines its large subsidiaries, in accordance with the UK CRR requirements, as those designated as an O-SII firm by the PRA or with a value of total assets equal to or greater than €30 billion. NatWest Group plc's large subsidiaries as of 31 December 2022 were:

- National Westminster Bank Plc (NWB Plc)
- The Royal Bank of Scotland plc (RBS plc)
- NatWest Markets Plc (NWM Plc)
- Royal Bank of Scotland International Limited (RBSI)
- Coutts & Company (Coutts & Co)

In addition, under the EU CRR rules, Ulster Bank Ireland DAC (UBIDAC) is also considered a large subsidiary of NatWest Group plc as the entity continues to be designated as an O-SII firm by its supervisors.

Disclosure roadmap

Based on current disclosure rules, all the information required under Title I (*General Principles*), Title II (*Technical Criteria on Transparency & Disclosure*) and Title III (*Qualifying Requirements for the Use of Particular Instruments or Methodologies*) in the Disclosure (CRR) part of the PRA Rulebook is contained in this report. The detailed capital instruments disclosure (UK CCA) is provided in a supplement which is published in the same location alongside this report.

The CRR roadmap included in Appendix 1 of this report details how the regulatory disclosure requirements have been met.

It is noted that this document should be read in conjunction with the 2022 NatWest Group Annual Report and Accounts (ARA). The Pillar 3 disclosures provide additional information over and above that contained in the ARAs. However, certain key prudential metrics and summaries are presented in the following sections:

- Financial performance measures and ratios – 2022 NatWest Group ARA – Strategic report – Highlights
- Key metrics – Capital, leverage and liquidity for NatWest Group, NatWest Holdings Group, NWB Plc, RBS plc, UBIDAC, RBSI, Coutts & Co and NWM Plc in their respective ARAs – Risk and capital management – Capital, liquidity and funding risk.

The NatWest Group Pillar 3 Report and the ARA are published in the same location at: investors.natwestgroup.com/reports-archive/2022

Presentation of information

The consolidated disclosures for NatWest Group in this document are calculated under the UK CRR rules as described above.

The following Pillar 3 templates were not applicable to NatWest Group at 31 December 2022. The table below references the excluded templates together with a summary of the reason for exclusion:

PRA template reference	Template name	Reasons for exclusion
UK CCA	Main features of regulatory own funds instruments and eligible liabilities instruments	Published as supplement alongside this report
UK CR2a	Changes in the stock of non-performing loans and advances and related net accumulated recoveries	Threshold for disclosure not met
UK CQ2	Quality of forbearance	Threshold for disclosure not met
UK CQ6	Collateral valuation - loans and advances	Threshold for disclosure not met
UK CQ7	Collateral obtained by taking possession and execution processes	Collateral obtained by taking possession is not recognised on the balance sheet
UK CQ8	Collateral obtained by taking possession and execution processes – vintage breakdown	Collateral obtained by taking possession is not recognised on the balance sheet & threshold not met
UK CCR5	Composition of collateral for CCR exposures	Threshold for disclosure not met
UK SEC5	Exposures securitised by the institution - Exposures in default and specific credit risk adjustments	No reportable exposures
UK INS1	UK INS1 - Insurance participations	No reportable exposures
UK INS2	UK INS2 - Financial conglomerates information on own funds and capital adequacy ratio	No reportable exposures
UK CR9.1	UK CR9.1 – IRB approach – Back-testing of PD per exposure class (only for PD estimates according to point (f) of Article 180(1) CRR)	No reportable exposures

Disclosure framework continued

The Pillar 3 disclosures for NatWest Group plc's large subsidiaries and the consolidated disclosures for NatWest Holdings Group are provided in separate documents along with the respective entity's annual financial statements. Disclosures for large subsidiaries that are non-UK entities are calculated in accordance with regulatory requirements applicable in the countries in which they are incorporated. These are published in the same location and are available on the NatWest Group website, located at: investors.natwestgroup.com/reports-archive/2022

Where appropriate, certain narrative disclosures required at a large subsidiary level are available only in this report or in the NatWest Holdings Group Pillar 3 report.

Certain fixed-format disclosure tables include bespoke requirements for comparatives. Where the requirements do not prescribe a particular comparative, the comparative selected is 31 December 2021. Where applicable, comparatives have not been provided for first-time disclosures.

Within this report, row and column references are based on those prescribed in the PRA templates. The IFRS9-FL and MREL disclosures have been prepared using the uniform format published by the EBA.

In this report, in line with the regulatory framework, the term credit risk excludes counterparty credit risk, unless specifically indicated otherwise.

The Pillar 3 disclosures in this report are presented in pounds sterling ('£') and have not been subject to external audit.

For definitions of terms, refer to the Glossary available on natwestgroup.com.

Regulatory disclosure developments in 2022

The UK rules on disclosures were finalised as part of the PRA's policy statement PS22/21 in October 2021 and are now incorporated in the PRA rulebook. NatWest Group plc implemented these changes from 1 January 2022 when they became effective in the UK.

PS22/21 also formally introduced the new standardised approach for counterparty credit risk (SA-CCR) as well as rule changes for the calculation of the net stable funding ratio (NSFR) and the liquidity coverage ratio (LCR). Affected disclosures in this document are presented in accordance with the new calculation requirements where applicable.

NatWest Group plc has implemented changes reflecting the new definition of default. Additionally, new regulation applicable to internal ratings based (IRB) models from 1 January 2022 has resulted in NatWest Group applying temporary model adjustments, with the most material adjustment for mortgages. Affected disclosures in this document are presented in accordance with the new requirements.

The Financial Policy Committee and the PRA published policy statement PS21/21 in October 2021 which introduced changes to the UK leverage ratio framework. As a result of these changes, all firms not in scope for the minimum leverage capital requirements are expected to manage their leverage ratio at the same levels as firms in scope (LREQ firms), with the minimum being 3.25% from 1 January 2022.

NatWest Group plc and NatWest Holdings Limited are currently in scope for the minimum leverage ratio capital requirements (LREQ firms) and are therefore also subject to additional disclosure requirements from 1 January 2022. Entities that are new to the minimum leverage ratio capital requirements will be subject to the minimum requirements and additional disclosures from 1 January 2023.

The revised rules also included new qualitative and quantitative disclosures for interest rate risk in the banking book (IRRBB) which provide information on the prescribed interest-rate shock scenarios in the ICAAP Part of the PRA Rulebook.

Overall, the disclosures required under the PRA framework are substantially equivalent to those required by Part Eight of the EU CRR although certain differences exist.

The EU CRR introduced a requirement for large EU listed institutions to publish disclosures on environmental, social and governance (ESG) risks; however, this requirement is not part of the rules under the PRA disclosure framework. NatWest Group currently discloses an annual ESG supplement which provides an overview of Our Purpose in action and key ESG matters. In addition, NatWest Group provides an annual climate-related disclosure report which details progress on its climate ambitions and an overview of its approach to climate-related governance, strategy (including scenario analysis), risk management, metrics and targets.

Independent review

The information presented in this Pillar 3 Report is not required to be, and has not been, subject to external audit.

Internal Audit undertakes procedures to provide management and the Board with assurance relating to the adequacy and effectiveness of the processes, controls and governance framework over the production of the Pillar 3 disclosures.

Internal Audit includes within the scope of its assurance work, the modelling and management of the organisation's capital and liquidity risks. Internal Audit is independent from the risk management function, and therefore from those responsible for the development and independent validation activity. Any material gaps in control identified by Internal Audit are escalated through standard board reporting and action plans agreed with those accountable for the activity behind the control.

Capital, liquidity and funding framework

Basel framework

The Basel framework is based on three pillars:

- Pillar 1 - Minimum capital requirements: defines rules for the determination of the capital requirement relating to credit, counterparty credit, market and operational risk;
- Pillar 2 - Supervisory review process: requires banks to undertake an internal capital adequacy assessment process for risks not included in Pillar 1; and
- Pillar 3 - Market discipline: requires individual banks to disclose key information which allows investors and other market participants to understand their risk profiles.

Pillar 1 - Minimum capital requirements

The CRR determines minimum capital requirements predominantly by calculating RWAs for credit, counterparty credit, market and operational risks. Various RWA calculation approaches are available to banks, with differing levels of sophistication.

NatWest Group uses the following approaches to calculate RWAs:

- Credit risk: The advanced internal ratings based (IRB) approach is used for most exposures. The standardised (STD) approach is used for exposures in certain portfolios.
- Counterparty credit risk: The exposure amount is calculated using either the Standardised approach for counterparty credit risk (SA-CCR) or the internal model method (IMM) for derivative transactions dependent on product type. The financial collateral comprehensive method using supervisory volatility adjustments is used for securities financing transactions. The resultant Exposure at Default (EAD) is risk-weighted as for credit risk.
- Market risk: The internal model approach (IMA) is predominantly used for market risk in the trading book. Some positions are capitalised under the standardised approach.
- Operational risk: The standardised approach is used.

The minimum capital requirement is calculated as a percentage of RWAs depending on the capital ratio being calculated. On top of the minimum capital requirement, a number of buffers are required to address capital conservation, countercyclicality and systemic importance. Further details on the constituents of capital and the various buffers can be found in the detailed quantitative capital disclosures provided in this document.

Pillar 2 - Supervisory review process

Pillar 2 comprises (i) the internal capital adequacy assessment process (ICAAP) for NatWest Group and its key subsidiaries and (ii) a supervisory review and evaluation process which is undertaken annually and focuses on the amounts, types and distribution of capital that NatWest Group considers adequate to cover the risks to which it is or may be exposed.

NatWest Group undertakes a risk assessment to ensure all material risks are identified, adequately managed and capitalised where appropriate.

Within Pillar 2A, NatWest Group assesses credit concentration risk, certain aspects of traded market risk that are not fully captured in Pillar 1, interest rate risk in the banking book (IRRBB), pension risk and operational risk to compensate for shortcomings of the Pillar 1 standardised approach. NatWest Group uses economic capital models to estimate Pillar 2A capital charges for operational and credit concentration risk.

Pillar 3 - Market discipline

NatWest Group is committed to delivering risk and capital disclosures that ensure stakeholders understand the risks faced by NatWest Group and how they are measured and capitalised. The Pillar 3 disclosures are designed to encourage and promote market transparency and stability; they represent a component of NatWest Group's broader disclosures framework.

Certain of NatWest Group's subsidiaries in Europe publish capital and RWA data externally through an appropriate mechanism (such as websites and annual reports), thereby satisfying the EBA requirements for disclosures in the EU member states.

It is possible that disclosures made by other banks, especially outside the UK, are not directly comparable with those in this report. Notes are included with the data tables to ensure transparency regarding the approaches used for the disclosures. At EU and global levels, different definitions and assumptions adopted by other banks can make direct comparison difficult.

Capital

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

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

Capital management is the process by which NatWest Group ensures that it has sufficient capital and other loss-absorbing instruments to operate effectively including meeting minimum regulatory requirements, operating within Board-approved risk appetite, maintaining its credit rating, and supporting its strategic goals. Capital management is critical in supporting NatWest Group's business and is enacted through an end-to-end framework across NatWest Group, its businesses and the legal entities through which it operates.

NatWest Group manages capital having regard to regulatory requirements. For large subsidiaries, regulatory capital is monitored and reported on an individual regulated bank legal entity basis, as relevant in each jurisdiction. For NatWest Group and the RFB sub-group, regulatory capital is monitored and reported on a consolidated basis.

Capital, liquidity and funding framework continued

Determination of capital sufficiency

In determining whether NatWest Group holds sufficient capital and other loss-absorbing debt instruments, NatWest Group assesses the amount and type of capital under a number of different bases:

Going concern vs. gone concern view

Going concern: This determination of capital sufficiency is made on the basis that there is sufficient capital to absorb losses and remain a viable going concern. NatWest Group is considered a going concern if it can operate in the foreseeable future to carry out its objectives and commitments without the need or intention on the part of management to liquidate.

Gone concern: This determination of capital sufficiency is made on the basis that there is sufficient capital and other loss-absorbing instruments to enable an orderly resolution in the event of failure. Gone concern would apply if NatWest Group had been deemed to fail, or likely to fail by the Bank of England (BoE).

Spot vs. forward-looking view

Spot view: This determination of capital sufficiency is made on the basis of prevailing actual positions and exposures.

Forward-looking view: This determination of capital sufficiency is made on the basis of positions, balance and exposures under a forward-looking view of the balance sheet in line with NatWest Group's planning horizons and parameters. This analysis examines both base and stress views.

Regulatory vs. risk appetite view

Regulatory requirements: This determination of capital sufficiency is an assessment of whether NatWest Group has sufficient capital and other loss-absorbing debt instruments to meet the requirements of prudential regulation.

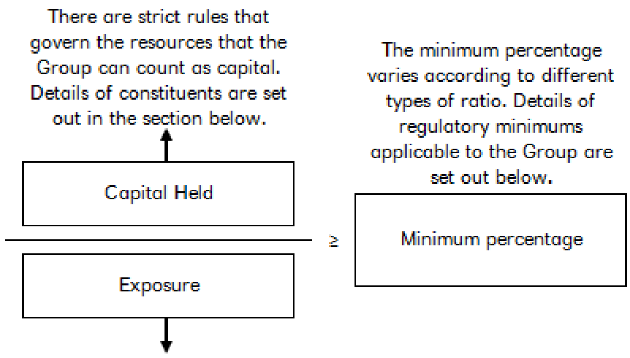
Risk appetite: This determination of capital sufficiency is an assessment of whether NatWest Group has sufficient capital and other loss-absorbing debt instruments to meet risk appetite limits. NatWest Group's risk appetite framework establishes quantitative and qualitative targets and limits within which NatWest Group operates to achieve its strategic objectives.

Capital sufficiency: going concern view

There are two types of capital ratios based on different exposure types:

Ratio	Exposure type	Description
Capital adequacy ratio	Risk-weighted assets	Assesses capital held against both size and inherent riskiness of on and off-balance sheet exposures.
Leverage ratio	Leverage exposure	Assesses capital held against the size of on and off-balance sheet exposure (largely based on accounting value with some adjustments).

The regulatory requirement for going concern capital typically takes the form of a ratio of capital compared to a defined exposure amount having to exceed a minimum percentage:



Constituents of capital held

The determination of which instruments and financial resources are eligible to be counted as capital is laid down by applicable regulation.

Capital is categorised by the CRR under two tiers (Tier 1 and Tier 2) according to the ability to absorb losses, degree of permanency and the ranking of absorbing losses. There are three broad categories of capital across these two tiers:

- CET1 capital. Common Equity Tier (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. CET1 capital absorbs losses before other types of capital and any loss-absorbing instruments.
- AT1 capital. This is the second form of loss-absorbing capital and must be capable of absorbing losses on a going concern basis. These instruments are either written down or converted into CET1 capital when a pre-specified CET1 ratio is reached. Coupons on Additional Tier 1 (AT1) issuances are discretionary and may be cancelled at the discretion of the issuer at any time. AT1 capital may not be called, redeemed or repurchased for five years from issuance.
- Tier 2 capital. Tier 2 capital is supplementary capital and provides loss absorption on a gone concern basis. Tier 2 capital absorbs losses after Tier 1 capital. It typically consists of subordinated debt securities with a minimum maturity of five years.

In addition to capital, other specific loss-absorbing instruments including senior notes issued by NatWest Group may be used to cover certain gone concern capital requirements which is referred to as minimum requirement for own funds and eligible liabilities (MREL). In order for liabilities to be eligible for MREL, a number of conditions must be met including the BoE being able to apply its stabilisation powers to them, including the use of bail-in provisions.

Capital, liquidity and funding framework continued

Capital adequacy

NatWest Group has to hold a minimum amount and quality of capital to satisfy capital adequacy regulatory requirements.

Risk-weighted assets

Capital adequacy ratios compare the amount of capital held to RWAs. RWAs are a measure of NatWest Group's assets and off-balance sheet exposures that capture both the size and risks inherent in those positions. RWAs are grouped into four categories:

Risk	Description
Credit	Risk of loss from a borrower failing to repay amounts due by the due date.
Counterparty credit	Risk of loss from a counterparty not meeting its contractual obligations. Also included is the risk of loss from changes in the fair value of derivative instruments.
Market	Risk of loss arising from fluctuations in market prices.
Operational	Risk of loss from inadequate or failed internal processes, people and systems or from external events.

Capital adequacy ratios

Regulation defines a minimum percentage of capital compared to RWAs. The percentage comprises system-wide requirements that apply to all banks and a component where the percentage is specific to NatWest Group. This is summarised as follows:

Type	Name	Description
System-wide	Pillar 1	Standard minimum percentages applicable to all banks. Must be held at all times.
	Capital conservation, countercyclical and Systemic buffers	Includes capital to absorb losses in times of stress, capital built up in response to credit conditions in the macroeconomic environment and for institutions of systemic importance.
Bank-specific	Pillar 2A	Captures risks that apply to individual banks that are either not adequately captured or not captured at all under Pillar 1. For example, pension risk is not captured in Pillar 1; therefore, capital that may need to be held against the risk is assessed under Pillar 2A. Must be held at all times.
	PRA buffer	Captures forward-looking risks and potential losses under a severe stress scenario. The PRA buffer is a capital buffer that is designed to ensure that NatWest Group can continue to meet minimum requirements (Pillar 1 and Pillar 2A) during a stressed period. The buffer also accommodates add-ons which may be applied by the regulator to cover Group Risk (subsidiary/sub-group capital requirements in excess of their share of NatWest Group) and Risk Management and Governance scalars (which may be levied where Risk Management and Governance deficiencies have been identified by the regulator).

Capital, liquidity and funding framework continued

Leverage ratios

NatWest Group has to hold a minimum amount and quality of capital to satisfy leverage ratio regulatory requirements. Unlike capital adequacy ratios, leverage ratio requirements do not consider the riskiness of NatWest Group's positions.

The leverage exposure is broadly aligned to the accounting value of NatWest Group's on and off-balance sheet exposures but subject to certain adjustments for derivatives, securities financing transactions and off-balance sheet exposures.

In common with capital adequacy ratios, the leverage ratio requirement for NatWest Group consists of a minimum requirement and a leverage ratio buffer.

MREL: capital sufficiency under the gone concern view

NatWest Group is required to hold sufficient capital and other loss-absorbing instruments such that, in the event of failure, there can be an orderly resolution that minimises any adverse impact on financial stability whilst preventing public funds being exposed to loss. NatWest Group follows the single point of entry (SPE) resolution strategy.

UK resolution entities are required to meet an external MREL equivalent to the higher of:

- two times the sum of Pillar 1 and Pillar 2A, ie 2x (Pillar 1 plus Pillar 2A; or
- if subject to a leverage ratio requirement, two times the applicable requirement.

MREL may consist of capital and other loss absorbing instruments. To qualify as eligible for MREL, liabilities have to comply with a number of strict conditions as set by the BoE including the ability for the BoE to apply its stabilisation powers to those liabilities. In addition, liabilities must have an effective remaining maturity (taking account of any rights of early repayment to investors) of greater than one year.

Internal MREL

In order that there is sufficient loss-absorbing capacity pre-positioned across NatWest Group, the proceeds of externally issued MREL will be allocated to material operating subsidiaries in the form of capital or other subordinated claims. This ensures that internal MREL will absorb losses before operating liabilities within operating subsidiaries.

The BoE will set individual MRELs for all material entities within NatWest Group and may also set individual MRELs for entities within NatWest Group that are important from a resolution perspective. The framework requires that ring-fence bank sub-groups meet MREL requirements equivalent to 90% of the equivalent NatWest Group requirement, whilst other material legal entities are required to meet 75% of the equivalent Group requirement

Liquidity and funding

Definition

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

Funding consists of on-balance sheet liabilities that are used to fund assets and off-balance sheet activities. Funding risk is the risk of not maintaining a diversified, stable and cost-effective funding base.

Regulatory oversight and liquidity framework

NatWest Group operates across different jurisdictions and is subject to a number of regulatory regimes, with the key metrics being:

Ratio	Profile type	Description
Liquidity coverage ratio (LCR)	Liquidity profile	Coverage of 30 calendar days' net outflows in stress.
Net stable funding ratio (NSFR)	Structural funding profile	Helps maintain a stable funding profile in relation to the composition of assets and off-balance sheet activities. Following the publication of PS 22/21 on 14 October 2021, a binding NSFR minimum requirement of 100% is effective from January 2022.

The principal regulator, the PRA, implements the CRR liquidity regime in the UK. To comply with the regulatory framework, NatWest Group undertakes the following:

Activity	Description
Individual Liquidity Adequacy Assessment Process (ILAAP)	This is NatWest Group's annual assessment of its key liquidity and funding vulnerabilities including control frameworks to measure and manage the risks.
Liquidity Supervisory Review and Evaluation Process (L-SREP)	An annual exercise with the PRA that involves a comprehensive review of the NatWest Group ILAAP, liquidity policies and risk management framework. This results in the setting of the Individual Liquidity Guidance, which influences the size of the liquidity portfolio.

Asset encumbrance

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

Prudential regulation changes that may impact capital requirements

NatWest Group faces numerous changes in prudential regulation that may impact the minimum amount of capital it must hold and consequently may increase funding costs and reduce return on equity.

Regulatory changes are actively monitored by NatWest Group, including engagement with industry associations and regulators and participation in quantitative impact studies. Monitoring the changing regulatory landscape forms a fundamental part of capital planning and management of its business.

NatWest Group believes that its strategy to focus on simpler, lower-risk activities within a more resilient recovery and resolution framework will enable it to manage the impact of these

UK and EU implementation of Basel framework

The European Union (EU) implemented the initial phase of the Basel III capital framework through the CRR and the Capital Requirements Directive (CRD). On 7 June 2019, amendments to the CRR and CRD (known as CRR2 and CRD5 respectively) were published in the Official Journal of the European Union. The majority of these changes were implemented in June 2021. Further changes relating to the Basel 3.1 standard will be implemented in EU by CRR3 and CRD6 for which the European Commission issued a proposal in October 2021. The implementation of these changes is not expected until January 2025. However, their impact will be limited to NatWest Group's EU subsidiaries.

From 1 January 2021, NatWest Group has been regulated under the onshored CRR and associated onshored binding technical standards which were created by the European Union (Withdrawal) Act 2018 and amending statutory instruments. As the Withdrawal Act applied to the CRR in place as of 31 December 2020, changes to the CRR in the EU are not reflected in the UK CRR unless separately legislated and amended by statutory instruments. Going forward, the Financial Services Bill gives the PRA the power to write prudential rules directly into the PRA rulebook and it will co-ordinate with HM Treasury to implement any required changes to the UK CRR.

As detailed above, the changes to the EU CRR included the substantial CRR2 amendments and equivalent reforms were eventually implemented in the UK on 1 January 2022.

On 30 November 2022, the PRA published its consultation paper CP16/22 setting out its proposed rules and expectations with respect to the Basel 3.1 standards that remain to be implemented in the UK. This will complete the implementation of post-global financial crisis prudential reforms, which were designed to i) increase the quantity of capital in the system, per unit of risk; ii) increase the quality of capital held by firms; and iii) improve the accuracy of risk-management firms, reducing the variability of risk-weighted assets (RWAs). The changes mainly impact capital requirements for STD and IRB Credit Risk, Market Risk, CVA, Counterparty Credit Risk and Operational Risk. An aggregate "output floor" is also being introduced to ensure that total RWAs for firms using advanced or internally modelled methods and subject to the floor cannot fall below 72.5% of RWAs under the standardised approach. The proposal did not include further changes to the Leverage Ratio, Large Exposures and Liquidity Risk frameworks.

Implementation of the PRA proposals is scheduled to align with that of the European Union, with a projected compliance date of 1 January 2025. The PRA's consultation period will end on 31 March 2023. See summary table for further details on the PRA's proposal.

Other developments

On 29 November 2022, the PRA published PS9/22 which contained amendments to the PRA's approach to identifying other systemically important institutions (O-SIIs). The amendments mainly aimed at removing the EBA's scoring methodology from the O-SII identification process and changing specific indicators and weights in the PRA's scoring methodology. In its policy statement, the PRA clarified that O-SII designation does not automatically result in higher loss absorbency requirements in the form of an O-SII buffer or otherwise. An O-SII buffer can only apply to O-SIIs, or parts of an O-SII that are ring-fenced bodies (RFBs).

On the same date, the PRA also published its 2022 list of firms designated as O-SIIs. NatWest Group is part of the PRA's O-SII list. Simultaneously, the PRA published a statement confirming a freeze of firms' O-SII buffer rates in 2022. O-SII buffers will be maintained at 2019 levels and the PRA will assess rates in 2023 based on its revised methodology. The decision on O-SII buffer rates taken in December 2023 will be based on end-2022 financial results and will take effect from January 2025 in line with the PRA's policy. This PRA statement is therefore relevant to NatWest Holdings Limited, which is currently subject an O-SII buffer.

Summary of future changes to prudential regulation in UK that may impact NatWest Group

The table below covers expected changes to prudential regulation in the UK which may impact NatWest Group at a consolidated level. Certain entities within the group will be exposed to changes in prudential regulation from other legislative bodies and/or local supervisory authorities where NatWest Group's entities are authorised (e.g. EU and Jersey) on a solo basis and these changes may be different in substance, scope and timing from those highlighted below.

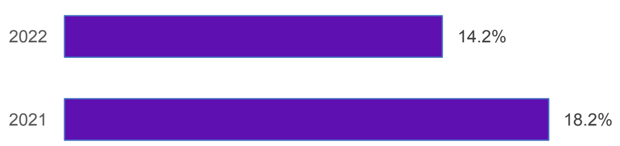
Prudential regulation changes that may impact capital requirements continued

Area of development	Key changes	Source of changes/implementation date
Leverage ratio framework	– Binding leverage ratio at individual bank level for material entities i.e. LREQ firms.	– SS45/15 – UK Leverage ratio framework – Implementation: 1 January 2023.
Capital – Output floor	– Level of application: Applies at highest level of application: Consolidated level for UK Groups; sub-consolidated level for Ring Fenced sub-groups. – Capital stack: Applies to full capital stack including capital buffers. – Transitional period for the application; starting with 50% at 1 January 2025 through to 72.5% at 1 January 2030.	– PRA Basel 3.1 CP16/22 – Expected implementation: 1 January 2025
Credit risk (STD, IRB, FIRB)	– Significant revisions to standardised credit risk, including to unrated corporates, SMEs, specialised lending, mortgages & equity exposures. – Changes to IRB; restrictions on IRB modelling (switch to standardised on central governments, switch to FIRB on financial institutions and large corporates), inclusion of input floors and other modelling changes. – Removal of SME & Infrastructure supporting factors (IRB & standardised). – Amendments to credit risk mitigation, including the withdrawal of some internal modelling approaches, the removal of double default and a new risk weight substitution approach on some exposures.	– PRA Basel 3.1 CP16/22 – Expected implementation: 1 January 2025
Market risk	– Implementation of FRTB - new standardised & modelled approaches (Expected Shortfall replaces VaR), revised banking/trading book boundary. – Model approval applications to be provided by 1 January 2024. This includes permissions for standardised MR & CVA.	– PRA Basel 3.1 CP16/22 – Expected implementation: 1 January 2025
CVA & counterparty credit risk	– Removal of modelled approach. – New standardised approach, aligned to Basel framework, including the removal of CVA exemptions on sovereigns, non-financial counterparties and pension funds. – Reduced SA-CCR alpha factor from 1.4 to 1 for non-financial counterparties and pension funds.	– PRA Basel 3.1 CP16/22 – Expected implementation: 1 January 2025
Operational risk	– Internal loss multiplier (ILM) set to 1. – Changes to the income requirements in scope of the business indicator.	– PRA Basel 3.1 CP16/22 – Expected implementation: 1 January 2025
Disclosures & reporting	– PRA proposes to adopt the Basel 3.1 disclosure templates without material deviations. – PRA proposes that large and listed firms to disclose at the minimum frequency prescribed in Basel 3.1 Standards.	– PRA Basel 3.1 CP16/22 – Expected implementation: 1 January 2025
Pillar 2	– PRA commitment to review Pillar 2A methodologies in 2024, to adjust requirements ahead of implementation of the Pillar 1	– PRA Basel 3.1 CP16/22 – Expected implementation: 1 January 2025

Annex I: Key metrics and overview of risk-weighted assets

NatWest Group - key points

CET1 ratio



The CET1 ratio decreased 400 basis points over the period, due to a £3.6 billion decrease in CET1 and a £19.1 billion increase in RWAs (movement in RWA explained below). The CET1 decrease of £3.6 billion is mainly driven by:

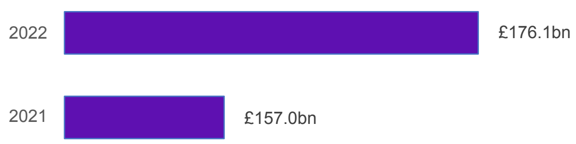
- the directed buyback of £1.2 billion;
- interim and special dividends of £2.1 billion;
- foreseeable charge for the on-market buyback programme of £0.8 billion;
- foreseeable final ordinary dividend of £1.0 billion and adjustment for pension trusts £0.4 billion;
- the removal of the adjustment for prudential amortisation on software development costs of £0.4 billion;
- a £0.3 billion decrease in the IFRS 9 transitional adjustment.

These reductions were offset by the £3.3 billion attributable profit in the period.

MREL

Loss absorbing capital decreased by £6.9 billion to £55.5 billion primarily due to a £3.6 billion decrease in CET1 (explained above), a £0.6 billion decrease in AT1 capital, a £0.7 billion decrease in Tier 2 capital and a £2.1 billion decrease in MREL eligible instruments. There has been a £0.5 billion decrease in ineligible subordinated debt instruments primarily driven by redemptions in the period, and a £1.6 billion decrease in senior unsecured debt driven by new issuances offset by redemptions, instruments now classified as ineligible and FX movements.

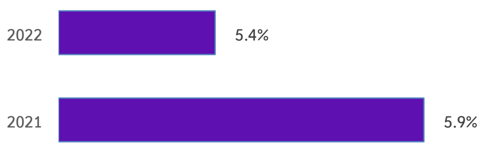
RWAs



Total RWAs increased by £19.1 billion to £176.1 billion mainly reflecting:

- An increase in credit risk RWAs of £21.8 billion, primarily due to model adjustments applied as a result of new regulation applicable to IRB models from 1 January 2022, in addition to drawdowns and new facilities within Commercial & Institutional and Retail Banking.
- A reduction in operational risk RWAs of £1.9 billion following the annual recalculation.
- A reduction in counterparty credit risk RWAs of £1.2 billion, mainly driven by external factors faced in the final quarter of the period including excess margin received and increases in the mark-to-market uncollateralised counterparties. This was partially offset by the implementation of SA-CCR, affecting the RWA calculation for the non-internally modelled exposure.

UK leverage

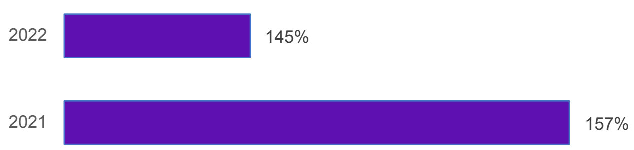


The leverage ratio at 31 December 2022 is 5.4% and has been calculated in accordance with changes to the UK's leverage ratio framework. As at 31 December 2021, the UK leverage ratio was 5.9%, which was calculated under the prior year's UK leverage methodology. The key driver of the decrease is a £4.2 billion decrease in Tier 1 capital.

LCR average

The average liquidity coverage ratio (LCR) for the 12 months to 31 December 2022 decreased 8% over the period from 165% to 157%.

NSFR



The net stable funding ratio (NSFR) was 145% compared to 157% in 2021. The decrease was due to lower deposits and shareholder distributions combined with higher lending.

IFRS 9-FL(1): Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECL

The table below shows key prudential regulation ratios and measures with and without the application of IFRS 9 transitional relief. NatWest Group has elected to take advantage of the transitional capital rules in respect of ECL provisions. Following the adoption of IFRS 9 from 1 January 2018, the CRR introduced transitional rules to phase in the full CET1 effect over a five-year period. The revised transitional amendments will maintain a CET1 add-back of relevant ECL provisions until 31 December 2024. Capital measures in this table are presented in line with table UK KM1.

		NatWest Group				
		31 December 2022	30 September 2022	30 June 2022	31 March 2022	31 December 2021
	Available capital (amounts) - transitional	**£m**	£m	£m	£m	£m
1	Common equity tier 1	**24,992**	25,556	25,693	26,889	28,596
2	Common equity tier 1 capital as if IFRS 9 transitional arrangements had not been applied	**24,631**	25,198	25,409	26,486	27,975
3	Tier 1 capital	**28,867**	29,431	29,568	30,764	33,042
4	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	**28,506**	29,073	29,284	30,361	32,421
5	Total capital	**33,920**	34,230	34,751	36,044	38,748
6	Total capital as if IFRS 9 transitional arrangements had not been applied	**33,956**	34,253	34,813	36,000	38,280
	Risk-weighted assets (amounts)					
7	Total risk-weighted assets	**176,101**	178,494	179,795	176,818	156,971
8	Total risk-weighted assets as if IFRS 9 transitional arrangements had not been applied	**176,030**	178,414	179,763	176,790	156,935
	Capital ratios	**%**	%	%	%	%
9	Common equity tier 1 ratio	**14.2**	14.3	14.3	15.2	18.2
10	Common equity tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	**14.0**	14.1	14.1	15.0	17.8
11	Tier 1 ratio	**16.4**	16.5	16.4	17.4	21.0
12	Tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	**16.2**	16.3	16.3	17.2	20.7
13	Total capital ratio	**19.3**	19.2	19.3	20.4	24.7
14	Total capital ratio as if IFRS 9 transitional arrangements had not been applied	**19.3**	19.2	19.4	20.4	24.4
	Leverage ratio (2)					
15	Leverage ratio exposure measure (£m)	**534,613**	564,866	570,752	564,418	743,480
16	Leverage ratio (%)	**5.4**	5.2	5.2	5.5	4.4
17	Leverage ratio (%) as if IFRS 9 transitional arrangements had not been applied	**5.3**	5.2	5.1	5.4	4.4

(1) The requirement to complete this table until the end of transitional period is based on EBA guidelines (EBA/GL/2018/01) and has been onshored in the UK disclosure framework via a joint Statement of Policy by the Bank of England and the PRA.

(2) The 2022 leverage metrics were calculated in accordance with the Leverage Ratio (CRR) part of the PRA Rulebook. The December 2021 comparatives are presented on a CRR basis in this table.

UK KM1: Key metrics

The table below provides a summary of the main prudential regulation ratios and measures. Capital ratios and measures are presented on a transitional basis, and therefore include permissible adjustments for the extended CRR2 grandfathering provisions and remaining IFRS 9 relief. NatWest Group has elected to take advantage of the IFRS 9 transitional capital rules in respect of ECL provisions. The revised transitional amendments will maintain a CET1 add-back of relevant ECL provisions until 31 December 2024.

		NatWest Group				
		31 December 2022	30 September 2022	30 June 2022	31 March 2022	31 December 2021
	Available own funds (amounts)	**£m**	£m	£m	£m	£m
1	Common equity tier 1 (CET1) capital	**24,992**	25,556	25,693	26,889	28,596
2	Tier 1 capital	**28,867**	29,431	29,568	30,764	33,042
3	Total capital	**33,920**	34,230	34,751	36,044	38,748
	Risk-weighted exposure amounts					
4	Total risk-weighted exposure amount	**176,101**	178,494	179,795	176,818	156,971
	Capital ratios (as a percentage of risk-weighted exposure amount)					
5	Common equity tier 1 ratio (%)	**14.2**	14.3	14.3	15.2	18.2
6	Tier 1 ratio (%)	**16.4**	16.5	16.4	17.4	21.0
7	Total capital ratio (%)	**19.3**	19.2	19.3	20.4	24.7
	Additional own funds requirements based on SREP (as a percentage of risk-weighted exposure amount)					
UK 7a	Additional CET1 SREP requirements (%)	**1.7**	1.8	1.7	1.8	2.0
UK 7b	Additional AT1 SREP requirements (%)	**0.6**	0.5	0.6	0.6	0.7
UK 7c	Additional Tier 2 SREP requirements (%)	**0.7**	0.8	0.8	0.8	0.9
UK 7d	Total SREP own funds requirements (%)	**11.0**	11.1	11.1	11.2	11.6
	Combined buffer requirement (as a percentage of risk-weighted exposure amount)					
8	Capital conservation buffer (%)	**2.5**	2.5	2.5	2.5	2.5
9	Institution specific countercyclical capital buffer (%) (1)	**0.8**	—	—	—	—
10	Global Systemically Important Institution buffer (%)					
UK 10a	Other Systemically Important Institution buffer (%)					
11	Combined buffer requirement (%)	**3.3**	2.5	2.5	2.5	2.5
UK 11a	Overall capital requirements (%)	**14.3**	13.6	13.6	13.7	14.1
12	CET1 available after meeting the total SREP own funds requirements (%) (2)	**8.0**	8.0	8.1	8.9	11.7
	Leverage ratio					
13	Total exposure measure excluding claims on central banks	**534,613**	564,866	570,752	564,418	561,858
14	Leverage ratio excluding claims on central banks (%)	**5.4**	5.2	5.2	5.5	5.9
	Additional leverage ratio disclosure requirements (3)					
UK 14a	Fully loaded ECL accounting model leverage ratio excluding claims on central banks (%)	**5.3**	5.2	5.1	5.4	
UK 14b	Leverage ratio including claims on central banks (%)	**4.3**	4.1	4.0	4.2	
UK 14c	Average leverage ratio excluding claims on central banks (%)	**5.6**	5.3	5.3	5.6	
UK 14d	Average leverage ratio including claims on central banks (%)	**4.3**	4.1	4.1	4.3	
UK 14e	Countercyclical leverage ratio buffer (%)	**0.3**	—	—	—	
	Liquidity coverage ratio					
15	Total high-quality liquid assets (HQLA) (weighted value-average)	**193,872**	204,269	204,862	200,588	193,404
UK 16a	Cash outflows - Total weighted value	**138,594**	139,646	137,363	133,761	129,857
UK 16b	Cash inflows - Total weighted value	**15,421**	14,989	14,278	13,864	12,640
16	Total net cash outflows (adjusted value)	**123,173**	124,657	123,085	119,897	117,217
17	Liquidity coverage ratio (%) (4)	**157**	164	166	167	165
	Net stable funding ratio (5)					
18	Total available stable funding	**429,703**	428,007	437,907	433,284	438,143
19	Total required stable funding	**287,375**	289,214	286,995	284,366	278,714
20	NSFR ratio (%)	**150**	148	153	152	157

(1) The institution-specific countercyclical capital buffer requirement is based on the weighted average of the buffer rates in effect for the countries in which institutions have exposures.
(2) Represents the CET1 ratio less CET1 currently used to meet SREP requirements (Pillar 1 & 2A).
(3) Additional disclosure requirements for LREQ firms from 1 January 2022 therefore comparatives are not presented.
(4) The liquidity coverage ratio (LCR) uses the simple average of the preceding 12 monthly periods ending on the quarterly reporting date as specified in the table.
(5) The NSFR ratio for 31 December 2022 is calculated as an average of the preceding four quarters reflecting PRA's guidance which came in effect on 1 January 2022. The prior periods ratios are presented on a spot basis in line with historic disclosures in the NatWest Group document.
(6) The following rows are not presented in the table above because they are not applicable: UK8a and UK9a.

KM2: Key metrics - MREL

The table below provides a summary of own funds, eligible liabilities, ratios and components for NatWest Group.

		NatWest Group	
		Minimum requirement for own funds and eligible liabilities (MREL)	Minimum requirement for own funds and eligible liabilities (MREL)
		31 December 2022	31 December 2021
		£m	£m
	Own funds and eligible liabilities, ratios and components		
1	Own funds and eligible liabilities	**55,473**	62,402
1a	Of which own funds and subordinated liabilities	**55,473**	62,402
2	Total risk exposure amount of the resolution group (TREA)	**176,101**	156,971
3	Own funds and eligible liabilities as a percentage of TREA (row1/row2)	**31.5%**	39.8%
3a	Of which own funds and subordinated liabilities	**31.5%**	39.8%
4	Total exposure measure of the resolution group	**534,613**	561,858
5	Own funds and eligible liabilities as percentage of the total exposure measure	**10.4%**	11.1%
5a	Of which own funds or subordinated liabilities	**10.4%**	11.1%
6a	Pro-memo item - Aggregate amount of permitted non-subordinated eligible liabilities instruments if the subordination discretion as per Article 72b(3) CRR is applied (max 3.5% exemption)	**n/a**	n/a
6b	Does the subordination exemption in Article 72(b)(4) of the CRR apply? (5% exemption)	**n/a**	n/a
6c	Pro-memo item: If a capped subordination exemption applies under Article 72(b)(3) or (4), the amount of funding issued that ranks pari passu with excluded liabilities and that is recognised under row 1 0110, divided by funding issued that ranks pari passu with excluded liabilities and that would be recognised under row 1 0110 if no cap was applied (%)	**n/a**	n/a
	Minimum requirement for own funds and eligible liabilities (MREL)		
7	MREL requirement expressed as percentage of the total risk exposure amount	**22.0%**	23.3%
9	MREL requirement expressed as percentage of the total exposure measure	**7.3%**	6.5%

(1) As NatWest Group is a single point of entry resolution firm, the resolution group is equal to the prudential consolidation group.
(2) Row 7 – "MREL requirement expressed as percentage of the total risk exposure amount" is based on the end state requirement i.e. higher of 2 x the sum of P1 and P2A add on; and 2 x the applicable Leverage ratio requirement.

UK OV1: Overview of risk-weighted exposure amounts

The table below shows RWAs and total own funds requirements by risk type. Total own funds requirements are calculated as 8% of RWAs.

		NatWest Group		
		a	b	c
		Risk-weighted exposure amounts (RWAs)		Total own funds requirements
		31 December 2022 £m	30 September 2022 £m	31 December 2022 £m
1	Credit risk (excluding counterparty credit risk)	140,299	139,969	11,224
2	*Of which: standardised approach*	23,048	25,700	1,844
3	*Of which: the foundation IRB (FIRB) approach*	—	—	—
4	*Of which: slotting approach*	12,330	11,971	986
UK 4a	*Of which: equities under the simple risk-weighted approach*	1,306	1,329	104
5	*Of which: the advanced IRB (AIRB) approach (1)*	103,615	100,969	8,290
6	Counterparty credit risk	6,627	8,394	530
7	*Of which: standardised approach*	1,069	1,367	86
8	*Of which: internal model method (IMM)*	3,479	4,886	277
UK 8a	*Of which: exposures to a CCP*	132	109	11
UK 8b	*Of which: credit valuation adjustment (CVA)*	1,300	1,326	104
9	*Of which: other counterparty credit risk*	647	706	52
15	Settlement risk	—	1	—
16	Securitisation exposures in the non-trading book (after the cap)	1,760	1,666	141
17	*Of which: SEC-IRBA approach*	—	—	—
18	*Of which: SEC-ERBA (including IAA)*	51	50	4
19	*Of which: SEC-SA approach*	1,664	1,562	133
UK 19a	*Of which: 1,250%/deduction*	45	54	4
20	Position, foreign exchange and commodities risk (market risk)	8,300	9,349	664
21	*Of which: standardised approach*	1,119	1,304	89
22	*Of which: IMA*	7,181	8,045	575
UK 22a	Large exposures	—	—	—
23	Operational risk	19,115	19,115	1,529
UK 23a	*Of which: basic indicator approach*	—	—	—
UK 23b	*Of which: standardised approach*	19,115	19,115	1,529
UK 23c	*Of which: advanced measurement approach*	—	—	—
24	Amounts below the thresholds for deduction (subject to 250% risk-weight) (2)	2,904	2,642	232
29	Total	176,101	178,494	14,088

(1) Of which £402 million RWAs (30 September 2022- £302 million) relate to equity IRB under the probability of default/loss given default approach.
(2) The amount is shown for information only, as these exposures are already included in rows 1 and 2.

UK OVC: ICAAP information

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.

UK CR8: RWA flow statement of credit risk exposures under the IRB approach

The table below shows movements in RWAs for credit risk exposures under the internal ratings based (IRB) approach. It excludes counterparty credit risk, securitisations and non-credit obligation assets.

		NatWest Group
		a
		RWAs
		£m
1	**At 31 December 2021**	**95,281**
2	Asset size	1,762
3	Asset quality	(1,144)
4	Model updates	19,198
5	Methodology and policy	167
7	Foreign exchange movements	261
9	**At 31 March 2022**	**115,525**
2	Asset size	1,754
3	Asset quality	(1,596)
4	Model updates	185
6	Acquisitions and disposals	(106)
7	Foreign exchange movements	844
8	Other	2,726
9	**At 30 June 2022**	**119,332**
2	Asset size	131
3	Asset quality	(633)
4	Model updates	(9,137)
7	Foreign exchange movements	825
9	**At 30 September 2022**	**110,518**
2	Asset size	2,595
3	Asset quality	(471)
4	Model updates	1,203
7	Foreign exchange movements	(522)
9	**At 31 December 2022**	**113,323**

(1) The following rows are hidden from the above table as they have zero values for the period (5) methodology and policy (6) acquisitions and disposals (8) other.

Q4 2022

- The uplift in asset size primarily relates to increases in Commercial & Institutional as a result of drawdowns and new facilities. Further uplifts were mainly due to increased exposures in Retail Banking.
- The increase in model updates was primarily due to adjustments as a result of new regulations applicable to IRB models from 1 January 2022.
- The decrease in foreign exchange movements was mainly a result of sterling strengthening against the US dollar and euro during the period.
- The reduction in RWAs related to asset quality primarily relates to customers moving into default and improved risk metrics within Commercial & Institutional. These movements are partially offset by an increase in Retail Banking due to a deterioration in loss given default and a change in loan-to-value, within the mortgage portfolio.

UK CCR7: RWA flow statements of counterparty credit risk exposures under the IMM

The table below shows movements in RWAs for counterparty credit risk exposures under the internal model method (IMM). It excludes the CVA capital charge, exposures to central counterparties and securitisations.

		NatWest Group
		a
		RWAs £m
1	**At 31 December 2021**	**4,100**
2	Asset size	(2)
3	Credit quality of counterparties	(5)
7	Foreign exchange movements	72
9	**At 31 March 2022**	**4,165**
2	Asset size	(140)
3	Credit quality of counterparties	(21)
7	Foreign exchange movements	145
9	**At 30 June 2022**	**4,149**
2	Asset size	577
3	Credit quality of counterparties	(62)
7	Foreign exchange movements	222
9	**At 30 September 2022**	**4,886**
2	Asset size	(1,179)
3	Credit quality of counterparties	(3)
7	Foreign exchange movements	(225)
9	**At 31 December 2022**	**3,479**

(1) RWAs for NatWest Group at 31 December 2021 presented in the table differ from those disclosed in the 2021 Pillar 3 Report due to the change in scope under the new UK regulatory framework.
(2) The following rows are not presented in the table because they had zero values for the period: (4) Model updates, (5) Methodology and policy, (6) Acquisitions and disposals, and (8) Other

Q4 2022

– The decrease in IMM RWAs mainly reflects a decrease in asset size resulting from the stabilisation in the market volatility experienced at the end of the previous quarter as well as the strengthening of sterling against the US dollar.

UK MR2-B: RWA flow statement of market risk exposures under the IMA

The table below shows movements in RWAs and own funds requirements for market risk exposures under the internal model approach (IMA).

		NatWest Group					
		a	b	c	e	f	g
		Value-at-risk (VaR) £m	Stressed value-at-risk (SVaR) £m	Incremental risk charge £m	Other (Risks Not in VaR) (RNIV) £m	Total RWAs £m	Total own funds requirements £m
1	**At 31 December 2021**	**1,456**	**2,591**	**1,295**	**1,565**	**6,907**	**552**
1a	*Regulatory adjustment (1)*	*(1,088)*	*(1,938)*	*(104)*	*—*	*(3,130)*	*(250)*
1b	*RWAs at 31 December 2021 (end of day)*	*368*	*653*	*1,191*	*1,565*	*3,777*	*302*
2	Movement in risk levels	(55)	78	(511)	(102)	(590)	(47)
3	Model updates/changes	1	—	36	(323)	(286)	(23)
8a	*RWAs at 31 March 2022 (end of day)*	*314*	*731*	*716*	*1,140*	*2,901*	*232*
8b	*Regulatory adjustment (1)*	*1,540*	*2,576*	*222*	*—*	*4,338*	*347*
8	**At 31 March 2022**	**1,854**	**3,307**	**938**	**1,140**	**7,239**	**579**
1a	*Regulatory adjustment (1)*	*(1,540)*	*(2,576)*	*(222)*	*—*	*(4,338)*	*(347)*
1b	*RWAs at 31 March 2022 (end of day)*	*314*	*731*	*716*	*1,140*	*2,901*	*232*
2	Movement in risk levels	90	(52)	378	(37)	379	30
3	Model updates/changes	—	—	—	—	—	—
8a	*RWAs at 30 June 2022 (end of day)*	*404*	*679*	*1,094*	*1,103*	*3,280*	*262*
8b	*Regulatory adjustment (1)*	*1,033*	*3,002*	*—*	*—*	*4,035*	*323*
8	**At 30 June 2022**	**1,437**	**3,681**	**1,094**	**1,103**	**7,315**	**585**
1a	*Regulatory adjustment (1)*	*(1,033)*	*(3,002)*	*—*	*—*	*(4,035)*	*(323)*
1b	*RWAs at 30 June 2022 (end of day)*	*404*	*679*	*1,094*	*1,103*	*3,280*	*262*
2	Movement in risk levels	*40*	*348*	*(431)*	*122*	*79*	*7*
3	Model updates/changes	*—*	*—*	*(25)*	*479*	*454*	*36*
8a	*RWAs at 30 September 2022 (end of day)*	*444*	*1,027*	*638*	*1,704*	*3,813*	*305*
8b	*Regulatory adjustment (1)*	*1,471*	*2,512*	*249*	*—*	*4,232*	*339*
8	**At 30 September 2022**	**1,915**	**3,539**	**887**	**1,704**	**8,045**	**644**
1a	*Regulatory adjustment (1)*	*(1,471)*	*(2,512)*	*(249)*	*—*	*(4,232)*	*(339)*
1b	*RWAs at 30 September 2022 (end of day)*	*444*	*1,027*	*638*	*1,704*	*3,813*	*305*
2	Movement in risk levels	(61)	(518)	41	221	(317)	(25)
3	Model updates/changes	—	—	—	28	28	2
8a	*RWAs at 31 December 2022 (end of day)*	*383*	*509*	*679*	*1,953*	*3,524*	*282*
8b	*Regulatory adjustment (1)*	*1,500*	*2,155*	*2*	*—*	*3,657*	*293*
8	**At 31 December 2022**	**1,883**	**2,664**	**681**	**1,953**	**7,181**	**575**

(1) Regulatory adjustments in rows 1a and 8b represent the difference in RWA terms between the risk spot measure at the end of the reporting period and the 60-day average of that measure, multiplied by the multiplication factor.
(2) The following rows and/or columns are not presented in the table because they had zero values for the period or are not used by NatWest Group: column (d) Comprehensive risk measure, row (4) Methodology and policy, row (5) Acquisitions and disposals, and row (7) Other. In addition, row (6) Foreign exchange movements is not presented. This is because changes in market risk arising from foreign currency retranslation are included within row (2) Movement in risk levels as they are managed together with portfolio changes.

Q4 2022

- Overall, market risk RWAs under the IMA decreased in Q4 2022.
- VaR-based RWAs were broadly unchanged over the quarter.
- The decrease in SVaR-based RWAs mainly reflected a decrease in interest rate risk.
- The lower incremental risk charge mainly reflected reductions related to government bond and corporate bond positions.
- The increase in RNIV-based RWAs was mainly driven by an RNIV aimed at capturing the missing risk of procyclicality in VaR. A prospective update to make the VaR model more sensitive to recent market conditions has been submitted to the PRA.

Annex III: Risk management - objectives and policies

UK OVA: Institution risk management approach

Risk management framework

The purpose-led strategy of NatWest Group is supported by strategic priorities and bank-wide financial targets, setting out how value will be created, and sustainable financial returns delivered. All risk-taking activities should support the Group's strategy and purpose; champion potential, helping people, families and businesses to thrive.

Strategy is informed and shaped by an understanding of the risk profile. NatWest Group's current strategy must also take in to account a range of threats, risks and uncertainties in the external economic, political and regulatory environment. Identifying these and understanding how they affect the Group informs risk appetite setting and risk management practices

NatWest Group operates an 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. It applies to all subsidiary legal entities, business segments and functions and links each component of the framework to help deliver our strategy in a safe and sustainable way.

The framework ensures that NatWest Group's principal risks – which are detailed in this section – are appropriately controlled and managed and risk management arrangements are adequate. 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 NatWest Group and its subsidiaries.

Adequacy of the Risk management framework

The risk management framework, which is designed and maintained by NatWest Group's independent Risk function, is owned by the Chief Risk Officer (CRO). It is reviewed and approved annually by the Board. The framework incorporates risk governance, NatWest Group's three lines of defence operating model and the Risk function's mandate. It is deemed to be adequate for the scope and nature of the institution and aligned with NatWest Group's risk profile and overall strategic objectives.

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.

The risk appetite framework supports effective risk management by promoting sound risk-taking through a structured approach, within agreed boundaries. It also ensures emerging risks 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 when 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 approves the risk appetite framework annually.

While all NatWest 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 CRO plays an integral role in providing the Board with advice on NatWest 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 threats, which are those that could have a significant negative impact on NatWest Group's ability to meet its strategic objectives. A complementary process operates to identify emerging threats. 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.

Enterprise-Wide Risk Management Framework

Risk Culture	Risk Governance	Three Lines of Defence	Risk Appetite

Risk Directory & Principal Risks

Common Risk Language, Architecture and Approach

Principal Financial Risks	Principal Non-Financial Risks
Credit risk	Conduct risk
Capital adequacy risk	Regulatory compliance risk
Liquidity & funding risk	Financial crime risk
Earnings stability risk	Operational risk
Non-traded market risk	Model risk
Traded market risk	Reputational risk
Pension risk	
Climate risk	

Further information on the risk governance structure is provided later in this section. An outline of principal risks is contained in the Risk and Capital management section of the Annual Report and Accounts.

UK OVA: Institution risk management approach continued

Risk appetite

The NatWest Group risk appetite framework sets the total level of risk that NatWest Group is willing to assume within its risk capacity to achieve its strategic objectives and business plan. Risk appetite is allocated to principal risks, legal entities and business segments using a cascade of risk appetite measures that incorporate forward-looking assumptions. These measures are designed to prevent NatWest Group from unknowingly exceeding risk capacity as market conditions change and to prevent or detect excessive risk-taking.

Risk appetite measures are:

- Expressed relative to quantitative factors such as financial metrics, risk concentrations or customer outcomes.
- Set at a level to constrain risk-taking within risk appetite.
- Specific and sensitive to the shape of actual portfolios, frequency-based and reportable.
- Initially set for each principal risk at NatWest Group level and then, where appropriate, allocated to business segments and legal entities based on strategic planning assumptions.
- Appropriate to reflect material risk concentrations at NatWest Group, legal entity and principal risk level as relevant.

Risk appetite measures take into account the interaction between principal risks within and across business segments and legal entities and their correlated or compounding impact on exposures and outcomes.

Risk appetite limits – and their associated trigger levels – are initially set for NatWest Group. To ensure subsidiary legal entities operate within the parameters of the parent legal entity, parent entities can propose an allocation of risk appetite limits and triggers to subsidiary entities where relevant. Legal entities may also create supplementary limits where they are required to provide their Board and Executive with visibility of specific measures, aligned to the achievement of entity-specific strategic objectives.

Risk appetite is managed such that measures remain aligned with principal risks including capital, liquidity, funding and earnings stability and are calibrated to a level where full utilisation of operational limits does not result in a breach of appetite. This alignment is evaluated and tested by the application of a mix of tools, tests and limits:

- Stress-testing the current and future risk profile across a range of scenarios provides evidence that risk-taking across the range of principal risks is within overall risk appetite.
- Sensitivity analysis explores how the risk profile changes when one or more principal risks move from current levels to full utilisation of risk appetite and is used to confirm that NatWest Group will remain within overall risk appetite even if utilisation moves to the limits.
- Scenario analysis explores how the risk profile reacts to specific changes in the economic environment and is a useful supplement to stress testing.
- Where a direct linkage is possible, measures are used to calibrate risk appetite with capital, liquidity, funding and earnings stability requirements.

The board approved strategy and budget is reviewed for alignment with risk appetite. These may be adjusted as required as opportunities and strategic objectives change. Such adjustments may require NatWest Group Board approval.

Operational Limits are set by each principal risk aligned to how the risk is managed on a day-to-day basis to achieve strategy and one of the primary tools used to monitor compliance with risk appetite and operational limits is a range of scenarios that are run on a regular basis. The scenarios are revised at a minimum annually or where there are significant changes in the risk environment and outlook. Any changes to the scenario portfolio require Board Risk Committee approval.

Material transactions in 2022

During 2022, the material transactions within NatWest Group, affiliates or related parties considered to have had a material impact on the risk profile of the institution were the following:

- During the year, Ulster Bank DAC continued to make progress on its phased withdrawal from the Republic of Ireland. Work continues on managing the residual activities of the bank, including remaining asset disposals.
- In Q4 2022, NatWest Group announced a new strategic partnership with the Vodeno Group to create a Banking-as-a Service business in the UK.

All transactions are reviewed by the Acquisition and Disposal Committee to ensure compliance with the risk framework, with oversight by the risk function with the CRO as member of the committee.

Risk governance structure

The main purposes and responsibilities of each of NatWest Group's risk committees are outlined below.

NatWest Group Board

Considers material risks and approves, as appropriate, actions recommended by the NatWest Group Board Risk Committee. It monitors performance against risk appetite. It reviews and approves the Enterprise-Wide Risk Management Framework (EWRMF) (including NatWest Group's risk appetite framework) and risk appetite for principal risks, in accordance with the risk appetite framework. It receives reports on and reviews the effectiveness of the risk management and internal control systems of NatWest Group. It receives and considers reports from executive management on the design, operation and monitoring of NatWest Group policy and procedures for the detection and prevention of bribery. It oversees and approves NatWest Group's operational resilience self-assessment, including the list of identified important business services and associated impact tolerances and any material changes.

NatWest Group Board Risk Committee (BRC)

Provides oversight and advice to the NatWest Group Board on current and future risk exposures of NatWest Group and its subsidiaries, future risk profile including NatWest Group risk appetite; the approval and effectiveness of the EWRMF and internal controls required to manage risk. Approves the Key Risk Policies and provides input to remuneration decisions. Reviews the operating model, adequacy and effectiveness of Risk resource.

UK OVA: Institution risk management approach continued

NatWest Group Executive Risk Committee
Reviews, challenges and debates all material risk exposures across NatWest Group. Supports the NatWest Group CEO and other accountable executives in discharging their risk management accountabilities. It reviews the NatWest Group EWRMF (including the NatWest Group risk appetite framework) and supports the NatWest Group CRO's and NatWest Group CEO's recommendation of it to the NatWest Group BRC. It reviews the performance of the Group relative to risk appetite and monitors any risk trends and concentrations. It considers NatWest Group's risk profile relative to current and future strategy and oversees implementation of the EWRMF.

NatWest Group Executive Committee
Supports the NatWest Group CEO in discharging her individual accountabilities including matters relating to strategy, financials, capital, risk and operational issues. It monitors the implementation of cultural change within the NatWest Group and the promotion and adoption of Group-wide culture and values. It supports the NatWest Group CEO in identifying matters required or appropriate for escalation to the NatWest Group Board or an appropriate Board Committee and in forming recommendations on relevant items before their escalation.

NatWest Group Asset & Liability Management Committee
Supports the NatWest Group CFO in overseeing the effective management of NatWest Group's current and future balance sheet in line with NatWest Group Board-approved strategy and risk appetite, under normal and under stress conditions. This includes reviewing the NatWest Group capital plan; reviewing the capital and leverage positions of NatWest Group; reviewing NatWest Group's funding plan and liquidity profile and reviewing the credit rating strategy and performance for the NatWest Group.

Group Executive Disclosure Committee
Supports the NatWest Group CFO in discharging her accountabilities relating to the production and integrity of NatWest Group's financial information and disclosures. Ensures that all significant NatWest Group disclosures are accurate, complete and fairly represent the business and financial condition of NatWest Group.. It ensures that there are no material misstatements or omissions in the NatWest Group, disclosures. It supports the NatWest Group CRO in reviewing and evaluating all significant expected credit losses and the NatWest Group CFO in reviewing and evaluating related provisions and valuations.

The NatWest Group CRO leads the NatWest Group risk function. He defines and delivers the risk, conduct, compliance, and financial crime strategies. He defines the overall risk service provision requirements to enable delivery of NatWest Group strategies, including policies, governance, frameworks, oversight and challenge, risk culture and risk reporting. He contributes to the development of strategy, transformation, and culture as a member of the NatWest Group Executive Committee.

The Directors of Risk receive delegated accountability from the relevant CRO to oversight business segments and functions. They primarily set operational limits in line with the delegated authority and the relevant legal entity, business segment or function Executive to enable the monitoring and management of principal Risks at a business level in line with risk appetite. Operational Limits of significant importance to the management of principal risks within risk appetite may be approved by the relevant CEO and CRO following recommendation by the relevant ERC to ensure appropriate visibility and oversight Operational Limits should align to and support the Risk appetite measures and associated risk appetite limits set for each principal risk to provide a comprehensive top down and bottom-up view to ensure that each business segment and legal entity is operating within the parameters set by the Board. This alignment is validated via independent review and verification.

Heads of Internal control
During 2022 the following changes to the heads of internal control, risk management, compliance and internal audit took place:

- The NatWest Group CRO submitted his resignation in November 2022. A replacement has been announced and will be in role during Q2 2023.
- In July 2022 Simon McNamara stepped down as Group Chief Administrative Officer (CAO). In September 2022 he was replaced by Scott Marcar who joined NatWest Group as Chief Information Officer.

Risk culture
Risk culture is at the heart of NatWest Group's risk management framework and its risk management practice. The approach to risk culture was refreshed in 2022 under the new banner of intelligent risk-taking to re-intensify focus on robust risk management behaviours and practices. NatWest 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 NatWest 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 NatWest 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 NatWest Group's core values". These act as an effective basis for a strong risk culture because the critical people capabilities form the basis of all recruitment and selection processes.

Disclosure on the scope and nature of risk disclosure and/or measurement systems
NatWest Group's enterprise-wide risk management framework ensures that NatWest Group's principal risks are appropriately controlled and managed. It seeks to ensure a

UK OVA: Institution risk management approach continued

consistent approach to risk management across NatWest Group and its subsidiaries. Risk appetite measures are in place for all principal risks, with performance against these measured on a monthly basis. The NatWest Group CRO provides regular reporting to the NatWest Group Executive Risk Committee, the Natwest Group Board Risk Committee and the NatWest Group Board. This includes an outline of performance against risk appetite measures for all principal risks and details of mitigants and management actions in place to address any areas of concern. The NatWest Group CRO also undertakes regular engagement with the Chair of the Board Risk Committee, including before and after each scheduled meeting of the Board Risk Committee.

A review of the effectiveness of controls is undertaken through the Control Environment Certification (CEC) process. This is a half-yearly self-assessment by the CEOs of NatWest Group's customer-facing business areas, as well as the heads of the bank's support functions. It provides a consistent and comparable view on the adequacy and effectiveness of the internal control environment. The NatWest Group Executive Risk Committee receives bi-annual updates on the CEC assessment for all of NatWest Group's customer-facing business areas and support functions.

Risk disclosure and measurement systems

The Risk Management Strategy is set over a three year time horizon and defines the target state for risk management, taking the requirements and ambitions of the Group Strategy and identifying the risk capabilities that the Group needs to retain, develop and invest in to deliver the NatWest Group Business Strategy, consistent with the following criteria:

- The Strategic Principles which articulate the high-level NatWest Group wide risk perimeter or "Guard Rails" set by the NatWest Group Board
- The NatWest Group Board's Risk Appetite, as expressed across the 14 principal risks
- The Target Control Environment rating (CE2)

NatWest Group's risk profile is reviewed and monitored on a regular basis. Management focus covers all principal risks as well as the top and emerging threats which may impact them. Risk profile relative to risk appetite is reported regularly to senior management and the NatWest Group Board.

The review of 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 when 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 NatWest Group Board approves the risk appetite framework annually. It also 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.

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

CEC covers material risks and the underlying key controls, including financial, operational and compliance controls, as well as their supporting risk management frameworks

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

Strategies and processes to manage risks

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 on the financial strength of NatWest Group of specified changes to risk factors, including its capital position.

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

The process for stress testing consists of four broad stages:

Define scenarios	– Identify macro and NatWest Group specific vulnerabilities and risks. – Define and calibrate scenarios to examine risks and vulnerabilities. – Formal governance process to agree scenarios.
Assess impact	– Translate scenarios into risk drivers. – Assess impact to current and projected P&L and balance sheet across NatWest Group.
Calculate results and assess implications	– Aggregate impacts into overall results. – Results form part of the risk management process. – Scenario results are used to inform 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 . Approval of scenarios is delegated to the NatWest Group Board Risk Committee by the NatWest Group Board.

UK OVA: Institution risk management approach continued

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

Key types of stress testing include those related to capital sufficiency and adequacy, liquidity, recovery and resolution planning, traded and non-traded market, internal scenarios and regulatory stress testing.

Risk management and monitoring

Each principal risk has its own risk committees and risk appetite statements, which set out specific metrics that are measured on a monthly basis against the limits set. Specific activities relating to compliance & conduct, credit and financial crime risks are subject to testing and monitoring by the Risk function. This confirms to both internal and external stakeholders – including the Board, senior management, the customer-facing businesses, Internal Audit and NatWest Group's regulators – that risk policies and procedures are being correctly implemented and that they are operating adequately and effectively. Selected key controls are also reviewed for adequacy and effectiveness. Thematic reviews and targeted reviews are also carried out where appropriate to ensure appropriate customer outcomes.

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

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

Risk mitigation and hedging

Mitigation is a critical aspect of ensuring that the risk profile remains within risk appetite. Risk mitigation strategies are discussed and agreed within NatWest 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 (see above), is also carried out.

Some key areas of risk mitigation are highlighted below.

Mitigation techniques, as set out in the appropriate credit policies and transactional acceptance standards, are used in the management of credit portfolios across NatWest Group. Counterparty credit risk is mitigated through collateralisation and netting agreements, which allow amounts owed by NatWest Group to a counterparty to be netted against amounts the counterparty owes NatWest Group.

Key to the mitigation of NatWest Group's non-traded market risk is its structural hedging programme. NatWest Group has a significant pool of stable, non, and low interest-bearing liabilities, principally comprising equity and money transmission accounts in addition to its equity and reserves. A proportion of these balances are hedged, either by investing directly in longer-term fixed-rate assets (such as fixed-rate mortgages) or by using interest rate swaps, which are generally booked as cash flow hedges of floating-rate assets, in order to provide a consistent and predictable revenue stream.

UK OVB: Disclosure on governance arrangements

Number of directorships held by members of the Board of NatWest Group plc (“the Board”) as at 31 December 2022 (1) :-

Name	No. of directorships
Howard Davies	3
Alison Rose	2
Katie Murray	2
Frank Dangeard	4
Roisin Donnelly	3
Patrick Flynn	2
Morten Friis	1
Yasmin Jetha	3
Mike Rogers	3
Mark Seligman	2
Lena Wilson	4

(1) Directorships counted in line with the Capital Requirements Directive. In this table, multiple directorships in the same group of companies have been counted as one directorship.

Number of directorships “effectively held” by members of the Board as at 31 December 2022 (2) :-

Name	No. of directorships
Howard Davies	4
Alison Rose	3
Katie Murray	2
Frank Dangeard	4
Roisin Donnelly	3
Patrick Flynn	2
Morten Friis	2
Yasmin Jetha	3
Mike Rogers	4
Mark Seligman	5
Lena Wilson	4

(2) includes directorships listed in the table above and directorships of entities which do not pursue predominantly commercial objectives or are charitable in nature. In this table, multiple directorships in the same group of companies have been counted as one directorship.

Recruitment policy

The Group Nominations and Governance Committee (“the Committee”) supports the Chairman in keeping the composition of the Board and its Committees under regular review.

The Committee reviews and recommends to the Board a skills matrix which is used to map the skills and experience of individual directors and ensure that the Board’s collective skill set remains appropriately balanced and aligned to current and future strategic priorities. The matrix is also used to identify any gaps and opportunities to enhance the collective balance of skills through additional recruitment to the Board.

The matrix reflects directors’ self-assessment of the skills and experience they bring to Board discussions. In December 2022 the Group Nominations and Governance Committee reviewed, and the Board approved, an updated version of the Board skills matrix, a summary view of which is set out in the 2022 Annual Report and Accounts and summarised below.

Skill	No. of directors
Broad Financial Services	10
Risk Management	10
Transformation	10
Customer Experience	9
Environmental, Social and Governance (incl climate)	9
Government / Regulatory / Public Sector	9
CEO / Senior Executive Management	8
Financial Markets / Investment Banking	8
Digital and Innovation	7
Retail / Commercial / Private Banking	6
Technology (infrastructure, cyber)	5
CFO / Accountant	3

Following the Committee’s review of the skills matrix and noting the tenure of a number of non-executive directors, the Committee supported implementation of the Board’s succession plans by overseeing the search for two new non-executive directors during 2022.

A subset of the Board’s membership selected an external search firm to support a comprehensive candidate search with diversity and inclusion considerations at the forefront of the search criteria. The Committee held a number of discussions on potential candidates as the search progressed, assessing the credentials of each candidate against the qualities and capabilities set out in the role specification agreed by the Committee. Following a formal, rigorous and transparent process the Committee recommended two candidates to the Board for appointment.

Roisin Donnelly joined the Board on 1 October 2022, and on 16 December 2022 it was announced that Stuart Lewis would join the Board with effect from 1 April 2023.

Policy on Diversity

The boardroom inclusion policy aims to promote diversity and inclusion in the composition of the Boards of directors of NatWest Group plc, NatWest Holdings Limited, National Westminster Bank Plc and The Royal Bank of Scotland plc, and in the nominations and appointments process.

This policy reflects NatWest Group’s values, its inclusion guidelines and relevant legal or voluntary code requirements. The policy includes measurable objectives which exist to ensure that the Boards, and any Committees they delegate nominations responsibilities to, follow an inclusive process when making decisions on nominations and appointments.

The policy includes targets which aspire to meet those set out in the UK Listing Rules along with the recommendations of the FTSE Women Leaders Review and the Parker Review. The policy also acknowledges NatWest Group’s ambition to have gender balance in our global top three levels (CEO-3 and above) by 2030.

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

UK OVB: Disclosure on governance arrangements continued

As at 31 December 2022:-

- 45% of the Board were female, which exceeded the FTSE Women Leaders Review target of 40% female representation by the end of 2025; and
- with a female Group CEO and Group CFO, NatWest Group plc also met the FTSE Women Leaders Review recommendation that companies should have at least one woman in the Chair or Senior Independent Director roles on the Board and/or one woman in the Chief Executive Officer or Finance Director role by the end of 2025.

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

The NatWest Group plc Board has established a Group Board Risk Committee, which met 8 times during 2022.

Description on the information flow on risk to the management body

NatWest Group's enterprise-wide risk management framework ensures that NatWest Group's principal risks are appropriately controlled and managed. It seeks to ensure a consistent approach to risk management across NatWest Group and its subsidiaries.

Risk appetite measures are in place for all principal risks, with performance against these measured on a monthly basis. The NatWest Group CRO provides regular reporting to the NatWest Group Executive Risk Committee, the NatWest Group Board Risk Committee and the NatWest Group Board. This includes an outline of performance against risk appetite measures for all principal risks and details of mitigants and management actions in place to address any areas of concern. The NatWest Group CRO also undertakes regular engagement with the Chair of the Board Risk Committee, including before and after each scheduled meeting of the Board Risk Committee.

A review of the effectiveness of controls is undertaken through the Control Environment Certification (CEC) process. This is a half-yearly self-assessment by the CEOs of NatWest Group's customer-facing business areas, as well as the heads of the bank's support functions. It provides a consistent and comparable view on the adequacy and effectiveness of the internal control environment. The NatWest Group Executive Risk Committee receives bi-annual updates on the CEC assessment for all of NatWest Group's customer-facing business areas and support functions.

Annex V: Scope of application

UK LI1: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories

The table below shows both the NatWest Group's consolidated balance sheet as at 31 December 2022 on an accounting consolidated basis and under the regulatory scope of consolidation. The differences between the accounting scope of consolidation and the regulatory scope of consolidation are further explained in template UK LI3. Detailed information relating to the consolidated balance sheet is available in NatWest Group's ARA.

		a	b	c	d	e	f	g
		NatWest Group						
				Carrying value of items:				
		Carrying values as reported in published financial statements £m	Carrying values under scope of regulatory consolidation £m	Subject to credit risk framework £m	Subject to securitisation framework £m	Subject to counterparty credit risk framework £m	Subject to the market risk framework £m	Not subject to capital requirements or subject to deduction from capital £m
	Assets							
1	Cash and balances at central banks	**144,832**	**144,865**	**144,865**	—	—	—	—
2	Trading assets	**45,577**	**45,577**	**14,118**	—	**21,537**	**45,577**	—
3	Derivatives	**99,545**	**99,545**	—	**116**	**99,545**	**99,545**	—
4	Settlement balances	**2,572**	**2,572**	**2,572**	—	—	—	—
5	Loans to banks - amortised cost	**7,139**	**7,284**	**7,007**	—	**277**	—	—
6	Loans to customers - amortised cost	**366,340**	**366,336**	**343,873**	**2,714**	**19,749**	—	—
7	Other financial assets	**30,895**	**30,646**	**23,450**	**7,196**	—	—	—
8	Intangible assets	**7,116**	**7,116**	—	—	—	—	**7,116**
9	Other assets	**9,176**	**9,297**	**8,027**	—	—	—	**1,270**
10	Assets of disposal groups	**6,861**	**6,861**	**6,861**	—	—	—	—
11	Amounts due to holding company and fellow subsidiaries	—	—	—	—	—	—	—
12	Total assets	**720,053**	**720,099**	**550,773**	**10,026**	**141,108**	**145,122**	**8,386**
	Liabilities							
1	Bank deposits	**20,441**	**20,441**	—	—	**1,446**	—	**18,995**
2	Customer deposits	**450,318**	**451,002**	—	—	**9,828**	—	**441,174**
3	Settlement balances	**2,012**	**2,012**	—	—	—	—	**2,012**
4	Trading liabilities	**52,808**	**52,808**	—	—	**23,740**	**52,808**	—
5	Derivatives	**94,047**	**94,047**	—	—	**94,047**	**94,047**	—
6	Other financial liabilities	**49,107**	**48,242**	—	—	—	—	**48,242**
7	Subordinated liabilities	**6,260**	**6,260**	—	—	—	—	**6,260**
8	Notes in circulation	**3,218**	**3,218**	—	—	—	—	**3,218**
9	Other liabilities	**5,346**	**5,573**	—	—	—	—	**5,573**
10	Liabilities of disposal groups	—	—	—	—	—	—	—
11	Amounts due to holding company and fellow subsidiaries	—	—	—	—	—	—	—
12	Total liabilities	**683,557**	**683,603**	—	—	**129,061**	**146,855**	**525,474**

(1) The table provides the breakdown of how the amounts reported in the consolidated regulatory balance sheet correspond to regulatory risk framework categories. Certain items included in these columns are subject to more than one risk framework and therefore the sum of all the risk framework categories may not equal the value reported in the "Carrying values under scope of regulatory consolidation" column.

UK LI2: Main sources of differences between regulatory exposure amounts and carrying values in financial statements

The table below provides information on the main sources of differences between the financial statements' carrying value amounts and the exposure amounts considered for regulatory purposes for NatWest Group.

		a	b	c	d	e
		NatWest Group				
		Items subject to:				
		Total (1) £m	Credit risk framework £m	Securitisation framework £m	CCR framework £m	Market risk framework £m
1	Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	**701,907**	**550,773**	**10,026**	**141,108**	**145,122**
2	Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	**(129,061)**	**—**	**—**	**(129,061)**	**(146,855)**
3	Total net amount under regulatory scope of consolidation	**572,846**	**550,773**	**10,026**	**12,047**	**(1,733)**
4	Off-balance sheet amounts	**77,135**	**75,624**	**1,511**	**—**	
5	Differences in valuations	**274**	**76**	**13**	**185**	
6	Differences due to different netting rules, other than those already included above	**(9,478)**	**(21,877)**	**—**	**12,399**	
7	Differences due to consideration of provisions	**3,118**	**3,118**	**—**	**—**	
8	Differences due to the use of credit risk mitigation techniques (CRMs)	**—**	**—**	**—**	**—**	
9	Differences due to credit conversion factors	**—**	**—**	**—**	**—**	
10	Differences due to Securitisation with risk transfer	**—**	**—**	**—**	**—**	
11	Other differences	**(5,982)**	**(1,014)**	**(14)**	**(4,954)**	
12	Exposure amounts considered for regulatory purposes (2)	**637,913**	**606,700**	**11,536**	**19,677**	**17,988**

(1) The total column above (column a) represents the sum of columns b, c and d.
(2) For Market Risk the exposure is only considered for positions treated under the standardised approach. The remaining exposure is considered under the internally developed market risk models.

UK LI3: Outline of the differences in the scopes of consolidation (entity by entity)

The table below provides information on NatWest Group entities which are treated differently under the accounting and regulatory scope of consolidation.

a	b	c	d	e	f	g	h
		NatWest Group					
		Method of regulatory consolidation					Description of the entity
Name of the entity	Method of accounting consolidation	Full consolidation	Proportional consolidation	Equity method	Neither consolidated nor deducted	Deducted	
Alcover A.G.	Fully Consolidated				X		Insurance undertaking
BGF Group Limited	Equity Accounting - Associate		X				Financial institution
Big Society Capital Limited	Investment Accounting				X		Financial institution
Coutts Private Equity Limited Partnership II	Investment Accounting		X				Financial institution
East Grove Holding Limited	Fully Consolidated				X		Other / non financial
Eris Finance S.R.L.	Investment Accounting		X				Financial institution
Dunmore Securities No 1 Designated Activity Company	Fully Consolidated				X		Financial institution
Findel Plc	Investment Accounting				X		Other / non financial
GWNW City Developments Limited	Equity Accounting - Joint Venture				X		Other / non financial
Gatehouse Way Developments Ltd	Fully Consolidated				X		Other / non financial
German Biogas Holdco Limited	Fully Consolidated				X		Financial institution
Herge Holding B.V.	Investment Accounting		X				Financial institution
Hire Purchase Information DAC	Investment Accounting				X		Ancillary services undertaking
Korala Associates Limited	Investment Accounting				X		Other / non financial
KUC Properties Limited	Fully Consolidated				X		Other / non financial
Listowel Races Developments Company Limited	Investment Accounting				X		Other / non financial
London Rail Leasing Limited	Equity Accounting - Joint Venture		X				Financial institution
Lunar Funding VIII Limited	Fully Consolidated				X		Financial institution
Land Options (West) Limited	Fully Consolidated				X		Other / non financial
Lothbury Insurance Company Limited	Fully Consolidated				X		Insurance undertaking
Mortgage Brain Holdings Limited	Equity Accounting - Associate				X		Financial institution
Motability Operations Group Plc	Investment Accounting	X					Financial institution
NatWest Markets Secured Funding (LM) Limited	Fully Consolidated		X				Financial institution
Nightingale UK Corp 2020 2 Ltd	Fully Consolidated				X		Financial institution
NatWest Property Investments Limited	Fully Consolidated				X		Other / non financial
Natwest Covered Bonds (LM) Limited	Investment Accounting		X				Financial institution
Nightingale CRE 2018-1 Limited	Fully Consolidated				X		Financial institution
Nightingale Project Finance 2019 1 Limited	Fully Consolidated				X		Financial institution
Nightingale Securities 2017-1 Limited	Fully Consolidated				X		Financial institution
Otcderiv Limited	Investment Accounting				X		Financial institution
Pharos Estates Limited	Equity Accounting - Associate				X		Other / non financial
Priority Sites Limited	Fully Consolidated				X		Other / non financial
Prize Holdings 1 S.a.r.l.	Investment Accounting				X		Other / non financial
The Drive4growth Company Limited	Investment Accounting				X		Other / non financial
The RBS Group Ireland Retirement Savings Trustee Limited	Fully Consolidated				X		Other / non financial
Ulster Bank Pension Trustees (RI) Limited	Fully Consolidated				X		Other / non financial
Ulster Bank Pension Trustees Limited	Fully Consolidated				X		Other / non financial
Volbroker.Com Limited	Investment Accounting				X		Financial institution
Wisniowy Management SP. Z O.O.	Equity Accounting - Associate				X		Other / non financial
Walton Lake Developments Ltd	Fully Consolidated				X		Other / non financial
West Register (Hotels Number 3) Limited	Fully Consolidated				X		Other / non financial
West Register (Property Investments) Limited	Fully Consolidated				X		Other / non financial
West Register (Realisations) Limited	Fully Consolidated				X		Other / non financial

UK LIA: Explanations of differences between accounting and regulatory exposure amounts

NatWest Group plc is the parent entity for all authorised firms in NatWest Group and is subject to consolidated supervision by the PRA. NatWest Holdings Limited is subject to sub-consolidated supervision by the PRA as the parent of the ring-fenced bank (RFB) sub-group. Inclusion of an entity in the statutory consolidation is driven by NatWest Group's ability to exercise control over that entity. The regulatory consolidation applies a comparable test, but consolidation is restricted to certain categories of entities. In accordance with PRA rules, non-financial and certain structured entities are excluded from the regulatory consolidation.

Where NatWest Group plc does not have control of an entity but has significant influence or more than 20% of the voting rights or capital of that entity, then it must be included in the regulatory consolidation on a pro-rata basis, unless it falls into one of the excluded categories or NatWest Group has agreed a different treatment with the PRA. Where NatWest Group has joint control, such entities will only be included in the statutory consolidation on a pro-rata basis. Entities where NatWest Group has significant influence will be equity accounted in the statutory consolidation.

Both the statutory and regulatory consolidated amounts are shown in table UK LI1 above.

The regulatory consolidation amounts are subject to a number of adjustments in order to reach the regulatory exposure amount which is show in table UK LI2 above. The main regulatory adjustments relate to:

- Off-balance sheet amounts which principally consist of undrawn credit facilities after the application of credit conversion factors (CCF)
- Differences due to different netting rules which reflects the effects of master netting agreements in addition to the netting permitted under International Accounting Standards (IAS) framework
- Differences due to consideration of provisions which relates to the impairment loss provisions on loans and advances and securities, and credit valuation adjustments on derivatives
- Other differences which includes regulatory consolidation differences, the IFRS9 transition adjustment and adjustments due to exposures being calculated by prescribed risk factors which are not considered in financial statement carrying values.

UK LIB: Other qualitative information on the scope of application

All NatWest Group companies are subject to policies, governance and controls set centrally. Aside from regulatory requirements, there are no current or foreseen material, practical or legal impediments to the transfer of capital or prompt repayments of liabilities when due. Entities outside the scope of consolidation are appropriately capitalised.

UK PV1(1): Prudent valuation adjustments (PVA)

Prudential valuation is a regulatory provision that requires additional valuation adjustments (AVAs) to be made over and above fair value adjustments that are calculated in accordance with accounting standards. AVAs represent excess valuation adjustments required to achieve a prudential value over the reported fair value. The purpose of these adjustments is to achieve an appropriate degree of certainty that the valuation is sufficiently prudent having regard to the dynamic nature of trading positions. Prudential valuation adjustments (PVAs) result in a deduction to CET1 capital in accordance with Article 105 UK CRR. NatWest Group applies prudential valuation to all positions that are subject to fair value accounting (both regulatory trading and non-trading books). The prudential valuation is the value of the positions at the lower bound (downside) of the valuation uncertainty range and is always equal to or lower than the fair value for assets, and equal to or higher than the fair value for liabilities. Types of financial instruments on which the highest PVA is observed include interest rate swaps, and equity positions.

		NatWest Group									
		a	b	c	d	e	UK e1	UK e2	f	g	h
		Risk category					Category level AVA - Valuation uncertainty				
	Category level AVA	Equity	Interest Rates	Foreign exchange	Credit	Commodities	Unearned credit spreads AVA	Investment and funding costs AVA	Total category level post-diversification	Of which: Total core approach in the trading book	Of which: Total core approach in the banking book
1	Market price uncertainty	37	188	19	31	—	1	2	139	103	36
3	Close-out cost	—	33	11	1	—	—	—	23	20	3
4	Concentrated positions	22	15	—	2	—	—	—	38	13	25
5	Early termination	—	—	—	—	—	—	—	—	—	—
6	Model risk	—	61	4	1	—	34	2	50	43	7
7	Operational risk	2	11	1	1	—	—	—	16	12	4
10	Future administrative costs	1	5	1	1	—	—	—	8	6	2
12	Total Additional Valuation Adjustments (AVAs)								274	197	77

(1) For more information regarding valuation methodologies of modelled and non-modelled products, the independent price verification process and the control and governance framework, please refer to the 2022 NatWest Group ARA Financial instruments – valuation (note 11).

Annex VII: Capital

UK CC1: Composition of regulatory own funds

The table below sets out the capital resources on a transitional basis. Regulatory adjustments comprise deductions from own funds and prudential filters. The table also includes a cross reference to the corresponding rows in template UK CC2 to facilitate full reconciliation of accounting and regulatory own funds.

		NatWest Group		
	CET1 capital: instruments and reserves	31 December 2022 £m	Source based on reference number/letters of the balance sheet under the regulatory scope of consolidation	31 December 2021 £m
1	Capital instruments and the related share premium accounts	**10,900**		11,804
	Of which: ordinary shares	***10,539***	(a)	*11,468*
	Of which: share premium	***1,161***	(k)	*1,161*
2	Retained earnings	**8,687**	(b)	9,868
3	Accumulated other comprehensive income (and other reserves)	**10,879**	(c)	12,311
UK-3a	Funds for general banking risk	**—**		—
4	Amount of qualifying items referred to in Article 484 (3) CRR and the related share premium accounts subject to phase out from CET1	**—**		—
5	Minority interests (amount allowed in consolidated CET1)	**—**		—
UK-5a	Independently reviewed interim profits net of any foreseeable charge or dividend	**—**	(b)	1,393
6	CET1 capital before regulatory adjustments	**30,466**		35,376
	Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	(-) Additional value adjustments	**(275)**		(274)
8	(-) Intangible assets (net of related tax liability)	**(7,116)**	(d)	(6,312)
10	(-) Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) CRR are met)	**(912)**	(e)	(761)
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	**2,771**	(i)	395
12	(-) Negative amounts resulting from the calculation of expected loss amounts	**—**		—
13	(-) Any increase in equity that results from securitised assets	**—**		—
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	**(58)**		21
15	(-) Defined-benefit pension fund assets	**(227)**	(f) & (g)	(465)
16	(-) Direct, indirect and synthetic holdings by an institution of own CET1 instruments	**—**		—
17	(-) Direct, indirect and synthetic holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution	**—**		—
18	(-) Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions)	**—**		—
19	(-) Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions)	**—**		—
UK-20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	**—**		—
UK-20b	*(-) Of which: qualifying holdings outside the financial sector*	**—**		—
UK-20c	*(-) Of which: securitisation positions*	**—**		—
UK-20d	*(-) Of which: free deliveries*	**—**		—
21	(-) Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in Article 38 (3) CRR are met)	**—**		—
22	(-) Amount exceeding the 17.65% threshold	**—**		—

UK CC1: Composition of regulatory own funds continued

		NatWest Group		
	Common Equity Tier 1 (CET1) capital: regulatory adjustments	31 December 2022 £m	Source based on reference number/letters of the balance sheet under the regulatory scope of consolidation	31 December 2021 £m
23	*(-) Of which: direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities*	**—**		—
25	*(-) Of which: deferred tax assets arising from temporary differences*	**—**		—
UK-25a	(-) Losses for the current financial year	**—**	**(b)**	—
UK-25b	(-) Foreseeable tax charges relating to CET1 items except where the institution suitably adjusts the amount of CET1 items insofar as such tax charges reduce the amount up to which those items may be used to cover risks or losses	**—**		—
27	(-) Qualifying AT1 deductions that exceed the AT1 items of the institution	**—**		—
27a	Other regulatory adjustments to CET1 capital (including IFRS 9 transitional adjustments when relevant)	**343**		616
28	Total regulatory adjustments to CET1	**(5,474)**		(6,780)
29	CET1 capital	**24,992**		28,596
	AT1 capital: instruments			
30	Capital instruments and the related share premium accounts	**3,875**	**(h)**	3,875
31	*Of which: classified as equity under applicable accounting standards*	***3,875***		*3,875*
32	*Of which: classified as liabilities under applicable accounting standards*	**—**		—
33	Amount of qualifying items referred to in Article 484(4) CRR and the related share premium accounts subject to phase out from AT1 as described in Article 486 (3) CRR	**—**	**(j)**	571
UK-33a	Amount of qualifying items referred to in Article 494a(1) CRR subject to phase out from AT1	**—**		—
UK-33b	Amount of qualifying items referred to in Article 494b(1) CRR subject to phase out from AT1	**—**		—
34	Qualifying tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	**—**	**(j)**	—
35	*Of which: instruments issued by subsidiaries subject to phase out*	**—**		—
36	AT1 capital before regulatory adjustments	**3,875**		4,446
	AT1 capital: regulatory adjustments			
37	(-) Direct, indirect and synthetic holdings by an institution of own AT1 instruments	**—**		—
38	(-) Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution	**—**		—
39	(-) Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions)	**—**		—
40	(-) Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions)	**—**		—
42	(-) Qualifying Tier 2 deductions that exceed the Tier 2 items of the institution	**—**		—
42a	Other regulatory adjustments to AT1 capital	**—**		—
43	Total regulatory adjustments to AT1 capital	**—**		—
44	AT1 capital	**3,875**		4,446
45	Tier 1 capital (Tier 1 = CET1 + AT1)	**28,867**		33,042

UK CC1: Composition of regulatory own funds continued

		31 December 2022 £m	NatWest Group Source based on reference number/letters of the balance sheet under the regulatory scope of consolidation	31 December 2021 £m
	Tier 2 capital: instruments			
46	Capital instruments and the related share premium accounts	**4,953**	(j)	4,935
47	Amount of qualifying items referred to in Article 484 (5) CRR and the related share premium accounts subject to phase out from Tier 2 as described in Article 486 (4) CRR	**—**	(j)	—
UK-47a	Amount of qualifying items referred to in Article 494a (2) CRR subject to phase out from Tier 2	**—**		—
UK-47b	Amount of qualifying items referred to in Article 494b (2) CRR subject to phase out from Tier 2	**—**		—
48	Qualifying own funds instruments included in consolidated Tier 2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	**82**	(j)	314
49	*Of which: instruments issued by subsidiaries subject to phase out*	***75***		*304*
50	Credit risk adjustments	**18**		457
51	Tier 2 capital before regulatory adjustments	**5,053**		5,706
	Tier 2 capital: regulatory adjustments			
52	(-) Direct, indirect and synthetic holdings of own Tier 2 instruments and subordinated loans	**—**		—
53	(-) Direct, indirect and synthetic holdings of the Tier 2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution	**—**		—
54	(-) Direct, indirect and synthetic holdings of the Tier 2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions)	**—**		—
55	(-) Direct, indirect and synthetic holdings by the institution of the Tier 2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions)	**—**		—
UK-56a	(-) Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution	**—**		—
UK-56b	(-) Other regulatory adjustments to Tier 2 capital	**—**		—
57	Total regulatory adjustments to Tier 2 capital	**—**		—
58	Tier 2 capital	**5,053**		5,706
59	Total capital (total capital = Tier 1 + Tier 2)	**33,920**		38,748
60	Total risk exposure amount	**176,101**		156,971
	Capital ratios and buffers			
61	CET1 (as a percentage of total risk exposure amount)	**14.2%**		18.2%
62	Tier 1 (as a percentage of total risk exposure amount)	**16.4%**		21.0%
63	Total capital (as a percentage of total risk exposure amount)	**19.3%**		24.7%
64	Institution CET1 overall capital requirement (CET1 requirement in accordance with article 92 (1) CRR, plus additional CET1 requirement which the institution is required to hold in accordance with point (a) of Article 104 (1) CRD, plus combined buffer requirement in accordance with Article 128 (6) CRD) expressed as a percentage of risk exposure amount)	**9.5%**		9.0%
65	*Of which: capital conservation buffer requirement*	**2.5%**		2.5%
66	*Of which: counter cyclical buffer requirement*	***0.8%***		*0.0%*
67	*Of which: systemic risk buffer requirement*	**—**		—
UK-67a	*Of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer*	**—**		—
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount) (1)	**8.0%**		11.7%

UK CC1: Composition of regulatory own funds continued

		NatWest Group		
		31 December 2022 £m	Source based on reference number/letters of the balance sheet under the regulatory scope of consolidation	31 December 2021 £m
Amounts below the thresholds for deduction (before risk weighting)				
72	Direct and indirect holdings of own funds and eligible liabilities of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	**273**		428
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 17.65% threshold and net of eligible short positions)	**727**		597
75	Deferred tax assets arising from temporary differences (amount below 17.65% threshold, net of related tax liability where the conditions in Article 38 (3) CRR are met)	**435**		167
Applicable caps on the inclusion of provisions in Tier 2				
76	Credit risk adjustments included in Tier 2 in respect of exposures subject to standardised approach (prior to the application of the cap)	**—**		—
77	Cap on inclusion of credit risk adjustments in Tier 2 under standardised approach	**288**		232
78	Credit risk adjustments included in Tier 2 in respect of exposures subject to internal ratings based approach (prior to the application of the cap)	**18**		457
79	Cap for inclusion of credit risk adjustments in Tier 2 under internal ratings-based approach	**713**		610
Capital instruments subject to phase-out arrangements (only applicable between 1 January 2014 and 1 January 2022)				
80	Current cap on CET1 instruments subject to phase out arrangements	**—**		—
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	**—**		—
82	Current cap on AT1 instruments subject to phase out arrangements	**—**		960
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	**—**		—
84	Current cap on Tier 2 instruments subject to phase out arrangements	**—**		673
85	Amount excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	**—**		—

(1) Row 68: represents the CET1 ratio less CET1 currently used to meet SREP requirements (Pillar 1 & 2A).
(2) The references (a) to (k) identify balance sheet components in table UK CC2 that are used in the calculation of regulatory capital in table UK CC1. Amounts between UK CC2 and UK CC1 are not always directly comparable due to differences in definitions and application of Capital Requirements Directive for the calculation of regulatory capital.
(3) The following lines are not presented as they are not applicable under the UK disclosure requirements: 9, 20, 24, 26, 41, 54a, 56, 69, 70, 71 and 74.

UK CC2: reconciliation of regulatory own funds to balance sheet in the audited financial statements

The table below shows the reconciliation between the accounting and regulatory consolidation with references showing the linkage between this table and UK CC1.

	NatWest Group		
	As at period end 31 December 2022		
	a	b	
Assets	Balance sheet as in published financial statements as at period end £m	Under regulatory scope of consolidation as at period end £m	References
Cash and balances at central banks	144,832	144,865	
Trading assets	45,577	45,577	
Derivatives	99,545	99,545	
Settlement balances	2,572	2,572	
Loans to banks - amortised cost	7,139	7,284	
Loans to customers - amortised cost	366,340	366,336	
Other financial assets	30,895	30,646	
Intangible assets	7,116	7,116	*(d)*
Property, plant and equipment	4,240	4,240	
Current and deferred tax assets	2,457	2,457	
of which: DTAs that rely on future profitability and do not arise from temporary differences	*912*	*912*	*(e)*
Prepayments, accrued income and other assets	2,479	2,600	
of which: defined benefit pension fund assets	*318*	*318*	*(f)*
Assets of disposal groups	6,861	6,861	
Total assets	**720,053**	**720,099**	
Liabilities			
Bank deposits	20,441	20,441	
Customer deposits	450,318	451,002	
Settlement balances	2,012	2,012	
Trading liabilities	52,808	52,808	
Derivatives	94,047	94,047	
Other financial liabilities	49,107	48,242	
Provisions, deferred income and other liabilities	5,064	5,294	
Current and deferred tax liabilities	282	279	
of which: defined benefit pension scheme assets	*91*	*91*	*(g)*
Subordinated liabilities	6,260	6,260	*(j)*
Notes in circulation	3,218	3,218	
Total liabilities	**683,557**	**683,603**	
Shareholders' Equity			
Non-controlling interests	8	8	
Owners' equity			
Called up share capital	10,539	10,539	*(a)*
Reserves	25,949	25,949	
of which: amount eligible for retained earnings	*10,019*	*10,019*	*(b)*
of which: amount eligible for accumulated OCI and other reserves	*10,879*	*10,879*	*(c) & (i)*
of which: amount of other equity instruments	*3,890*	*3,890*	*(h)*
of which: share premium accounts	*1,161*	*1,161*	*(k)*
Total shareholders' equity	**36,496**	**36,496**	

(1) The references (a) to (k) identify balance sheet components in table UK CC2 that are used in the calculation of regulatory capital in table UK CC1. Amounts between tables UK CC2 and UK CC1 are not always directly comparable due to differences in definitions and application of Capital Requirements Directive for the calculation of regulatory capital.

TLAC1: Composition - MREL

The table below shows the composition of own funds and eligible liabilities and ratios for NatWest Group.

		NatWest Group 2022	2021
		a	a
		Minimum requirement for own funds and eligible liabilities (MREL) £m	Minimum requirement for own funds and eligible liabilities (MREL) £m
	Own funds and eligible liabilities: Non-regulatory capital elements		
1	Common Equity Tier 1 capital (CET1)	**24,992**	28,596
2	Additional Tier 1 capital (AT1)	**3,875**	4,369
6	Tier 2 capital (Tier 2)	**4,854**	5,284
11	Own funds for the purpose of Articles 92a CRR and 45 BRRD arising from regulatory capital instruments	**33,721**	38,249
	Own funds and eligible liabilities: Non-regulatory capital elements		
12	Eligible liabilities instruments issued directly by the resolution entity that are subordinated to excluded liabilities (not grandfathered)	**21,230**	22,807
12a	Eligible liabilities instruments issued by other entities within the resolution group that are subordinated to excluded liabilities (not grandfathered)	**—**	—
12b	Eligible liabilities instruments that are subordinated to excluded liabilities, issued prior to 27 June 2019 (subordinated grandfathered)	**—**	—
12c	Tier 2 instruments with a residual maturity of at least one year to the extent they do not qualify as Tier 2 items	**522**	1,346
13	Eligible liabilities that are not subordinated to excluded liabilities (not grandfathered pre cap)	**—**	—
13a	Eligible liabilities that are not subordinated to excluded liabilities issued prior to 27 June 2019 (pre-cap)	**—**	—
14	Amount of non subordinated instruments eligible, where applicable after application of articles 72b (3) and (4) CRR		
17	Eligible liabilities items before adjustments	**21,752**	24,153
17a	*Of which subordinated*	**21,752**	24,153
	Own funds and eligible liabilities: Adjustments to non-regulatory capital elements		
18	Own funds and eligible liabilities items before adjustments	**55,473**	62,402
19	Deduction of exposures between MPE resolution groups		
20	Deduction of investments in other eligible liabilities instruments		
22	Own funds and eligible liabilities after adjustments	**55,473**	62,402
22a	*Of which own funds and subordinated*	**55,473**	62,402
	Risk-weighted exposure amount and leverage exposure measure of the resolution group		
23	Total risk exposure amount adjusted as permitted by article 45h(2) of Directive 2014/59/EU	**176,101**	156,971
24	Total exposure measure	**534,613**	561,858
	Ratio of own funds and eligible liabilities		
25	Own funds and eligible liabilities (as a percentage of total risk exposure amount)	**31.5%**	39.8%
25a	*Of which own funds and subordinated*	**31.5%**	39.8%
26	Own funds and eligible liabilities (as a percentage of total exposure measure)	**10.4%**	11.1%
26a	*Of which own funds and subordinated*	**10.4%**	11.1%
27	CET1 (as a percentage of TREA) available after meeting the resolution group's requirements	**8.0%**	11.7%
28	Institution-specific combined buffer requirement	**3.3%**	2.5%
29	of which: capital conservation buffer requirement	**2.5%**	2.5%
30	of which: countercyclical buffer requirement	**0.8%**	0.0%
31	of which: systemic risk buffer requirement	**0.0%**	0.0%
31a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	**0.0%**	0.0%

TLAC3: creditor ranking - resolution entity

The table below shows information regarding creditor ranking for NatWest Group.

2022		NatWest Group				
		Insolvency ranking				
1	Description of insolvency ranking	Shareholders Equity £m	Preference shares and contingent capital notes £m	Subordinated debt £m	Senior unsecured debt and other pari passu liabilities £m	Total £m
2	Total liabilities and own funds	46,237	3,904	6,065	23,447	79,653
3	*of which excluded liabilities*	—	—	693	2,217	2,910
4	Total liabilities and own funds less excluded liabilities	46,237	3,904	5,372	21,230	76,743
5	Subset of row 4 that are own funds and liabilities potentially eligible for meeting MREL	46,237	3,904	5,372	21,230	76,743
6	*of which residual maturity ≥ 1 year < 2 years*	—	—	*728*	*2,160*	*2,888*
7	*of which residual maturity ≥ 2 year < 5 years*	—	—	—	*9,359*	*9,359*
8	*of which residual maturity ≥ 5 years < 10 years*	—	—	*3,288*	*9,711*	*12,999*
9	*of which residual maturity ≥ 10 years, but excluding perpetual securities*	—	—	*1,356*	—	*1,356*
10	*of which perpetual securities*	*46,237*	*3,904*	—	—	*50,141*

2021		NatWest Group				
		Insolvency ranking				
1	Description of insolvency ranking	Shareholders Equity £m	Preference shares and contingent capital notes £m	Subordinated debt £m	Senior unsecured debt and other pari passu liabilities £m	Total £m
2	Total liabilities and own funds	43,536	4,384	7,273	22,813	78,006
3	*of which excluded liabilities*	—	—	1,156	6	1,162
4	Total liabilities and own funds less excluded liabilities	43,536	4,384	6,117	22,807	76,844
5	Subset of row 4 that are own funds and liabilities potentially eligible for meeting MREL	43,536	4,384	6,117	22,807	76,844
6	*of which residual maturity ≥ 1 year < 2 years*	—	—	*1,380*	*6,710*	*8,090*
7	*of which residual maturity ≥ 2 year < 5 years*	—	—	*920*	*7,844*	*8,764*
8	*of which residual maturity ≥ 5 years < 10 years*	—	—	*2,557*	*8,253*	*10,810*
9	*of which residual maturity ≥ 10 years, but excluding perpetual securities*	—	—	*1,260*	—	*1,260*
10	*of which perpetual securities*	*43,536*	*4,384*	—	—	*47,920*

Annex IX: Countercyclical capital buffers

UK CCyB1: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer

As part of the banking reforms introduced by Basel III, a countercyclical capital buffer is required to ensure banks take account of the macro-financial environment when assessing adequate capital requirements. The buffer is to help protect banks during periods of excess aggregate credit growth that have often been associated with the build-up of system-wide risk. This regime is intended to help reduce the risk that the supply of credit will be constrained during a period of economic downturn, which in turn could undermine the performance of the real economy and consequently result in additional credit losses in the banking system.

The table below summarises NatWest Group's total exposures and own funds requirements based on country of economic operation of the customer. Where applicable, a countercyclical capital buffer rate is applied to the own funds requirement for the geographic region to capture an additional countercyclical requirement.

General credit and trading book exposures exclude those with central governments/banks, regional governments, local authorities, public sector entities, multilateral development banks, international organisations and institutions. The exposures below therefore differ from those presented in the credit and counterparty credit risk sections.

	NatWest Group												
	a	b	c	d	e	f	g	h	i	j	k	l	m
	General credit exposures		Relevant credit exposures - Market risk				Own fund requirements						
31 December 2022	Exposure value under the standardised approach £m	Exposure value under the IRB approach £m	Sum of long and short positions of trading book exposures for SA £m	Value of trading book exposures for internal models £m	Securitisation exposures Exposure value for non-trading book £m	Total exposure value £m	Relevant credit risk exposures - Credit risk £m	Relevant credit exposures - Market risk £m	Relevant credit exposures - Securitisation positions in the non trading book £m	Total £m	Risk weighted exposure amounts £m	Own fund requirements weights %	Countercyclical buffer rate %
Breakdown by country (with existing CCyB rates)													
Norway	143	794	—	7	—	944	20	—	—	20	256	0.18%	2.00%
Denmark	—	287	—	43	—	330	6	—	—	6	78	0.06%	2.00%
Iceland	—	—	—	—	—	—	—	—	—	—	—	—	2.00%
Czech Republic	—	—	—	5	—	5	—	—	—	—	1	—	1.50%
Great Britain	24,969	350,603	18	153	6,554	382,297	9,027	19	78	9,124	114,046	80.70%	1.00%
Sweden	173	1,599	—	162	96	2,030	63	2	1	66	819	0.58%	1.00%
Hong Kong	249	64	—	—	—	313	8	—	—	8	106	0.07%	1.00%
Slovakia	—	1	—	—	—	1	—	—	—	—	—	—	1.00%
Estonia	—	1	—	—	—	1	—	—	—	—	—	—	1.00%
Bulgaria	—	—	—	—	—	—	—	—	—	—	—	—	1.00%
Luxembourg	108	9,024	—	23	—	9,155	154	1	—	155	1,939	1.37%	0.50%
Romania	—	2	—	—	—	2	—	—	—	—	—	—	0.50%
Total (countries with existing CCyB rates)	25,642	362,375	18	393	6,650	395,078	9,278	22	79	9,379	117,245	82.96%	

UK CCyB1: Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer continued

	NatWest Group												
	a	b	c	d	e	f	g	h	i	j	k	l	m
	General credit exposures		Relevant credit exposures - Market risk				Own fund requirements						
31 December 2022	Exposure value under the standardised approach £m	Exposure value under the IRB approach £m	Sum of long and short positions of trading book exposures for SA £m	Value of trading book exposures for internal models £m	Securitisation exposures Exposure value for non-trading book £m	Total exposure value £m	Relevant credit risk exposures - Credit risk £m	Relevant credit exposures - Market risk £m	Relevant credit exposures - Securitisation positions in the non trading book £m	Total £m	Risk weighted exposure amounts £m	Own fund requirements weights %	Countercyclical buffer rate %
Breakdown by country (with zero CCyB rates and with own funds requirement weights 1% and above)													
US	150	15,095	2	455	3,713	19,415	410	6	45	461	5,758	4.07%	
Ireland	8,114	1,337	—	2	157	9,610	397	1	2	400	4,989	3.53%	
Jersey	974	3,304	—	—	264	4,542	161	—	3	164	2,055	1.45%	
France	312	3,686	—	21	685	4,704	122	5	8	135	1,686	1.19%	
Netherlands	378	2,573	—	529	27	3,507	118	4	4	126	1,575	1.11%	
Guernsey	415	3,961	—	—	—	4,376	120	—	—	120	1,503	1.06%	
Germany	77	2,559	1	20	4	2,661	111	2	—	113	1,413	1.00%	
Total (Countries with zero CCyB rate and with own funds requirement weights 1% and above)	10,420	32,515	3	1,027	4,850	48,815	1,439	18	62	1,519	18,979	13.41%	
Total (rest of the world with zero CCyB rate and below 1% requirement)	1,832	8,034	2	4,124	36	14,028	390	17	—	407	5,095	3.63%	
Total	37,894	402,924	23	5,544	11,536	457,921	11,107	57	141	11,305	141,319	100.00%	

UK CCyB2: Amount of institution-specific countercyclical capital buffer

		NatWest Group 31 December 2022 £m
1	Total risk exposure amount	**176,101**
2	Institution specific countercyclical capital buffer rate	**0.82%**
3	Institution specific countercyclical capital buffer requirement (1)	**1,451**

(1) The Financial Policy Committee increased the UK CCyB rate from 0% to 1% effective from 13 December 2022. A further increase from 1% to 2% was announced on 5 July 2022, effective 5 July 2023. In June 2022, the Central Bank of Ireland announced that the CCyB on Irish exposures will increase from 0% to 0.5%, applicable from 15 June 2023. This is the first step towards a gradual increase, which conditional on macro-financial developments, would see a CCyB of 1.5% announced by mid-2023.

Annex XI: Leverage

UK LR1 - LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

The table below shows a reconciliation between total assets under IFRS standards and the leverage exposure measure. The leverage metrics are calculated in accordance with the Leverage Ratio (CRR) part of the PRA Rulebook.

		NatWest Group	
		31 December 2022 £m	30 June 2022 £m
1	Total assets as per published financial statements	**720,053**	806,478
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of prudential consolidation	**45**	(2)
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	**—**	—
4	(Adjustment for exemption of exposures to central banks)	**(141,144)**	(176,163)
5	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the total exposure measure in accordance with point (1) of Article 429a(1) of the CRR)	**—**	—
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	**(2,012)**	(9,779)
7	Adjustment for eligible cash pooling transactions	**—**	—
8	Adjustment for derivative financial instruments	**(82,029)**	(86,743)
9	Adjustment for securities financing transactions (SFTs)	**4,147**	5,184
10	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	**46,458**	45,201
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced tier 1 capital (leverage))	**(320)**	(361)
UK-11a	(Adjustment for exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) of the CRR)	**—**	—
UK-11b	(Adjustment for exposures excluded from the total exposure measure in accordance with point (j) of Article 429a(1) of the CRR)	**—**	—
12	Other adjustments	**(10,585)**	(13,063)
13	Total exposure measure	**534,613**	570,752

UK LR2 - LRCom: Leverage ratio common disclosure

The table below shows the leverage ratio common disclosure on a transitional basis. The leverage metrics are calculated in accordance with the Leverage Ratio (CRR) part of the PRA Rulebook.

		NatWest Group	
		31 December 2022	30 June 2022
	On-balance sheet exposures (excluding derivatives and SFTs)	£m	£m
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	**571,802**	629,646
2	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	**—**	—
3	(Deductions of receivable assets for cash variation margin provided in derivatives transactions)	**(15,367)**	(14,416)
4	(Adjustment for securities received under securities financing transactions that are recognised as an asset)	**—**	—
5	(General credit risk adjustments to on-balance sheet items)	**—**	—
6	(Asset amounts deducted in determining Tier 1 capital (leverage))	**(5,415)**	(6,594)
7	Total on-balance sheet exposures (excluding derivatives, and SFTs)	**551,020**	608,636
	Derivative exposures		
8	Replacement cost associated with SA-CCR derivatives transactions (i.e. net of eligible cash variation margin)	**13,864**	15,796
UK-8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach	**—**	—
9	Add-on amounts for PFE associated with SA-CCR derivatives transactions	**18,327**	20,552
UK-9a	Derogation for derivatives: potential future exposure contribution under the simplified standardised approach	**—**	—
UK-9b	Exposure determined under the original exposure method	**—**	—
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	**—**	—
UK-10a	(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)	**—**	—
UK-10b	(Exempted CCP leg of client-cleared trade exposures) (original exposure method)	**—**	—
11	Adjusted effective notional amount of written credit derivatives	**5,090**	5,044
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	**(4,398)**	(4,377)
13	Total derivative exposures	**32,883**	37,015
	Securities financing transaction (SFT) exposures		
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	**61,775**	83,381
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	**(20,211)**	(32,396)
16	Counterparty credit risk exposure for SFT assets	**4,147**	5,184
UK-16a	Derogation for SFTs: counterparty credit risk exposure in accordance with Articles 429e(5) and 222 of the CRR	**—**	—
UK-17	Agent transaction exposures	**—**	—
UK-17a	(Exempted CCP leg of client-cleared SFT exposures)	**—**	—
18	Total securities financing transaction exposures	**45,711**	56,169
	Other off-balance sheet exposures		
19	Off-balance sheet exposures at gross notional amount	**137,056**	134,838
20	(Adjustments for conversion to credit equivalent amounts)	**(90,867)**	(89,699)
21	(General provisions deducted in determining tier 1 capital (leverage) and specific provisions associated with off-balance sheet exposures)	**(46)**	(44)
22	Off-balance sheet exposures	**46,143**	45,095

UK LR2 - LRCom: Leverage ratio common disclosure continued

		NatWest Group	
		31 December 2022 £m	30 June 2022 £m
Excluded exposures			
UK-22a	(Exposures excluded from the total exposure measure in accordance with point (c) of Article 429a(1) of the CRR)	—	—
UK-22b	(Exposures exempted in accordance with point (j) of Article 429a(1) of the CRR (on- and off-balance sheet))	—	—
UK-22g	(Excluded excess collateral deposited at triparty agents)	—	—
UK-22k	(Total exempted exposures)	—	—
Capital and total exposure measure			
23	Tier 1 capital (leverage)	28,867	29,568
24	Total exposure measure including claims on central banks	675,757	746,915
UK-24a	(-) Claims on central banks excluded	(141,144)	(176,163)
UK-24b	Total exposure measure excluding claims on central banks	534,613	570,752
Leverage ratio			
25	Leverage ratio excluding claims on central banks (%)	5.4	5.2
UK-25a	Fully loaded ECL accounting model leverage ratio excluding claims on central banks (%)	5.3	5.1
UK-25b	Leverage ratio excluding central bank reserves as if the temporary treatment of unrealised gains and losses measured at fair value through other comprehensive income had not been applied (%)	5.4	5.2
UK-25c	Leverage ratio including claims on central banks (%)	4.3	4.0
26	Regulatory minimum leverage ratio requirement (%)	3.25	3.25
Additional leverage ratio disclosure requirements - leverage ratio buffers			
27	Leverage ratio buffer (%)	0.3	—
UK-27a	*Of which: G-SII or O-SII additional leverage ratio buffer (%)*	—	—
UK-27b	*Of which: countercyclical leverage ratio buffer (%)*	0.3	—
Additional leverage ratio disclosure requirements - disclosure of mean values			
28	Mean of daily values of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivable	36,076	47,279
29	Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	41,564	50,985
UK-31	Average total exposure measure excluding claims on central banks	531,429	568,761
UK-32	Average total exposure measure including claims on central banks	684,305	735,045
UK-33	Average leverage ratio excluding claims on central banks	5.6	5.3
UK-34	Average leverage ratio including claims on central banks	4.3	4.1

(1) NatWest Group is an LREQ firm therefore subject to the additional quarterly disclosures for averaging and the countercyclical leverage ratio buffer.

(2) The prior period values are as at 30 June 2022 to provide a comparable view of the leverage metrics based on the current requirements in the Leverage Ratio (CRR) part of the PRA rulebook.

UK LR3 - LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

The table below shows the breakdown of the leverage ratio exposures on a transitional basis.

		NatWest Group	
		31 December 2022 £m	30 June 2022 £m
UK-1	Total on balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	**409,876**	446,889
UK-2	Trading book exposures	**12,330**	48,563
UK-3	Banking book exposures, of which:	**397,546**	398,326
UK-4	Covered bonds	**4,868**	4,426
UK-5	Exposures treated as sovereigns	**20,274**	30,329
UK-6	Exposures to regional governments, multilateral development bank, international organisations and public sector entities not treated as sovereigns	**5,060**	6,380
UK-7	Institutions	**5,415**	10,052
UK-8	Secured by mortgages of immovable properties	**239,529**	238,421
UK-9	Retail exposures	**20,075**	19,537
UK-10	Corporate	**79,765**	77,142
UK-11	Exposures in default	**5,156**	4,589
UK-12	Other exposures (e.g. equity, securitisations, and non-credit obligation assets)	**17,404**	7,450

UK LRA: Disclosure of LR qualitative information

Processes used to manage the risk of excessive leverage

The Group actively manages the risk of excessive leverage through relevant Board approved Risk Appetite measures, operational limits, targets, and recovery indicators. This ensures that the Group and its entities are sufficiently capitalised to meet supervisory leverage requirements in normal business conditions and appropriate requirements for leverage under stress events. The Group embeds its strong focus on leverage in its capital planning, capital allocation, and transfer pricing processes, incentivising businesses to make appropriate decisions with regards to leverage exposure within their portfolios. The Group regularly monitors leverage targets, exposure, and capacity, on an actual and forecast basis, in relevant Governance committees.

Factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers

The leverage ratio as at 31 December 2022 is 5.4%, calculated in accordance current requirements in the Leverage Ratio (CRR) part of the PRA rulebook. The ratio increased by 20 basis points in the period since 30 June 2022. The key driver is a £36.1 billion decrease in leverage exposure due to reduced balance sheet exposures, predominantly in trading assets and debt securities. This is partially offset by a £0.7 billion decrease in Tier 1 capital.

In the quarter to December 2022, NatWest Group average leverage ratio increased 30 basis points to 5.6%. This was primarily due to a decrease in the average leverage exposure driven by a reduction in balance sheet assets.

Annex XIII: Liquidity

UK LIQ1: Quantitative information of LCR

The tables below show the breakdown of high-quality liquid assets, cash inflows and cash outflows, on both an unweighted and weighted basis, that are used to derive the liquidity coverage ratio for NatWest Group. The weightings applied reflect the stress factors applicable under the UK LCR rules. The values presented are the simple average of the preceding monthly periods ending on the quarterly reporting date as specified in the table. LCR outflows do not capture all liquidity risks (e.g. intra-day liquidity). NatWest Group assesses these risks as part of its Individual Liquidity Adequacy Assessment Process and maintains appropriate levels of liquidity.

		NatWest Group							
		Total unweighted value (average)				Total weighted value (average)			
		31 December 2022	30 September 2022	30 June 2022	31 March 2022	**31 December 2022**	30 September 2022	30 June 2022	31 March 2022
	Number of data points used in the calculation of averages	**12**	12	12	12	**12**	12	12	12
		£m	£m	£m	£m	**£m**	£m	£m	£m
	High-quality liquid assets								
1	Total high-quality liquid assets (HQLA)					**193,872**	204,269	204,862	200,588
	Cash - outflows								
2	Retail deposits and deposits from small business customers	**269,923**	269,534	266,758	263,130	**21,352**	21,392	21,163	20,835
	of which:								
3	*Stable deposits*	***159,675***	*161,205*	*161,824*	*161,757*	***7,984***	*8,060*	*8,091*	*8,088*
4	*Less stable deposits*	***102,783***	*103,144*	*101,727*	*99,820*	***12,997***	*13,022*	*12,818*	*12,552*
5	Unsecured wholesale funding	**185,732**	189,696	190,112	186,819	**86,024**	87,807	87,449	85,113
6	*Operational deposits (all counterparties) and deposits in networks of cooperative banks*	***72,101***	*73,203*	*73,988*	*73,599*	***17,706***	*17,981*	*18,178*	*18,080*
7	*Non-operational deposits (all counterparties)*	***111,529***	*114,495*	*114,097*	*111,410*	***66,216***	*67,828*	*67,244*	*65,223*
8	*Unsecured debt*	***2,102***	*1,998*	*2,027*	*1,810*	***2,102***	*1,998*	*2,027*	*1,810*
9	Secured wholesale funding					**999**	926	849	707
10	Additional requirements	**79,414**	78,715	77,597	77,143	**21,948**	21,429	20,537	20,185
11	*Outflows related to derivative exposures and other collateral requirements*	***7,109***	*6,892*	*6,723*	*7,075*	***6,611***	*6,293*	*6,084*	*6,376*
12	*Outflows related to loss of funding on debt products*	**—**	—	—	—	**—**	—	—	—
13	*Credit and liquidity facilities*	***72,305***	*71,823*	*70,874*	*70,068*	***15,337***	*15,136*	*14,453*	*13,809*
14	Other contractual funding obligations	**19,348**	23,072	25,161	25,303	**2,629**	2,962	2,701	2,599
15	Other contingent funding obligations	**51,177**	49,286	47,945	47,133	**5,642**	5,130	4,664	4,322
16	Total cash outflows					**138,594**	139,646	137,363	133,761
	Cash - inflows								
17	Secured lending (e.g. reverse repos)	**49,872**	53,142	56,651	57,280	**598**	449	364	326
18	Inflows from fully performing exposures	**10,814**	10,655	10,409	9,990	**9,222**	9,044	8,781	8,391
19	Other cash inflows	**13,728**	13,646	13,309	13,333	**5,601**	5,496	5,133	5,147
UK-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)	**—**	—	—	—	**—**	—	—	—
UK-19b	(Excess inflows from a related specialised credit institution)	**—**	—	—	—	**—**	—	—	—
20	Total cash inflows	**74,414**	77,443	80,369	80,603	**15,421**	14,989	14,278	13,864
UK-20a	*Fully exempt inflows*	**—**	—	—	—	**—**	—	—	—
UK-20b	*Inflows subject to 90% cap*	**—**	—	—	—	**—**	—	—	—
UK-20c	*Inflows subject to 75% cap*	***71,153***	*73,550*	*75,812*	*75,509*	***15,421***	*14,989*	*14,278*	*13,864*
	Total adjusted value								
UK-21	Liquidity buffer					**193,872**	204,269	204,862	200,588
22	Total net cash outflows					**123,173**	124,657	123,085	119,897
23	Liquidity coverage ratio (%)					**157**	164	166	167

UK LIQ2: Net Stable Funding Ratio

	(In £m)	NatWest Group a	b	c	d	e
		Unweighted value by residual maturity (average)				Weighted Value (average)
		No maturity	< 6 months	6 months to < 1 yr	≥ 1 yr	
	Available stable funding (ASF) Items					
1	Capital items and instruments	37,306	—	—	5,017	42,323
2	*Own funds*	37,306	—	—	4,869	42,175
3	*Other capital instruments*		—	—	148	148
4	Retail Deposits		267,248	2,017	723	251,106
5	*Stable deposits*		160,220	678	431	153,284
6	*Less stable deposits*		107,028	1,339	292	97,822
7	Wholesale funding		266,159	8,256	49,062	133,679
8	*Operational deposits*		67,430	—	7	10,410
9	*Other wholesale funding*		198,728	8,256	49,055	123,269
10	Interdependent liabilities		—	—	—	—
11	Other liabilities	20,439	14,353	—	2,594	2,594
12	*NSFR derivative liabilities*	20,439				
13	*All other liabilities and capital instruments not included in the above categories*		14,353	—	2,594	2,594
14	Total available stable funding (ASF)					429,703
	Required stable funding (RSF) Items					
15	Total high-quality liquid assets (HQLA)					1,431
UK-15a	Assets encumbered for more than 12 million in cover pool		—	—	—	—
16	Deposits held at other financial institutions for operational purposes		—	—	—	—
17	Performing loans and securities:		93,723	22,952	300,420	255,555
18	*Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut*		43,493	3,038	82	3,241
19	*Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions*		15,343	5,162	14,891	19,223
20	*Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:*		28,519	9,265	84,422	94,912
21	*With a risk weight of less than or equal to 35% under Basel II Standardised Approach for credit risk*		9,633	2,464	24,108	30,157
22	*Performing residential mortgages, of which:*		6,235	5,425	193,662	131,711
23	*With a risk weight of less than or equal to 35% under the the Basel II Standardised Approach for credit risk*		6,235	5,425	193,662	131,711
24	*Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products*		132	62	7,364	6,469
25	Interdependent assets		—	—	—	—
26	Other assets:	—	30,242	139	22,518	25,116
27	*Physical traded commodities*				—	—
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*				4,169	3,543
29	*NSFR derivative assets*		1,651			1,651
30	*NSFR derivative liabilities before deduction of variation margin posted*		20,439			1,022
31	*All other assets not included in the above categories*		8,151	139	18,349	18,899
32	Off-balance sheet items		105,449	—	—	5,272
33	Total RSF					287,375
34	Net Stable Funding Ratio (%)					150

UK LIQA: Liquidity risk management

Strategies and processes in the management of the liquidity risk, including policies on funding

The Internal Liquidity Adequacy Assessment Process (ILAAP) is the key mechanism for assessing the liquidity and funding needs of NatWest Group and its main subsidiaries. ILAAPs are currently completed for NatWest Group, NWH Group, UBIDAC, NatWest Bank Europe GmbH, NWM Plc, NWM N.V. and RBSI. ILAAPs are used to comprehensively identify sources and potential sources of liquidity risk. The ILAAPs are completed at least annually, and ensure liquidity and funding risks are identified, measured, managed, and monitored across different time horizons and stress scenarios. The Group ILAAP is approved by NatWest Group plc Board, with other ILAAPs approved by their own Boards, and are compliant with regulatory standards. As part of the ILAAP, an annual review of stress assumptions is undertaken to ensure they remain appropriate.

On at least an annual basis NatWest Group plc Board approve the liquidity and funding risk appetites, consisting of qualitative statements and supporting quantitative measures, which define the type and aggregate level of risk we are willing to accept in pursuit of our strategic objectives and business plans. The risk appetites are supported by a series of operational limits. In order to ensure our funding is managed within risk appetite, a 5-year Funding Plan is maintained, subject to at least annual refresh. This is supported by monthly rolling forecasts, which track expected performance against plan.

Structure and organisation of the liquidity risk management function

On an annual basis the Board review and approve the overall approach to risk management in NatWest Group as laid out in the enterprise-wide risk management framework (EWRMF), as well as key components of liquidity management, including the liquidity and funding risk appetites, the ILAAP and Recovery Plan (bi-annually).

The structure and organisation of liquidity and funding risk management is defined within the Group Liquidity and Funding Risk Policy, which is approved by Group Board Risk Committee. It includes defined roles and responsibilities which are consistent with the Three Lines of Defence Model within the overall EWRMF, which ensures effective oversight and assurance. These are also aligned to the Senior Manager Function (SMF) requirements.

Centralisation of liquidity management and interaction between the group's units

NatWest Group manages its liquidity to ensure it is always available when and where required, taking into account regulatory, legal and other constraints. The PRA has granted a permission for NWB Plc, RBS plc and Coutts & Co to apply the requirements in the Liquidity Parts of CRR (inc LCR and NSFR) as a single liquidity sub-group (the UK DoLSub). Following the implementation of ring-fencing legislation, liquidity is no longer considered fully fungible across NatWest Group and principal liquidity portfolios are maintained in the UK DoLSub (primarily in NWB Plc), UBIDAC, NWM Plc, RBSI and NWM N.V. All legal entities within NatWest Group are managed to all relevant local regulatory requirements as well as within internally defined risk appetites. All legal entities within NatWest Group are subject to the Group Liquidity and Funding Policies.

Scope and nature of liquidity risk reporting and measurement systems

Regulatory and Risk Reporting and Control has overall accountability for the accurate and timely production of external regulatory liquidity reporting and internal liquidity management reporting.

The liquidity position of NatWest Group, UK DoLSub and other material subsidiaries is reported on a daily basis to those Executives with responsibility of the management and control of liquidity risk, and on a regular basis to ALCo and BRC. Defined escalation processes are in place for breach of any liquidity risk appetites or operational limits. Liquidity condition indicators are monitored daily and provide early warning indicators of potential stresses or increased vulnerability to stress.

Policies for hedging and mitigating the liquidity risk

The Group Liquidity and Funding Risk Policy defines the requirements for the identification, assessment, management and mitigation of liquidity and funding risk. These are underpinned by a strong risk culture, risk appetites, policies, and oversight and assurance via the Three Lines of Defence model.

As a key mitigant of liquidity and funding risk, NatWest Group maintain liquidity portfolios, which consist of high quality liquid assets that can be monetised in times of stress. We monitor the sufficiency of the liquidity portfolios through the risk appetites. The liquidity portfolios must be managed in line with investment mandates, which are approved at least annually by the Group Treasurer and entity Treasurers as applicable and set out the level of risk we are willing to take within the regulatory and internal framework.

Contingency funding plans

NatWest Group maintains integrated liquidity contingency and Recovery plans which ensure that we maintain the capabilities and capacity to identify and respond to potential or actual threats to our liquidity and funding position.

NatWest Group's Recovery Plan is regularly reviewed, tested and approved by the Board to ensure it remains effective under a variety of scenarios in line with the requirements set out by the PRA.

Key elements of the Recovery Plan include:

- A framework to facilitate early identification, monitoring and escalation of actual or potential threats to our liquidity position
- A range of credible actions to restore liquidity in stress together with clear implementation plans, execution timelines and valuations
- Clear procedures and playbooks to support the operational management of a stress, including procedures relating to decision making in stress, provision of management information, communication plans, regulatory engagement, disclosure requirements and the co-ordinated response across subsidiaries of NatWest Group.

UK LIQA: Liquidity risk management continued

Stress Testing

NatWest Group manages liquidity and funding risk over various time horizons using regulatory and internal measures.

Liquidity stress testing is undertaken to ensure that we holds sufficient liquidity resources, both in terms of size and composition, in the event of a severe but plausible stress event. Stress testing is undertaken on daily basis within the Stress Outflow Coverage (SOC) metric, which complements the regulatory LCR metric. The SOC framework covers an analysis of key vulnerabilities to which we are exposed and assessed against a balanced mix of scenarios including idiosyncratic, market-wide, and combined scenarios over a three month time horizon, referencing both historic and hypothetical stress events. Scenarios, assumptions and methodologies are selected and reviewed at least annually as part of the ILAAP process. All parameters used in the calculations are subject to review and challenge from 2nd line of defence and approved by the appropriate governance committee.

Funding stress testing is undertaken to assess longer term pressures on funding and the stability of the funding base. A range of scenarios are identified to test the risks and vulnerabilities to the funding plan. The funding plan sets out NatWest Group's medium-and long-term obligations to ensure they are adequately met with a range of diverse funding sources.

In addition, horizon risks are assessed on an ongoing basis, in order to proactively identify any changes in customer behaviour and to ensure effective monitoring controls are in place.

Finally, we conduct enterprise-wide stress testing of which liquidity & funding are sub-components. This broad view provides us with an understanding of the full range of impacts and highlights the interplay between risk disciplines including capital and liquidity.

Adequacy of liquidity risk management arrangements

NatWest Group plc Board confirm the adequacy of our liquidity risk management arrangements, including systems and controls, annually via the ILAAP. The ILAAP details NatWest Group's approach to the identification, measurement and management of liquidity and funding risk and the formulation of the funding plan and is subsequently submitted to the PRA. The Boards of relevant legal entities (as detailed under (a)) approve their own ILAAPs on the same basis.

Management statement on liquidity risk profile

- NatWest Group and its subgroups hold sufficient liquidity, in respect of quantity and quality, to cover its business risks, maintain the continuity of its operations on an ongoing basis and support its planned business growth strategy
- The Group's liquidity & funding strategy is to ensure that there is (i) sufficient liquid reserves to cover severe but plausible stresses; (ii) there are credible recovery options to execute in the event of such stresses, (iii) a stable and diversified funding base
- The liquidity & funding risk appetite qualitative statement supports intelligent risk-taking aligned to the Group's strategy and purpose. The qualitative statement articulates the nature and level of liquidity and funding risk the Group is willing to take in order to pursue strategic and business objectives.
- The qualitative statement is underpinned by quantitative limits and triggers against specific liquidity and funding risk appetite measures appetites (including regulatory measures like the Liquidity Coverage Ratio ("LCR") and Net Stable Funding Ratio ("NSFR"), and supporting operational limits.
- Liquidity risk is further assessed within the Internal Liquidity Adequacy Assessment Process("ILAAP") which includes a range of internally assessed stress testing scenarios.

UK LIQB: Qualitative information on LCR, which complements template UK LIQ1

LCR inputs & results over time

The LCR aims to ensure that Banks and Banking Groups hold a sufficient reserve of High-Quality Liquid Assets (HQLA) to survive a period of liquidity stress lasting 30 calendar days.

All figures included in the table represent a 12-month rolling average for the period January 2022 - December 2022.

As at 31 December 2022 the LCR ratio for NatWest Group Plc was 145% or £52bn of excess over the regulatory minimum of 100%. This compares to 168% as at 31 January 2022 or £82bn of excess over the regulatory minimum of 100%. The average LCR ratio for the 12 months to 31 December 2022 has decreased 7% over the previous quarter, from 164% to 157%. The decrease is mainly due to lower deposits and increased customer lending in NatWest Holdings.

Concentration of funding sources

Natwest Group Plc maintains a diversified set of funding sources of which retail, SME and corporate deposits are the biggest contributors. Other sources include wholesale unsecured funding, capital (including equity and MREL-eligible bonds), central banks (TFSME), repos, covered bonds and derivative cash collateral. Wholesale unsecured funding includes a range of products including deposits, commercial paper, certificates of deposit and medium-term notes, and is accepted from various corporate counterparties and financial institutions.

Liquidity buffer composition

HQLA is primarily held in Level 1 cash and central bank Reserves (84%) and Level 1 high quality securities (14%), Level 2 securities account for (2%).

Derivative exposures and potential collateral calls

NatWest Group Plc actively manages its derivative exposures and potential calls, including both due collateral and excess collateral, with derivative outflows under stress captured under the Historical Look Back Approach which considers the impact of an adverse market scenario on derivatives. Potential collateral calls under a 3-notch downgrade of the credit ratings of the entities within NatWest Group Plc are also captured.

Currency mismatch in the LCR

The LCR is calculated for EUR, USD and GBP which have been identified as significant currencies (having liabilities > 5 % of total group liabilities excluding regulatory capital and off-balance sheet liabilities) in accordance with the Liquidity Coverage Ratio (CRR) part of the PRA Rulebook (subject to modification). NatWest Group Plc manages currency mismatch for significant currencies according to its internal liquidity adequacy assessment framework.

Annex XXXV: Encumbrance

UK AE1: Encumbered and unencumbered assets

The table below provides a view of NatWest Group's encumbered and unencumbered assets.

	Encumbered and unencumbered assets	NatWest Group							
		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
		£m	£m	£m	£m	£m	£m	£m	£m
		010	030	040	050	060	080	090	100
010	Assets of the reporting institution	**80,316**	**30,065**			**708,898**	**183,384**		
030	Equity instruments	**—**	**—**	**—**	**—**	**573**	**—**	**573**	**—**
040	Debt securities	**27,033**	**23,670**	**27,028**	**23,670**	**26,105**	**21,051**	**26,040**	**21,051**
050	of which: covered bonds	**149**	**118**	**149**	**118**	**3,767**	**2,907**	**3,621**	**2,907**
060	of which: securitisations	**1,618**	**932**	**1,618**	**932**	**1,885**	**1,629**	**1,966**	**1,629**
070	of which: issued by general governments	**23,529**	**21,369**	**23,530**	**21,369**	**11,751**	**9,855**	**11,751**	**9,855**
080	of which: issued by financial corporations	**2,912**	**1,939**	**2,906**	**1,939**	**13,553**	**11,162**	**13,488**	**11,162**
090	of which: issued by non-financial corporations	**372**	**278**	**421**	**278**	**252**	**46**	**252**	**46**
120	Other assets	**51,563**	**6,002**			**678,015**	**157,007**		

(1) The values in row 010 reflect the median of the sums of four quarterly end-of-period values over the previous twelve months for rows 030, 040 and 120.

UK AE2: Collateral received and own debt securities issued

The table below provides a view of encumbered collateral received and own debt securities issued.

	NatWest Group							
	31 December 2022				31 December 2021			
			Unencumbered				Unencumbered	
Collateral received	Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance		Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance	
		of which nationally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which nationally eligible EHQLA and HQLA		of which EHQLA and HQLA
	£m	£m	£m	£m	£m	£m	£m	£m
	010	030	040	060	010	030	040	060
130 Collateral received by the reporting institution	**52,667**	**48,584**	**14,387**	**11,677**	48,361	46,092	16,101	14,556
140 Loans on demand	**—**	**—**	**—**	**—**	—	—	—	—
150 Equity instruments	**—**	**—**	**—**	**—**	—	—	—	—
160 Debt securities	**53,667**	**48,584**	**14,387**	**11,677**	48,361	46,092	16,101	14,556
170 of which: covered bonds	**117**	**120**	**—**	**—**	282	282	16	9
180 of which: securitisation	**1,531**	**120**	**2,033**	**—**	924	42	1,075	—
190 of which: issued by general governments	**48,096**	**46,859**	**11,780**	**11,583**	45,189	45,189	14,620	14,455
200 of which: issued by financial corporations	**3,275**	**1,120**	**2,185**	**22**	2,150	720	1,278	101
210 of which: issued by non-financial corporations	**1,693**	**430**	**442**	**—**	1,368	547	162	—
220 Loans and advances other than loans on demand	**—**	**—**	**—**	**—**	—	—	—	—
230 Other collateral received	**—**	**—**	**—**	**—**	—	—	—	—
240 Own debt securities issued other than own covered bonds or securitisations	**—**	**—**	**—**	**—**	—	—	—	—
241 Own covered bonds and securitisations issued and not yet pledged			**66**	**66**			—	—
250 Total assets, collateral received and own debt securities issued	**126,979**	**71,870**			136,308	114,642		

(1) The total collateral received as shown in row 130 is the median of the sums of four quarterly end of period values over the previous twelve months for rows 140 to 160, 220 and 230.
(2) The total in row 250 is the median of the sums of four quarterly end-of-period values over the previous twelve months for row 010 in Template UK AE1 and rows 130 and 240 in Template UK AE2.

UK AE3: Sources of encumbrance

The table below provides a view of financial liabilities associated with encumbered assets.

	Sources of encumbrance	NatWest Group	
		Matching liabilities, contingent liabilities or securities lent £m 010	Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered £m 030
010	Carrying amount of selected financial liabilities	**82,240**	**94,764**

UK AE4: Accompanying narrative information

The asset encumbrance disclosures present median values, which are rolling medians over the previous quarter ends. They cannot be used in direct comparison with the Asset Encumbrance presented in the Groups Annual Accounts as this is a point in time.

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

Following the implementation of ring-fencing legislation, liquidity is no longer considered fully fungible across NatWest Group and principal liquidity portfolios are maintained in the UK DoLSub (primarily in NWB Plc), UBIDAC, NWM Plc, RBSI and NWM N.V. All NatWest Group legal entities are managed within relevant local regulatory requirements, internally defined risk appetites and are subject to the Group Liquidity and Funding Policies.

NatWest Group have a regulated covered bond programme compromised of residential mortgages. The covered bond pool has sufficient headroom over it's 3 bonds it has in issued, these mature from March 2023 to May 2024.

NatWest Group predominately operates its encumbrance through GBP, USD and EUR currencies.

NatWest Group would not consider it normal business to encumber the assets held in 030 Equity instruments and 120 Other assets.

The cover pool total is £7bn as at year end 2022 based on the latest investor report.

Row 120 "Other assets" of Template UK AE1 is predominately made up of cash collateral held to function UBIDAC's Single European Payments Area. The unencumbered other assets include derivative assets and intangible assets.

Annex XV: Credit risk quality

UK CQ1: Credit quality of forborne exposures

The table below shows gross carrying amount of forborne exposures and the related accumulated impairment, provisions, accumulated change in fair value due to credit risk and collateral and financial guarantees received by portfolio and exposure class.

		NatWest Group							
		a	b	c	d	e	f	g	h
		Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	*Of which: collateral and financial guarantees received on non-performing exposures with forbearance measures*
31 December 2022		Performing forborne £m	Non-performing forborne £m	*Of which: defaulted* £m	*Of which: impaired* £m	On performing forborne exposures £m	On non-performing forborne exposures £m	£m	£m
005	Cash balances at central banks and other demand deposits	—	—	—	—	—	—	—	—
010	Loans and advances	4,080	2,161	1,991	1,683	(161)	(644)	4,168	1,337
020	*Central banks*	—	—	—	—	—	—	—	—
030	*General governments*	23	—	—	—	—	—	23	—
040	*Credit institutions*	—	—	—	—	—	—	—	—
050	*Other financial corporations*	22	31	31	31	(1)	(14)	11	4
060	*Non-financial corporations*	3,534	899	809	797	(148)	(292)	2,904	476
070	*Households*	501	1,231	1,151	855	(12)	(338)	1,230	857
080	Debt securities	—	—	—	—	—	—	—	—
090	Loan commitments given	657	117	51	52	(1)	(1)	221	17
100	Total	4,737	2,278	2,042	1,735	(162)	(645)	4,389	1,354

		NatWest Group							
		a	b	c	d	e	f	g	h
		Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	*Of which: collateral and financial guarantees received on non-performing exposures with forbearance measures*
31 December 2021		Performing forborne £m	Non-performing forborne £m	*Of which: defaulted* £m	*Of which: impaired* £m	On performing forborne exposures £m	On non-performing forborne exposures £m	£m	£m
005	Cash balances at central banks and other demand deposits	—	—	—	—	—	—	—	—
010	Loans and advances	5,157	2,222	1,722	1,749	(277)	(692)	5,196	1,310
020	*Central banks*	—	—	—	—	—	—	—	—
030	*General governments*	—	—	—	—	—	—	—	—
040	*Credit institutions*	—	—	—	—	—	—	—	—
050	*Other financial corporations*	16	20	20	20	(2)	(1)	11	—
060	*Non-financial corporations*	4,065	803	662	667	(238)	(276)	3,247	356
070	*Households*	1,076	1,399	1,040	1,062	(37)	(415)	1,938	954
080	Debt securities	—	—	—	—	—	—	—	—
090	Loan commitments given	767	131	48	50	(1)	—	236	32
100	Total	5,924	2,353	1,770	1,799	(278)	(692)	5,432	1,342

(1) Exposures classified as held-for-trading and held-for-sale are excluded from the table in accordance with FINREP definitions.

UK CQ3: Credit quality of performing and non-performing exposures by past due days

The table below shows the gross carrying amount/nominal amount (including accrued interest) of performing and non-performing exposures according to the scope of regulatory consolidation. For the on-balance sheet exposures, the template shows the breakdown by past-due band.

		NatWest Group											
		a	b	c	d	e	f	g	h	i	j	k	l
		Gross carrying amount/nominal amount											
	31 December 2022	Performing exposures £m	*Of which: Not past due or past due ≤ 30 days* £m	*Of which: Past due > 30 days ≤ 90 days* £m	Non-performing exposures £m	*Of which: Unlikely to pay that are not past due or are past due ≤ 90 days* £m	*Of which: Past due > 90 days ≤ 180 days* £m	*Of which: Past due > 180 days ≤ 1 year* £m	*Of which: Past due > 1 year ≤ 2 years* £m	*Of which: Past due > 2 years ≤ 5 years* £m	*Of which: Past due > 5 years ≤ 7 years* £m	*Of which: Past due > 7 years* £m	*Of which: Defaulted* £m
005	Cash balances at central banks and other demand deposits	147,509	147,509	—	—	—	—	—	—	—	—	—	—
010	Loans and advances	370,504	369,516	988	5,859	2,991	675	620	613	651	136	173	5,517
020	*Central banks*	*2,110*	*2,110*	—	—	—	—	—	—	—	—	—	—
030	*General governments*	*3,554*	*3,547*	*7*	*26*	*26*	—	—	—	—	—	—	*26*
040	*Credit institutions*	*1,654*	*1,654*	—	—	—	—	—	—	—	—	—	—
050	*Other financial corporations*	*44,891*	*44,888*	*3*	*46*	*15*	*24*	*4*	*1*	*2*	—	—	*46*
060	*Non-financial corporations*	*98,097*	*97,436*	*661*	*1,965*	*1,278*	*110*	*152*	*164*	*160*	*34*	*67*	*1,835*
070	*Of which: SMEs*	*27,043*	*26,807*	*236*	*1,013*	*475*	*84*	*136*	*155*	*108*	*28*	*27*	*959*
080	*Households*	*220,198*	*219,881*	*317*	*3,822*	*1,672*	*541*	*464*	*448*	*489*	*102*	*106*	*3,610*
090	Debt securities	29,080	29,080	—	—	—	—	—	—	—	—	—	—
100	*Central banks*	*141*	*141*	—	—	—	—	—	—	—	—	—	—
110	*General governments*	*14,381*	*14,381*	—	—	—	—	—	—	—	—	—	—
120	*Credit institutions*	*5,787*	*5,787*	—	—	—	—	—	—	—	—	—	—
130	*Other financial corporations*	*8,696*	*8,696*	—	—	—	—	—	—	—	—	—	—
140	*Non-financial corporations*	*75*	*75*	—	—	—	—	—	—	—	—	—	—
150	Off-balance sheet exposures	136,147			690								529
160	*Central banks*	—			—								—
170	*General governments*	*1,067*			*19*								*19*
180	*Credit institutions*	*1,064*			—								—
190	*Other financial corporations*	*18,562*			*1*								*1*
200	*Non-financial corporations*	*71,002*			*326*								*181*
210	*Households*	*44,452*			*344*								*328*
220	Total	683,240	546,105	988	6,549	2,991	675	620	613	651	136	173	6,046

UK CQ3: Credit quality of performing and non-performing exposures by past due days continued

		NatWest Group											
		a	b	c	d	e	f	g	h	i	j	k	l
		Gross carrying amount/nominal amount											
	31 December 2021	Performing exposures £m	*Of which: Not past due or past due ≤ 30 days* £m	*Of which: Past due > 30 days ≤ 90 days* £m	Non-performing exposures £m	*Of which: Unlikely to pay that are not past due or are past due ≤ 90 days* £m	*Of which: Past due > 90 days ≤ 180 days* £m	*Of which: Past due > 180 days ≤ 1 year* £m	*Of which: Past due > 1 year ≤ 2 years* £m	*Of which: Past due > 2 years ≤ 5 years* £m	*Of which: Past due > 5 years ≤ 7 years* £m	*Of which: Past due > 7 years* £m	*Of which: Defaulted* £m
005	Cash balances at central banks and other demand deposits	181,170	181,170	—	—	—	—	—	—	—	—	—	—
010	Loans and advances	362,747	361,747	1,000	5,597	2,535	753	632	588	707	131	251	4,885
020	*Central banks*	2,617	2,617	—	—	—	—	—	—	—	—	—	—
030	*General governments*	3,786	3,786	—	*3*	*3*	—	—	—	—	—	—	*3*
040	*Credit institutions*	469	469	—	—	—	—	—	—	—	—	—	—
050	*Other financial corporations*	49,196	49,177	19	*45*	*41*	*1*	—	—	*3*	—	—	*45*
060	*Non-financial corporations*	95,601	95,050	551	*1,964*	*1,190*	*210*	*168*	*89*	*176*	*43*	*88*	*1,784*
070	*Of which: SMEs*	26,440	26,286	154	*1,035*	*440*	*185*	*143*	*73*	*129*	*24*	*41*	*966*
080	*Households*	211,078	210,648	430	*3,585*	*1,301*	*542*	*464*	*499*	*528*	*88*	*163*	*3,053*
090	Debt securities	44,575	44,575	—	—	—	—	—	—	—	—	—	—
100	*Central banks*	*181*	181	—	—	—	—	—	—	—	—	—	—
110	*General governments*	*33,092*	33,092	—	—	—	—	—	—	—	—	—	—
120	*Credit institutions*	*5,735*	5,735	—	—	—	—	—	—	—	—	—	—
130	*Other financial corporations*	*5,482*	5,482	—	—	—	—	—	—	—	—	—	—
140	*Non-financial corporations*	*85*	85	—	—	—	—	—	—	—	—	—	—
150	Off-balance sheet exposures	127,981			575								463
160	*Central banks*	—			—								—
170	*General governments*	*1,696*			—								—
180	*Credit institutions*	*887*			—								—
190	*Other financial corporations*	*17,177*			*2*								*2*
200	*Non-financial corporations*	*66,191*			*236*								*158*
210	*Households*	*42,030*			*337*								*303*
220	Total	716,473	587,492	1,000	6,172	2,535	753	632	588	707	131	251	5,348

(1) Exposures classified as held-for-trading and held-for-sale are excluded from the table in accordance with FINREP definitions.

UK CQ4: Quality of non-performing exposures by geography

The table below shows gross carrying amount of performing and non-performing exposures and the related accumulated impairment, provisions and accumulated change in fair value due to credit risk by geography. Geographical analysis is based on the country of operation of the customer.

		NatWest Group						
		a	b	c	d	e	f	g
31 December 2022		Gross carrying/ nominal amount £m	Of which: Non-performing £m	Of which: defaulted £m	Of which: subject to impairment £m	Accumulated impairment £m	Provisions on off-balance-sheet commitments and financial guarantees given £m	Accumulated negative changes in fair value due to credit risk on non-performing exposures £m
010	**On-balance sheet exposures**	**405,443**	**5,859**	**5,517**	**401,885**	**(3,334)**	—	**(203)**
020	*UK*	*357,050*	*5,190*	*4,854*	*356,485*	*(3,019)*	—	*(6)*
030	*RoI*	*2,222*	*503*	*501*	*1,462*	*(105)*	—	*(197)*
040	*Other Western Europe*	*18,684*	*41*	*37*	*16,908*	*(90)*	—	—
050	*US*	*18,819*	—	—	*18,497*	*(51)*	—	—
070	*Other countries*	*8,668*	*125*	*125*	*8,533*	*(69)*	—	—
080	**Off-balance sheet exposures**	**136,837**	**690**	**529**	—	—	**(88)**	—
090	*UK*	*101,958*	*427*	*406*	—	—	*(65)*	—
100	*RoI*	*1,652*	*20*	*20*	—	—	*(2)*	—
110	*Other Western Europe*	*20,301*	*145*	*64*	—	—	*(9)*	—
120	*US*	*10,714*	*59*	—	—	—	*(11)*	—
140	*Other countries*	*2,212*	*39*	*39*	—	—	*(1)*	—
150	**Total**	**542,280**	**6,549**	**6,046**	**401,885**	**(3,334)**	**(88)**	**(203)**

UK CQ4: Quality of non-performing exposures by geography continued

		NatWest Group						
		a	b	c	d	e	f	g
31 December 2021		Gross carrying/ nominal amount £m	Of which: Non-performing £m	Of which: defaulted £m	Of which: subject to impairment £m	Accumulated impairment £m	Provisions on off-balance-sheet commitments and financial guarantees given £m	Accumulated negative changes in fair value due to credit risk on non-performing exposures £m
010	On-balance sheet exposures	412,919	5,597	4,885	410,475	(3,698)	—	—
020	*UK*	*360,589*	*4,589*	*3,928*	*359,299*	*(3,038)*	—	—
030	*RoI*	*8,255*	*810*	*766*	*8,244*	*(456)*	—	—
040	*Other Western Europe*	*19,025*	*57*	*50*	*18,451*	*(91)*	—	—
050	*US*	*16,346*	*1*	*1*	*16,003*	*(12)*	—	—
070	*Other countries*	*8,704*	*140*	*140*	*8,478*	*(101)*	—	—
070	Off-balance sheet exposures	128,556	575	463	—	—	(94)	—
090	*UK*	*96,584*	*499*	*388*	—	—	*(81)*	—
100	*RoI*	*2,998*	*22*	*21*	—	—	*(4)*	—
110	*Other Western Europe*	*18,229*	*43*	*43*	—	—	*(8)*	—
120	*US*	*8,391*	—	—	—	—	*(1)*	—
140	*Other countries*	*2,354*	*11*	*11*	—	—	—	—
150	Total	541,475	6,172	5,348	410,475	(3,698)	(94)	—

(1) The geographical breakdown disclosed is based on combined on and off-balance sheet exposures and represent greater than 98% of total exposure.
(2) Exposures classified as held-for-trading and held-for-sale are excluded from the table in accordance with FINREP definitions. Cash balances at central banks and other demand deposits are also excluded.

UK CQ5: Credit quality of loans and advances by industry

The table below shows gross carrying amount of performing and non-performing exposures to non-financial corporations and the related accumulated impairment, provisions and accumulated change in fair value due to credit risk by industry.

		NatWest Group					
		a	b	c	d	e	f
31 December 2022		**Gross carrying amount £m**	**Of which: non-performing £m**	**Of which: defaulted £m**	**Of which: loans and advances subject to impairment £m**	**Accumulated impairment £m**	**Accumulated negative changes in fair value due to credit risk on non-performing exposures £m**
010	Agriculture, forestry and fishing	**3,669**	**69**	**62**	**3,669**	**(63)**	**—**
020	Mining and quarrying	**625**	**57**	**57**	**625**	**(34)**	**—**
030	Manufacturing	**9,266**	**163**	**146**	**9,260**	**(119)**	**—**
040	Electricity, gas, steam and air conditioning supply	**4,684**	**6**	**6**	**4,684**	**(18)**	**—**
050	Water supply	**3,339**	**7**	**6**	**3,339**	**(10)**	**—**
060	Construction	**5,328**	**302**	**286**	**5,326**	**(139)**	**—**
070	Wholesale and retail trade	**14,692**	**95**	**91**	**14,619**	**(143)**	**—**
080	Transport and storage	**5,825**	**114**	**113**	**5,825**	**(111)**	**—**
090	Accommodation and food service activities	**5,233**	**187**	**179**	**5,233**	**(187)**	**—**
100	Information and communication	**5,107**	**68**	**67**	**5,092**	**(55)**	**—**
110	Financial and insurance activities	**13**	**—**	**—**	**13**	**—**	**—**
120	Real estate activities	**23,677**	**414**	**359**	**23,598**	**(221)**	**(6)**
130	Professional, scientific and technical activities	**3,888**	**77**	**75**	**3,869**	**(61)**	**—**
140	Administrative and support service activities	**7,247**	**76**	**69**	**7,244**	**(95)**	**—**
150	Public administration and defence, compulsory social security	**159**	**1**	**1**	**159**	**(2)**	**—**
160	Education	**547**	**9**	**9**	**547**	**(9)**	**—**
170	Human health services and social work activities	**4,494**	**143**	**133**	**4,487**	**(85)**	**—**
180	Arts, entertainment and recreation	**1,356**	**13**	**12**	**1,355**	**(23)**	**—**
190	Other services	**913**	**164**	**164**	**913**	**(30)**	**—**
200	Total	**100,062**	**1,965**	**1,835**	**99,857**	**(1,405)**	**(6)**

		NatWest Group					
		a	b	c	d	e	f
31 December 2021		Gross carrying amount £m	Of which: non-performing £m	Of which: defaulted £m	Of which: loans and advances subject to impairment £m	Accumulated impairment £m	Accumulated negative changes in fair value due to credit risk on non-performing exposures £m
010	Agriculture, forestry and fishing	3,862	64	42	3,862	(57)	—
020	Mining and quarrying	888	50	50	888	(39)	—
030	Manufacturing	7,760	111	96	7,710	(98)	—
040	Electricity, gas, steam and air conditioning supply	4,073	6	1	4,073	(6)	—
050	Water supply	2,950	5	4	2,948	(8)	—
060	Construction	5,615	320	297	5,615	(136)	—
070	Wholesale and retail trade	13,906	177	165	13,854	(188)	—
080	Transport and storage	5,961	118	107	5,960	(116)	—
090	Accommodation and food service activities	5,568	288	242	5,560	(277)	—
100	Information and communication	3,569	56	56	3,533	(44)	—
110	Financial and insurance activities	30	—	—	30	—	—
120	Real estate activities	25,129	330	318	25,073	(200)	—
130	Professional, scientific and technical activities	4,121	101	89	3,911	(55)	—
140	Administrative and support service activities	6,432	89	84	6,347	(133)	—
150	Public administration and defence, compulsory social security	168	6	6	168	(1)	
160	Education	647	16	15	647	(14)	—
170	Human health services and social work activities	4,555	145	135	4,488	(101)	—
180	Arts, entertainment and recreation	1,358	18	14	1,358	(19)	—
190	Other services	973	64	63	971	(19)	—
200	Total	97,565	1,964	1,784	96,996	(1,511)	—

(1) Exposures classified as held-for-trading and held-for-sale are excluded from the table in accordance with FINREP definitions.

UK CR1: Performing and non-performing exposures and related provisions

The table below shows gross carrying amount of performing and non-performing exposures and the related accumulated impairment, provisions, accumulated change in fair value due to credit risk, accumulated partial write-off and collateral and financial guarantees received by portfolio and exposure class.

		NatWest Group														
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions								
		Performing exposures			Non-performing exposures			Performing exposures – accumulated impairment and provisions			Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			Accumulated partial write-off	Collateral and financial guarantees received	
31 December 2022		£m	Of which: Stage 1 £m	Of which: Stage 2 £m	£m	Of which: Stage 2 £m	Of which: Stage 3 £m	Total £m	Of which: Stage 1 £m	Of which: Stage 2 £m	£m	Of which: Stage 2 £m	Of which: Stage 3 £m	£m	On performing exposures £m	On non-performing exposures £m
005	Cash balances at central banks and other demand deposits	147,509	147,507	2	—	—	—	(12)	(12)	—	—	—	—	—	6	—
010	Loans and advances	370,504	323,398	46,545	5,859	280	5,093	(1,552)	(576)	(976)	(1,973)	(19)	(1,752)	(195)	293,797	3,469
020	Central banks	2,110	2,110	—	—	—	—	—	—	—	—	—	—	—	—	—
030	General governments	3,554	3,337	161	26	—	26	(1)	—	(1)	(3)	—	(3)	—	2,999	23
040	Credit institutions	1,654	1,629	25	—	—	—	—	—	—	—	—	—	—	278	—
050	Other financial corporations	44,891	43,568	1,322	46	—	46	(31)	(20)	(11)	(17)	—	(17)	—	21,879	15
060	Non-financial corporations	98,097	75,971	22,022	1,965	104	1,813	(757)	(274)	(483)	(654)	(4)	(643)	(26)	62,875	1,157
070	Of which: SMEs	27,043	20,695	6,348	1,013	31	975	(291)	(96)	(195)	(354)	(2)	(350)	—	23,001	579
080	Households	220,198	196,783	23,015	3,822	176	3,208	(763)	(282)	(481)	(1,299)	(15)	(1,089)	(169)	205,766	2,274
090	Debt securities	29,080	28,323	756	—	—	—	(12)	(11)	(1)	—	—	—	—	—	—
100	Central banks	141	141	—	—	—	—	—	—	—	—	—	—	—	—	—
110	General governments	14,381	14,381	—	—	—	—	(1)	(1)	—	—	—	—	—	—	—
120	Credit institutions	5,787	5,031	756	—	—	—	(4)	(3)	(1)	—	—	—	—	—	—
130	Other financial corporations	8,696	8,695	—	—	—	—	(6)	(6)	—	—	—	—	—	—	—
140	Non-financial corporations	75	75	—	—	—	—	(1)	(1)	—	—	—	—	—	—	—
150	Off-balance sheet exposures	136,147	118,985	17,161	690	151	528	(80)	(34)	(46)	(8)	(1)	(7)		19,530	77
160	Central banks	—	—	—	—	—	—	—	—	—	—	—	—		—	—
170	General governments	1,067	1,062	4	19	—	19	—	—	—	—	—	—		177	9
180	Credit institutions	1,064	1,023	41	—	—	—	—	—	—	—	—	—		430	—
190	Other financial corporations	18,562	17,388	1,174	1	—	1	(4)	(2)	(2)	—	—	—		677	—
200	Non-financial corporations	71,002	57,372	13,630	326	146	180	(49)	(20)	(29)	(7)	(1)	(6)		12,839	50
210	Households	44,452	42,140	2,312	344	5	328	(27)	(12)	(15)	(1)	—	(1)		5,407	18
220	Total	683,240	618,213	64,464	6,549	431	5,621	(1,656)	(633)	(1,023)	(1,981)	(20)	(1,759)	(195)	313,333	3,546

UK CR1: Performing and non-performing exposures and related provisions continued

NatWest Group

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions								
		Performing exposures			Non-performing exposures			Performing exposures – accumulated impairment and provisions			Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions			Accumulated partial write-off	Collateral and financial guarantees received	
31 December 2021		£m	*Of which: Stage 1* £m	*Of which: Stage 2* £m	Total £m	*Of which: Stage 2* £m	*Of which: Stage 3* £m	£m	*Of which: Stage 1* £m	*Of which: Stage 2* £m	£m	*Of which: Stage 2* £m	*Of which: Stage 3* £m	£m	On performing exposures £m	On non-performing exposures £m
005	Cash balances at central banks and other demand deposits	181,170	*181,167*	*3*	—	—	—	(14)	*(14)*	—	—	—	—	—	3	—
010	Loans and advances	362,747	*329,050*	*33,399*	5,597	*571*	*5,018*	(1,643)	*(266)*	*(1,377)*	(2,050)	*(36)*	*(2,014)*	(233)	294,238	3,137
020	*Central banks*	*2,617*	*2,617*	*—*	*—*	*—*	*—*	*(1)*	*(1)*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
030	*General governments*	*3,786*	*3,572*	*132*	*3*	*—*	*3*	*(1)*	*—*	*(1)*	*(2)*	*—*	*(2)*	*—*	*2,874*	*1*
040	*Credit institutions*	*469*	*439*	*30*	*—*	*—*	*—*	*(1)*	*(1)*	*—*	*—*	*—*	*—*	*—*	*189*	*—*
050	*Other financial corporations*	*49,196*	*48,501*	*695*	*45*	*—*	*45*	*(45)*	*(8)*	*(37)*	*(3)*	*—*	*(3)*	*—*	*27,838*	*20*
060	*Non-financial corporations*	*95,601*	*78,570*	*16,888*	*1,964*	*137*	*1,827*	*(782)*	*(104)*	*(678)*	*(729)*	*(8)*	*(721)*	*(29)*	*66,188*	*1,076*
070	*Of which: SMEs*	*26,440*	*19,694*	*6,729*	*1,035*	*37*	*998*	*(363)*	*(47)*	*(316)*	*(330)*	*(2)*	*(328)*	*—*	*22,692*	*613*
080	*Households*	*211,078*	*195,351*	*15,654*	*3,585*	*434*	*3,143*	*(813)*	*(152)*	*(661)*	*(1,316)*	*(28)*	*(1,288)*	*(204)*	*197,149*	*2,040*
090	Debt securities	44,575	*44,282*	*287*	—	—	—	(5)	*(5)*	—	—	—	—	—	—	—
100	*Central banks*	*181*	*181*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
110	*General governments*	*33,092*	*33,045*	*47*	*—*	*—*	*—*	*(2)*	*(2)*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
120	*Credit institutions*	*5,735*	*5,507*	*228*	*—*	*—*	*—*	*(1)*	*(1)*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
130	*Other financial corporations*	*5,482*	*5,468*	*12*	*—*	*—*	*—*	*(2)*	*(2)*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
140	*Non-financial corporations*	*85*	*81*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*
150	Off-balance sheet exposures	127,981	*120,152*	*7,829*	575	*90*	*476*	(81)	*(16)*	*(65)*	(13)	*(1)*	*(12)*		20,619	74
160	*Central banks*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*		*—*	*—*
170	*General governments*	*1,696*	*1,692*	*4*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*		*419*	*—*
180	*Credit institutions*	*887*	*853*	*34*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*	*—*		*402*	*—*
190	*Other financial corporations*	*17,177*	*16,703*	*474*	*2*	*—*	*2*	*(2)*	*(1)*	*(1)*	*—*	*—*	*—*		*592*	*—*
200	*Non-financial corporations*	*66,191*	*61,589*	*4,602*	*236*	*77*	*159*	*(43)*	*(6)*	*(37)*	*(13)*	*(1)*	*(12)*		*13,255*	*63*
210	*Households*	*42,030*	*39,315*	*2,715*	*337*	*13*	*315*	*(36)*	*(9)*	*(27)*	*—*	*—*	*—*		*5,951*	*11*
220	Total	716,473	*674,651*	*41,518*	6,172	*661*	*5,494*	(1,743)	*(301)*	*(1,442)*	(2,063)	*(37)*	*(2,026)*	(233)	314,860	3,211

(1) The gross NPL ratio for NatWest Group is 1.56% (31 December 2021 – 1.52%). Loans and advances classified as held-for-sale, cash balances at central banks and other demand deposits were excluded from the ratio calculation.
(2) Exposures classified as held-for-trading and held-for-sale are excluded from the table in accordance with FINREP definitions.

UK CR1-A: Maturity of exposures

The table below shows the maturity breakdown of gross carrying amount net of related accumulated impairment, provisions and accumulated change in fair value due to credit risk.

		NatWest Group					
		a	b	c	d	e	f
		Net exposure value					
31 December 2022		On demand £m	<= 1 year £m	> 1 year <= 5 years £m	> 5 years £m	No stated maturity £m	Total £m
1	Loans and advances	22,707	52,800	69,760	227,571	—	372,838
2	Debt securities	—	5,587	15,165	8,316	—	29,068
3	Total	22,707	58,387	84,925	235,887	—	401,906

(1) Exposures classified as held-for-trading and held-for-sale are excluded from the table in accordance with FINREP definitions. Cash balances at central banks and other demand deposits are also excluded.

UK CR2: Changes in the stock of non-performing loans and advances

The table below shows movements of gross carrying amounts of non-performing loans and advances during the period.

		NatWest Group
		a
		Gross carrying amount £m
010	Initial stock of non-performing loans and advances	5,597
020	Inflows to non-performing portfolios	4,704
030	Outflows from non-performing portfolios	(4,442)
040	Outflows due to write-offs	(477)
050	Outflow due to other situations	(3,965)
060	Final stock of non-performing loans and advances	5,859

(1) Outflow due to other situations in the table above primarily includes outflow due to loan repayment, transfer to performing portfolio and reclassification as held-for-sale.
(2) Exposures classified as held-for-trading and held-for-sale are excluded from the table in accordance with FINREP definitions.

UK CRA: General qualitative information about credit risk

Definition

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

Sources of risk

The principal sources of credit risk for NatWest Group are lending, off-balance sheet products, derivatives and securities financing, and debt securities. NatWest Group is also exposed to settlement risk through foreign exchange, trade finance and payments activities.

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

Governance

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 NatWest Group and business unit provisions and model committees.
- Development and approval of credit grading models.

Risk appetite

Risk appetite defines the type and aggregate level of risk NatWest 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 NatWest 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 NatWest 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 risks 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 when 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 approves the risk appetite framework annually.

Establishing risk appetite

In line with NatWest Group's risk appetite framework, risk appetite is maintained across NatWest Group through risk appetite statements. These are in place for all principal risks, including Credit Risk 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-today 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 NatWest Group is well placed to meet its priorities and long-term targets even in challenging economic environments. This supports NatWest Group in remaining resilient and secure as it pursues its strategic business objectives.

NatWest Group's risk profile is frequently reviewed and monitored. Management focus is concentrated on all principal risks as well as the top and emerging risk issues which 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.

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

Personal

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

UK CRA: Additional disclosure related to the credit quality of asset continued

Wholesale

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

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

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

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

Identification and measurement

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

For credit risk, 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.

Counterparty credit risk

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

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

Three lines of defence

NatWest Group uses the industry-standard three lines of defence model to articulate accountabilities and responsibilities for managing risk, including credit 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 business segments. The first line of defence is empowered to take credit risk within the constraints of the risk management framework, policies, risk appetite statements and measures set by the 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 credit risk function, as a second line of defence function, is empowered to design and maintain the credit risk management framework and its components. It undertakes proactive credit risk oversight and continuous monitoring activities to confirm that NatWest Group engages in permissible and sustainable credit 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 and measures set by the 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 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 key risks, including credit risk, 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.

Assessment and monitoring

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

Personal

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

UK CRA: Additional disclosure related to the credit quality of asset continued

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

Underwriting standards and portfolio performance are monitored on an ongoing basis to ensure they remain adequate in the current market environment and are not weakened materially to sustain growth. The actual performance of each portfolio is tracked relative to operational limits. The limits apply to a range of credit risk-related measures including projected credit default rates across products and the loan-tovalue (LTV) ratio of the mortgage portfolios. Where operational limits identify areas of concern management action is taken to adjust credit or business strategy.

Wholesale

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

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

In response to COVID-19, a new framework was introduced to categorise clients in a consistent manner across the Wholesale portfolio, based on the effect of COVID-19 on their financial position and outlook in relation to the sector risk appetite. This framework has been retained and updated to consider viability impacts 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 and supports the Risk of Credit Loss framework in assessing whether customers exhibit a SICR, if support is considered to be granting forbearance and the time it would take for customers to return to operating within transactional acceptance standards.

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

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

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

UK CRB: Additional disclosure related to the credit quality of asset

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.

As of January 2022, a new regulatory definition of default for was introduced in line with PRA and EBA guidance. This definition of default was also adopted for IFRS 9.

Impairment, provisioning and write-offs

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

IFRS 9 ECL model design principles

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.

UK CRB: Additional disclosure related to the credit quality of asset continued

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

- Unbiased – material regulatory conservatism has been removed from IFRS 9 parameters to produce unbiased estimates.
- Point-in-time – IFRS 9 parameters reflect actual economic conditions at the reporting date instead of long-run average or downturn conditions.
- Forward-looking – IFRS 9 PD estimates and, where appropriate, EAD and LGD estimates reflect forward-looking economic conditions.
- Lifetime measurement – IFRS 9 PD, LGD and EAD are provided as multi-period term structures up to exposure lifetimes instead of over a fixed one-year horizon.

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

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

PD estimates

Personal models

Personal PD models follow a discrete multi-horizon survival approach, predicting quarterly PDs up to lifetime using account level and forward-looking economic information, with the key driver at account level being scores from related internal ratings based PD models. The current suite of PD models was introduced in 2022 replacing the previous, first-generation suite, based on the Exogenous, Maturity and Vintage (EMV) approach.

Wholesale models

Wholesale PD models use a point-in-time/through-the-cycle framework to convert one-year regulatory PDs into point-intime estimates that reflect economic conditions at the reporting date. The framework utilises credit cycle indices (CCIs) for a comprehensive set of region/industry segments. 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 Basel LGD models with bespoke adjustments to ensure estimates are unbiased and, where relevant, forward-looking.

Personal

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

Wholesale

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

EAD estimates

Personal

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

- Revolving products use the existing Basel models as a basis, with appropriate adjustments incorporating a term structure based on time to default.
- Amortising products use an amortising schedule, where a formula is used to calculate the expected balance based on remaining terms and interest rates.

Analysis has indicated that there is minimal impact on EAD arising from changes in the economy for all Personal portfolios except mortgages. Therefore, forward-looking information is only incorporated in the mortgage EAD model (through forecast changes in interest rates).

Wholesale

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

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

Governance and post model adjustments

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

- Deferred model calibrations – ECL adjustments where PD model monitoring indicated that actual defaults were below estimated levels but where it was judged that an implied ECL release was not supportable due to the influence of government support schemes on default levels in the past two years. As a consequence, any potential ECL release was deferred and retained on the balance sheet until modelled ECL levels are affirmed by new model parallel runs or similar analyses.
- Economic uncertainty – ECL adjustments primarily arising from uncertainties associated with increased inflation and cost of living risks 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 to be amended.

UK CRB: Additional disclosure related to the credit quality of asset continued

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

Significant increase in credit risk (SICR)

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). NatWest 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 NatWest Group and align to credit risk management practices, where appropriate.

The framework comprises the following elements:

- IFRS 9 lifetime PD assessment (the primary driver) – on modelled portfolios, the assessment is based on the relative deterioration in forward-looking lifetime PD and is assessed monthly. To assess whether credit deterioration has occurred, the residual lifetime PD at balance sheet date (which PD is established at date of initial recognition (DOIR)) is compared to the current PD. If the current lifetime PD exceeds the residual origination PD by more than a threshold amount, deterioration is assumed to have occurred and the exposure transferred into Stage 2 for a lifetime loss assessment. For Wholesale, a doubling of PD would indicate a SICR subject to a minimum PD uplift of 0.1%. For Personal portfolios, the criteria vary by risk band, with lower risk exposures needing to deteriorate more than higher risk exposures.
- Qualitative high-risk backstops – the PD assessment is complemented with the use of qualitative high-risk backstops to further inform whether significant deterioration in lifetime risk of default has occurred. The qualitative high-risk backstop assessment includes the use of the mandatory 30+ days past due backstop, as prescribed by IFRS 9 guidance, and other features such as forbearance support, Wholesale exposures managed within the Risk of Credit Loss framework, and adverse credit bureau results for Personal customers.
- Persistence (Personal and business banking customers only) – the persistence rule ensures that accounts which have met the criteria for PD driven deterioration are still considered to be significantly deteriorated for three months thereafter. This additional rule enhances the timeliness of capture in Stage 2. The persistence rule is applied to PD driven deterioration only.

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

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

Annex XVII: Credit risk mitigation

UK CR3: CRM techniques overview: Disclosure of the use of credit risk mitigation techniques

The table below shows net carrying values of credit risk exposures analysed by use of different credit risk mitigation techniques as recognised under the applicable accounting framework regardless of whether these techniques are recognised under CRR. Counterparty credit risk exposures are excluded.

		NatWest Group				
		a	b	c	d	e
31 December 2022		**Unsecured carrying amount £m**	**Secured carrying amount £m**	**Of which: secured by collateral £m**	**Of which: secured by financial guarantees £m**	**Of which: secured by credit derivatives £m**
1	Loans and advances	**214,221**	**306,114**	**286,908**	**10,364**	**—**
2	Debt securities	**29,068**	**—**	**—**	**—**	**—**
3	Total	**243,289**	**306,114**	**286,908**	**10,364**	**—**
4	*Of which: non-performing exposures*	**316**	**3,570**	**2,997**	**472**	**—**
5	*Of which: defaulted*	***322***	***3,289***	***2,732***	***469***	**—**

		NatWest Group				
		a	b	c	d	e
31 December 2021		Unsecured carrying amount £m	Secured carrying amount £m	Of which: secured by collateral £m	Of which: secured by financial guarantees £m	Of which: secured by credit derivatives £m
1	Loans and advances	238,395	307,412	284,145	13,233	—
2	Debt securities	44,570	—	—	—	—
3	Total	282,965	307,412	284,145	13,233	—
4	*Of which: non-performing exposures*	*244*	*3,303*	*2,630*	*507*	—
5	*Of which: defaulted*	*182*	*2,673*	*2,027*	*496*	—

(1) Exposures classified as held-for-trading and held-for-sale are excluded from the table in accordance with FINREP definitions and Basel disclosure requirements. Comparatives were restated to reflect these requirements.

UK CRC: Qualitative disclosure requirements related to CRM techniques

Credit risk mitigation

Credit risk mitigation (CRM) is defined as the use of collateral or guarantees to reduce potential loss if a customer fails to settle all or part of its obligations to NatWest Group. The application of CRM depends on which approach (standardised or IRB) is used to calculate RWAs related to a credit exposure.

Recognition of CRM under the standardised approach is carried out in accordance with regulatory requirements and entails the reduction of EAD (netting and financial collateral) or the adjustment of risk-weights (in the case of real estate), third-party guarantees and/or credit derivatives. Under the IRB approach, a wider scope of collateral can be recognised.

NatWest Group uses a number of credit risk mitigation approaches. These differ for Wholesale and Personal customers.

Mitigation techniques, as set out in the appropriate credit policies and transactional acceptance standards, are used in the management of credit portfolios across NatWest 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. When seeking to mitigate risk, at a minimum NatWest Group considers the following:

- Suitability of the proposed risk mitigation, particularly if restrictions apply.
- The means by which legal certainty is to be established, including required documentation, supportive legal opinions and the steps needed to establish legal rights.
- Acceptability of the methodologies to be used for initial and subsequent valuation of collateral, the frequency of valuations.
- Actions which can be taken if the value of collateral or other mitigants is less than needed.
- The risk that the value of mitigants and counterparty credit quality will deteriorate simultaneously.
- The need to manage concentration risks arising from collateral types.
- The need to ensure that any risk mitigation remains legally effective and enforceable.

The business and credit teams are supported by specialist in-house documentation teams. NatWest Group uses industry-standard loan and security documentation wherever possible. However, when non-standard documentation is used, external lawyers are employed to review the documentation on a case-by-case basis. Mitigants (including any associated insurance) are monitored throughout the life of the transaction to ensure they perform as anticipated. Similarly, documentation is also monitored to ensure it remains enforceable.

Wholesale

NatWest Group mitigates credit risk relating to Wholesale customers through the use of netting, collateral and market standard documentation, depending on the nature of the counterparty and its assets. The most common types of mitigation are:

- Commercial real estate.
- Other physical assets – Including stock, plant, equipment, machinery, vehicles, ships and aircraft. Such assets are suitable collateral only if NatWest Group can identify, locate, and segregate them from other assets on which it does not have a claim. NatWest Group values physical assets in a variety of ways, depending on the type of asset and may rely on balance sheet valuations in certain cases.
- Receivables – These are amounts owed to NatWest Group's counterparties by their own customers. Valuation takes into account the quality of the counterparty's receivable management processes and excludes any that are past due.

All collateral is assessed, case by case, independently of the provider to ensure that it is suitable security for the proposed loan. NatWest Group monitors the value of the collateral and, if there is a shortfall, will review the position, which may lead to seeking additional collateral.

Property is used to mitigate credit risk across a number of portfolios, in particular commercial real estate (CRE).

For CRE valuations, NatWest Group has an actively managed panel of chartered surveying firms that cover the spectrum of geography and property sectors in which NatWest Group takes collateral. Suitable Royal Institution of Chartered Surveyors (RICS) registered valuers for particular assets are typically contracted through a service agreement to ensure consistency of quality and advice. valuations are generally commissioned when an asset is taken as security; a material increase in a facility is requested; or a default event is anticipated or has occurred. In the UK, an independent third-party market indexation is applied to update external valuations once they are more than a year old and every three years, a formal independent valuation review is commissioned. In the Republic of Ireland, assets are revalued in line with the Central Bank of Ireland threshold requirements, which permits indexation for lower value residential assets, but demands regular valuations for higher value assets.

Personal

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

Annex XIX: Credit risk – standardised approach

UK CR4: Standardised approach – credit risk exposure and CRM effects

The table below shows the effect of CRM techniques on credit risk exposures under the standardised approach. It shows exposures both pre and post CRM and CCFs as well as associated RWAs and RWA density, split by exposure class. It excludes counterparty credit risk and securitisations.

		NatWest Group					
		a	b	c	d	e	f
		Exposures pre CCF and CRM		Exposures post CCF and CRM		RWAs and RWAs density	
	Exposure Classes	On-balance sheet	Off-balance sheet	On-balance sheet	Off-balance sheet	RWA	RWA density
	31 December 2022	£m	£m	£m	£m	£m	%
1	Central governments or central banks	121,052	502	122,000	216	1,088	1
2	Regional governments or local authorities	110	249	100	—	4	4
3	Public sector entities	—	—	—	—	—	—
4	Multilateral development banks	2,628	—	2,628	—	—	—
5	International organisations	—	—	—	—	—	—
6	Institutions	997	56	1,024	18	209	20
7	Corporates	5,869	2,728	4,170	786	4,571	92
8	Retail	3,216	4,525	3,026	54	1,923	62
9	Secured by mortgages on immovable property	26,449	1,705	26,335	400	11,824	44
10	Exposures in default	830	64	798	3	882	110
11	Items associated with particularly high risk	2	1	2	—	3	150
12	Covered bonds	301	—	301	—	30	10
13	Institutions and corporates with a short-term credit assessment	—	—	—	—	—	—
14	Collective investment undertakings	—	—	—	—	—	—
15	Equity	742	—	742	—	1,832	247
16	Other items	988	—	988	—	682	69
17	Total	163,184	9,830	162,114	1,477	23,048	14

		NatWest Group					
		a	b	c	d	e	f
		Exposures pre CCF and CRM		Exposures post CCF and CRM		RWAs and RWAs density	
		On-balance sheet	Off-balance sheet	On-balance sheet	Off-balance sheet	RWA	RWA density
	31 December 2021	£m	£m	£m	£m	£m	%
1	Central governments or central banks	158,673	1,028	159,733	418	418	—
2	Regional governments or local authorities	25	258	24	—	5	21
3	Public sector entities	—	—	—	—	—	—
4	Multilateral development banks	457	—	462	—	—	—
5	International organisations	—	—	—	—	—	—
6	Institutions	2,187	30	2,221	—	437	20
7	Corporates	5,806	2,565	4,211	757	4,691	94
8	Retail	2,519	4,108	2,339	61	1,431	60
9	Secured by mortgages on immovable property	19,936	1,513	19,823	292	8,702	43
10	Exposures in default	428	64	433	5	490	112
11	Items associated with particularly high risk	—	—	—	—	—	—
12	Covered bonds	120	—	122	—	24	20
13	Institutions and corporates with a short-term credit assessment	—	—	—	—	—	—
14	Collective investment undertakings	—	—	—	—	—	—
15	Equity	612	—	612	—	1,508	246
16	Other items	848	—	901	—	827	92
17	Total	191,611	9,566	190,881	1,533	18,533	10

- The decrease within central governments or central banks reflects a reduction in money market loans and a reduction in the use of central bank funding.
- The increase in secured by immovable property primarily reflects Ulster Bank RoI reverting to the standardised approach for calculating capital requirements as of July 2022, relating to the phased withdrawal from the Republic of Ireland.

UK CR5: Standardised approach

The table below shows credit risk EAD post CRM under the standardised approach by risk-weight, split by exposure class. It excludes counterparty credit risk and securitisations.

	NatWest Group																
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Risk-weight																*Of which:*
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1,250%	Others	Total	*unrated*
Exposure classes	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	*£m*
31 December 2022																	
1 Central governments or central banks	**121,781**	—	—	—	—	—	—	—	—	—	—	**435**	—	—	—	**122,216**	**436**
2 Regional governments or local authorities	**79**	—	—	—	**21**	—	—	—	—	—	—	—	—	—	—	**100**	**21**
3 Public sector entities	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4 Multilateral development banks	**2,628**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**2,628**	—
5 International organisations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6 Institutions	**29**	—	—	—	**995**	—	**18**	—	—	—	—	—	—	—	—	**1,042**	**21**
7 Corporates	**43**	—	—	—	**145**	—	**90**	—	—	**4,678**	—	—	—	—	—	**4,956**	**1,672**
8 Retail exposures	—	—	—	—	**268**	**48**	—	—	**2,762**	—	**2**	—	—	—	—	**3,080**	—
9 Exposures secured by mortgages on immovable property	—	—	—	—	—	**22,379**	—	—	**491**	**3,852**	**13**	—	—	—	—	**26,735**	**26,735**
10 Exposures in default	—	—	—	—	—	—	—	—	—	**636**	**165**	—	—	—	—	**801**	**801**
11 Exposure associated with particularly high risk	—	—	—	—	—	—	—	—	—	—	**2**	—	—	—	—	**2**	**2**
12 Covered bonds	—	—	—	**301**	—	—	—	—	—	—	—	—	—	—	—	**301**	—
13 Exposures to institutions and corporates with a short-term credit assessment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14 Units or shares in collective investment undertakings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15 Equity exposures	—	—	—	—	—	—	—	—	—	**16**	—	**726**	—	—	—	**742**	**726**
16 Other items	**267**	—	—	—	**12**	—	**18**	—	—	**668**	—	—	—	—	**23**	**988**	**988**
17 Total	**124,827**	—	—	**301**	**1,441**	**22,427**	**126**	—	**3,253**	**9,850**	**182**	**1,161**	—	—	**23**	**163,591**	**31,402**

UK CR5: standardised approach continued

		NatWest Group																
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
		Risk-weight																*Of which:*
		0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1,250%	Others	Total	*unrated*
	Exposure classes	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	*£m*
	31 December 2021																	
1	Central governments or central banks	159,984	—	—	—	—	—	—	—	—	—	—	167	—	—	—	160,151	*168*
2	Regional governments or local authorities	—	—	—	—	24	—	—	—	—	—	—	—	—	—	—	24	*24*
3	Public sector entities	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	Multilateral development banks	462	—	—	—	—	—	—	—	—	—	—	—	—	—	—	462	—
5	International organisations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Institutions	34	—	—	—	2,187	—	—	—	—	—	—	—	—	—	—	2,221	*11*
7	Corporates	2	—	—	—	158	—	37	—	—	4,752	1	—	—	—	18	4,968	*1,663*
8	Retail exposures	—	—	—	—	346	2	—	—	2,050	—	2	—	—	—	—	2,400	—
9	Exposures secured by mortgages on immovable property	—	—	—	—	—	17,413	—	—	—	2,702	—	—	—	—	—	20,115	*20,080*
10	Exposures in default	—	—	—	—	—	—	—	—	—	334	104	—	—	—	—	438	*438*
11	Exposure associated with particularly high risk	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	Covered bonds	—	—	—	—	122	—	—	—	—	—	—	—	—	—	—	122	—
13	Exposures to institutions and corporates with a short-term credit assessment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	Units or shares in collective investment undertakings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	Equity exposures	—	—	—	—	—	—	—	—	—	15	—	597	—			612	*597*
15	Other items	3	—	—	—	68	—	25	—	—	800	—	—	—	—	5	901	*901*
17	Total	160,485	—	—	—	2,905	17,415	62	—	2,050	8,603	107	764	—	—	23	192,414	*23,882*

UK CRD: Qualitative disclosure requirements related to standardised model

Under the standardised approach, risk-weights are assigned to exposures in accordance with the CRR. For corporates, sovereigns and financial institutions, NatWest Group uses risk-weights based on credit quality steps that are mapped from issuer level credit ratings issued by external rating agencies, namely Standard & Poor's (S&P), Moody's, Fitch and ARC.

NatWest Group uses credit quality steps (CQS) to calculate the RWAs associated with non-counterparty credit risk exposures. Each rated exposure in the STD portfolio is assigned to one of six CQS. The CQS map to the rating of the four external rating agencies, as shown in the table below. Each CQS is associated with a particular risk-weighting. Each exposure is multiplied by the appropriate risk-weighting to calculate the relevant RWA amount. If no external rating is available, NatWest Group assigns the exposure a risk-weighting in line with the CRR.

Credit quality step	Standard & Poor's	Moody's	Fitch	ARC
Step 1	AAA to AA-	Aaa to Aa3	AAA to AA-	AAA to AA-
Step 2	A+ to A-	A1 to A3	A+ to A-	A+ to A-
Step 3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	BBB+ to BBB-
Step 4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-	BB+ to BB-
Step 5	B+ to B-	B1 to B3	B+ to B-	B+ to B-
Step 6	CCC+ and below	Caa1 and below	CCC and below	CCC+ and below

Annex XXI: Credit risk – IRB approach

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range

The table below shows the key parameters used for the calculation of capital requirements for credit risk exposures under the Advanced IRB approach, split by PD range. The table excludes counterparty credit risk, securitisations, equity and non-credit obligation exposures.

	NatWest Group											
a	b	c	d	e	f	g	h	i	j	k	l	m
	Central Governments and Central Banks											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2022												
0.00 to <0.15	40,779	162	36	41,048	0.01	42	45	0.71	764	2	1	1
0.00 to <0.10	*40,779*	*162*	36	*41,048*	0.01	*42*	*45*	0.71	*764*	2	*1*	*1*
0.10 to <0.15	—	—	—	—	—	—	—	—	—	—	—	—
0.15 to <0.25	—	—	—	—	—	—	—	—	—	—	—	—
0.25 to <0.50	279	—	—	279	0.32	2	49	1.19	135	49	—	—
0.50 to <0.75	—	—	—	—	—	—	—	—	—	—	—	—
0.75 to <2.50	—	—	—	—	—	—	—	—	—	—	—	—
0.75 to <1.75	—	—	—	—	—	—	—	—	—	—	—	—
1.75 to <2.50	—	—	—	—	—	—	—	—	—	—	—	—
2.50 to <10.00	—	—	—	—	—	1	50	1.00	—	—	—	—
2.50 to < 5.00	—	—	—	—	*2.50*	*1*	*50*	*1.00*	—	—	—	—
5.00 to < 10.00	—	—	—	—	—	—	—	—	—	—	—	—
10.00 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
10.00 to <20.00	—	—	—	—	—	—	—	—	—	—	—	—
20.00 to <30.00	—	—	—	—	—	—	—	—	—	—	—	—
30.00 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
100.00 (default)	3	—	—	3	100.00	1	56	1.00	—	—	2	3
Subtotal (exposure class)	41,061	162	36	41,330	0.01	46	45	0.71	899	2	3	4
Total (all exposures classes)	345,793	121,535	64	416,302		21,230,538		0.86	99,001	24	2,575	2,949

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

NatWest Group

a	b	c	d	e	f	g	h	i	j	k	l	m
	Central Governments and Central Banks											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2021												
0.00 to <0.15	*57,989*	*223*	*39*	*58,127*	*0.01*	*61*	*45*	*1.13*	*2,698*	*5*	*4*	*2*
0.00 to <0.10	*57,989*	*223*	*39*	*58,127*	*0.01*	*61*	*45*	*1.13*	*2,698*	*5*	*4*	*2*
0.10 to <0.15	—	—	—	—	—	—	—	—	—	—	—	—
0.15 to <0.25	—	—	—	—	—	—	—	—	—	—	—	—
0.25 to <0.50	277	—	—	277	0.32	2	56	1.18	153	55	—	—
0.50 to <0.75	—	—	—	—	—	—	—	—	—	—	—	—
0.75 to <2.50	—	—	—	—	—	—	—	—	—	—	—	—
0.75 to <1.75	—	—	—	—	—	—	—	—	—	—	—	—
1.75 to <2.50	—	—	—	—	—	—	—	—	—	—	—	—
2.50 to <10.00	—	—	—	—	2.50	—	50	4.99	—	—	—	—
2.50 to < 5.00	—	—	—	—	*2.50*	—	*50*	*4.99*	—	—	—	—
5.00 to < 10.00	—	—	—	—	—	—	—	—	—	—	—	—
10.00 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
10.00 to <20.00	—	—	—	—	—	—	—	—	—	—	—	—
20.00 to <30.00	—	—	—	—	—	—	—	—	—	—	—	—
30.00 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
100.00 (default)	*2*	—	—	*2*	100.00	1	7	1.00	—	—	*1*	*2*
Subtotal (exposure class)	58,268	223	39	58,407	0.02	64	45	1.13	2,851	5	5	4
Total (all exposures classes)	351,477	113,064	64	416,483		21,786,184		0.89	82,102	20	2,226	3,518

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

	NatWest Group											
a	b	c	d	e	f	g	h	i	j	k	l	m
	Institutions											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2022												
0.00 to <0.15	4,816	734	83	5,346	0.10	222	38	1.60	1,124	21	3	2
0.00 to <0.10	*1,640*	*185*	*61*	*1,648*	*0.06*	*165*	*34*	*2.99*	*379*	*23*	—	*2*
0.10 to <0.15	*3,176*	*549*	*91*	*3,698*	*0.11*	*57*	*40*	*0.97*	*745*	*20*	*3*	—
0.15 to <0.25	3,289	362	37	3,445	0.19	92	36	2.49	1,578	46	3	3
0.25 to <0.50	312	110	38	353	0.36	42	24	2.77	138	39	—	—
0.50 to <0.75	1	4	59	4	0.64	15	56	0.81	3	83	—	—
0.75 to <2.50	13	13	40	18	1.32	17	37	1.92	15	84	—	—
0.75 to <1.75	*12*	*11*	*43*	*17*	*1.27*	*12*	*34*	*2.02*	*12*	74	—	—
1.75 to <2.50	*1*	*2*	*20*	*1*	*1.81*	*5*	*75*	*0.83*	*3*	199	—	—
2.50 to <10.00	16	2	41	14	3.23	99	56	0.99	23	158	—	—
2.50 to < 5.00	*14*	—	*100*	*12*	*2.60*	*92*	*53*	*0.99*	*17*	133	—	—
5.00 to < 10.00	*2*	*2*	*35*	*2*	*6.81*	*7*	*75*	*0.97*	*6*	297	—	—
10.00 to <100.00	2	—	31	2	27.28	4	75	1.08	7	462	—	—
10.00 to <20.00	—	—	*20*	—	*14.48*	*2*	*75*	*1.00*	—	412	—	—
20.00 to <30.00	*2*	—	*31*	*2*	*27.60*	*2*	*75*	*1.08*	*7*	463	—	—
30.00 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
100.00 (default)	5	—	32	1	100.00	4	40	1.50	—	—	—	—
Subtotal (exposure class)	8,454	1,225	65	9,183	0.16	495	37	1.97	2,888	31	6	5
Total (all exposures classes)	345,793	121,535	64	416,302		21,230,538		0.86	99,001	24	2,575	2,949

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

NatWest Group												
a	b	c	d	e	f	g	h	i	j	k	l	m
Institutions												
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2021												
0.00 to <0.15	4,580	660	83	5,023	0.10	235	40	1.41	1,038	21	*3*	—
0.00 to <0.10	*1,348*	*211*	*62*	*1,354*	*0.06*	*176*	*40*	*3.15*	*368*	*27*	—	—
0.10 to <0.15	*3,232*	*449*	*83*	*3,669*	*0.11*	*59*	*40*	*0.76*	*670*	*18*	*3*	—
0.15 to <0.25	2,417	371	34	2,549	0.18	109	36	1.80	943	37	*2*	*1*
0.25 to <0.50	526	21	31	534	0.35	54	15	2.38	128	24	—	—
0.50 to <0.75	31	15	43	37	0.64	15	46	2.63	41	109	—	—
0.75 to <2.50	33	15	36	39	1.18	25	36	2.00	31	81	—	—
0.75 to <1.75	*32*	*11*	*41*	*37*	*1.14*	*16*	*34*	*2.06*	*28*	*75*	—	—
1.75 to <2.50	*1*	*4*	*22*	*2*	*1.81*	*9*	*73*	*0.88*	*3*	*192*	—	—
2.50 to <10.00	13	3	67	15	3.02	106	54	1.01	23	148	—	—
2.50 to < 5.00	*12*	*3*	*67*	*14*	*2.83*	*105*	*57*	*1.01*	*22*	*158*	—	—
5.00 to < 10.00	*1*	—	—	*1*	*5.12*	*1*	*14*	*1.00*	*1*	*47*	—	—
10.00 to <100.00	—	1	20	—	28.90	6	60	1.10	1	332	—	—
10.00 to <20.00	—	—	*20*	—	*14.48*	*3*	*75*	*1.00*	*1*	*412*	—	—
20.00 to <30.00	—	—	—	—	—	—	—	—	—	—	—	—
30.00 to <100.00	—	*1*	*20*	—	*40.96*	*3*	*47*	*1.18*	—	*265*	—	—
100.00 (default)	—	—	—	—	100.00	1	50	1.00	—	—	—	—
Subtotal (exposure class)	7,600	1,086	64	8,197	0.16	551	37	1.60	2,205	27	5	1
Total (all exposures classes)	351,477	113,064	64	416,483		21,786,184		0.89	82,102	20	2,226	3,518

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

	NatWest Group											
a	b	c	d	e	f	g	h	i	j	k	l	m
	Exposures to corporates – SME											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2022												
0.00 to <0.15	**350**	**61**	**41**	**375**	**0.06**	**45**	**43**	**4.24**	**306**	**81**	**—**	**—**
0.00 to <0.10	***245***	***50***	***40***	***265***	***0.04***	***2***	***35***	***4.58***	***218***	***82***	**—**	**—**
0.10 to <0.15	***105***	***11***	***45***	***110***	***0.11***	***43***	***63***	***3.42***	***88***	***80***	**—**	**—**
0.15 to <0.25	**618**	**367**	**49**	**798**	**0.21**	**1,497**	**27**	**3.08**	**251**	**31**	**1**	**1**
0.25 to <0.50	**3,083**	**1,336**	**47**	**3,710**	**0.40**	**5,716**	**22**	**3.05**	**1,016**	**27**	**4**	**9**
0.50 to <0.75	**2,613**	**806**	**47**	**2,998**	**0.64**	**3,547**	**24**	**2.78**	**1,005**	**34**	**5**	**11**
0.75 to <2.50	**5,788**	**1,655**	**44**	**6,538**	**1.26**	**7,525**	**22**	**2.68**	**2,697**	**41**	**20**	**50**
0.75 to <1.75	***4,265***	***1,217***	***44***	***4,812***	***1.07***	***5,728***	***22***	***2.71***	***1,957***	**41**	**13**	**30**
1.75 to <2.50	***1,523***	***438***	***45***	***1,726***	***1.81***	***1,797***	***20***	***2.62***	***740***	**43**	**7**	**20**
2.50 to <10.00	**2,214**	**447**	**51**	**2,455**	**3.39**	**2,774**	**23**	**2.61**	**1,322**	**54**	**21**	**63**
2.50 to < 5.00	***1,811***	***386***	***50***	***2,018***	***2.84***	***2,223***	***23***	***2.68***	***1,045***	**52**	**15**	**47**
5.00 to < 10.00	***403***	***61***	***52***	***437***	***5.93***	***551***	***21***	***2.28***	***277***	**63**	**6**	**16**
10.00 to <100.00	**223**	**41**	**42**	**242**	**15.26**	**370**	**24**	**2.47**	**213**	**88**	**10**	**15**
10.00 to <20.00	***171***	***29***	***44***	***186***	***12.19***	***268***	***24***	***2.49***	***156***	**83**	**6**	**10**
20.00 to <30.00	***44***	***11***	***32***	***48***	***22.71***	***86***	***24***	***2.49***	***48***	**101**	**3**	**4**
30.00 to <100.00	***8***	***1***	***70***	***8***	***40.96***	***16***	***29***	***1.97***	***9***	**110**	**1**	**1**
100.00 (default)	**414**	**31**	**27**	**425**	**100.00**	**890**	**41**	**2.18**	**848**	**200**	**161**	**171**
Subtotal (exposure class)	**15,303**	**4,744**	**46**	**17,541**	**3.78**	**22,364**	**24**	**2.80**	**7,658**	**44**	**222**	**320**
Total (all exposures classes)	**345,793**	**121,535**	**64**	**416,302**		**21,230,538**		**0.86**	**99,001**	**24**	**2,575**	**2,949**

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

NatWest Group												
a	b	c	d	e	f	g	h	i	j	k	l	m
Exposures to corporates – SME												
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2021												
0.00 to <0.15	30	2	79	32	0.11	51	37	3.78	7	24	—	—
0.00 to <0.10	*7*	—	40	*7*	0.08	*2*	45	*4.99*	*2*	*29*	—	—
0.10 to <0.15	*23*	*2*	80	*25*	0.11	*49*	35	*3.43*	*5*	*22*	—	—
0.15 to <0.25	483	175	59	586	0.21	1,545	25	3.38	112	19	—	1
0.25 to <0.50	2,871	1,000	53	3,408	0.40	6,104	23	3.28	855	25	3	21
0.50 to <0.75	2,401	707	47	2,739	0.64	3,810	23	2.74	785	29	4	25
0.75 to <2.50	5,803	1,827	47	6,676	1.29	9,185	21	2.87	2,630	39	18	107
0.75 to <1.75	*4,190*	*1,282*	*47*	*4,800*	*1.08*	*6,830*	*21*	*2.94*	*1,594*	*33*	*11*	*61*
1.75 to <2.50	*1,613*	*545*	*47*	*1,876*	*1.81*	*2,355*	*21*	*2.71*	*1,036*	*55*	*7*	*46*
2.50 to <10.00	2,740	563	50	3,040	3.46	3,852	21	2.78	1,301	43	22	158
2.50 to < 5.00	*2,185*	*467*	*51*	*2,438*	*2.90*	*3,044*	*21*	*2.78*	*994*	*41*	*14*	*113*
5.00 to < 10.00	*555*	*96*	*45*	*602*	*5.74*	*808*	*22*	*2.78*	*307*	*51*	*8*	*45*
10.00 to <100.00	284	31	49	302	15.33	467	23	2.66	232	77	10	35
10.00 to <20.00	*218*	*27*	*46*	*232*	*12.67*	*356*	*23*	*2.54*	*166*	*72*	*7*	*27*
20.00 to <30.00	*64*	*4*	*69*	*68*	*23.58*	*100*	*20*	*3.05*	*63*	*93*	*3*	*8*
30.00 to <100.00	*2*	—	*20*	*2*	*40.96*	*11*	*32*	*2.81*	*3*	*114*	—	—
100.00 (default)	452	41	31	467	100.00	1,062	46	2.35	589	126	178	209
Subtotal (exposure class)	15,064	4,346	49	17,250	4.27	26,076	23	2.92	6,511	38	235	556
Total (all exposures classes)	351,477	113,064	64	416,483		21,786,184		0.89	82,102	20	2,226	3,518

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

	NatWest Group											
a	b	c	d	e	f	g	h	i	j	k	l	m
	Exposures to corporates – specialised lending											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2022												
0.00 to <0.15	—	—	—	—	—	—	—	—	—	—	—	—
0.00 to <0.10	—	—	—	—	—	—	—	—	—	—	—	—
0.10 to <0.15	—	—	—	—	—	—	—	—	—	—	—	—
0.15 to <0.25	—	—	—	—	—	—	—	—	—	—	—	—
0.25 to <0.50	—	—	—	—	—	—	—	—	—	—	—	—
0.50 to <0.75	—	—	—	—	—	—	—	—	—	—	—	—
0.75 to <2.50	—	—	—	—	—	—	—	—	—	—	—	—
0.75 to <1.75	—	—	—	—	—	—	—	—	—	—	—	—
1.75 to <2.50	—	—	—	—	—	—	—	—	—	—	—	—
2.50 to <10.00	—	—	—	—	—	—	—	—	—	—	—	—
2.50 to < 5.00	—	—	—	—	—	—	—	—	—	—	—	—
5.00 to < 10.00	—	—	—	—	—	—	—	—	—	—	—	—
10.00 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
10.00 to <20.00	—	—	—	—	—	—	—	—	—	—	—	—
20.00 to <30.00	—	—	—	—	—	—	—	—	—	—	—	—
30.00 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
100.00 (default)	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal (exposure class)	—	—	—	—	—	—	—	—	—	—	—	—
Total (all exposures classes)	**345,793**	**121,535**	**64**	**416,302**		**21,230,538**		**0.86**	**99,001**	**24**	**2,575**	**2,949**

(1) Specialised lending exposures are not reported as the NatWest Group uses the supervisory slotting approach for this portfolio.

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

NatWest Group

a	b	c	d	e	f	g	h	i	j	k	l	m
	Exposures to corporates – specialised lending											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2021												
0.00 to <0.15	—	—	—	—	—	—	—	—	—	—	—	—
0.00 to <0.10	—	—	—	—	—	—	—	—	—	—	—	—
0.10 to <0.15	—	—	—	—	—	—	—	—	—	—	—	—
0.15 to <0.25	—	—	—	—	—	—	—	—	—	—	—	—
0.25 to <0.50	—	—	—	—	—	—	—	—	—	—	—	—
0.50 to <0.75	—	—	—	—	—	—	—	—	—	—	—	—
0.75 to <2.50	—	—	100	—	1.81	1	1	5.00	—	—	—	—
0.75 to <1.75	—	—	—	—	—	—	—	—	—	—	—	—
1.75 to <2.50	—	—	*100*	—	*1.81*	*1*	*1*	*5.00*	—	—	—	—
2.50 to <10.00	—	—	—	—	—	—	—	—	—	—	—	—
2.50 to < 5.00	—	—	—	—	—	—	—	—	—	—	—	—
5.00 to < 10.00	—	—	—	—	—	—	—	—	—	—	—	—
10.00 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
10.00 to <20.00	—	—	—	—	—	—	—	—	—	—	—	—
20.00 to <30.00	—	—	—	—	—	—	—	—	—	—	—	—
30.00 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
100.00 (default)	5	—	*20*	*5*	100.00	5	94	1.02	—	—	*4*	*5*
Subtotal (exposure class)	5	—	59	5	97.68	6	91	1.11	—	—	*4*	*5*
Total (all exposures classes)	351,477	113,064	64	416,483		21,786,184		0.89	82,102	20	2,226	3,518

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

	NatWest Group											
a	b	c	d	e	f	g	h	i	j	k	l	m
	Exposures to corporates – other											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2022												
0.00 to <0.15	33,939	46,441	46	55,039	0.06	2,439	42	2.57	11,135	20	13	25
0.00 to <0.10	*30,369*	*39,478*	*46*	*48,277*	*0.05*	*1,994*	*42*	*2.53*	*9,031*	*19*	*10*	*18*
0.10 to <0.15	*3,570*	*6,963*	*46*	*6,762*	*0.11*	*445*	*41*	*2.81*	*2,104*	*31*	*3*	*7*
0.15 to <0.25	8,935	10,400	43	13,253	0.19	1,096	41	2.41	5,366	40	10	24
0.25 to <0.50	5,649	5,988	47	8,352	0.39	2,030	36	2.62	4,616	55	12	48
0.50 to <0.75	4,300	2,822	46	5,563	0.64	1,242	33	2.50	3,406	61	12	33
0.75 to <2.50	11,763	6,692	46	14,735	1.33	5,354	30	2.41	10,701	73	58	127
0.75 to <1.75	*8,274*	*4,519*	*47*	*10,382*	*1.13*	*3,707*	*31*	*2.41*	*7,484*	*72*	*37*	*81*
1.75 to <2.50	*3,489*	*2,173*	*44*	*4,353*	*1.81*	*1,647*	*27*	*2.43*	*3,217*	*74*	*21*	*46*
2.50 to <10.00	4,594	2,332	47	5,624	3.54	3,164	28	2.30	4,944	88	55	116
2.50 to < 5.00	*3,371*	*1,859*	*47*	*4,176*	*2.84*	*2,686*	*28*	*2.37*	*3,472*	*83*	*32*	*60*
5.00 to < 10.00	*1,223*	*473*	*48*	*1,448*	*5.57*	*478*	*28*	*2.10*	*1,472*	*102*	*23*	*56*
10.00 to <100.00	391	77	33	413	14.16	264	20	1.52	396	96	12	15
10.00 to <20.00	*341*	*73*	*32*	*360*	*12.12*	*210*	*20*	*1.46*	*332*	*92*	*9*	*10*
20.00 to <30.00	*43*	*4*	*60*	*45*	*26.13*	*37*	*17*	*1.68*	*44*	*98*	*2*	*3*
30.00 to <100.00	*7*	*—*	*44*	*8*	*41.13*	*17*	*46*	*3.79*	*20*	*267*	*1*	*2*
100.00 (default)	775	129	33	804	100.00	636	41	2.03	175	22	310	224
Subtotal (exposure class)	70,346	74,881	46	103,783	1.33	16,225	38	2.50	40,739	39	482	612
Total (all exposures classes)	345,793	121,535	64	416,302		21,230,538		0.86	99,001	24	2,575	2,949

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

NatWest Group												
a	b	c	d	e	f	g	h	i	j	k	l	m
Exposures to corporates – other												
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2021												
0.00 to <0.15	30,303	40,361	44	47,989	0.06	2,497	42	2.76	9,983	21	11	10
0.00 to <0.10	*27,014*	*33,985*	*44*	*41,930*	*0.05*	*1,867*	*41*	*2.76*	*8,088*	*19*	*8*	*6*
0.10 to <0.15	*3,289*	*6,376*	*44*	*6,059*	*0.11*	*630*	*42*	*2.74*	*1,895*	*31*	*3*	*4*
0.15 to <0.25	6,494	8,835	42	10,153	0.18	1,300	39	2.45	3,887	38	7	10
0.25 to <0.50	5,545	7,144	46	8,713	0.38	2,624	39	2.39	4,694	54	11	47
0.50 to <0.75	3,825	2,747	44	4,982	0.64	2,137	33	2.70	3,114	63	10	20
0.75 to <2.50	10,148	7,178	45	13,276	1.34	9,460	30	2.43	9,765	74	52	119
0.75 to <1.75	*6,570*	*4,937*	*47*	*8,850*	*1.11*	*6,581*	*32*	*2.52*	*6,458*	*73*	*31*	*61*
1.75 to <2.50	*3,578*	*2,241*	*42*	*4,426*	*1.81*	*2,879*	*26*	*2.27*	*3,307*	*75*	*21*	*58*
2.50 to <10.00	4,814	2,404	48	5,906	3.57	4,411	29	2.35	5,452	92	60	172
2.50 to < 5.00	*3,591*	*2,031*	*48*	*4,520*	*2.89*	*3,689*	*29*	*2.34*	*3,995*	*88*	*38*	*92*
5.00 to < 10.00	*1,223*	*373*	*44*	*1,386*	*5.79*	*722*	*28*	*2.40*	*1,457*	*105*	*22*	*80*
10.00 to <100.00	860	167	47	936	15.11	565	24	1.92	1,070	114	32	71
10.00 to <20.00	*543*	*139*	*48*	*611*	*11.48*	*342*	*27*	*2.02*	*752*	*123*	*19*	*51*
20.00 to <30.00	*302*	*23*	*36*	*307*	*20.89*	*105*	*16*	*1.66*	*271*	*88*	*10*	*18*
30.00 to <100.00	*15*	*5*	*63*	*18*	*39.57*	*118*	*45*	*2.93*	*47*	*258*	*3*	*2*
100.00 (default)	431	85	39	446	100.00	675	45	2.17	159	36	194	261
Subtotal (exposure class)	62,420	68,921	44	92,401	1.18	23,669	38	2.60	38,124	41	377	710
Total (all exposures classes)	351,477	113,064	64	416,483		21,786,184		0.89	82,102	20	2,226	3,518

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

	NatWest Group											
a	b	c	d	e	f	g	h	i	j	k	l	m
	Retail exposures – SME secured by immovable property collateral											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2022												
0.00 to <0.15	—	—	—	—	—	—	—		—	—	—	—
0.00 to <0.10	—	—	—	—	—	—	—		—	—	—	—
0.10 to <0.15	—	—	—	—	—	—	—		—	—	—	—
0.15 to <0.25	—	1	100	—	0.17	77	59		—	—	—	—
0.25 to <0.50	—	74	100	49	0.30	4,959	61		13	27	—	—
0.50 to <0.75	63	2	100	65	0.63	1,223	31		15	23	—	—
0.75 to <2.50	634	40	100	660	1.20	8,568	24		188	28	2	8
0.75 to <1.75	537	10	100	545	1.03	6,225	20		113	21	1	4
1.75 to <2.50	97	30	100	115	2.03	2,343	41		75	66	1	4
2.50 to <10.00	223	3	100	225	4.79	2,482	26		151	67	3	4
2.50 to < 5.00	134	1	100	135	3.59	1,587	26		79	*58*	1	*2*
5.00 to < 10.00	89	2	100	90	6.60	895	27		72	*80*	2	*2*
10.00 to <100.00	56	1	100	56	24.82	535	22		53	94	3	3
10.00 to <20.00	28	1	100	28	14.13	298	25		29	*102*	1	*1*
20.00 to <30.00	—	—	—	—	—	—	—		—	—	—	—
30.00 to <100.00	28	—	100	28	35.75	237	19		24	*86*	2	*2*
100.00 (default)	41	—	100	43	100.00	673	16		8	18	6	13
Subtotal (exposure class)	1,017	121	100	1,098	6.92	18,517	26		428	39	14	28
Total (all exposures classes)	345,793	121,535	64	416,302		21,230,538		0.86	99,001	24	2,575	2,949

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

NatWest Group

a	b	c	d	e	f	g	h	i	j	k	l	m
Retail exposures – SME secured by immovable property												
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2021												
0.00 to <0.15	—	—	—	—	0.14	1	72		—	—	—	—
0.00 to <0.10	—	—	—	—	—	—	—		—	—	—	—
0.10 to <0.15	—	—	—	—	0.14	*1*	*72*		—	—	—	—
0.15 to <0.25	—	*1*	100	—	0.17	*69*	*60*		—	—	—	—
0.25 to <0.50	—	*83*	100	*54*	0.31	*5,678*	*62*		*15*	*28*	—	*1*
0.50 to <0.75	*61*	*2*	100	*63*	0.63	*1,322*	*30*		*14*	*22*	—	—
0.75 to <2.50	*684*	*37*	100	*707*	1.19	9,539	21		*176*	25	*2*	*6*
0.75 to <1.75	*595*	*10*	*100*	*601*	*1.04*	*7,257*	*17*		*108*	*18*	*1*	*4*
1.75 to <2.50	*89*	*27*	*100*	*106*	*2.03*	*2,282*	*40*		*68*	*64*	*1*	*2*
2.50 to <10.00	*230*	*2*	100	*232*	4.77	*2,507*	23		*138*	59	*3*	*5*
2.50 to < 5.00	*137*	*1*	*100*	*139*	*3.56*	*1,619*	*22*		*68*	*49*	*2*	*3*
5.00 to < 10.00	*93*	*1*	*100*	*93*	*6.57*	*888*	*25*		*70*	*74*	*1*	*2*
10.00 to <100.00	*42*	—	100	*42*	25.32	*457*	18		*32*	*77*	*2*	*2*
10.00 to <20.00	*22*	—	*100*	*22*	*14.24*	*265*	*21*		*19*	*88*	*1*	*1*
20.00 to <30.00	—	—	—	—	—	—	—		—	—	—	—
30.00 to <100.00	*20*	—	*100*	*20*	*37.23*	*192*	*14*		*13*	*65*	*1*	*1*
100.00 (default)	*30*	—	—	*31*	100.00	498	23		*8*	*26*	*7*	*11*
Subtotal (exposure class)	*1,047*	*125*	100	*1,129*	5.48	20,071	24		*383*	34	*14*	*25*
Total (all exposures classes)	351,477	113,064	64	416,483		21,786,184		0.89	82,102	20	2,226	3,518

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

	NatWest Group											
a	b	c	d	e	f	g	h	i	j	k	l	m
	Retail exposures – non-SME secured by immovable property collateral											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2022												
0.00 to <0.15	2,623	1,840	100	4,507	0.06	32,984	11		199	4	—	—
0.00 to <0.10	*2,251*	*1,115*	*100*	*3,392*	*0.05*	*21,005*	*11*		*126*	*4*	*—*	*—*
0.10 to <0.15	*372*	*725*	*100*	*1,115*	*0.11*	*11,979*	*11*		*73*	*7*	*—*	*—*
0.15 to <0.25	38,087	785	100	38,914	0.15	318,345	9		2,815	7	8	15
0.25 to <0.50	106,568	14,354	100	119,791	0.32	761,898	10		17,530	15	56	70
0.50 to <0.75	27,620	95	100	27,746	0.56	151,808	12		4,298	15	22	25
0.75 to <2.50	6,081	79	100	6,171	1.20	42,461	10		2,084	34	11	11
0.75 to <1.75	*5,190*	*66*	*100*	*5,264*	*1.08*	*35,107*	*10*		*1,695*	*32*	*8*	*9*
1.75 to <2.50	*891*	*13*	*100*	*907*	*1.89*	*7,354*	*12*		*389*	*43*	*3*	*2*
2.50 to <10.00	1,230	6	100	1,238	5.28	9,057	11		944	76	9	6
2.50 to < 5.00	*567*	*5*	*100*	*573*	*3.41*	*4,229*	*12*		*311*	*54*	*3*	*3*
5.00 to < 10.00	*663*	*1*	*100*	*665*	*6.90*	*4,828*	*10*		*633*	*95*	*6*	*3*
10.00 to <100.00	1,149	2	100	1,152	29.29	9,353	10		1,418	123	44	6
10.00 to <20.00	*456*	*2*	*100*	*457*	*14.32*	*4,100*	*10*		*582*	*127*	*9*	*2*
20.00 to <30.00	*16*	*—*	*100*	*17*	*24.42*	*154*	*11*		*29*	*176*	*1*	*—*
30.00 to <100.00	*677*	*—*	*100*	*678*	*39.51*	*5,099*	*10*		*807*	*119*	*34*	*4*
100.00 (default)	1,796	15	100	1,963	100.00	17,091	12		795	41	265	209
Subtotal (exposure class)	185,154	17,176	100	201,482	1.51	1,342,997	10		30,083	15	415	342
Total (all exposures classes)	345,793	121,535	64	416,302		21,230,538		0.86	99,001	24	2,575	2,949

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

NatWest Group

a	b	c	d	e	f	g	h	i	j	k	l	m
	Retail exposures – non-SME secured by immovable property											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	100 Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2021												
0.00 to <0.15	5,934	2,092	100	8,069	0.09	54,601	17		378	5	2	3
0.00 to <0.10	*2,398*	*1,260*	*100*	*3,688*	0.05	*23,194*	11		*61*	*2*	*—*	*1*
0.10 to <0.15	*3,536*	*832*	*99*	*4,381*	3.00	*31,407*	22		*317*	*7*	*2*	*2*
0.15 to <0.25	23,112	852	100	23,990	0.16	179,695	10		885	4	4	8
0.25 to <0.50	108,813	12,208	100	119,975	0.34	868,085	10		7,799	7	45	75
0.50 to <0.75	32,267	101	100	32,445	0.59	196,264	13		3,905	12	27	27
0.75 to <2.50	7,333	92	100	7,443	1.12	51,966	13		1,314	18	11	26
0.75 to <1.75	*6,511*	*78*	*100*	*6,604*	1.01	*44,320*	13		*1,138*	*17*	*9*	*21*
1.75 to <2.50	*822*	*14*	*100*	*839*	3.00	*7,646*	10		*176*	*21*	*2*	*5*
2.50 to <10.00	1,318	10	100	1,332	5.57	11,020	12		707	53	10	24
2.50 to < 5.00	*650*	*7*	*100*	*660*	*3.87*	*5,708*	*12*		*384*	*58*	*4*	*10*
5.00 to < 10.00	*668*	*3*	*100*	*672*	*7.23*	*5,312*	*11*		*323*	*48*	*6*	*14*
10.00 to <100.00	1,883	2	100	1,895	23.38	15,584	13		1,408	74	60	60
10.00 to <20.00	*983*	*2*	*100*	*985*	14.10	*8,625*	10		*542*	*55*	*15*	*20*
20.00 to <30.00	*318*	—	*100*	*327*	22.69	*2,709*	24		*465*	*143*	*17*	*3*
30.00 to <100.00	*582*	—	*100*	*583*	39.45	*4,250*	11		*401*	*69*	*28*	*37*
100.00 (default)	1,677	7	100	1,654	100.00	15,839	19		840	51	246	522
Subtotal (exposure class)	182,337	15,364	100	196,803	1.47	1,393,054	11		17,236	9	405	745
Total (all exposures classes)	351,477	113,064	64	416,483		21,786,184		0.89	82,102	20	2,226	3,518

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

	NatWest Group											
a	b	c	d	e	f	g	h	i	j	k	l	m
	Retail exposures – qualifying revolving											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2022												
0.00 to <0.15	56	6,175	100	11,069	0.04	10,051,253	53		185	2	3	9
0.00 to <0.10	*4*	*5,295*	*100*	*9,646*	*0.03*	*8,486,331*	*52*		*124*	*1*	*2*	*4*
0.10 to <0.15	*52*	*880*	*100*	*1,423*	*0.12*	*1,564,922*	*57*		*61*	*4*	*1*	*5*
0.15 to <0.25	172	228	100	474	0.17	157,583	64		32	7	1	7
0.25 to <0.50	305	1,556	100	1,518	0.36	1,546,088	60		173	11	4	12
0.50 to <0.75	803	5,943	100	1,648	0.60	1,481,549	68		319	19	7	17
0.75 to <2.50	1,553	6,917	100	3,189	1.40	2,788,727	70		1,223	38	34	50
0.75 to <1.75	*746*	*4,738*	*100*	*1,944*	*1.07*	*1,850,238*	*70*		*606*	*31*	*16*	*25*
1.75 to <2.50	*807*	*2,179*	*100*	*1,245*	*1.92*	*938,489*	*71*		*617*	*50*	*18*	*25*
2.50 to <10.00	1,886	827	100	2,429	4.65	1,057,028	74		2,244	92	89	130
2.50 to < 5.00	*1,167*	*656*	*100*	*1,594*	*3.56*	*780,990*	*73*		*1,188*	*74*	*43*	*58*
5.00 to < 10.00	*719*	*171*	*100*	*835*	*6.74*	*276,038*	*76*		*1,056*	*126*	*46*	*72*
10.00 to <100.00	212	35	100	265	20.99	142,149	72		521	197	43	36
10.00 to <20.00	*140*	*27*	*100*	*179*	*13.43*	*91,569*	*73*		*321*	*179*	*20*	*20*
20.00 to <30.00	—	—	*100*	*1*	*26.02*	*1,626*	*61*		*3*	*288*	—	—
30.00 to <100.00	*72*	*8*	*100*	*85*	*36.94*	*48,954*	*69*		*197*	*233*	*23*	*16*
100.00 (default)	314	297	100	325	100.00	355,921	78		412	127	240	240
Subtotal (exposure class)	5,301	21,978	100	20,917	2.67	17,580,298	61		5,109	24	421	501
Total (all exposures classes)	345,793	121,535	64	416,302		21,230,538		0.86	99,001	24	2,575	2,949

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

NatWest Group												
a	b	c	d	e	f	g	h	i	j	k	l	m
Retail exposures – qualifying revolving												
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2021												
0.00 to <0.15	10	5,881	100	10,711	0.04	9,937,607	53		167	2	2	12
0.00 to <0.10	—	*5,231*	100	*9,384*	0.03	*8,396,514*	52		*114*	*1*	*1*	*6*
0.10 to <0.15	*10*	*650*	100	*1,327*	0.11	*1,541,093*	56		*53*	*4*	*1*	*6*
0.15 to <0.25	193	390	100	603	0.17	424,973	66		39	7	1	5
0.25 to <0.50	272	1,237	100	1,487	0.36	1,564,726	59		158	11	3	14
0.50 to <0.75	789	5,997	100	1,656	0.60	1,534,182	68		306	18	7	18
0.75 to <2.50	1,451	6,954	100	3,141	1.40	2,988,218	70		1,144	36	31	66
0.75 to <1.75	*697*	*4,889*	100	*1,936*	1.07	*2,014,170*	69		*573*	*30*	*14*	*35*
1.75 to <2.50	*754*	*2,065*	100	*1,205*	1.94	*974,048*	71		*571*	*47*	*17*	*31*
2.50 to <10.00	1,677	811	100	2,229	4.57	1,112,717	74		1,973	89	76	148
2.50 to < 5.00	*1,076*	*657*	*100*	*1,507*	*3.55*	*822,517*	*73*		*1,126*	*75*	*39*	*78*
5.00 to < 10.00	*601*	*154*	*100*	*722*	*6.71*	*290,200*	*76*		*847*	*117*	*37*	*70*
10.00 to <100.00	205	38	100	273	22.89	174,714	72		518	190	44	56
10.00 to <20.00	*124*	*29*	100	*172*	13.63	*103,034*	73		*292*	*170*	*17*	*27*
20.00 to <30.00	—	—	100	*2*	25.49	*3,555*	63		*3*	*189*	—	—
30.00 to <100.00	*81*	*9*	100	*99*	38.83	*68,125*	70		*223*	*225*	*27*	*29*
100.00 (default)	250	280	100	256	100.00	300,227	83		245	95	194	196
Subtotal (exposure class)	4,847	21,588	100	20,356	2.38	18,037,364	60		4,550	22	358	515
Total (all exposures classes)	351,477	113,064	64	416,483		21,786,184		0.89	82,102	20	2,226	3,518

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

	NatWest Group											
a	b	c	d	e	f	g	h	i	j	k	l	m
	Retail exposures – SME other											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2022												
0.00 to <0.15	—	—	—	—	—	—	—		—	—	—	—
0.00 to <0.10	—	—	—	—	—	—	—		—	—	—	—
0.10 to <0.15	—	—	—	—	—	—	—		—	—	—	—
0.15 to <0.25	—	11	100	8	—	4,013	59		1	18	—	—
0.25 to <0.50	—	775	100	797	—	374,598	62		221	28	2	5
0.50 to <0.75	802	41	100	905	1	89,832	33		196	22	2	3
0.75 to <2.50	6,918	366	100	7,423	1	515,230	25		1,654	22	26	57
0.75 to <1.75	*5,651*	*146*	*100*	*5,891*	*1*	*330,073*	*22*		*1,081*	18	14	29
1.75 to <2.50	*1,267*	*220*	*100*	*1,532*	*2*	*185,157*	*36*		*573*	37	12	28
2.50 to <10.00	2,702	43	100	2,886	5	277,593	28		940	33	38	42
2.50 to < 5.00	*1,673*	*22*	*100*	*1,816*	*3*	*215,605*	*27*		*562*	31	18	21
5.00 to < 10.00	*1,029*	*21*	*100*	*1,070*	*7*	*61,988*	*29*		*378*	35	20	21
10.00 to <100.00	635	9	100	653	24	43,136	26		296	45	37	29
10.00 to <20.00	*328*	*6*	*100*	*341*	*14*	*23,615*	*30*		*155*	46	14	14
20.00 to <30.00	*15*	*—*	*—*	*14*	*23*	*646*	*30*		*8*	58	1	—
30.00 to <100.00	*292*	*3*	*100*	*298*	*36*	*18,875*	*21*		*133*	45	22	15
100.00 (default)	1,473	3	100	1,495	100	66,966	15		219	15	211	205
Subtotal (exposure class)	12,530	1,248	100	14,167	13.31	1,371,368	27		3,527	25	316	341
Total (all exposures classes)	345,793	121,535	64	416,302		21,230,538		0.86	99,001	24	2,575	2,949

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

NatWest Group												
a	b	c	d	e	f	g	h	i	j	k	l	m
Retail exposures – SME other												
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2021												
0.00 to <0.15	—	*77*	100	*136*	*0.14*	*19,371*	*72*		*24*	18	—	—
0.00 to <0.10	—	—	—	—	—	—	—		—	—	—	—
0.10 to <0.15	—	*77*	*100*	*136*	*0.14*	*19,371*	*72*		*24*	*18*	—	—
0.15 to <0.25	—	*11*	*100*	*8*	*0.17*	*3,950*	*60*		*1*	18	—	—
0.25 to <0.50	—	*861*	100	885	*0.32*	*387,953*	*63*		249	28	*2*	*5*
0.50 to <0.75	776	*45*	100	892	*0.63*	*91,130*	*33*		196	22	*2*	*2*
0.75 to <2.50	8,078	*352*	100	8,608	*1.24*	*542,942*	*22*		1,709	20	25	37
0.75 to <1.75	*6,794*	*144*	*100*	*7,058*	*1.06*	*359,088*	*20*		*1,168*	*17*	*15*	*18*
1.75 to <2.50	*1,284*	*208*	*100*	*1,550*	*2.04*	*183,854*	*33*		*541*	*35*	*10*	*19*
2.50 to <10.00	3,201	*55*	100	3,393	*4.66*	*288,144*	*26*		1,047	31	42	50
2.50 to < 5.00	*1,928*	*37*	*100*	*2,080*	*3.39*	*221,641*	*26*		*606*	*29*	*18*	*18*
5.00 to < 10.00	*1,273*	*18*	*100*	*1,313*	*6.67*	*66,503*	*27*		*441*	*34*	*24*	*32*
10.00 to <100.00	754	*10*	100	776	*25.47*	*52,437*	*24*		328	42	42	29
10.00 to <20.00	*384*	*6*	*100*	*397*	*14.04*	*26,363*	*29*		*175*	*44*	*16*	*14*
20.00 to <30.00	*6*	—	—	*6*	*28.36*	*327*	*30*		*3*	*61*	—	—
30.00 to <100.00	*364*	*4*	*100*	*373*	*37.61*	*25,747*	*19*		*150*	*40*	*26*	*15*
100.00 (default)	752	—	100	765	*100.00*	*36,750*	*24*		240	31	170	163
Subtotal (exposure class)	13,561	*1,411*	100	15,463	*8*	*1,422,677*	*24*		3,794	31	283	286
Total (all exposures classes)	351,477	113,064	64	416,483		*21,786,184*		0.89	82,102	20	2,226	3,518

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

	NatWest Group											
a	b	c	d	e	f	g	h	i	j	k	l	m
	Retail exposures – non-SME other											
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2022												
0.00 to <0.15	—	—	100	—	0.06	1	62		—	—	—	—
0.00 to <0.10	—	—	*100*	—	*0.06*	*1*	*62*		—	—	—	—
0.10 to <0.15	—	—	—	—	—	—	—		—	—	—	—
0.15 to <0.25	—	—	100	—	0.20	2	68		—	—	—	—
0.25 to <0.50	—	—	—	—	0.45	46	66		24	8,840	—	—
0.50 to <0.75	74	—	—	75	0.69	15,162	69		68	90	1	1
0.75 to <2.50	4,115	—	—	4,213	1.48	580,010	73		4,139	98	53	96
0.75 to <1.75	*2,679*	—	—	*2,742*	*1.15*	*449,560*	*71*		*2,441*	89	26	42
1.75 to <2.50	*1,436*	—	—	*1,471*	*2.09*	*130,450*	*77*		*1,698*	115	27	54
2.50 to <10.00	1,468	—	—	1,499	5.08	149,007	77		1,990	133	68	130
2.50 to < 5.00	*886*	—	—	*905*	*3.75*	*89,116*	*78*		*1,143*	126	29	*74*
5.00 to < 10.00	*582*	—	—	*594*	*7.11*	*59,891*	*77*		*847*	143	39	*56*
10.00 to <100.00	385	—	—	390	21.51	43,219	79		763	195	77	76
10.00 to <20.00	*264*	—	—	*269*	*13.59*	*27,993*	*78*		*467*	*173*	34	*42*
20.00 to <30.00	*3*	—	—	*3*	*22.98*	*98*	*45*		*9*	*313*	1	—
30.00 to <100.00	*118*	—	—	*118*	*39.58*	*15,128*	*80*		*287*	*244*	42	*34*
100.00 (default)	585	—	100	624	100.00	90,781	78		686	110	497	493
Subtotal (exposure class)	6,627	—	100	6,801	12.45	878,228	75		7,670	113	696	796
Total (all exposures classes)	345,793	121,535	64	416,302		21,230,538		0.86	99,001	24	2,575	2,949

UK CR6: IRB approach – Credit risk exposures by exposure class and PD range continued

NatWest Group

Retail exposures – non-SME other

a	b	c	d	e	f	g	h	i	j	k	l	m
PD range	On-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	Exposure weighted average CCF %	Exposure post CCF and post CRM £m	Exposure weighted average PD %	Number of obligors	Exposure weighted average LGD %	Exposure weighted average maturity (years)	Risk-weighted exposure amount after supporting factors £m	Density of risk-weighted exposure amount %	Expected loss amount £m	Value adjustments and provisions £m
31 December 2021												
0.00 to <0.15	—	—	100	—	0.13	4	71		—	—	—	—
0.00 to <0.10	—	—	—	—	—	—	—		—	—	—	—
0.10 to <0.15	—	—	*100*	—	*0.13*	*4*	*71*		—	—	—	—
0.15 to <0.25	—	—	—	—	0.17	3	75		—	—	—	—
0.25 to <0.50	38	—	—	39	0.36	6,864	74		18	47	—	—
0.50 to <0.75	108	—	—	109	0.68	19,461	70		69	63	1	—
0.75 to <2.50	3,967	—	—	4,059	1.44	575,602	72		3,578	88	43	114
0.75 to <1.75	*2,688*	—	—	*2,748*	*1.14*	*452,512*	*70*		*2,200*	*80*	*22*	*62*
1.75 to <2.50	*1,279*	—	—	*1,311*	*2.08*	*123,090*	*76*		*1,378*	*105*	*21*	*52*
2.50 to <10.00	1,356	—	—	1,384	5.03	142,913	76		1,654	120	53	92
2.50 to < 5.00	*822*	—	—	*839*	*3.72*	*85,462*	*77*		*974*	*116*	*24*	*59*
5.00 to < 10.00	*534*	—	—	*545*	*7.04*	*57,451*	*76*		*680*	*125*	*29*	*33*
10.00 to <100.00	395	—	—	395	25.21	47,592	77		701	177	77	46
10.00 to <20.00	*246*	—	—	*250*	13.88	*27,683*	76		*385*	*154*	*27*	*20*
20.00 to <30.00	*4*	—	—	*4*	22.88	*171*	47		*5*	*117*	—	—
30.00 to <100.00	*145*	—	—	*141*	45.32	*19,738*	79		*311*	*220*	*50*	*26*
100.00 (default)	464	—	—	486	100.00	70,213	82		428	88	366	419
Subtotal (exposure class)	6,328	—	100	6,472	11.04	862,652	74		6,448	100	540	671
Total (all exposures classes)	351,477	113,064	64	416,483		21,786,184		0.89	82,102	20	2,226	3,518

UK CR6-A: Scope of the use of IRB and SA approaches

The table below shows the following for each AIRB exposure class: a. the percentage of the total exposure value subject to the permanent partial use of standardised approach (column c), b. the percentage of total exposure subject to the IRB approach (column d), and c. the percentage of total exposures subject to a roll-out plan (column e). The aggregate exposure value of IRB and SA exposures (as shown in column b) uses the leverage ratio exposure methodology. This template excludes counterparty credit risk (CCR) exposures and securitisation exposures.

		NatWest Group				
		Exposure value as defined in Article 166 CRR for exposures subject to IRB approach £m	Total exposure value for exposures subject to the Standardised approach and to the IRB approach £m	Percentage of total exposure value subject to the permanent partial use of the SA (%)	Percentage of total exposure value subject to IRB Approach (%)	Percentage of total exposure value subject to a roll-out plan(1) (%)
		a	b	c	d	e
1	Central governments or central banks	**41,459**	**164,583**	**75.12**	**24.88**	**—**
1.1	*Of which Regional governments or local authorities*	**2,448**	**2,292**	**5.92**	**94.08**	**—**
1.2	*Of which Public sector entities*	**—**	**—**	**—**	**—**	**—**
2	Institutions	**11,215**	**11,910**	**9.69**	**90.31**	**—**
3	Corporates	**148,612**	**169,549**	**15.59**	**84.41**	**—**
3.1	*Of which Corporates - Specialised lending, excluding slotting approach*	**—**	**1**	**100.00**	**—**	**—**
3.2	*Of which Corporates - Specialised lending under slotting approach*	**19,241**	**19,290**	**9.23**	**90.77**	**—**
4	Retail	**244,465**	**233,941**	**5.20**	**94.80**	**—**
4.1	*Of which Retail – Secured by real estate SMEs*	**1,098**	**1,028**	**1.47**	**98.53**	**—**
4.2	*Of which Retail – Secured by real estate non-SMEs*	**201,482**	**203,508**	**5.02**	**94.98**	**—**
4.3	*Of which Retail – Qualifying revolving*	**20,917**	**9,488**	**3.09**	**96.91**	**—**
4.4	*Of which Retail – Other SMEs*	**14,167**	**13,711**	**9.27**	**90.73**	**—**
4.5	*Of which Retail – Other non-SMEs*	**6,801**	**6,205**	**6.03**	**93.97**	**—**
5	Equity	**804**	**1,547**	**48.00**	**52.00**	**—**
6	Other non-credit obligation assets	**6,419**	**6,374**	**13.15**	**86.85**	**—**
7	Total	**452,974**	**587,904**	**28.06**	**71.94**	**—**

(1) Exposures subject to the phased withdrawal from the Republic of Ireland are excluded.

UK CR7: IRB approach – Effect on the RWAs of credit derivatives used as CRM techniques

The table below shows the effect of credit derivatives on the calculation of IRB approach capital requirements by AIRB exposure class. The table excludes counterparty credit risk, securitisations, equity exposures and non-credit obligation assets.

		NatWest Group			
		31 December 2022		31 December 2021	
		a	b	a	b
		Pre-credit derivatives RWAs £m	Actual RWAs £m	Pre-credit derivatives RWAs £m	Actual RWAs £m
5	Exposures under AIRB	**99,105**	**99,001**	82,211	82,102
6	Central governments and central banks	**899**	**899**	2,851	2,851
7	Institutions	**2,887**	**2,888**	2,205	2,205
8	Corporates	**48,502**	**48,397**	44,744	44,635
8.1	*Of which: SME*	***7,714***	***7,658***	*6,511*	*6,511*
8.2	*Of which: Specialised lending (2)*	**—**	**—**	—	—
8.3	*Of which: Other*	***40,788***	***40,739***	*38,233*	*38,124*
9	Retail	**46,817**	**46,817**	32,411	32,411
9.1	*Of which: Secured by real estate SME - Secured by immovable property collateral*	***428***	***428***	*383*	*383*
9.2	*Of which: Secured by real estate non-SME - Secured by immovable property collateral*	***30,083***	***30,083***	*17,236*	*17,236*
9.3	*Of which: Qualifying revolving*	***5,109***	***5,109***	*4,550*	*4,550*
9.4	*Of which: Other SME*	***3,527***	***3,527***	*3,794*	*3,794*
9.5	*Of which: Other non-SME*	***7,670***	***7,670***	*6,448*	*6,448*
10	Total	**99,105**	**99,001**	82,211	82,102

(1) Rows 1-4.2 are not presented as NatWest Group does not use FIRB to calculate capital requirements for IRB exposures.
(2) Specialised lending exposures under the slotting approach are excluded.

- The increase within Retail - secured by real estate non-SME - secured by immoveable property collateral was primarily due to adjustments as a result of new regulations applicable to IRB models, from 1 January 2022.

UK CR7-A: IRB approach – Disclosure of the extent of the use of CRM techniques

The table below provides a view of the CRR credit risk mitigation techniques used in the capital requirements calculation for IRB exposures. These are presented by AIRB exposure class only as NatWest Group does not apply the FIRB method. The table excludes counterparty credit risk, securitisations and non-credit obligation assets.

		NatWest Group												
		Credit risk mitigation techniques												
		Funded credit protection (FCP)									Unfunded credit protection (UFCP)		Credit risk mitigation methods in the calculation of RWAs	
	Total exposures £m	Part of exposures covered by financial collaterals %	Part of exposures covered by other eligible collaterals %	Part of exposures covered by immovable property collaterals %	Part of exposures covered by receivables %	Part of exposures covered by other physical collaterals %	Part of exposures covered by other funded credit protection %	Part of exposures covered by cash on deposit %	Part of exposures covered by life insurance policies %	Part of exposures covered by instruments held by a third party %	Part of exposures covered by guarantees %	Part of exposures covered by credit derivatives %	RWA post all assigned to the obligor exposure class £m	RWA with substitution effects £m
31 December 2022	a	b	c	d	e	f	g	h	i	j	k	l	m	n
1 Central governments and central banks	**41,330**	**0.31**	**0.08**	**0.08**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**1,603**	**899**
2 Institutions	**9,183**	**22.36**	**1.09**	**0.96**	**—**	**0.12**	**—**	**—**	**—**	**—**	**5.37**	**—**	**3,405**	**2,888**
3 Corporates	**121,324**	**11.17**	**130.96**	**93.97**	**6.41**	**30.57**	**0.01**	**—**	**—**	**0.01**	**2.40**	**0.69**	**61,300**	**48,397**
3.1 *Of which: SME*	***17,541***	***9.01***	***509.91***	***441.06***	***17.05***	***51.80***	***0.01***	**—**	**—**	***0.01***	***7.19***	**—**	***8,106***	***7,658***
3.2 *Of which: Specialised lending*	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
3.3 *Of which: Other*	***103,783***	***11.53***	***66.91***	***35.31***	***4.62***	***26.98***	***0.01***	**—**	**—**	***0.01***	***1.59***	***0.80***	***53,194***	***40,739***
4 Retail	**244,465**	**—**	**186.12**	**186.12**	**—**	**—**	**—**	**—**	**—**	**—**	**2.56**	**—**	**18,981**	**46,817**
4.1 *Of which: Immovable property SME*	***1,098***	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	***1.39***	**—**	***425***	***428***
4.2 *Of which: Immovable property non-SME*	***201,482***	**—**	***225.82***	***225.82***	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	***16,440***	***30,083***
4.3 *Of which: Qualifying revolving*	***20,917***	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	***542***	***5,109***
4.4 *Of which: Other SMEs*	***14,167***	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	***43.99***	**—**	***171***	***3,527***
4.5 *Of which: Other non-SME*	***6,801***	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	***1,403***	***7,670***
5 Total	**416,302**	**3.78**	**147.49**	**136.71**	**1.87**	**8.91**	**—**	**—**	**—**	**—**	**2.32**	**0.20**	**85,289**	**99,001**

UK CR7-A: IRB approach – Disclosure of the extent of the use of CRM techniques continued

	A-IRB	NatWest Group													
			Credit risk mitigation techniques											Credit risk mitigation methods in the calculation of RWAs	
			Funded credit protection (FCP)									Unfunded credit protection (UFCP)			
		Total exposures £m	Part of exposures covered by financial collaterals %	Part of exposures covered by other eligible collaterals %	Part of exposures covered by immovable property collaterals %	Part of exposures covered by receivables %	Part of exposures covered by other physical collaterals %	Part of exposures covered by other funded credit protection %	Part of exposures covered by cash on deposit %	Part of exposures covered by life insurance policies %	Part of exposures covered by instruments held by a third party %	Part of exposures covered by guarantees %	Part of exposures covered by credit derivatives %	RWA post all assigned to the obligor exposure class £m	RWA with substitution effects £m
		a	b	c	d	e	f	g	h	i	j	k	l	m	n
6	Specialised lending under the slotting approach	19,219	0.34	128.92	123.87	—	5.05	0.54	—	—	0.54	2.66	—	12,400	12,330
7	Equity Exposures	676	—	—	—	—	—	—	—	—	—	—	—	1,301	1,306
8	Total	19,895	0.33	124.54	119.66	—	4.88	0.52	—	—	0.52	2.57	—	13,701	13,636

UK CR9: IRB approach – Back-testing of PD per exposure class (fixed PD scale)

The table below provides an overview of credit risk model performance, demonstrated by the analysis of average PDs. The table excludes counterparty credit risk, securitisation positions, other non-credit obligation assets and equity exposures. Exposures calculated under the supervisory slotting approach (corporate specialised lending) are also excluded.

		NatWest Group					
Exposure class	PD range	Number of Obligors at the end of the Previous Year	Of which: number of obligors which defaulted in the year	Observed average default rate (%)	Exposure weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
a	b	c	d	e	f	g	h
Central Governments & Central Banks	0.00 to <0.15	58	—	—	0.01	0.02	—
	0.00 to <0.10	*58*	—	—	*0.01*	*0.02*	—
	0.10 to <0.15	—	—	*n/a*	*n/a*	*n/a*	—
	0.15 to <0.25	1	—	—	0.23	0.23	—
	0.25 to <0.50	2	—	—	0.32	0.32	—
	0.50 to <0.75	—	—	n/a	n/a	n/a	—
	0.75 to <2.50	—	—	n/a	n/a	n/a	—
	0.75 to <1.75	—	—	*n/a*	*n/a*	*n/a*	—
	1.75 to <2.50	—	—	*n/a*	*n/a*	*n/a*	—
	2.50 to <10.00	—	—	n/a	n/a	n/a	—
	2.50 to <5.00	—	—	*n/a*	*n/a*	*n/a*	—
	5.00 to <10.0	—	—	*n/a*	*n/a*	*n/a*	—
	10.00 to <100.00	—	—	n/a	n/a	n/a	20.00
	10.00 to <20.00	—	—	*n/a*	*n/a*	*n/a*	—
	20.00 to <30.00	—	—	*n/a*	*n/a*	*n/a*	*20.00*
	30.00 to <100.00	—	—	*n/a*	*n/a*	*n/a*	—
	100.00 (Default)	1	n/a	n/a	100.00	100.00	n/a

		NatWest Group					
Exposure class	PD range	Number of Obligors at the end of the Previous Year	Of which: number of obligors which defaulted in the year	Observed average default rate (%)	Exposure weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
a	b	c	d	e	f	g	h
Institutions	0.00 to <0.15	283	—	—	0.10	0.07	—
	0.00 to <0.10	*202*	—	—	*0.06*	*0.06*	—
	0.10 to <0.15	*81*	—	—	*0.11*	*0.11*	—
	0.15 to <0.25	181	—	—	0.18	0.19	0.08
	0.25 to <0.50	104	1	0.96	0.37	0.37	0.19
	0.50 to <0.75	27	—	—	0.64	0.64	—
	0.75 to <2.50	46	1	2.17	1.31	1.30	0.74
	0.75 to <1.75	*36*	—	—	*1.16*	*1.16*	*0.45*
	1.75 to <2.50	*10*	*1*	*10.00*	*1.81*	*1.81*	*2.00*
	2.50 to <10.00	21	—	—	2.88	3.33	—
	2.50 to <5.00	*20*	—	—	*2.82*	*3.24*	—
	5.00 to <10.0	*1*	—	—	*5.12*	*5.12*	—
	10.00 to <100.00	4	—	—	28.71	20.04	—
	10.00 to <20.00	*3*	—	—	*14.48*	*13.07*	—
	20.00 to <30.00	—	—	*n/a*	*n/a*	*n/a*	—
	30.00 to <100.00	*1*	—	—	*40.96*	*40.96*	—
	100.00 (Default)	1	n/a	n/a	100.00	100.00	n/a

For the notes to these tables refer to page 107.

UK CR9: IRB approach – Back-testing of PD per exposure class (fixed PD scale) continued

Exposure class	PD range	NatWest Group Number of Obligors at the end of the Previous Year	Of which: number of obligors which defaulted in the year	Observed average default rate (%)	Exposure weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
a	b	c	d	e	f	g	h
Corporates	0.00 to <0.15	4,692	1	0.02	0.05	0.05	0.02
	0.00 to <0.10	*4,032*	*1*	*0.02*	*0.05*	*0.04*	*0.02*
	0.10 to <0.15	*660*	*—*	*—*	*0.11*	*0.11*	*0.03*
	0.15 to <0.25	2,746	8	0.29	0.18	0.20	0.10
	0.25 to <0.50	8,098	30	0.37	0.39	0.40	0.20
	0.50 to <0.75	5,221	38	0.73	0.64	0.64	0.39
	0.75 to <2.50	15,434	126	0.82	1.33	1.30	0.65
	0.75 to <1.75	*11,105*	*84*	*0.76*	*1.10*	*1.10*	*0.58*
	1.75 to <2.50	*4,329*	*42*	*0.97*	*1.81*	*1.81*	*0.81*
	2.50 to <10.00	7,483	200	2.67	3.54	3.40	1.85
	2.50 to <5.00	*6,126*	*117*	*1.91*	*2.89*	*2.86*	*1.38*
	5.00 to <10.0	*1,357*	*83*	*6.12*	*5.76*	*5.84*	*4.13*
	10.00 to <100.00	825	111	13.45	15.13	15.34	9.59
	10.00 to <20.00	*623*	*68*	*10.91*	*11.73*	*12.12*	*7.76*
	20.00 to <30.00	*169*	*35*	*20.71*	*21.44*	*22.22*	*13.93*
	30.00 to <100.00	*33*	*8*	*24.24*	*40.95*	*40.94*	*16.59*
	100.00 (Default)	1,593	n/a	n/a	100.00	100.00	n/a

Exposure class	PD range	NatWest Group Number of Obligors at the end of the Previous Year	Of which: number of obligors which defaulted in the year	Observed average default rate (%)	Exposure weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
a	b	c	d	e	f	g	h
Exposure to Corporates - SME	0.00 to <0.15	89	—	—	0.10	0.09	—
	0.00 to <0.10	*32*	*—*	*—*	*0.08*	*0.06*	*—*
	0.10 to <0.15	*57*	*—*	*—*	*0.12*	*0.12*	*—*
	0.15 to <0.25	1,395	7	0.50	0.21	0.21	0.18
	0.25 to <0.50	5,749	25	0.43	0.40	0.40	0.22
	0.50 to <0.75	3,635	24	0.66	0.64	0.64	0.37
	0.75 to <2.50	8,798	68	0.77	1.29	1.27	0.67
	0.75 to <1.75	*6,550*	*46*	*0.70*	*1.08*	*1.08*	*0.59*
	1.75 to <2.50	*2,248*	*22*	*0.98*	*1.81*	*1.81*	*0.86*
	2.50 to <10.00	3,729	116	3.11	3.47	3.54	2.13
	2.50 to <5.00	*2,947*	*74*	*2.51*	*2.89*	*2.93*	*1.69*
	5.00 to <10.0	*782*	*42*	*5.37*	*5.74*	*5.82*	*3.76*
	10.00 to <100.00	457	62	13.57	15.51	15.12	9.38
	10.00 to <20.00	*343*	*40*	*11.66*	*12.64*	*12.18*	*7.64*
	20.00 to <30.00	*101*	*16*	*15.84*	*23.63*	*21.79*	*12.96*
	30.00 to <100.00	*13*	*6*	*46.15*	*40.92*	*40.90*	*23.02*
	100.00 (Default)	1,029	n/a	n/a	100.00	100.00	n/a

For the notes to these tables refer to page 107.

UK CR9: IRB approach – Back-testing of PD per exposure class (fixed PD scale) continued

		NatWest Group					
Exposure class	PD range	Number of Obligors at the end of the Previous Year	Of which: number of obligors which defaulted in the year	Observed average default rate (%)	Exposure weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
a	b	c	d	e	f	g	h
Exposure to Corporates - Other	0.00 to <0.15	4,603	1	0.02	0.05	0.05	0.02
	0.00 to <0.10	*4,000*	*1*	*0.03*	*0.05*	*0.04*	*0.02*
	0.10 to <0.15	*603*	*—*	*—*	*0.11*	*0.11*	*0.03*
	0.15 to <0.25	1,352	1	0.07	0.18	0.19	0.04
	0.25 to <0.50	2,375	5	0.21	0.38	0.40	0.17
	0.50 to <0.75	1,616	14	0.87	0.64	0.64	0.49
	0.75 to <2.50	6,770	58	0.86	1.35	1.34	0.62
	0.75 to <1.75	*4,650*	*38*	*0.82*	*1.11*	*1.12*	*0.55*
	1.75 to <2.50	*2,120*	*20*	*0.94*	*1.81*	*1.81*	*0.73*
	2.50 to <10.00	3,810	84	2.21	3.57	3.28	1.53
	2.50 to <5.00	*3,226*	*43*	*1.33*	*2.90*	*2.81*	*1.06*
	5.00 to <10.0	*584*	*41*	*7.02*	*5.77*	*5.86*	*4.72*
	10.00 to <100.00	370	49	13.24	15.00	15.61	10.33
	10.00 to <20.00	*282*	*28*	*9.93*	*11.37*	*12.06*	*8.26*
	20.00 to <30.00	*68*	*19*	*27.94*	*20.98*	*22.85*	*17.52*
	30.00 to <100.00	*20*	*2*	*10.00*	*40.96*	*40.96*	*10.84*
	100.00 (Default)	575	n/a	n/a	100.00	100.00	n/a

For the notes to this table refer to page 107.

UK CR9: IRB approach – Back-testing of PD per exposure class (fixed PD scale) continued

Exposure class	PD range	NatWest Group					
		Number of Obligors at the end of the Previous Year	Of which: number of obligors which defaulted in the year	Observed average default rate (%)	Exposure weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
a	b	c	d	e	f	g	h
Retail	0.00 to <0.15	9,590,282	21,277	0.22	0.07	0.04	0.07
	0.00 to <0.10	*9,074,920*	*18,299*	*0.20*	*0.05*	*0.03*	*0.06*
	0.10 to <0.15	*515,362*	*2,978*	*0.58*	*0.12*	*0.13*	*0.19*
	0.15 to <0.25	1,089,874	4,806	0.44	0.20	0.19	0.22
	0.25 to <0.50	2,305,116	15,989	0.69	0.36	0.36	0.38
	0.50 to <0.75	1,788,638	14,021	0.78	0.59	0.60	0.53
	0.75 to <2.50	4,070,506	77,676	1.91	1.25	1.31	1.34
	0.75 to <1.75	*3,219,825*	*51,767*	*1.61*	*1.10*	*1.11*	*1.16*
	1.75 to <2.50	*850,681*	*25,909*	*3.05*	*2.10*	*2.07*	*2.01*
	2.50 to <10.00	1,467,594	93,997	6.40	4.84	4.35	4.16
	2.50 to <5.00	*1,084,184*	*54,623*	*5.04*	*3.59*	*3.45*	*3.06*
	5.00 to <10.0	*383,410*	*39,374*	*10.27*	*6.80*	*6.91*	*6.65*
	10.00 to <100.00	269,414	71,555	26.56	21.82	23.78	22.93
	10.00 to <20.00	*155,581*	*29,346*	*18.86*	*14.06*	*13.72*	*13.73*
	20.00 to <30.00	*55,061*	*16,139*	*29.31*	*23.60*	*23.87*	*22.45*
	30.00 to <100.00	*58,772*	*26,070*	*44.36*	*49.76*	*50.31*	*46.73*
	100.00 (Default)	405,718	n/a	n/a	100.00	100.00	n/a

Exposure class	PD range	NatWest Group					
		Number of Obligors at the end of the Previous Year	Of which: number of obligors which defaulted in the year	Observed average default rate (%)	Exposure weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
a	b	c	d	e	f	g	h
Exposure to Retail - non-SME secured by immovable property collateral	0.00 to <0.15	79,474	120	0.15	0.09	0.09	0.12
	0.00 to <0.10	*48,859*	*61*	*0.12*	*0.07*	*0.07*	*0.07*
	0.10 to <0.15	*30,615*	*59*	*0.19*	*0.12*	*0.12*	*0.15*
	0.15 to <0.25	304,131	706	0.23	0.21	0.20	0.16
	0.25 to <0.50	635,872	1,874	0.29	0.36	0.36	0.21
	0.50 to <0.75	180,708	726	0.40	0.59	0.60	0.31
	0.75 to <2.50	49,721	783	1.57	1.12	1.16	0.85
	0.75 to <1.75	*43,493*	*621*	*1.43*	*1.02*	*1.04*	*0.75*
	1.75 to <2.50	*6,228*	*162*	*2.60*	*2.06*	*2.05*	*1.52*
	2.50 to <10.00	10,061	725	7.21	5.52	5.47	4.66
	2.50 to <5.00	*5,272*	*326*	*6.18*	*3.87*	*3.83*	*3.66*
	5.00 to <10.0	*4,789*	*399*	*8.33*	*7.22*	*7.27*	*5.69*
	10.00 to <100.00	12,023	1,930	16.05	18.73	18.17	15.85
	10.00 to <20.00	*8,146*	*1,028*	*12.62*	*14.39*	*14.16*	*12.66*
	20.00 to <30.00	*3,149*	*569*	*18.07*	*23.44*	*23.43*	*18.36*
	30.00 to <100.00	*728*	*333*	*45.74*	*39.70*	*40.29*	*26.56*
	100.00 (Default)	12,261	n/a	n/a	100.00	100.00	n/a

For the notes to these tables refer to page 107.

UK CR9: IRB approach – Back-testing of PD per exposure class (fixed PD scale) continued

Exposure class	PD range	NatWest Group					
		Number of Obligors at the end of the Previous Year	Of which: number of obligors which defaulted in the year	Observed average default rate (%)	Exposure weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
a	b	c	d	e	f	g	h
Exposure to Retail - Qualifying revolving	0.00 to <0.15	9,510,805	21,157	0.22	0.04	0.04	0.07
	0.00 to <0.10	*9,026,060*	*18,238*	*0.20*	*0.03*	*0.03*	*0.06*
	0.10 to <0.15	*484,745*	*2,919*	*0.60*	*0.13*	*0.13*	*0.17*
	0.15 to <0.25	764,459	4,048	0.53	0.19	0.18	0.24
	0.25 to <0.50	1,301,635	12,251	0.94	0.36	0.36	0.44
	0.50 to <0.75	1,500,254	11,896	0.79	0.59	0.59	0.53
	0.75 to <2.50	2,906,685	54,449	1.87	1.39	1.29	1.34
	0.75 to <1.75	*2,283,940*	*36,434*	*1.60*	*1.15*	*1.09*	*1.18*
	1.75 to <2.50	*622,745*	*18,015*	*2.89*	*2.06*	*2.04*	*1.89*
	2.50 to <10.00	1,034,573	60,674	5.86	4.58	4.28	3.97
	2.50 to <5.00	*777,672*	*37,918*	*4.88*	*3.57*	*3.43*	*2.94*
	5.00 to <10.0	*256,901*	*22,756*	*8.86*	*6.69*	*6.87*	*6.55*
	10.00 to <100.00	160,517	40,339	25.13	23.27	22.89	22.43
	10.00 to <20.00	*95,555*	*16,625*	*17.40*	*13.35*	*13.51*	*13.39*
	20.00 to <30.00	*32,565*	*9,074*	*27.86*	*24.11*	*24.13*	*22.86*
	30.00 to <100.00	*32,397*	*14,640*	*45.19*	*53.60*	*49.29*	*46.86*
	100.00 (Default)	287,387	n/a	n/a	100.00	100.00	n/a

Exposure class	PD range	NatWest Group					
		Number of Obligors at the end of the Previous Year	Of which: number of obligors which defaulted in the year	Observed average default rate (%)	Exposure weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
a	b	c	d	e	f	g	h
Exposure to Retail - SME Other	0.00 to <0.15	—	—	n/a	n/a	n/a	0.08
	0.00 to <0.10	—	—	*n/a*	*n/a*	*n/a*	*0.04*
	0.10 to <0.15	—	—	*n/a*	*n/a*	*n/a*	*0.08*
	0.15 to <0.25	21,283	52	0.24	0.21	0.21	0.20
	0.25 to <0.50	367,559	1,864	0.51	0.33	0.35	0.40
	0.50 to <0.75	89,004	1,058	1.19	0.63	0.64	0.72
	0.75 to <2.50	543,808	13,395	2.46	1.24	1.37	1.39
	0.75 to <1.75	*412,650*	*8,928*	*2.16*	*1.08*	*1.13*	*1.15*
	1.75 to <2.50	*131,158*	*4,467*	*3.41*	*2.10*	*2.11*	*2.05*
	2.50 to <10.00	284,923	23,120	8.11	4.68	4.19	4.25
	2.50 to <5.00	*218,452*	*11,726*	*5.37*	*3.46*	*3.36*	*3.04*
	5.00 to <10.0	*66,471*	*11,394*	*17.14*	*6.55*	*6.90*	*7.39*
	10.00 to <100.00	50,668	18,584	36.68	25.74	24.73	22.38
	10.00 to <20.00	*25,061*	*7,162*	*28.58*	*13.79*	*13.91*	*14.98*
	20.00 to <30.00	*11,842*	*4,559*	*38.50*	*23.85*	*23.82*	*22.71*
	30.00 to <100.00	*13,765*	*6,863*	*49.86*	*49.97*	*45.21*	*40.33*
	100.00 (Default)	37,201	n/a	n/a	100.00	100.00	n/a

(1) Exposure to Retail – SME other includes all Retail SME exposure, including Exposure to Retail – SME secured by immovable property collateral.

For the remaining notes to these tables refer to page 107.

UK CR9: IRB approach – Back-testing of PD per exposure class (fixed PD scale) continued

		NatWest Group					
Exposure class	PD range	Number of Obligors at the end of the Previous Year	Of which: number of obligors which defaulted in the year	Observed average default rate (%)	Exposure weighted average PD (%)	Average PD (%)	Average historical annual default rate (%)
a	b	c	d	e	f	g	h
Exposure to Retail - non-SME other	0.00 to <0.15	3	—	—	0.10	0.10	—
	0.00 to <0.10	*1*	—	—	*0.06*	*0.06*	—
	0.10 to <0.15	*2*	—	—	*0.12*	*0.12*	—
	0.15 to <0.25	1	—	—	0.19	0.19	—
	0.25 to <0.50	50	—	—	0.46	0.45	0.66
	0.50 to <0.75	18,672	341	1.83	0.69	0.69	0.89
	0.75 to <2.50	570,292	9,049	1.59	1.44	1.33	1.34
	0.75 to <1.75	*479,742*	*5,784*	*1.21*	*1.25*	*1.16*	*1.03*
	1.75 to <2.50	*90,550*	*3,265*	*3.61*	*2.17*	*2.23*	*2.87*
	2.50 to <10.00	138,037	9,478	6.87	5.05	5.15	5.35
	2.50 to <5.00	*82,788*	*4,653*	*5.62*	*3.75*	*3.85*	*4.30*
	5.00 to <10.0	*55,249*	*4,825*	*8.73*	*7.14*	*7.11*	*6.94*
	10.00 to <100.00	46,206	10,702	23.16	24.73	27.28	28.24
	10.00 to <20.00	*26,819*	*4,531*	*16.89*	*13.68*	*14.16*	*14.92*
	20.00 to <30.00	*7,505*	*1,937*	*25.81*	*23.62*	*22.99*	*22.72*
	30.00 to <100.00	*11,882*	*4,234*	*35.63*	*59.15*	*59.59*	*53.72*
	100.00 (Default)	68,869	n/a	n/a	100.00	100.00	n/a

(1) Number of obligors as at 31 December 2021 includes all non-defaulted obligors with any credit obligation.
(2) The number of obligors that defaulted during 2022 is based on the new regulatory definition of default implemented from 1 January 2022, whereas the non-defaulted population as at 31 December 2021 is based on the previous definition of default.
(3) Due to specific data exclusions used for model back-testing, the values reported in table UK CR9 do not fully reconcile with table UK CR6.
(4) UBIDAC exposures are not included due to the reversion to the standardised approach during 2022.
(5) NatWest Group has an established temporary model adjustment (TMA) framework in place. TMAs are used to increase RWA and/or EL where material underestimation is identified. TMAs are regularly reviewed until underlying model deficiencies have been remediated.
(6) The total number of obligors with short-term contracts (where residual maturity is less than 12 months) as at 31 December 2022 was approximately 18.6 million, representing 88% of total obligors. Of the total short term contracts, the majority (94%) were in the Retail QRRE class. The overall numbers include approximately 50,000 obligors residing in the Corporate - SME and Corporate – Others exposure classes accounting for 83%, of the total Wholesale obligors.
(7) NatWest Group uses an approach with no overlapping windows in the calculation of Wholesale long-run average PD rates.
(8) Specialised lending exposures are not reported as NatWest Group uses the supervisory slotting approach for this portfolio.

UK CRE: Qualitative disclosure requirements related to IRB approach

Introduction

There are three approaches available to calculate RWAs. These are:

- Standardised approach.
- Foundation internal ratings based (FIRB) approach.
- Advanced internal ratings based (AIRB) approach.

The CRR establishes the standardised approach as the method for banks to calculate RWAs for credit and counterparty credit risk.

To use the more complex FIRB or AIRB approaches, banks must gain regulatory permission. NatWest Group has been granted permission by local and European regulators to use the AIRB approach to calculate RWAs for the majority of its credit and counterparty credit risk exposures.

NatWest Group does not use the FIRB approach. Therefore, in these disclosures, IRB refers to the AIRB approach.

The IRB permission allows NatWest Group to use its own estimates for the following inputs to the regulatory formula used to calculate RWAs:

- PD and LGD for credit risk and counterparty credit risk.
- EAD for credit risk.

EAD for counterparty credit risk is estimated in accordance with NatWest Group's internal model method permission.

In the case of specialised lending to project finance and income-producing real estate customers, the IRB supervisory slotting methodology is used to calculate RWAs.

NatWest Group uses the standardised approach for certain portfolios on a permanent basis; for low default/data portfolios where modelling is not suitable and for immaterial/run-off portfolios. Additionally, NatWest Group uses the standardised approach for exposures which are subject to sequential implementation of the IRB approach (IRB rollout plan).

Advanced IRB models

NatWest Group uses credit risk models not only to calculate RWAs under the IRB approach but also to support risk assessments in the credit approval process as well as ongoing credit risk management, monitoring and reporting.

NatWest Group develops credit risk models for both Retail and Wholesale customers. Retail models are automated and applied across a portfolio of products. Wholesale models generally rely on the input of customer data as part of the credit risk management process – usually at the time of the customer's annual review – and permits the use of expert judgment overrides, which are subject to Credit Risk approval.

In line with all firms with permissions to use the IRB approach, NatWest Group is currently undertaking a programme of model and rating system development, in order to align with new regulations which came into force on 1 January 2022. The PRA have notified firms that they should submit new models for approval at prescribed dates per model group.

Retail IRB models

Probability of default/customer credit grade models

- PD models assess the probability that a customer will fail to honour their credit obligations in the next 12 months.
- NatWest Group assigns a score to each customer account and this is used across the businesses to support decision making and portfolio management. This score is used as an input into the PD model.
- Retail PD models are currently point-in-time by design, meaning they predict the probability of default under economic conditions at a given point-in-time. They are typically developed applying logistic regression techniques using a range of customer and account data across portfolios, as well as data from credit bureaux.
- Different models are developed for different product types, with further distinctions based on other criteria such as whether a customer also has a current account with NatWest Group. All Retail PD models produce both a best estimate measure, used for portfolio reporting and forecasting, and a conservative estimate, which is an input to RWA calculations. The conservative estimate is designed to consider normal volatility in actual default rates and is floored at 0.03%, as mandated by regulation.
- All Retail PD models are regularly monitored for accuracy, discrimination and stability.

Loss given default models

- LGD models estimate the amount of exposure that will not be recovered by NatWest Group in the event of customer default.
- These models are developed by product type using internal loss data reflecting the collections and recoveries processes. They use a combination of borrower and facility characteristics and take account of credit risk mitigants, including collateral.
- As LGD represents economic loss, the estimate also incorporates the cost of collections and the impact of discounting to account for delays in recovery. In accordance with regulatory requirements, the estimates are calibrated to reflect loss rates expected during an economic downturn.

Exposure at default models

- EAD models estimate the utilisation of a credit facility at the time of a customer's default, recognising that further drawings on unused credit facilities may be made prior to default.
- Historical data on limit utilisation, in the period prior to customer default, is used for estimation and calibration. EAD for revolving products (for example credit cards and current accounts) has a more material anticipation of further drawings.
- As required by regulation, EAD estimates are set to be no lower than the current balance and reflect economic downturn conditions.

UK CRE: Qualitative disclosure requirements related to IRB approach continued

The table below presents an overview of the Retail IRB models used to calculate RWAs for Retail customers and small business brands. Retail models are statistical models developed using logistic or linear regression techniques.

Portfolio	RWAs (£m)	Model type	Number of models	IRB exposure class	IRB model segmentation	Model characteristics
Mortgages	30,084	PD	3	Retail – Secured by real estate non-SME	There are separate models for standard and non-standard products.	Key model drivers include the internal behaviour score of the related current account and loan-to-value (LTV).
		LGD	2			LGD is estimated by modelling the probability of possession given default and shortfall given repossession, using key drivers such as LTV. Regulatory floors are applied at the appropriate level.
		EAD	3			EAD estimate is determined by account limit.
Personal unsecured loans and current accounts	8,745	PD	3	Retail – Other non-SME Retail – Qualifying revolving	Product level PD and EAD models are in place, with loans common across all regions. LGD models are combined across products.	Model estimates are mainly based on internal behavioural data, with some also using external credit bureau data.
		LGD	1			Models estimate the probability of loss on a defaulted account, which is converted into an LGD estimate.
		EAD	2			Current accounts: A combination of linear regression and average models have been developed using internal data, such as account limit and balance. Loans: EAD estimate is determined by account balance.
Small business loans and current accounts	4,256	PD	2	Retail – Other SME	For PD, LGD and EAD, separate models are in place for loans and current accounts, common across all regions.	Model estimates are mainly based on internal behaviour data.
		LGD	2			For unsecured lending the models estimate the probability of loss on a defaulted account which is converted into an LGD estimate. For secured lending the LGD model estimates are based on the estimated recoveries from the liquidation of collateral. Regulatory floors are applied depending on the type of security.
		EAD	2			Current accounts: A combination of linear regression and average models have been developed using internal data, such as account limit and balance. Loans: EAD estimate is determined by account balance.
Personal credit cards	3,465	PD	1	Retail – Qualifying revolving	PD, EAD and LGD models developed for use across the retail brands.	Model estimates are based on internal behavioural data.
		LGD	1			Statistical PD model developed using internal and external data.
		EAD	1			A combination of linear regression and average models has been developed using internal data, such as account limit and balance.
Personal and small business asset finance	267	PD	1	Retail – Other SME Retail – Other non-SME	PD, EAD and LGD models developed for use within the UK Lombard brand.	Statistical PD model segmented by time on book, customer type and entity type.
		LGD	1			For LGD, a statistical model is used based on long-run internal loss outcomes with key model drivers being security, together with customer and facility attributes.
		EAD	1			EAD for leasing is the present value of lease payments per regulatory requirements.

UK CRE: Qualitative disclosure requirements related to IRB approach continued

Wholesale IRB models

Probability of default/customer credit grade models

- As part of the credit assessment process, NatWest Group assigns each customer a credit grade reflecting the customer's PD. NatWest Group maintains and uses a number of credit grading models which consider risk characteristics relevant to the customer, incorporating both quantitative and qualitative inputs. NatWest Group uses these credit grades in its risk management and measurement frameworks, including credit sanctioning and expected credit loss as well as managing single name concentration risk.
- Different models are developed for different customer types.
- Regulation defines the minimum time series and other attributes of the data used for developing and calibrating models. For the most material models, external data (historical default and rating data from rating agencies and insolvency rates) is referenced for estimation and calibration purposes so that models are based on over 20 years of default experience. The models applied to medium to large-size corporate customers, bank and sovereign counterparties (those used for the largest aggregate amounts of exposure) are the most material models.
- Most of the less material models are developed for portfolios with low default frequency – where customer loan volumes are lower or borrowers are of higher credit quality. In these cases, as required by the PRA, a specific low-default portfolio approach is applied to produce an appropriately prudent calibration to reflect the potential that future outcomes differ from the very low risk outcomes historically observed. The models applied to non-bank financial institutions and quasi-government entities are considered less material models.
- The majority of the PD model suite discriminates risk levels well and are stable; current observed default rates are generally lower than model estimates. This reflects prudent calibrations across most of the Wholesale models.
- PDs are floored at 0.03% (except for the Central Governments & Central Banks exposure class) as mandated by regulation.

Loss given default models

- Models are developed for different customer segments and reflect the recoveries approach applied to each segment.
- Where sufficient internal and external loss data exists, LGD is modelled based on this experience and directly incorporates the impact of credit cycle conditions. As LGD represents economic loss, the estimate also incorporates the cost of collections and the impact of discounting to account for delays in recovery. LGDs reflect loss rates expected during an economic downturn.
- For low-default portfolios, where loss data is scarce or the effect of credit conditions is only of limited relevance, simple benchmark LGDs are assigned in accordance with the PRA's low-default portfolio framework.

Exposure at default models

- EAD is estimated on a product type basis, with different credit conversion factors (CCFs) – measuring the portion of unused credit facility expected to be further drawn prior to default – assigned to each product. For contingent products, such as trade letters of credit, a "probability of call" multiplier is also applied which reflects the likelihood of pay-out once issued.
- Exposure can be reduced by a netting agreement, subject to meeting standards of legal enforceability.
- Where sufficient internal historical data exists, CCF estimates are developed to reflect economic downturn conditions and are based on limit utilisation in the period prior to customer default.
- For low-default portfolios, where data is scarce, products are rank-ordered and CCFs benchmarked to modelled products or relevant regulatory values.
- The most material product families for EAD are those applying to non-contingent products, in particular loans, overdrafts and revolving credit facilities.

UK CRE: Qualitative disclosure requirements related to IRB approach continued

The table below presents the Wholesale IRB models NatWest Group uses to calculate RWAs.

Portfolio	RWAs (£m)	Model type	Number of models	IRB exposure class	IRB model segmentation	Model characteristics
Sovereign and quasi-government entities	4,686	PD	4	Central governments and central banks Institutions Corporate – Other	Global PD and LGD models are developed for sovereign and quasi-government type entities.	Sovereign: external rating agency replication model calibrated to the agency long-run average default rates. Local authority, UK housing association and UK university: expert-driven scorecard models using both qualitative and quantitative inputs.
		LGD	2			Sovereign: an unsecured model calibrated using a logistic regression on a limited dataset of internal and external observations. LGD is floored at 45% in accordance with PRA requirements. Quasi-Government: the model is based on sovereign LGDs or regulatory LGD benchmarks due to its low-default nature.
Financial institutions	11,661	PD	6	Central governments and central banks Institutions Corporate – Other Equity IRB	Global PD and LGD models are developed for bank and non-bank financial institutions (NBFIs).	PD models are developed by counterparty type: Bank and insurance companies: external rating agency replication models calibrated to agency long-run average default rates. Geared investment fund: statistical model which is directly calibrated to internal default experience. Investment fund bridging: expert-driven model using quantitative and qualitative inputs. Hedge fund and managed fund: expert-driven scorecard models based mainly on qualitative inputs, due to their low-default nature.
		LGD	2			Bank models and a single NBFI model are structured as simple decision trees relying on a few regulatory LGD benchmarks, due to low frequency or loss data.
Corporations : Turnover above £50 million	29,679	PD	2	Corporates – Other Equity IRB	PD: global large corporate model is used to grade customers that are externally rated or have a turnover in excess of £500 million. Mid-large corporate model is used to grade customers in key countries (United Kingdom and US) with turnover between £50 million and £500 million, and that are not externally rated. LGD: global LGD model is used for large and mid-large corporate customers. LGD model for shipping customers.	Large corporate: external rating agency replication model which is calibrated to external and internal long-run average default data. Mid-large corporate: statistical model which is calibrated to internal long run data.
		LGD	2			Statistical model using a combination of internal and external loss data. Key model drivers are seniority, collateral, industry facility type and a credit cycle index. Lease facilities use secured collateral specific recovery rate models, calibrated to internal loss data. Large corporate LGD: a 35% LGD floor is applied for certain countries due to scarcity of loss data. Shipping: simple model based on benchmarks by ship types calibrated to internal loss data.

UK CRE: Qualitative disclosure requirements related to IRB approach continued

Portfolio	RWAs (£m)	Model type	Number of models	IRB exposure class	IRB model segmentation	Model characteristics
Corporations: Turnover below £50 million	11,243	PD	1	Corporates – SME Corporate – Other Equity IRB	United Kingdom PD and LGD models for corporates with a turnover below £50 million.	Statistical rating model which uses qualitative and quantitative inputs to produce a score that is transformed into a PD. Long-run average default rate calibrations based on internal and external data and taking into account differences between industry and sectors.
		LGD	4			Statistical models based on internal loss outcomes with key model drivers being security, together with customer and facility attributes.
Credit risk (excluding counterparty credit risk) EAD model			2	Central governments and central banks Institutions Corporates – SME Corporates – Specialised lending Corporates – Other	Consists of a global wholesale EAD model for banking book portfolios and a specialist EAD model for the RBS Invoice Finance brand.	EAD is modelled by grouping product types (products sharing similar contractual features and expected drawdown behaviour) and calculated based on the assigned CCF. CCFs are estimated either using historical internal data or based on benchmarks when data is scarce.

UK CRE: Qualitative disclosure requirements related to IRB approach continued

IRB model governance

The governance process for approval and oversight of IRB credit models involves the model developers, model users and independent model validation. The process applies increased scrutiny to the more material models. Credit risk models are developed and maintained within a framework that includes the following key components:

- A high level policy that establishes responsibilities and minimum requirements applying to each stage of the modelling lifecycle:
  - Material model change and new model development and testing.
  - Temporary model adjustments to address RWA/EL under estimation arising from model deficiencies or non-compliance.
  - Model approval.
  - Model implementation and use.
  - Model monitoring, reporting and challenge.
- Detailed procedures and associated materials that define the approaches and activities undertaken at each of these stages.
- Defined structures and roles and responsibilities.
- Model development teams which are part of the independent risk management function, separate from the functions responsible for originating or renewing exposures, and are responsible for model development, calibration, approval and subsequent changes to rating systems.
- A model risk governance team responsible for model risk management across NatWest Group.
- An independent Model Risk function that is organisationally separate from the model development teams, sets validation standards, independently reviews all activities and also completes a formal regular validation for each model.

The framework aims to ensure NatWest Group model risk is managed appropriately and that the approaches deployed continue to meet both internal and regulatory standards.

The model performance is tested by monitoring and regular validation. Each model is subject to a comparison of estimates to outcomes to assess the accuracy of the model. Other statistical tests assess the ability of the models to discriminate risk (i.e. its ability to determine the relative risk of a particular customer or exposure), the extent to which portfolio composition remains stable and, where relevant, the frequency and magnitude of overrides applied to modelled estimates.

Validation reports include further analyses that consider:

- Ongoing user acceptance and confidence in the model and its performance.
- Movements in the portfolio (both observed and anticipated).
- Other relevant data that might be used to explain or assess model performance.

Action may be taken when model performance is determined to be outside tolerance. This may entail recalibration of the model, enhancement (such as by reweighting existing model factors) or redevelopment. Temporary model adjustments may be applied whilst the remediation activity is undertaken if management believe the underperformance may lead to insufficient capital requirements for the portfolio.

In accordance with regulatory requirements, once a new IRB model or changes to incumbent IRB models have been approved through internal governance, they must follow appropriate regulatory approval or notification processes before implementation.

Independent model validation

All new and changed credit risk models are subject to detailed independent review aimed at testing that the models are appropriate for regulatory capital calculations. The following (non-exhaustive) list outlines key areas of focus:

- Conceptual soundness of the methodology.
- Testing the assumptions underlying the model, where feasible, against actual behaviour.
- Checking the accuracy of calculations.
- Comparing outputs with results from alternative methods.
- Testing parameter selection and calibration.
- Back-testing of key model metrics (accuracy, discrimination and stability).
- Sensitivity analysis.

The relevant model approver will consider review findings when approving a model or model change and also approve the model owner response to findings.

Independent Model Validation sets standards for all independent reviews and conducts the majority of them.

Internal Audit

Internal Audit includes within the scope of its assurance work, the modelling and management of the organisation’s model risk. Internal Audit is independent from the risk management function, and therefore from those responsible for model development and independent validation activity. Any material gaps in control identified by Internal Audit are escalated through standard board reporting and action plans are agreed with those accountable for the activity behind the control.

Annex XXIII: Specialised lending

UK CR10: Specialised lending and equity exposures under the simple risk weighted approach

The table below shows specialised lending exposures subject to the supervisory slotting approach analysed by type of lending and regulatory category. NatWest Group does not have Object Finance and Commodities Finance exposures; therefore, those are not presented separately. The table excludes exposures subject to the Securitisations framework. This disclosure also includes a separate section (i.e. UK CR10.5) for equity exposures subject to the simple risk-weighted approach.

CR10.1

		NatWest Group					
		a	b	c	d	e	f
		Specialised lending: Project finance (slotting approach)					
31 December 2022	Remaining maturity	On-balance sheet exposure £m	Off-balance sheet exposure £m	Risk-weight %	Exposure value £m	Risk-weighted exposure amount £m	Expected loss amount £m
Category 1	Less than 2.5 years	890	285	50%	1,115	455	—
	Equal to or more than 2.5 years	3,909	2,049	70%	6,094	3,585	24
Category 2	Less than 2.5 years	—	76	70%	75	52	—
	Equal to or more than 2.5 years	245	249	90%	434	332	3
Category 3	Less than 2.5 years	—	—	115%	—	—	—
	Equal to or more than 2.5 years	57	8	115%	69	68	2
Category 4	Less than 2.5 years	—	—	250%	—	—	—
	Equal to or more than 2.5 years	—	—	250%	—	—	—
Category 5	Less than 2.5 years	—	—	—	—	—	—
	Equal to or more than 2.5 years	110	—	—	111	—	56
Total	Less than 2.5 years	890	361		1,190	507	—
	Equal to or more than 2.5 years	4,321	2,306		6,708	3,985	85

		NatWest Group					
		a	b	c	d	e	f
		Specialised lending: Project finance (slotting approach)					
31 December 2021	Remaining maturity	On-balance sheet exposure £m	Off-balance sheet exposure £m	Risk-weight %	Exposure value £m	Risk-weighted exposure amount £m	Expected loss amount £m
Category 1	Less than 2.5 years	623	220	50%	782	314	—
	Equal to or more than 2.5 years	3,304	1,252	70%	4,332	2,423	17
Category 2	Less than 2.5 years	17	35	70%	31	22	—
	Equal to or more than 2.5 years	312	108	90%	402	296	3
Category 3	Less than 2.5 years	—	—	115%	—	—	—
	Equal to or more than 2.5 years	23	3	115%	26	30	1
Category 4	Less than 2.5 years	—	—	250%	—	—	—
	Equal to or more than 2.5 years	34	—	250%	34	84	3
Category 5	Less than 2.5 years	1	—	—	2	—	1
	Equal to or more than 2.5 years	49	—	—	49	—	24
Total	Less than 2.5 years	641	255		815	336	1
	Equal to or more than 2.5 years	3,722	1,363		4,843	2,833	48

UK CR10: Specialised lending and equity exposures under the simple risk weighted approach continued

CR10.2

		NatWest Group					
		a	b	c	d	e	f
		Specialised lending: Income-producing real estate and high volatility commercial real estate (slotting approach)					
31 December 2022	Remaining maturity	On-balance sheet exposure £m	Off-balance sheet exposure £m	Risk-weight %	Exposure value £m	Risk-weighted exposure amount £m	Expected loss amount £m
Category 1	Less than 2.5 years	3,467	423	50%	3,662	1,831	—
	Equal to or more than 2.5 years	2,626	419	70%	2,838	1,985	11
Category 2	Less than 2.5 years	2,861	303	70%	3,078	2,155	12
	Equal to or more than 2.5 years	1,378	171	90%	1,522	1,370	12
Category 3	Less than 2.5 years	269	10	115%	280	322	8
	Equal to or more than 2.5 years	97	1	115%	101	117	3
Category 4	Less than 2.5 years	113	—	250%	113	283	9
	Equal to or more than 2.5 years	5	—	250%	5	13	—
Category 5	Less than 2.5 years	101	—	—	102	—	51
	Equal to or more than 2.5 years	32	2	—	33	—	17
Total	Less than 2.5 years	6,811	736		7,235	4,591	80
	Equal to or more than 2.5 years	4,138	593		4,499	3,485	43

		NatWest Group					
		a	b	c	d	e	f
		Specialised lending: Income-producing real estate and high volatility commercial real estate (slotting approach)					
31 December 2021	Remaining maturity	On-balance sheet exposure £m	Off-balance sheet exposure £m	Risk-weight %	Exposure value £m	Risk-weighted exposure amount £m	Expected loss amount £m
Category 1	Less than 2.5 years	3,172	614	50%	3,495	1,747	—
	Equal to or more than 2.5 years	2,228	323	70%	2,392	1,674	10
Category 2	Less than 2.5 years	3,074	410	70%	3,343	2,340	13
	Equal to or more than 2.5 years	1,164	136	90%	1,269	1,142	10
Category 3	Less than 2.5 years	353	5	115%	357	411	10
	Equal to or more than 2.5 years	50	6	115%	56	65	1
Category 4	Less than 2.5 years	119	—	250%	119	297	10
	Equal to or more than 2.5 years	13	—	250%	13	33	1
Category 5	Less than 2.5 years	142	2	—	142	—	73
	Equal to or more than 2.5 years	135	3	—	136	—	69
Total	Less than 2.5 years	6,860	1,031		7,456	4,795	106
	Equal to or more than 2.5 years	3,590	468		3,866	2,914	91

UK CR10: Specialised lending and equity exposures under the simple risk weighted approach continued

CR10.5

	NatWest Group					
	a	b	c	d	e	f
	Equity exposures under the simple risk-weighted approach					
31 December 2022	**On-balance sheet exposure £m**	**Off-balance sheet exposure £m**	**Risk-weight %**	**Exposure value £m**	**Risk-weighted exposure amount £m**	**Expected loss amount £m**
Private equity exposures	**609**	**55**	**190%**	**665**	**1,264**	**6**
Exchange-traded equity exposures	**—**	**—**	**290%**	**—**	**—**	**—**
Other equity exposures	**9**	**3**	**370%**	**11**	**42**	**—**
Total	**618**	**58**		**676**	**1,306**	**6**

	NatWest Group					
	a	b	c	d	e	f
	Equity exposures under the simple risk-weighted approach					
31 December 2021	On-balance sheet exposure £m	Off-balance sheet exposure £m	Risk-weight %	Exposure value £m	Risk-weighted exposure amount £m	Expected loss amount £m
Private equity exposures	656	64	190%	719	1,369	6
Exchange-traded equity exposures	—	—	290%	—	—	—
Other equity exposures	4	—	370%	4	16	—
Total	660	64		723	1,385	6

Annex XXV: Counterparty credit risk

UK CCR1: Analysis of CCR exposure by approach

The table below shows the methods used to calculate counterparty credit risk exposure and RWAs. It excludes the CVA charge, exposures to central counterparties (CCPs) and exposures to securitisation positions.

	NatWest Group							
	a	b	c	d	e	f	g	h
	Replacement cost/current (RC)	Potential future exposure (PFE)	EEPE	Alpha used for computing regulatory exposure value	Exposure value pre-CRM	Exposure value post-CRM	Exposure value	RWA
31-December 2022	£m	£m	£m	£m	£m	£m	£m	£m
1 SA-CCR (for derivatives)	**682**	**973**	**—**	**1.4**	**9,211**	**2,317**	**2,271**	**1,069**
2 Internal model method (for derivatives and SFTs)	**—**	**—**	**7,544**	**1.4**	**31,980**	**10,561**	**10,475**	**3,479**
2b *of which: derivatives and long settlement transactions netting sets*	**—**	**—**	**7,544**	**1.4**	**31,980**	**10,561**	**10,475**	**3,479**
4 *Financial collateral comprehensive method (for SFTs)*	**—**	**—**	**—**	**—**	**105,025**	**4,279**	**4,279**	**647**
6 Total					**146,216**	**17,157**	**17,025**	**5,195**

(1) Disclosures relating to the items excluded from the scope of this table are presented as follows: a) Table UK CCR2 (CVA charge), b) Table UK CCR8 (exposures to CCPs) and c) Tables UK SEC1-5 (exposures to securitisation positions).

(2) The following rows and/or columns are not presented in the table because they had zero values for the period or are not used by NatWest Group: row (UK1) Original Exposure Method (for derivatives), row (UK2) Simplified SA-CCR (for derivatives), row (2a) IMM (for derivatives and SFTs) Of which securities financing transactions netting sets, row (2c) IMM (for derivatives and SFTs) Of which from contractual cross-product netting sets, row (3) Financial collateral simple method (for SFTs), and row (5) VaR for SFTs.

UK CCR2: Transactions subject to own funds requirements for CVA risk

The table below shows the CVA charge, split by approach.

		NatWest Group			
		a	b	a	b
		31 December 2022		31 December 2021	
		Exposure amount £m	RWAs £m	Exposure amount £m	RWAs £m
1	Total transactions subject to the advanced method	**5,281**	**932**	6,209	929
2	(i) VaR component (including the 3x multiplier) (1)		**196**		275
3	(ii) Stressed VaR component (including the 3x multiplier) (1)		**736**		654
4	Transactions subject to the standardised method	**1,046**	**368**	1,480	438
5	Total transactions subject to own funds requirements for CVA risk	**6,327**	**1,300**	7,689	1,367

(1) The calculation of the VaR and SVaR components includes the use of a multiplier, which is at least 3x, as set by the regulator.
(2) The following rows and/or columns are not presented in the table because they had zero values for the period or are not used by NatWest Group: row (UK4) Transactions subject to the Alternative approach (based on the Original Exposure Method).

- For portfolios subject to the advanced charge, exposure decreased reflecting the reduction in asset size while RWAs remained broadly unchanged.
- For portfolios subject to the standardised charge, both exposure and RWAs decreased. The exposure decline primarily reflects a change in methodology to include regulatory initial margin in the exposure at default (EAD) calculation.

UK CCR3: Standardised approach – CCR exposures by regulatory exposure class and risk weights

The table below shows a view of counterparty credit risk positions subject to the standardised risk-weight approach by exposure class. It excludes the CVA charge, exposures to securitisation positions and default fund contributions. Exposures to qualifying CCPs are included.

		NatWest Group											
		Risk-weight											
		a	b	c	d	e	f	g	h	i	j	k	l
	Exposure class	0% £m	2% £m	4% £m	10% £m	20% £m	50% £m	70% £m	75% £m	100% £m	150% £m	Others £m	Total exposure value £m
31 December 2022													
1	Central governments or central banks	**470**	—	—	—	—	—	—	—	—	—	—	**470**
2	Regional government or local authorities	—	—	—	—	**7**	—	—	—	—	—	—	**7**
4	Multilateral development banks	**57**	—	—	—	—	—	—	—	—	—	—	**57**
6	Institutions	**239**	**1,911**	—	—	**175**	—	—	—	—	—	—	**2,325**
7	Corporates	—	—	—	—	**57**	**93**	—	—	**140**	—	—	**290**
11	Total exposure value	**766**	**1,911**	—	—	**239**	**93**	—	—	**140**	—	—	**3,149**

		NatWest Group											
		Risk-weight											
		a	b	c	d	e	f	g	h	i	j	k	l
		0% £m	2% £m	4% £m	10% £m	20% £m	50% £m	70% £m	75% £m	100% £m	150% £m	Others £m	Total exposure value £m
31 December 2021													
1	Central governments or central banks	601	—	—	—	—	—	—	—	—	—	—	601
2	Regional government or local authorities	35	—	—	—	18	—	—	—	—	—		53
4	Multilateral development banks	—	—	—	—	—	—	—	—	—	—	—	—
6	Institutions	—	3,247	—	—	646	1	—	—	—	—	—	3,894
7	Corporates	—	—	—	—	75	71	—	—	98	—	1	245
11	Total exposure value	636	3,247	—	—	739	72	—	—	98	—	1	4,793

(1) The following rows are not presented in the table because they had zero values for the period: row (3) Public sector entities, row (5) International organisations, row (8) Retail, row (9) Institutions and corporates with a short-term credit assessment, and row (10) other items.

- The decrease in exposure over the year was driven by the Institutions class.

UK CCR4: IRB approach – CCR exposures by exposure class and PD scale

The table below shows a detailed view of counterparty credit risk positions subject to the IRB risk-weight approach by exposure class and PD scale. It excludes the CVA charge, exposures to CCPs and exposures to securitisation positions.

		NatWest Group						
		a	b	c	d	e	f	g
31 December 2022	PD scale	Exposure value £m	Exposure weighted Average PD %	Number of obligors	Exposure weighted Average LGD %	Exposure weighted Average maturity Years	RWAs £m	Density of risk weighted exposure amounts %
Central governments and central banks	0.00 to <0.15	853	0.01	19	45	1.55	40	5
Central governments and central banks	0.15 to <0.25	10	0.23	1	45	5.00	8	75
Central governments and central banks	0.25 to <0.50	—	—	—	—	—	—	—
Central governments and central banks	0.50 to <0.75	—	—	—	—	—	—	—
Central governments and central banks	0.75 to <2.50	—	—	—	—	—	—	—
Central governments and central banks	2.50 to <10.00	—	—	—	—	—	—	—
Central governments and central banks	10.00 to <100.00	—	—	—	—	—	—	—
Central governments and central banks	100.00 (Default)	—	—	—	—	—	—	—
Total - Central governments and central banks		863	0.01	20	45	1.59	48	5
Institutions	0.00 to <0.15	1,813	0.09	111	45	2.12	417	23
Institutions	0.15 to <0.25	2,201	0.19	134	46	2.25	745	34
Institutions	0.25 to <0.50	366	0.34	77	46	2.80	201	55
Institutions	0.50 to <0.75	68	0.64	17	46	4.33	80	118
Institutions	0.75 to <2.50	15	1.32	28	56	1.49	18	125
Institutions	2.50 to <10.00	6	3.88	22	56	3.06	13	211
Institutions	10.00 to <100.00	—	10.24	1	45	2.16	—	202
Institutions	100.00 (Default)	—	—	—	—	—	—	—
Total - Institutions		4,469	0.17	390	46	2.28	1,474	33
Corporates - SME	0.00 to <0.15	—	0.11	2	63	1.00	—	18
Corporates - SME	0.15 to <0.25	4	0.22	34	46	1.09	1	27
Corporates - SME	0.25 to <0.50	8	0.39	170	44	1.29	3	33
Corporates - SME	0.50 to <0.75	6	0.64	94	44	1.73	3	48
Corporates - SME	0.75 to <2.50	12	1.25	203	33	1.42	5	44
Corporates - SME	2.50 to <10.00	4	3.45	63	40	1.63	3	71
Corporates - SME	10.00 to <100.00	—	10.65	2	55	1.77	—	166
Corporates - SME	100.00 (Default)	—	100.00	3	53	1.00	1	565
Total - Corporates - SME		34	1.53	571	40	1.43	16	45

UK CCR4: IRB approach – CCR exposures by exposure class and PD scale continued

		NatWest Group						
		a	b	c	d	e	f	g
31 December 2022	PD scale	Exposure value £m	Exposure weighted Average PD %	Number of obligors	Exposure weighted Average LGD %	Exposure weighted Average maturity Years	RWAs £m	Density of risk weighted exposure amounts %
Corporates - Other	0.00 to <0.15	**7,261**	**0.05**	**2,424**	**45**	**1.88**	**1,377**	**19**
Corporates - Other	0.15 to <0.25	**1,604**	**0.19**	**370**	**46**	**2.71**	**694**	**43**
Corporates - Other	0.25 to <0.50	**933**	**0.36**	**274**	**50**	**1.77**	**590**	**63**
Corporates - Other	0.50 to <0.75	**98**	**0.64**	**92**	**39**	**1.36**	**63**	**64**
Corporates - Other	0.75 to <2.50	**272**	**1.37**	**235**	**46**	**2.01**	**302**	**111**
Corporates - Other	2.50 to <10.00	**51**	**2.96**	**164**	**46**	**1.40**	**70**	**136**
Corporates - Other	10.00 to <100.00	**26**	**19.31**	**7**	**46**	**1.32**	**64**	**243**
Corporates - Other	100.00 (Default)	**—**	**100.00**	**4**	**65**	**1.46**	**—**	**47**
Total - Corporates - Other		**10,245**	**0.20**	**3,570**	**45**	**1.99**	**3,160**	**31**
Total - Wholesale all portfolios		**15,611**	**0.18**	**4,551**	**45**	**2.05**	**4,698**	**30**

(1) Counterparty credit risk exposures subject to the supervisory slotting method are no longer included in this table and they are disclosed in UK CR10. Comparatives have been restated to reflect this exclusion.

UK CCR4: IRB approach – CCR exposures by exposure class and PD scale continued

		NatWest Group						
		a	b	c	d	e	f	g
31 December 2021	PD scale	Exposure value £m	Exposure weighted Average PD %	Number of obligors	Exposure weighted Average LGD %	Exposure weighted Average maturity Years	RWAs £m	Density of risk weighted exposure amounts %
Central governments and central banks	0.00 to <0.15	665	0.01	21	46	1.80	45	7
Central governments and central banks	0.15 to <0.25	—	0.23	1	45	5.00	—	—
Central governments and central banks	0.25 to <0.50	—	—	—	—	—	—	—
Central governments and central banks	0.50 to <0.75	—	—	—	—	—	—	—
Central governments and central banks	0.75 to <2.50	—	—	—	—	—	—	—
Central governments and central banks	2.50 to <10.00	—	—	—	—	—	—	—
Central governments and central banks	10.00 to <100.00	—	—	—	—	—	—	—
Central governments and central banks	100.00 (Default)	—	—	—	—	—	—	—
Total - Central governments and central banks		665	0.01	22	46	1.80	45	7
Institutions	0.00 to <0.15	1,996	0.09	107	45	2.21	596	30
Institutions	0.15 to <0.25	2,531	0.18	149	46	2.66	927	37
Institutions	0.25 to <0.50	404	0.38	88	47	3.09	202	50
Institutions	0.50 to <0.75	30	0.64	18	59	1.17	31	105
Institutions	0.75 to <2.50	25	1.51	33	54	1.33	31	122
Institutions	2.50 to <10.00	34	2.79	22	51	3.99	194	570
Institutions	10.00 to <100.00	—	—	—	—	—	—	—
Institutions	100.00 (Default)	—	—	—	—	—	—	—
Total - Institutions		5,020	0.19	417	46	2.51	1,981	39
Corporates - SME	0.00 to <0.15	—	—	—	—	—	—	—
Corporates - SME	0.15 to <0.25	1	0.20	24	54	1.02	—	24
Corporates - SME	0.25 to <0.50	8	0.40	137	43	2.57	3	41
Corporates - SME	0.50 to <0.75	4	0.64	82	35	2.47	2	41
Corporates - SME	0.75 to <2.50	15	1.06	207	34	1.48	6	43
Corporates - SME	2.50 to <10.00	5	3.68	50	38	2.02	3	68
Corporates - SME	10.00 to <100.00	—	10.24	2	25	1.00	—	65
Corporates - SME	100.00 (Default)	1	100.00	3	52	1.66	5	562
Total - Corporates - SME		34	3.85	505	38	1.94	19	59

UK CCR4: IRB approach – CCR exposures by exposure class and PD scale continued

		NatWest Group						
		a	b	c	d	e	f	g
31 December 2021	PD scale	Exposure value £m	Exposure weighted Average PD %	Number of obligors	Exposure weighted Average LGD %	Exposure weighted Average maturity Years	RWAs £m	Density of risk weighted exposure amounts %
Corporates - Other	0.00 to <0.15	7,782	0.05	2,587	45	1.89	1,439	18
Corporates - Other	0.15 to <0.25	1,762	0.19	359	47	2.89	804	46
Corporates - Other	0.25 to <0.50	684	0.39	306	51	2.62	494	72
Corporates - Other	0.50 to <0.75	118	0.64	140	48	0.99	79	67
Corporates - Other	0.75 to <2.50	306	1.24	288	44	1.09	255	83
Corporates - Other	2.50 to <10.00	36	3.27	187	49	1.45	49	135
Corporates - Other	10.00 to <100.00	15	20.90	8	45	2.14	36	241
Corporates - Other	100.00 (Default)	1	100.00	3	28	1.39	—	—
Total - Corporates - Other		10,704	0.18	3,878	46	2.07	3,156	29
Total - Wholesale all portfolios		16,423	0.18	4,822	46	2.30	5,201	33

(1) Counterparty credit risk exposures subject to the supervisory slotting method are no longer included in this table and they are disclosed in UK CR10. Comparatives have been restated to reflect this exclusion.

UK CCR6 – Credit derivatives exposures

As part of its strategy to manage credit risk concentrations, NatWest Group buys credit derivative products. The counterparties from which this protection is bought are subject to standard credit risk analysis. Eligibility criteria apply: credit protection bought from the same counterparty group as the reference entity is not eligible in cases where double default applies under the relevant regulation. The table below shows credit derivatives bought and sold by notional and fair values.

		NatWest Group			
		a	b	a	b
		31 December 2022		31 December 2021	
Notionals		**Protection bought £m**	**Protection sold £m**	Protection bought £m	Protection sold £m
1	Single-name credit default swaps	**5,783**	**4,282**	3,634	2,456
2	Index credit default swaps	**2,254**	**1,399**	3,697	695
3	Total return swaps	**60**	**60**	150	150
4	Credit options				
5	Other credit derivatives	**2,000**	**—**	2,000	—
6	Total notionals	**10,097**	**5,741**	9,481	3,301
	Fair values				
7	Positive fair value (asset)	**55**	**38**	91	62
8	Negative fair value (liability)	**(72)**	**(39)**	(195)	(93)

– The increase in notional of bought and sold single-name credit default swaps is driven by an intermediation trade.

UK CCR8 – Exposures to CCPs

The table below shows counterparty credit risk exposures to CCPs including default fund contributions. A qualifying CCP (QCCP) means a CCP that has been either authorised or recognised in accordance with the relevant regulation.

		NatWest Group			
		a	b	a	b
		31 December 2022		31 December 2021	
		Exposure value £m	RWA £m	Exposure value £m	RWA £m
1	Exposures to QCCPs (total)		**132**		322
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions)	**2,150**	**38**	3,745	165
	Of which:				
3	*(i) OTC derivatives*	***491***	***10***	*1,429*	*118*
4	*(ii) Exchange-traded derivatives*	***489***	***10***	*267*	*6*
5	*(iii) Securities financing transactions*	***1,170***	***18***	*2,049*	*41*
9	Pre-funded default fund contributions	**385**	**94**	398	157

(1) The following rows are not presented in the table because they had zero values for the period: Exposures to QCCPs: row (6) Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which Netting sets where cross-product netting has been approved, row (7) Segregated initial margin, row (8) Non-segregated initial margin and row (10) Unfunded default fund contributions. Row (11) Exposures to non-QCCPs (total), row (12) Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions), row (13) OTC derivatives, row (14) Exchange-traded derivatives, now (15) SFTs, row (16) Netting sets where cross-product netting has been approved, row (17) Segregated initial margin, row (18) Non-segregated initial margin, row (19) Prefunded default fund contributions and row (20) Unfunded default fund contributions.

– Exposures to qualifying central counterparties decreased over the year. RWAs decreased to an even greater degree as a result of lower risk-weights being applied following the implementation of SA-CCR.

UK CCRA – Qualitative disclosure related to counterparty credit risk

Definition and framework

Counterparty credit risk relates to derivative contracts (including over-the-counter derivatives and exchange-traded derivatives), securities financing transactions (SFTs) and long settlement transactions in either the trading or the non-trading book. It is the risk of loss arising from a default of a counterparty before the final settlement of the transaction's cash flows, which vary in value by reference to a market factor, such as an interest rate, exchange rate or asset price.

Counterparty credit risk is covered by NatWest Group's credit risk framework. Refer to the Credit risk section in this report for more information.

A number of specific policies apply to derivatives including those transacted with central counterparties (CCPs) and SFTs. These include policies that address documentation and collateral requirements, product-specific requirements (for example, securities financing) and counterparty specific requirements (for example, hedge funds).

Counterparty credit limit setting

Counterparty credit limits are established through the credit risk management framework. Limits are based on the credit quality of the counterparty and the appetite for the modelled potential future exposure. The utilisations recorded against the limits also reflect the netting of transactions where legally enforceable and the anticipated close-out periods in the event of default.

For CCPs, utilisations are calculated using the same model as for other collateralised counterparties, and a credit limit is set. Limits are separately set to cover initial margin posted to the CCP, default fund contributions and other contingent liabilities. Stress testing is used to assess contingent liabilities such as additional default fund contributions.

Counterparty credit risk management

The credit policy framework governs counterparty credit risk management requirements. Industry-standard documentation (for example, International Swaps and Derivatives Association master agreements for derivatives and Global Master Repurchase Agreements for SFTs) is typically executed with clients prior to trading. Exceptions to this require specific approval from a senior credit risk officer.

Where there is no legal certainty regarding the enforceability of netting, exposures are shown gross. Where netting and collateral enforceability criteria are not fulfilled, exposure is assumed to be uncollateralised. The framework also includes a formal escalation policy for counterparty collateral disputes and unpaid collateral calls.

Collateral required in the event of a credit rating downgrade

NatWest Group calculates the additional collateral and other liquidity impacts that would contractually arise in the event of its credit ratings being downgraded. This is undertaken on a daily basis for Treasury and liquidity management purposes.

As at 31 December 2022, a simultaneous one-notch long-term and associated short-term downgrade in the credit ratings of all rated entities within NatWest Group by all major ratings agencies would have required NatWest Group to post estimated additional collateral of £0.4 billion, without taking mitigating management actions into account. A two-notch downgrade would have required £1.5 billion.

Credit valuation adjustments (CVAs)

The counterparty exposure management team charges the relevant trading desk a credit premium at the inception of a trade, in exchange for taking on the credit risk over the life of the transaction. The team may then hedge the default risk using credit derivatives sourced from third-party providers. CVA sensitivities may be hedged using a combination of credit derivatives, interest rate derivatives, foreign exchange derivatives and other instruments.

NatWest Group calculates a regulatory CVA capital charge. The purpose of this charge is to improve the resilience of banks to potential mark-to-market losses associated with deterioration in the creditworthiness of counterparties with which NatWest Group has transacted non-cleared derivative trades. Under CRR rules, the charge is calculated using either the advanced approach or the standardised approach. NWM Plc and NWM N.V. have regulatory approval to use an internal model to calculate counterparty credit risk capital and permission to use an internal value-at-risk model for the specific risk of debt instruments; therefore, the advanced approach is used where possible for these entities. For products that fall outside these model permissions, the standardised approach, which is based on the external credit rating of the counterparty, is used.

Wrong-way risk

Wrong-way risk represents the risk of loss that arises when the risk factors driving the exposure to a counterparty have a material positive correlation with the probability of default of that counterparty, i.e. the size of the exposure tends to increase at the same time as the risk of the counterparty being unable to meet that obligation increases.

In addition to its usual credit approval and credit authority policies, NatWest Group also manages its exposure to wrong-way risk through a dedicated policy that establishes a framework incorporating approvals, controls, limits and regular monitoring, where appropriate.

Under the framework, enhanced transaction approval is required and limits are set to constrain wrong-way risk arising through currency exposure to countries classified as high-risk under the internal Watchlist process. The reporting process includes a monthly review of wrong-way risks arising either from such currency exposure or through reverse repos, credit derivatives and equity trades.

The framework distinguishes between specific wrong-way risk (where the risk factor driving the exposure is specific to the counterparty) and general wrong-way risk (where the risk factor driving the exposure is not specific to the counterparty but still positively correlated with its probability of default, for instance country or currency related factors).

Annex XXVII: Securitisations

UK-SEC1: Securitisation exposures in the non-trading book

The table below shows total non-trading book securitisation exposures where NatWest Group acted as originator, sponsor or investor. These are presented by exposure type.

		NatWest Group														
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Institution acts as Originator							Institution acts as Sponsor				Institution acts as Investor			
		Traditional				Synthetic		Sub-total	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total
		STS		Non-STS												
			of which SRT		of which SRT		of which SRT		STS	Non-STS			STS	Non-STS		
31 December 2022		**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**
1	**Total exposures**	—	—	—	—	**4,004**	—	**4,004**	—	—	—	—	**1,363**	**10,173**	—	**11,536**
2	Retail (total)	—	—	—	—	—	—	—	—	—	—	—	**1,238**	**4,090**	—	**5,328**
3	Residential mortgage	—	—	—	—	—	—	—	—	—	—	—	**386**	**2,650**	—	**3,036**
4	Credit card	—	—	—	—	—	—	—	—	—	—	—	**651**	—	—	**651**
5	Other retail exposures	—	—	—	—	—	—	—	—	—	—	—	**201**	**1,440**	—	**1,641**
7	**Wholesale (total)**	—	—	—	—	**4,004**	—	**4,004**	—	—	—	—	**125**	**6,083**	—	**6,208**
8	Loans to corporates	—	—	—	—	**3,256**	—	**3,256**	—	—	—	—	—	**4,748**	—	**4,748**
9	Commercial Mortgage	—	—	—	—	**748**	—	**748**	—	—	—	—	—	**819**	—	**819**
10	Lease and receivables	—	—	—	—	—	—	—	—	—	—	—	**125**	**516**	—	**641**
11	Other wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

		NatWest Group														
		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
		Institution acts as Originator							Institution acts as Sponsor				Institution acts as Investor			
		Traditional				Synthetic		Sub-total	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total
		STS		Non-STS												
			of which SRT		of which SRT		of which SRT		STS	Non-STS			STS	Non-STS		
31 December 2021		£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
1	Total exposures	—	—	—	—	4,808	4,808	4,808	—	20	—	20	373	7,156	—	7,529
2	Retail (total)	—	—	—	—	—	—	—	—	20	—	20	298	4,418	—	4,716
3	Residential mortgage	—	—	—	—	—	—	—	—	—	—	—	98	3,015	—	3,113
4	Credit card	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	Other retail exposures	—	—	—	—	—	—	—	—	20	—	20	200	1,403	—	1,603
7	Wholesale (total)	—	—	—	—	4,808	4,808	4,808	—	—	—	—	75	2,738	—	2,813
8	Loans to corporates	—	—	—	—	3,712	3,712	3,712	—	—	—	—	—	1,709	—	1,709
9	Commercial Mortgage	—	—	—	—	1,096	1,096	1,096	—	—	—	—	—	506	—	506
10	Lease and receivables	—	—	—	—	—	—	—	—	—	—	—	75	523	—	598
11	Other wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(1) The re-securitisation rows are not presented in UK SEC1 – 4 as there were no applicable exposures in NatWest Group in either period.

(2) The overall securitisation non-trading book exposure amount included EAD of £0.1 billion (2021 – £0.4 billion) and RWAs of £0.1 billion (2021 – £0.3 billion) related to counterparty credit risk associated with derivative trades. Within this, residential mortgages accounted for EAD of £0.1 billion (2021 – £0.2 billion) and RWAs of £0.1 billion (2021 – £0.2 billion).

- Total exposures decreased, due to amortisation of the underlying pool of assets on originated transactions in NWH Group.
- Total investor positions increased, primarily driven by NWM Plc.

UK-SEC2: Securitisation exposures in the trading book

The table below shows total trading book securitisation exposures where NatWest Group acted as originator, sponsor or investor. These are presented by exposure type.

	NatWest Group											
	a	b	c	d	e	f	g	h	i	j	k	l
	Institution acts as Originator				Institution acts as Sponsor				Institution acts as Investor			
	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total
	STS	Non-STS			STS	Non-STS			STS	Non-STS		
31 Decmeber 2022	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**
1 **Total exposures**	—	—	—	—	—	—	—	—	—	**21**	—	**21**
2 Retail (total)										**5**		**5**
3 Residential mortgage	—	—	—	—	—	—	—	—	—	**5**	—	**5**
4 Credit card	—	—	—	—	—	—	—	—	—	—	—	—
5 Other retail exposures	—	—	—	—	—	—	—	—	—	—	—	—
7 **Wholesale (total)**	—	—	—	—	—	—	—	—	—	**16**	—	**16**
8 Loans to corporates	—	—	—	—	—	—	—	—	—	**15**	—	**15**
9 Commercial mortgage	—	—	—	—	—	—	—	—	—	—	—	—
10 Lease and receivables	—	—	—	—	—	—	—	—	—	—	—	—
11 Other wholesale	—	—	—	—	—	—	—	—	—	**1**	—	**1**

	NatWest Group											
	a	b	c	d	e	f	g	h	i	j	k	l
	Institution acts as Originator				Institution acts as Sponsor				Institution acts as Investor			
	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total	Traditional		Synthetic	Sub-total
	STS	Non-STS			STS	Non-STS			STS	Non-STS		
31 December 2021	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
1 Total exposures	—	—	—	—	—	—	—	—	—	31	—	31
2 Retail (total)	—	—	—	—	—	—	—	—	—	12	—	12
3 Residential mortgage	—	—	—	—	—	—	—	—	—	12	—	12
4 Credit card	—	—	—	—	—	—	—	—	—	—	—	—
5 Other retail exposures	—	—	—	—	—	—	—	—	—	—	—	—
7 Wholesale (total)	—	—	—	—	—	—	—	—	—	19	—	19
8 Loans to corporates	—	—	—	—	—	—	—	—	—	16	—	16
9 Commercial mortgage	—	—	—	—	—	—	—	—	—	2	—	2
10 Lease and receivables	—	—	—	—	—	—	—	—	—	—	—	—
11 Other wholesale	—	—	—	—	—	—	—	—	—	1	—	1

- Securitisation exposures in the trading book were broadly unchanged compared to 31 December 2021.

UK-SEC3: Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor

The table below shows securitisation exposures in the non-trading book and associated regulatory capital requirements where NatWest Group acted as originator or sponsor. These are presented by exposure type.

	NatWest Group																
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
31 December 2022	≤20% RW £m	>20% to 50% RW £m	>50% to 100% RW £m	>100% to <1250% RW £m	1250% RW/ deductions £m	SEC-IRBA £m	SEC-ERBA (including IAA) £m	SEC-SA £m	1250%/ deductions £m	SEC-IRBA £m	SEC-ERBA (including IAA) £m	SEC-SA £m	1250%/ deductions £m	SEC-IRBA £m	SEC ERBA (including IAA) £m	SEC-SA £m	1250%/ deductions £m
1 **Total Exposures**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2 Traditional transactions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3 Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4 Retail underlying	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5 Of which STS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9 Synthetic transactions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10 Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11 Retail underlying	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12 Wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

	NatWest Group																
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
31 December 2021	≤20% RW £m	>20% to 50% RW £m	>50% to 100% RW £m	>100% to <1250% RW £m	1250% RW/ deductions £m	SEC-IRBA £m	SEC-ERBA (including IAA) £m	SEC-SA £m	1250%/ deductions £m	SEC-IRBA £m	SEC-ERBA (including IAA) £m	SEC-SA £m	1250%/ deductions £m	SEC-IRBA £m	SEC ERBA (including IAA) £m	SEC-SA £m	1250%/ deductions £m
1 Total Exposures	4,813	—	—	—	15	4,808	—	20	—	911	—	3	—	73	—	—	—
2 Traditional transactions	20	—	—	—	—	—	—	20	—	—	—	3	—	—	—	—	—
3 Securitisation	20	—	—	—	—	—	—	20	—	—	—	3	—	—	—	—	—
4 Retail underlying	20	—	—	—	—	—	—	20	—	—	—	3	—	—	—	—	—
5 Of which STS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9 Synthetic transactions	4,793	—	—	—	15	4,808	—	—	—	911	—	—	—	73	—	—	—
10 Securitisation	4,793	—	—	—	15	4,808	—	—	—	911	—	—	—	73	—	—	—
11 Retail underlying	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12 Wholesale	4,793	—	—	—	15	4,808	—	—	—	911	—	—	—	73	—	—	—

(1) Rows 6 and 7 are not presented as there were no traditional securitisations where NWH Group acted as originator or sponsor in either period.

UK-SEC4: Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor

The table below shows securitisation exposures in the non-trading book and associated regulatory capital requirements where NatWest Group acted as originator or investor. These are presented by exposure type.

NatWest Group

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands/deductions)					**Exposure values (by regulatory approach)**				**RWA (by regulatory approach)**				**Capital charge after cap**			
31 December 2022	**≤20% RW**	**>20% to 50% RW**	**>50% to 100% RW**	**>100% to <1250% RW**	**1250% RW/ deductions**	**SEC-IRBA**	**SEC-ERBA (including IAA)**	**SEC-SA**	**1250%/ deductions**	**SEC-IRBA**	**SEC-ERBA (including IAA)**	**SEC-SA**	**1250%/ deductions**	**SEC-IRBA**	**SEC-ERBA (including IAA)**	**SEC-SA**	**1250%/ deductions**
1 **Total exposures**	**11,420**	**56**	**44**	**12**	**4**	**—**	**60**	**11,472**	**4**	**—**	**51**	**1,665**	**45**	**—**	**4**	**133**	**4**
2 Traditional securitisation	**11,420**	**56**	**44**	**12**	**4**	**—**	**60**	**11,472**	**4**	**—**	**51**	**1,665**	**45**	**—**	**4**	**133**	**4**
3 Securitisation	**11,420**	**56**	**44**	**12**	**4**	**—**	**60**	**11,472**	**4**	**—**	**51**	**1,665**	**45**	**—**	**4**	**133**	**4**
4 Retail underlying	**5,313**	**4**	**—**	**7**	**4**	**—**	**11**	**5,313**	**4**	**—**	**13**	**743**	**45**	**—**	**1**	**59**	**4**
5 Of which STS	**1,238**	**—**	**—**	**—**	**—**	**—**	**—**	**1,238**	**—**	**—**	**—**	**132**	**—**	**—**	**—**	**11**	**—**
6 Wholesale	**6,107**	**52**	**44**	**5**	**—**	**—**	**49**	**6,159**	**—**	**—**	**38**	**922**	**—**	**—**	**3**	**74**	**—**
7 Of which STS	**125**	**—**	**—**	**—**	**—**	**—**	**—**	**125**	**—**	**—**	**—**	**14**	**—**	**—**	**—**	**1**	**—**
9 Synthetic securitisation	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
10 Securitisation	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
11 Retail underlying	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
12 Wholesale	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**

NatWest Group

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
	Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWA (by regulatory approach)				Capital charge after cap			
31 December 2021	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions
1 Total exposures	6,998	239	146	139	7	—	361	7,161	7	—	327	1,143	86	—	26	91	7
2 Traditional securitisation	6,998	239	146	139	7	—	361	7,161	7	—	327	1,143	86	—	26	91	7
3 Securitisation	6,998	239	146	139	7	—	361	7,161	7	—	327	1,143	86	—	26	91	7
4 Retail underlying	4,501	2	73	133	7	—	185	4,524	7	—	232	673	86	—	18	54	7
5 Of which STS	298	—	—	—	—	—	—	298	—	—	—	30	—	—	—	2	—
6 Wholesale	2,497	237	73	6	—	—	176	2,637	—	—	95	470	—	—	8	37	—
7 Of which STS	75	—	—	—	—	—	—	75	—	—	—	9	—	—	—	1	—
9 Synthetic securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10 Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11 Retail underlying	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12 Wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

- The increase in total exposures was primarily driven by an increase in investor positions in NWM Plc.

UK-SECA - Qualitative disclosure requirements related to securitisation exposures

Framework, roles and definitions

This section presents descriptive information on NatWest Group's securitisation activities and related risk management processes and accounting policies.

Definitions

Securitisation and special purpose entities

The CRR defines a securitisation as a transaction or scheme where the credit risk of an exposure or pool of exposures is tranched, where the payments arising from the transaction or scheme are dependent upon the performance of the underlying exposure(s) and where the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme.

Securitisations can broadly take two forms: traditional and synthetic. In traditional securitisations, the originator transfers ownership of the underlying exposure(s) to an SSPE, putting the asset(s) beyond the reach of the originator and its creditors. The purchase of the underlying exposure(s) by the SSPE is funded by the issuance of securities.

In synthetic securitisations, the originator retains ownership of the underlying exposure(s) but transfers the associated credit risk to another entity through the use of guarantees or credit derivatives.

SSPEs are set up for a specific limited purpose to facilitate a securitisation transaction. They do not provide a commercial service or employ staff. They may take a variety of legal forms, such as trusts, partnerships and companies. Their activities are limited to those appropriate to carrying out a securitisation and their structure is intended to isolate the obligations of the SSPE from those of the originator institution and to ensure that the holders of the beneficial interests have the right to pledge or exchange those interests without restriction. Typically, their share capital is held ultimately by charitable trusts.

Although SSPEs are frequently used, they are not necessarily required for all securitisation structures.

The following definitions are used in these Pillar 3 disclosures:

Trading book – The trading book consists of positions in financial instruments and commodities held either with the intent to trade or in order to hedge other elements of the trading book. To be eligible for trading book capital treatment, financial instruments must either be free of any covenants restricting their tradability or be able to be hedged.

Non-trading book – The non-trading book consists of positions, exposures, assets and liabilities that are not in the trading book. It is also referred to as the 'banking book'. In this section, the counterparty credit risk arising from derivative trades associated with SSPEs is captured in the non-trading book disclosures, including in situations where the derivative attracts market risk in the trading book.

Securitisation position – Any exposure to a securitisation that falls within the scope of regulatory treatment. This includes not only exposures arising from the purchase or retention of the securities issued by an SSPE but also loans and liquidity facilities to securitisations, and the counterparty credit risk exposure of derivative positions transacted with an SSPE.

Re-securitisation – A securitisation in which the underlying asset or pool of assets comprises at least one securitisation position. NatWest Group does not have any re-securitisation exposures.

Securitised exposure – An asset or pool of assets that is securitised by way of a traditional or synthetic securitisation.

Significant risk transfer assessment – An assessment prescribed by the CRR and designed to determine whether or not a securitisation structure transfers significant risk on the underlying assets to a party or parties other than the originator.

Term securitisation – A securitisation vehicle funding a pool of assets through the issuance of long-term securities. A term securitisation may hold the assets of one or more originators.

Asset-backed commercial paper (ABCP) conduit – A securitisation vehicle funding a pool of assets through the issuance of predominantly short-term securities (namely commercial paper). A conduit may hold the assets of one or more originators (referred to as a single-seller or multi-seller conduit, respectively).

Simple, transparent and standardised securitisation (STS) – these are exposures which meet requirements contained in the Securitisation Regulation. If they additionally meet some further requirements in the CRR, they can qualify for reduced capital requirements.

Objectives and roles

By participating in securitisation activity, NatWest Group aims to achieve one or both of the following objectives, either for its own purposes or for customers:

- To diversify sources of funding; and
- To facilitate prudential balance sheet and risk management.

In doing so, NatWest Group may incur a range of risks, including credit, market, liquidity and funding, legal, regulatory and reputational risks; for which it must hold regulatory capital.

UK-SECA - Qualitative disclosure requirements related to securitisation exposures continued

NatWest Group may play one or more of the following roles in a securitisation transaction:

Originator – NatWest Group may originate securitisation transactions for either funding or risk and capital management purposes

The aim of originating funding transactions is to diversify its sources of funding and manage its balance sheet.

In these transactions, NatWest Group will be exposed to credit risk and market risk on the underlying assets, as the structure of the transaction does not transfer these risks to third parties.

The transactions originated for risk and capital management purposes, are synthetic transactions with the assets remaining on the accounting balance sheet. Risk is transferred by way of guarantees, with the intention of meeting the signification risk transfer requirements and derecognising the underlying credit risk and recognising the securitisation tranches, with credit risk mitigation on the protected tranches.

Investor – To generate financial returns, NatWest Group may:

- Purchase asset backed loans and securities;
- Enter into derivative transactions with an SSPE

To generate additional fee income, NatWest Group may play other roles as well:

Sponsor – NatWest Group may establish and manage a term securitisation that purchases bonds or other financial assets from third parties. It may do so on its own account or on behalf of its customers. Additionally, it historically established and managed ABCP conduits. In its role as sponsor, it is particularly exposed to credit and liquidity risk.

Arranger – NatWest Group may structure a securitisation transaction, drafting the documentation that governs the behaviour of the SSPE, and then sell the securities issued by the SSPE to investors. It may act as arranger for securitisation transactions it originates or, alternatively, for securitisation transactions originated by its customers, principally financial institutions and large corporates.

Manager – NatWest Group may manage and service the asset pool of the securitisation as required by the terms of the transaction.

Underwriter – NatWest Group may underwrite the securities issued by an SSPE. The associated securitisation transaction may be originated by NatWest Group or its customers.

Other administrative roles – As a ‘contractual party’, NatWest Group may do any of the following, alone or in combination:

- Hold the bank account of an SSPE on its own books;
- Monitor the credit quality of the underlying assets on behalf of investors;
- Report on the performance of the SSPE to investors; and
- Make payments to investors on behalf of the SSPE.

Information relating to the significant roles performed by NatWest Group (investor, originator, sponsor) is contained in the tables within this section.

Risk management

As noted above, acting as an originator, sponsor or investor in a securitisation transaction may give rise to both credit and market risk. NatWest Group may also incur other types of risk during its exposure to securitisation activity.

All such risks are described in the table below, along with details of how they are monitored and managed.

STS and non-STS positions are not managed differently, although STS transactions which comply with all relevant requirements, may have a lower capital requirement.

UK-SECA - Qualitative disclosure requirements related to securitisation exposures continued

Types of risk	Definition and how the risk may arise	How NatWest Group monitors and manages the risk
Credit risk	The risk that a customer or counterparty (or, in the case of a securitisation, an SSPE) fails to meet its obligations to settle outstanding amounts. Securitisation may expose NatWest Group to credit risk for any of several reasons. If NatWest Group invests in an SSPE by purchasing or (in the case of a securitisation it has originated) retaining the bonds it issues, conducting derivative transactions with it or lending to it, NatWest Group is exposed to the risk that the SSPE will fail to meet its obligations to settle outstanding amounts to NatWest Group. This may happen because cash flows generated by the underlying assets are insufficient to repay creditors, including bondholders, derivative counterparties or lenders, or in the event of a third party, such as a bank account provider or derivative counterparty, defaulting on its obligation to the SSPE. The SSPE pays principal and interest to creditors in order of seniority, with the most senior paid first. When NatWest Group originates a securitisation transaction, if the securitisation structure does not substantially transfer the economic risks of the underlying assets, including credit risk, to a third party, it is exposed to credit risk on those assets just as it would be if the securitisation had never taken place. Credit risk is heightened if the assets in the SSPE are not diversified by sector, geography or borrower.	NatWest Group's overall exposure to third party securitisation is governed by its sector concentration framework. If it retains or purchases bonds issued by an SSPE, conducts derivative transactions with it or lends to it, NatWest Group monitors the performance of the vehicle in part by reviewing information provided by the trustee as well as by rating agencies or other third parties. As an originator, if the securitisation structure does not transfer substantial credit risk to a third party, NatWest Group manages it as if the securitisation had never taken place. NatWest Group has credit limits in place and monitors SSPE positions with third party bank account providers for own asset securitisations which generate a credit risk exposure for NatWest Group. NatWest Group may seek to mitigate credit risk arising from the purchase (or retention) of bonds issued by an SSPE through the use of unfunded protection, usually guarantees. It hedges the risk associated with purchased bonds, which are generally held in the trading book, as appropriate. It does not usually hedge the credit risk associated with retained bonds, which are generally held in the non-trading book.
Traded market risk	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.	NatWest Group manages this risk in accordance with its policy on market risk. Re-securitisation exposures are subject to individual scrutiny.
Non-traded market risk	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.	NatWest Group manages this risk in accordance with its policy on non-traded market risk, including structural interest rate risk.
Liquidity and funding risk	Liquidity risk is the risk of being unable to meet financial obligations as and when they fall due. Funding risk is the risk of not maintaining a diversified, stable and cost-effective funding base. NatWest Group may sponsor securitisations and, as sponsor, may provide liquidity facilities to the SSPE. If the SSPE utilises these facilities, NatWest Group will need to fund them, giving rise to the risk that it will not be able to do so.	NatWest Group manages these risks in accordance with its policy on liquidity and funding risk.

UK-SECA - Qualitative disclosure requirements related to securitisation exposures continued

Types of risk	Definition and how the risk may arise	How NatWest Group monitors and manages the risk
Legal risk	The risk that NatWest Group will incur losses as a result of the failure of the documentation relating to a securitisation to perform as expected or as a result of investors asserting that NatWest Group made inadequate disclosures or conducted inadequate due diligence in relation to the relevant credit exposures. Legal risk is elevated if the parties to the transaction are located in different jurisdictions, as documentation effective in one jurisdiction may not be effective in another. Additional losses may arise as a result of costs incurred by the parties in an effort to address documentary shortcomings. This risk is heightened in the case of re-securitisations, as NatWest Group needs to gather information surrounding each of the original transactions, together with an understanding of their interaction within the re-securitisation.	NatWest Group has specific processes and controls in place designed to ensure adequate due diligence is undertaken and appropriate disclosures are made in relation to the relevant offerings. In relation to documentation, distribution of securities and compliance with relevant laws and regulations, NatWest Group works with experienced internal and external counsel to ensure all reasonable steps are taken to ensure documentation standards are satisfactory and applicable laws and regulations in all relevant jurisdictions are complied with.
Compliance & conduct risk	Compliance risk is the risk that the behaviour of NatWest Group towards customers fails to comply with laws, regulations, rules, standards and codes of conduct. Conduct risk is the risk that the conduct of NatWest Group and its subsidiaries and its staff towards customers – or in the markets in which it operates – leads to unfair or inappropriate customer outcomes and results in reputational damage, financial loss or both. Compliance and conduct risks exist across all stages of NatWest 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 insider information.	Well established policies and supporting processes are in place to ensure timely identification of, and effective responses to, changes in official sector requirements, laws, regulations and major industry standards affecting NatWest Group. This risk falls under the governance of the Mandatory Change Advisory Committee, which meets monthly with representatives from all franchises and functions.
Reputational risk	The risk of damage to stakeholder trust due to negative consequences arising from internal actions or 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).	NatWest Group manages reputational risk in accordance with its reputational risk management framework.
Operational risk	The risk of loss resulting from inadequate or failed internal processes, people and systems, or external events. This risk arises from day-to-day operations and is relevant to every aspect of the business.	NatWest Group manages operational risk in accordance with its operational risk management framework.

UK-SECA - Qualitative disclosure requirements related to securitisation exposures continued

Regulatory treatment

NatWest Group determines the regulatory capital required for exposures related to its securitisation activities in accordance with the CRR. In so doing, with respect to each securitisation transaction, it considers on an ongoing basis:

- The effectiveness of the originated securitisation structure in achieving risk transfer; and
- Whether the securitisation positions it holds relate to the trading or non-trading book.

In instances where it is an originator, NatWest Group carries out a significant risk transfer assessment to evaluate whether the securitisation structure transfers significant credit risk associated with the underlying assets to the holders of the securitisation positions and that the reduction in capital requirements is commensurate with the reduction in risk.

If significant risk transfer is achieved, NatWest Group does not hold any capital against the underlying assets but does hold capital against any retained securitisation positions. However, if it is not achieved, capital will be held against the underlying assets as if the securitisation had never taken place.

None of the SRT transactions are STS compliant. The retained positions are mostly senior exposures, with a very small amount of first loss exposure.

As noted earlier, NatWest Group may play several roles in respect of securitisations. Of these, three may result in NatWest Group holding securitisation positions in connection with which a capital charge is required: originator; sponsor; or investor.

In the case of securitisation positions related to the trading book, NatWest Group calculates regulatory capital needed for specific and general market risks (refer to the market risk section in Pillar 3). Trading book exposures can be across the capital stack, they are generally not STS compliant.

In the case of securitisation positions in the non-trading book, NatWest Group calculates regulatory capital for credit risk. Depending on the nature of the instrument there may also be capital requirements for counterparty credit risk. These positions tend to be to senior securitisation exposures, some of which may be STS compliant.

Calculation of risk-weighted exposures

Risk weighted exposures for securitisation positions are calculated in accordance with the CRR, which was amended in 2019.

There are three different methodologies for calculating risk weights and a hierarchy of approaches.

SEC-IRBA is the Internal Ratings-Based Approach. The calculation of the applicable risk weight is based on the capital charge for the underlying pool of exposures calculated under the IRB approach. Additional data inputs used in the calculation are the attachment and detachment points of the tranche, tranche maturity, effective number of exposures and the pool LGD.

SEC-SA is the Standardised Approach. The calculation of the applicable risk weight is based on the capital charge for the underlying pool of exposures calculated under the Standardised Approach. Additional data inputs used in the calculation are the nominal amount of delinquent exposures and the attachment and detachment points of the tranche.

SEC-ERBA is the External Ratings-Based Approach. This is based on external credit ratings from credit rating agencies. The ratings are mapped to corresponding credit quality steps (CQS) and, along with seniority of the tranche, maturity and tranche thickness, these are used to determine the risk weight for each exposure. NatWest Group recognises ratings issued by Standard & Poor's, Moody's, Fitch, DBRS or ARC Ratings. Most transactions are rated by two or more of these rating agencies, which are formally classified as external credit assessment institutions (ECAIs).

NatWest Group does not have any exposures capitalised using the Internal Assessment Approach (IAA).

Lower risk weights apply under all approaches to positions which qualify as Simple, Transparent and Standardised securitisations (STS).

NatWest Group applies the hierarchy as set out in the CRR and applies one of the methodologies, SEC-IRBA, SEC-SA or SEC-ERBA as required. The SEC-IRBA approach has only been used on own-originated transactions, where IRB risk weights on the underlying assets are available. The remaining exposures are risk weighted, as appropriately, using SEC-SA or SEC-ERBA.

UK-SECA - Qualitative disclosure requirements related to securitisation exposures continued

Summary of accounting policies including derecognition

Accounting assessment takes place at the time of closing a transaction and depends on a securitisation's residual risk. By contrast, significant risk transfer assessments take place at regular intervals and the resulting capital calculations can differ depending on the change in residual risk over time.

The most relevant accounting policies for transactions involving securitisation of NatWest Group's own assets are 1) consolidation of the securitisation vehicle; and 2) derecognition of the securitised assets in the original company.

The most relevant accounting policies for the purchase of third-party securitisation exposures (referred to in the accounting framework as contractually linked notes) are 1) recognition; 2) classification and measurement; and 3) consolidation of the securitisation vehicle.

Consolidation

A structured entity is consolidated when NatWest Group, or one if its subsidiaries, controls it. Control over a structured entity arises when NatWest Group, or one of its subsidiaries, has the power to direct the key activities of the entity so as to affect its exposure to the variable returns from the entity.

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 NatWest Group retains substantially all the risks and rewards of ownership.

A financial liability is removed from the balance sheet when the obligation is paid, cancelled, or expires. Cancellation includes the issuance of a substitute instrument on substantially different terms.

Derecognition assessment will be considered both at the consolidated and company level when a financial instrument is transferred to a structured entity.

Financial instruments

Financial instruments are measured at fair value upon initial recognition on the balance sheet. Monetary financial assets are classified into one of the following subsequent measurement categories. This is 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 NatWest Group manages its 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.

The contractual terms of a financial asset; any leverage features; prepayment and extension terms; and triggers, discounts or penalties to interest rates that are part of meeting Environmental, Social 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.

Contractually linked notes (securitisation positions) contain features which require additional consideration, and the position in the waterfall of payments may affect the outcome.

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.

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 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.

UK-SECA - Qualitative disclosure requirements related to securitisation exposures continued

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.

Assets awaiting securitisation

At both 31 December 2022 and 31 December 2021, no assets were categorised as awaiting securitisation.

Implicit support

NatWest Group has not provided support to any securitisation transactions beyond its contractual obligations.

Types of transactions

In the role of originator, NatWest Group securitises a variety of assets which typically include the following:

Residential mortgages and commercial real estate loans **–** NatWest Group securitises residential mortgages and commercial real estate loans that it originates itself. Mortgages and real estate loans are assigned to SSPEs, which fund themselves principally through the issue of floating rate notes.

Other loan types – NatWest Group selectively securitises other loans that it originates, principally those to corporates and small and medium-sized enterprises.

SSPEs used by NatWest Group

SSPEs used by NatWest Group hold either the securitised assets themselves (traditional securitisations) or a package of other assets economically equivalent to those assets (synthetic securitisations).

At 31 December 2022, NatWest Group sponsored one remaining multi-seller commercial paper conduit programme, Thames Asset Global Securitization (TAGS). NatWest Group provides programme-wide credit enhancement and liquidity facilities to TAGS. During 2022, TAGS issued no commercial paper to external parties.

There is one remaining outstanding traditional securitisation SSPE - Dunmore Securities No. 1 Designated Activity Company, which contains mortgages originated by UBIDAC.

The synthetic securitisations purchase credit protection via the Nightingale SSPEs which issue CLN to the investors. These entities are:

Nightingale Securities 2017-1 Limited
Nightingale CRE 2018-1 Limited
Nightingale Project Finance 2019 1 Limited
NIGHTINGALE UK CORP 2020 2 LTD
Nightingale LF 2021-1 Ltd

Affiliates of NatWest Group do not invest in securitisations originated by the NatWest Group or in securitisation positions issued by SSPEs sponsored NatWest Group.

No transactions have been originated by NatWest Group during 2022.

Annex XXIX: Market risk

UK MR1: Market risk under the standardised approach

The table below shows market risk RWAs by type of risk under the standardised approach.

		NatWest Group	
		31 December 2022	31 December 2021
		a	a
		RWAs	RWAs
		£m	£m
Outright products			
1	Interest rate risk (general and specific)	**294**	366
2	Equity risk (general and specific)	**—**	—
3	Foreign exchange risk	**747**	560
4	Commodity risk	**6**	—
Options			
5	Simplified approach	**—**	—
6	Delta-plus approach	**—**	—
7	Scenario approach	**—**	—
8	Securitisation (specific risk)	**72**	84
9	Total	**1,119**	1,010

- The increase in market risk RWAs under the standardised approach was mainly due to an increase in foreign exchange risk across the year.

UK MR2-A: Market risk under the internal model approach (IMA)

The table below shows market risk RWAs and own funds requirements by component under the IMA.

		NatWest Group			
		31 December 2022		31 December 2021	
		a	b	a	b
		RWAs	Own funds requirements	RWAs	Own funds requirements
		£m	£m	£m	£m
1	VaR (higher of values a and b)	**1,883**	**151**	1,456	116
a	Previous day's VaR (VaRt-1)		**31**		29
b	Multiplication factor (mc) x average of previous 60 working days (VaRavg)		**151**		116
2	SVaR (higher values of a and b)	**2,664**	**213**	2,591	207
a	Latest available SVaR (SVaRt-1)		**41**		52
b	Multiplication factor (ms) x average of previous 60 working days (sVaRavg)		**213**		207
3	IRC (higher of values a and b)	**681**	**54**	1,295	104
a	Most recent IRC measure		**54**		95
b	12 weeks average IRC measure		**56**		104
5	Other (RNIV at period end)	**1,953**	**156**	1,565	125
6	Total	**7,181**	**574**	6,907	552

– Refer to commentary under Table MR2-B.

UK MR3: IMA values for trading portfolios

The table below shows the minimum, maximum, average and period end values, over the reporting period, derived from the models approved under the IMA for use in calculating market risk capital requirements and RWAs. The reported values do not include any capital multipliers or other additional capital charges that may be applied at the supervisor's discretion.

		NatWest Group	
		31 December 2022 £m	31 December 2021 £m
	VaR (10 day 99%)		
1	Maximum value	**54**	49
2	Average value	**34**	36
3	Minimum value	**23**	28
4	Period end	**31**	29
	SVaR (10 day 99%)		
5	Maximum value	**112**	157
6	Average value	**66**	94
7	Minimum value	**41**	51
8	Period end	**41**	52
	IRC (99.9%)		
9	Maximum value	**112**	138
10	Average value	**69**	95
11	Minimum value	**50**	76
12	Period end	**54**	95

– The movements in VaR, SVaR and IRC values were broadly in line with the trends in market risk capital requirements under the IMA, as presented in Table MR2-B.

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.

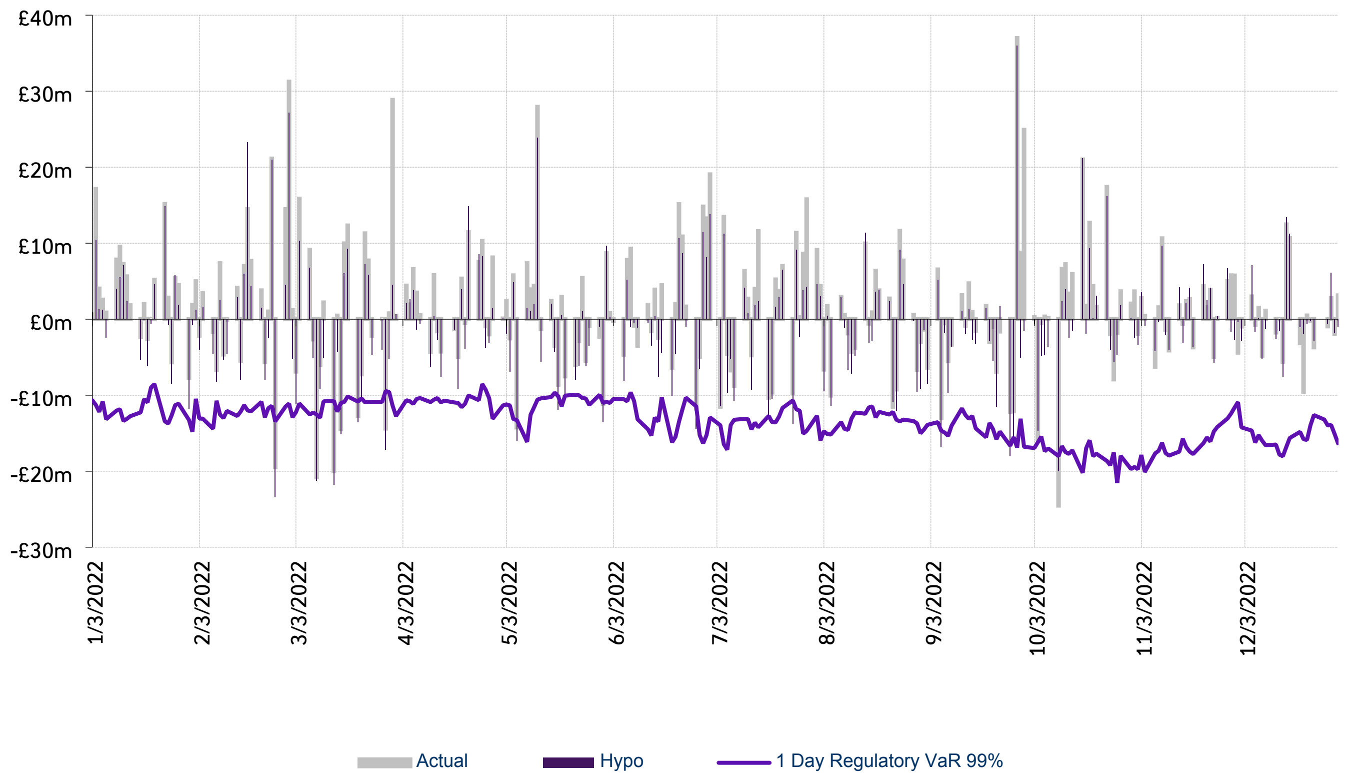
The Actual P&L for a particular business day is the firm's actual P&L in respect of the trading activities including intraday activities, adjusted by stripping out fees and commissions, brokerage, and additions to and releases from reserves that are not directly related to market risk.

The Hypothetical P&L is the firm's Actual P&L excluding any intra-day activities.

A portfolio is said to produce a back-testing exception when the Actual or Hypothetical P&L exceeds the VaR level on a given day. Such an event may be caused by a large market movement or may highlight issues such as missing risk factors or inappropriate time series. Any such issues identified are analysed and addressed through appropriate remediation or development action. Both Actual and Hypothetical back-testing exceptions are monitored.

UK MR4: Comparison of VaR estimates with gains/losses

The graph below shows one-day 99% regulatory VaR compared with Actual and Hypothetical (Hypo) P&L for NatWest Markets Plc, NatWest Group's largest legal entity by market risk RWAs and positions.



- In the 250-business-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 onset of the Ukraine/Russia conflict.

UK MRA: Qualitative disclosure requirements related to market risk

Definition and framework

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

The majority of traded market risk exposure arises from trading activities in NatWest Markets. The primary objective of these activities is to provide a range of financing, risk management and investment services to clients – including major corporations and financial institutions around the world. From a market risk perspective, activities are primarily focused on: currencies; rates; securitised products; and traded credit. Trading activities may also give rise to counterparty credit risk. For further detail refer to the Counterparty credit risk section.

In addition to NWM Plc, NWM N.V. and NWM Securities Inc. are the major contributors to market risk capital requirements in NatWest Group.

Market risk governance and management

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

NatWest 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 NatWest 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 NatWest 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 NatWest 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 the appetite and control frameworks relating to NatWest Group's principal risks, refer to UK OVA.

Monitoring and mitigation

Traded market risk is identified and assessed by gathering, analysing, monitoring and reporting market risk information at desk, business, business segment and NatWest 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, business segment and NatWest 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 the Executive Risk Committee and Board Risk Committee.

Measurement

NatWest 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 NatWest 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.

These methods have been designed to capture correlation effects and allow NatWest Group to form an aggregated view of its traded market risk across risk types, markets and business lines while also taking into account the characteristics of each risk type.

Further information on regulatory VaR, regulatory SVaR, RNIVs and the incremental risk charge is provided in UK MRB below. Further information on internal VaR and internal SVaR is provided in the Traded Market Risk section of the 2022 NatWest Group ARA.

UK MRB: Qualitative disclosure requirements for institutions using the internal market risk models

Inclusion of exposures in trading book

The Trading Book Policy sets out the principles and criteria for identifying and classifying trading book positions for the purpose of regulatory capital and market risk and credit risk measurement. The policy also stipulates the control requirements for the management and regular monitoring of the trading book status of positions and the procedures for escalation where necessary. Key criteria for determining trading book status set within the policy include considerations such as whether positions are transferable or comprise hedgeable financial instruments held with the intent to trade or in a hedging relationship with other trading book positions.

Trading book positions must be valued by marking them to market or to model on a daily basis. They are subject to market risk-based rules, with market risk capital requirements calculated either by using internal models where regulatory approval has been received or otherwise by using the non-modelled or standardised approach. Where the criteria set out in the policy are not met, positions are classified as non-trading book exposure and capitalised as outlined later in this section.

Calculation of market risk capital requirements

NatWest Group uses two broad methodologies to calculate its market risk capital charge: (i) the standardised approach, whereby regulator-prescribed rules are applied, and (ii) the internal model approach (IMA), where, subject to regulatory approval, the internal model is used to calculate the capital charge.

NatWest Group has IMA permission from the PRA for NWM Plc and NWM N.V. on a consolidated basis and from the DNB for NWM N.V. on a solo basis

Under the IMA, the following measures are used to calculate the capital charge: VaR, stressed VaR (SVaR), the incremental risk charge (IRC) and Risks Not In VaR (RNIVs). NatWest Group does not use the comprehensive risk measure.

For the percentage of NatWest Group's own funds requirements covered by use of the PRA-approved models, refer to the quantitative disclosures, notably UK MR1 and UK MR2-B.

NWM N.V. and NWM Securities Inc. are not currently considered large subsidiaries of NatWest Group for CRR purposes and therefore values for these entities are not shown separately.

Regulatory VaR

VaR is a statistical estimate of the potential change in the market value of a portfolio (and, thus, the impact on the income statement) over a specified time horizon at a given confidence level. NatWest Markets uses an approximate revaluation approach in calculating VaR and SVaR.

The regulatory VaR model is based on a historical simulation, utilising market data from the previous 500 days on an equally weighted basis. It assumes a time horizon to hedge or liquidate of ten trading days and a confidence level of 99%.

In contrast with internal VaR, it takes into account only products, locations and legal entities covered by the regulator's IMA permission. In addition, regulatory VaR is based on a directly modelled ten-day holding period, rather than the one-day holding period on which internal VaR is based. The PRA approval covers general market risk in interest rate, foreign exchange, equity and commodity products and specific market risk in interest rate and equity products.

Management tools to assess model performance include:

- Back-testing – Regulatory and internal back-testing is conducted on a daily basis. (For information on regulatory back-testing, refer to UK MR4. For information on internal back-testing, refer to the Traded Market Risk section of the 2022 NatWest Group ARA.)
- Ongoing model validation – VaR model performance is assessed both regularly, and on an ad-hoc basis, if market conditions or the portfolio profile change significantly.
- Model Risk Management review – As part of the model lifecycle and in keeping with NatWest Group policy, all risk models (including the VaR model) are independently reviewed to ensure that they remain fit for purpose given current market conditions and the portfolio profile (refer to Risk models below).

Regulatory stressed VaR (SVaR)

As with VaR, the SVaR technique 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%.

NatWest Group's SVaR use case of its VaR model has also been approved by the PRA for use in the capital requirement calculation. The position scopes of regulatory and internal SVaR are the same as those of regulatory and internal VaR.

Risk factors

The VaR model captures the potential impact of the following risk factors:

- Interest rate risk – the risk that a position's fair value will alter due to a change in the absolute level of interest rates, in the spread between two rates, in the shape of the yield curve or in any other interest rate relationship.
- Credit spread risk – the risk that the value of a position will alter due to changes in the real or market-perceived ability of a borrower to pay related cash flows or obligations.
- Foreign currency price risk – the risk that the fair value of a position will alter due to a change in foreign currency or gold rates.
- Equity price risk – the risk that the fair value of a position will alter due to a change in equity prices.
- Commodity price risk – the risk that the fair value of a position will alter due to a change in commodity prices.

When simulating potential movements in risk factors, a combination of absolute and relative returns is used, depending on the risk factor.

UK MRB: Qualitative disclosure requirements for institutions using the internal market risk models continued

General and specific risks

The market risks subject to capital requirements under Pillar 1 are primarily interest rate and credit spread risks in the trading book and foreign exchange risk in both the trading and non-trading books. Interest rate risk is split between general and specific risks. General risks represent market risks due to a move in a market as a whole, such as a main index or yield curve, while specific risks represent market risks arising from events particular to an underlying issuer.

The aggregation approach taken for general and specific risks is as follows:

- General risks are aggregated at the simulation level, adding P&L forecasts generated by the VaR model before statistics such as VaR and SVaR are extracted.
- Specific interest rate risks have both a systematic component and an idiosyncratic component. The systematic component captures the risk in market movements of credit spreads (across sectors, geographic locations and ratings) while the idiosyncratic component captures the credit spread variability of the underlying entity. The systematic components of specific interest rate risks are aggregated at the simulation level, while the idiosyncratic components are calculated as a standalone charge.
- VaR and SVaR capture general and specific risks using a single model but not risks arising from the impact of defaults and rating changes associated with traded credit products and their derivatives. For these risks, two product-dependent approaches are used:
- The incremental risk charge model (see below) captures risks arising from rating migration and default events for the more liquid traded credit instruments and their derivatives.
- Securitisation and re-securitisation risks in the trading book are treated with the non-modelled capitalisation approach.

VaR limitations

Historical VaR and NatWest Group's implementation of this risk measurement methodology have a number of known limitations, as summarised below, and VaR should be interpreted in light of these. NatWest Group's approach is to supplement VaR with other risk metrics that address these limitations to ensure appropriate coverage of all material market risks.

Historical simulation VaR may not provide the best estimate of future market movements. It can only provide a forecast of portfolio losses based on events that occurred in the past. The NatWest Group model uses the previous 500 days of data; this period represents a balance between model responsiveness to recent shocks and risk factor data coverage.

Market data time series are updated on a daily basis, with a ten-working-day time lag. The use of a 99% confidence level VaR statistic does not provide information about losses beyond this level, usually referred to as 'tail' risks. These risks are more appropriately assessed using measures such as SVaR and stress testing.

Finally, where market data time series are not appropriate (due to poor quality or a lack of liquidity in the market), NatWest Group uses proxy time series or excludes the risk factor from its VaR model and capitalises the risk through its RNIV framework.

Risks Not In VaR (RNIV)

The RNIV framework is used to identify and quantify market risks that are inadequately captured by the VaR and SVaR models.

The need for an RNIV calculation is typically identified in one of the following three circumstances: (i) as part of the New Product Risk Assessment process, when a risk manager or other subject matter expert opines that the associated risk is not adequately captured by the VaR model or system; (ii) when risks are mapped to time series that are deemed to be inadequate (for example, due to data quality problems or proxy series usage); or (iii) as a result of a recommendation made during the ongoing model validation or by Model Risk Management during its annual review of the VaR model. The controls and operating model to this end are governed by internal policy.

RNIVs that are related specifically to instruments that have level 3 valuation hierarchy assumptions (refer to Fair value hierarchy in the 2022 NatWest Group ARA) are mainly included in the following categories: proxied sensitivities or risk factors, higher-order sensitivity terms, and static pricing parameters.

NatWest Group adopts two approaches for the quantification of RNIVs:

- Under the VaR/SVaR approach, two values are calculated: (i) the VaR RNIV; and (ii) the SVaR RNIV.
- Under the stress-scenario approach, an assessment of ten-day extreme, but plausible, market moves is used in combination with position sensitivities to give a stress-type loss number – the stress-based RNIV value.

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) that are held in the trading book. It further captures basis risk between different instruments, maturities and reference entities.

Following the internal ratings-based approach for credit risk, the IRC is calculated over a one-year capital horizon with a 99.9% confidence level. The dependency of positions is modelled using a single-factor Gaussian copula.

The IRC is mainly driven by three-month credit rating transition, default and correlation parameters. The portfolio impact of correlated defaults and rating changes is assessed by observing changes in the market value of positions using stressed recovery rates and modelled credit spread changes. Revaluation matrices are used to capture any non-linear behaviour.

The transition matrix is estimated using Moody's history of issuer ratings.

NWM Plc's average liquidity horizon by position (weighted by materiality) at 31 December 2022 was 3.7 months (2021 – 3.3 months). The horizon is determined based on issuer liquidity, position concentration, product type and maturity.

The NatWest Group risk models policy governs IRC model parameter changes and ongoing model reviews as well as data inputs and outcomes. In addition, diagnostic testing is performed quarterly. IRC models are also subject to independent stress-testing and sensitivity analysis, as described more generally for risk models under Model Validation below.

UK MRB: Qualitative disclosure requirements for institutions using the internal market risk models continued

Model validation

NatWest Group uses a variety of models to manage and measure market risk. These include pricing models (used for valuation of positions) and risk models (for risk measurement and capital calculation purposes). They are developed and approved in NatWest Markets, with material models subject to independent review by Model Risk Management. For further detail on the independent model validation carried out by Model Risk Management, refer to the Model Risk section of the 2022 NatWest Group ARA. Information relating to pricing and market risk models is presented below.

Pricing models

Pricing models are developed by a dedicated first line team, in conjunction with the trading desk. The models are used to value positions for which prices are not directly observable as well as for the risk management of the portfolio. Any pricing models that are used as the basis for valuing portfolios and records are subject to approval and oversight by asset-level modelled product review committees. These committees comprise representatives of the trading, finance, market risk, model development and model review functions. Approval requires review and approval by these stakeholders as well as Model Risk Management.

The review process includes the following steps:

- The committees prioritise models for review by Model Risk Management, considering the materiality of the risk booked against the model and an assessment of the degree of model risk, which is the valuation uncertainty arising from the choice of modelling assumptions.
- Model Risk Management quantifies the model risk, which may include comparing the model outputs with those of alternative models developed by Model Risk Management.
- The sensitivities derived from the pricing models are validated.
- The conclusions of the review are used to inform risk limits and by the Finance function to inform model reserves.

Risk models

All model changes are approved through model governance committees at business segment level. Changes to existing models are subject to Model Risk Management review. NatWest Group follows regulatory guidance for assessing the materiality of extensions and changes to the internal model approach for market risk. In addition to Model Risk Management's independent oversight – which provides additional assurance that NatWest Group holds appropriate capital for the market risk to which it is exposed – the methodology team monitors the model performance for market risk through back-testing and other processes.

Calculation of regulatory capital for non-trading book exposures

Market risk exposures in the non-trading book that are not captured under Pillar 1 are capitalised through the Internal Capital Adequacy Assessment Process (ICAAP). This covers gap risk, basis risk, credit spread risk, pipeline risk, structural foreign exchange risk, prepayment risk and accounting volatility risk. A combination of value-based and earnings-based measures are used in the ICAAP.

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 and is produced to a 99% confidence level. Methodologies are reviewed by Model Risk Management and results are approved by the NWH Board.

Annex XXXI: Operational risk

UK OR1: Operational risk own funds requirements and risk-weighted exposure amounts

The table below shows income used in the calculation of own funds requirements for operational risk. NatWest Group applies the Standardised approach for calculating such requirements making use of audited income figures for the relevant indicator.

		NatWest Group				
		a	b	c	d	e
in £m.		Relevant indicator			Own funds requirements	Risk-weighted exposure amount
Banking activities		2020	2021	2022		
1	Banking activities subject to basic indicator approach (BIA)	—	—	—	—	—
2	Banking activities subject to standardised (TSA) / alternative standardised (ASA) approaches	**11,850**	**11,093**	**10,776**	**1,529**	**19,115**
3	*Subject to TSA:*	***11,850***	***11,093***	***10,776***		
4	*Subject to ASA:*	—	—	—		
5	Banking activities subject to advanced measurement approaches AMA	—	—	—	—	—

UK ORA - Qualitative information on operational risk

Risk management objectives and policies

NatWest Group defines operational risk as “the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events.” It is a level 1 key risk, within the NatWest Group risk directory and it is managed through the setting of policy, which is supported by risk standards and a risk handbook to drive the effective management of operational risk within the NatWest Group Board approved risk appetite.

NatWest Group’s operational risk appetite is calibrated annually and defines the type and aggregate level of risk NatWest Group is willing to accept in pursuit of its strategic objectives and business plans. The operational risk appetite encompasses the full range of operational risks faced by its legal entities, businesses, and functions. It supports the effective management of operational risk, the promotion of robust risk practices and risk behaviours.

The NatWest Group operational risk policy, defines, at a high level, the key principles and approach to managing and reporting operational risk across NatWest Group including the minimum requirements and approach that all legal entities must adhere to including how the risk appetite is overseen and controlled. It supports a risk based, principles-led approach to operational risk management with minimum requirements defined at a level commensurate to the risk exposure of each legal entity, business segment, and function.

The NatWest Group operational risk policy is supported by risk standards aligned to each Level 2 operational risk. Risk standards are a more granular expression of policy and detail the mandatory controls that must be applied to manage each level 2 risk within appetite. Thus, providing the necessary requirements for the first line of defence (1LOD) to develop operational policies, controls and procedures.

Operational risk qualitative statement

NatWest Group seeks to reduce financial loss and / or adverse consequences of operational risk for customers and NatWest Group to an acceptable level through robust risk practices and behaviour and a proportionate control environment, balancing the cost of control. NatWest Group accepts that operational risk is unavoidable as a result of conducting business and in the provision of services to customers.

Operational risk appetite is expressed through the operational risk loss experience, delivery of Tier 1 programmes, the confidence level of avoiding a cyber-attack resulting in a large financial loss, high impact cyber incidents and the ability to recover from a severe but plausible event.

Operational risk strategies and processes

Within the Enterprise-wide risk management framework, the risk handbook defines the approaches, tools, and techniques for managing risk (split by all key risks, financial and non-financial risks). They include the minimum standards for identification, assessment, management, monitoring, and reporting of operational risk.

Structure and organisation of the risk management function for operational risk

The NatWest Group Director of Non-Financial Risk reports directly to the Chief Risk Officer and has primary responsibility for the Operational Risk Function.

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

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

In line with industry best practice and sound risk governance principles, the NatWest Group adopts a Three Lines of Defence model of risk governance. The operational risk management function sits within the second line of defence (2LOD) operating as risk oversight and control to the first line of defence (1LOD) within business segments, Functions and legal entities. The operational risk function is comprised of the following areas:

- Risk Framework Delivery & Insights – responsible for the design and ongoing development and maintenance of non-financial risk policies, standards, and handbook in alignment with the EWRMF.
- Directors of Risk (DoR): interface with the business segments and functions and leverage wider Risk teams to provide expert oversight and challenge.
- Specialist Risk Directors (SRD): provide deep/specialist technical expertise, use technical knowledge to support the DoR teams and provide an aggregated view of specific risks.

Operational risk measurements and control

Operational Risk appetite is monitored through a series of measures, this includes measurement of operational risk losses and events; cyber security, change initiatives, quality and accessibility of priority data, service availability and third-party risks. The performance of these measures was reported to the Executive Risk Committee (ERC) and the Board Risk Committee (BRC), monthly, with a breach reporting process in place to ensure timely escalation and action management.

In addition, our end-to-end Risk and Control Self-Assessment (RCSA) process is the key mechanism through which the NatWest Group non-financial risk exposure is understood. It is used to identify and measure material non-financial risks faced by the group in order to facilitate the effective management of risks within risk appetite. NatWest Group assessments are supported by an understanding of the end-to-end journey meaning we break down our assessment by key process steps within the journey and examine the risks to the objectives of those processes.

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

UK ORA - Qualitative information on operational risk continued

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

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

Operational risk reporting

Standardised monthly reporting requirements and prescribed risk governance via the Group's risk governance committees is in place across the Natwest Group, supported by legal entity, business segments, and functions reporting. This supports the visibility and tracking of the business level and aggregated bank wide risk profile in relation to appetite, ensuring effective ongoing oversight and challenge of operational risk across NatWest Group. This includes monthly reporting to the ERC, the BRC, and business level risk committees.

To support effective oversight of operational risk, an Operational Risk Executive Steering Group (ESG) is also in place. The purpose of this ESG is to ensure that all Level 2 operational risks are monitored, and material risks are identified, understood and managed effectively.

The main responsibilities of the ESG are to:

- Review bank-wide the operational risk profile and mitigation against material themes through receipt of appropriate management information to monitor current operational risk relative to appetite.
- Review regular deep dives into the bank's material operational risks (leveraging framework outputs, loss/event data, industry context etc,) relative to agreed appetite, to understand status, consider emerging trends and review mitigation approaches and progress.
- Review return to appetite progress against material risk themes
- Review and consider insights from audit reports, market peers, historical events, emerging themes and trends.
- Review the aggregated Operational Risk Appetite Measures/limits/triggers for material operational risk themes
- Provide an escalation route for breaches of appetite measures, with appropriate challenge and oversight of mitigating actions
- Provide oversight of the Group's control environment through review and challenge of remediation plans
- Support Group Executive Risk Committee and Board Risk Committee in overseeing the effective management of operational risk across the Group and its legal entities. ensuring they operate within Group risk appetite, policies and overall business strategy.

In addition to deep dives into the material operational risks mentioned above, all these requirements are supported with an annual operational risk deep dive into the overall risk profile.

Policies for hedging and mitigating operational risk

The NatWest Group operational risk policy defines the minimum requirements and approach that all legal entities must follow with respect to operational risk, including how the risk appetite is overseen and controlled. It supports a risk based, principles approach to operational risk management with minimum requirements defined at a level commensurate to the risk exposure of each legal entity, business segment, and function. The key risk operational risk policy is supplemented by additional risk standards aligned to our level 2 L2 risk directory.

Level 2 Key Risk Policies or subsidiary legal entities, entity specific versions of Risk Policies may be written. These must align to the Group approach, or where exceptions are required, these must be agreed with the Group CRO and Board Risk Committee. Unless there is a specific regulatory or jurisdictional expectation, Risk Policies are not mandated for any legal entities below NWH, NWM and RBSI. Group Risk Policies are created, owned and maintained by the 2LoD and are reviewed at least annually to ensure alignment with the EWRMF. Group Risk Policies are approved by the Group Board Risk Committee

Minimum policy requirements for the identification and assessment, management and mitigation, monitoring and reporting of operational risk are outlined below. These requirements are set at NatWest Group level and must be applied consistently by legal entities, business segments, and functions. The management of operational risk is made more effective by:

- Maintaining a strong risk culture.
- Defining and operating within risk appetite.
- Defining, implementing, and monitoring risk standards and controls across NatWest Group in relation to risk exposures. The expected key control requirements are outlined in the risk standards.
- Defining, implementing, and monitoring risk management lifecycle tools and processes; and
- The provision of independent 2LOD oversight as per three lines of defence model.

Minimum capital requirements for operational risk

NatWest 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 (relevant indicator) by coefficients set by the regulator based on business line. As part of the wider Internal Capital Adequacy Assessment Process (ICAAP), 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 NatWest Group. It provides a forward-looking basis for evaluating and managing operational risk exposures.

Insurances and other risk transfer mechanisms are not used for operational risk mitigation in the standardised approach.

Please refer to table UK OR1 for further details on operational risk own funds requirements.

UK ORA - Qualitative information on operational risk continued

Identification, assessment, and management

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

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

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.

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 and recoveries associated with an operational risk event are reported against the date they were recorded in NatWest Group's financial accounts. A single event can result in multiple losses (or recoveries) that may take time to crystallise. Losses and recoveries with a financial accounting date in 2022 may relate to events that occurred, or were identified in, prior years. NatWest Group purchases insurance against specific losses and to comply with statutory or contractual requirements.

Annex XXXVII: Interest rate risk in the banking book (IRRBB)

UK IRRBB1: Quantitative information on IRRBB

The table below shows information on changes in economic value of equity (ΔEVE) and net interest income (ΔNII) under each of the prescribed interest rate shock scenarios. These scenarios are prescribed in Rule 9.7 of the ICAA Part of the PRA Rulebook and in accordance with points (a) and (b) of CRR Article 448(1).

		NatWest Group					
		a	b	c	d	e	f
		ΔEVE		ΔNII		Tier 1 capital	
		31 December 2022 £m	30 June 2022 £m	31 December 2022 £m	30 June 2022 £m	31 December 2022 £m	30 June 2022 £m
010	Parallel shock up	**(2,157)**	(2,783)	**1,505**	2,389		
020	Parallel shock down	**890**	1,192	**(2,123)**	(2,516)		
030	Steepener shock	**(62)**	(154)				
040	Flattener shock	**(267)**	(374)				
050	Short rates shock up	**(1,238)**	(1,223)				
060	Short rates shock down	**569**	528				
070	**Maximum**	**(2,157)**	(2,783)	**(2,123)**	(2,516)		
080	**Tier 1 capital**					**28,867**	29,568

- NatWest Group's most adverse EVE sensitivity is to the parallel upward rate shock. This is primarily driven by the value impact on the equity structural hedge. NatWest Group's adverse earnings sensitivity is to the parallel downward rate shock. This is primarily driven by lower returns on floating-rate assets including customer lending and cash placed at the Bank of England forming part of the liquid asset buffer.
- Since June 2022, adverse EVE sensitivity to the parallel shock up has fallen. This was the result of several factors including higher discount rates, a result of the higher level of interest rates at 31 December 2022 compared to 30 June 2022, a reduction in equity hedges including UBIDAC, and further hedging activity in Treasury.
- NII sensitivity to the parallel shock up and parallel shock down has fallen. This is the result of several factors including increased product structural hedging and lower customer deposit balances. The higher level of interest rates at December 2022 has also had an impact; for example, interest rates are no longer negative in the parallel down shock, unlike at June 2022.

UK IRRBBA: IRRBB risk management objectives and policies

Definition and risk appetite framework

Interest rate risk in the banking book (IRRBB) is the risk of an economic loss due to unexpected movements in interest rates.

NatWest Group's approach to managing IRRBB follows the overarching risk management framework and approach outlined in UK OVA. NatWest Group measures its economic value and earnings risk sensitivity to IRRBB and has a risk appetite framework that limits these sensitivities.

Banking book risk positions are managed within limits. Management activity may involve offsetting or reducing on or off balance sheet positions, or hedging risk positions with derivatives. Limit or trigger breaches are escalated through the first and second lines of defence model using established procedures.

The quantitative risk appetite is mainly expressed in terms of value at risk (VaR), stressed value at risk (SVaR), present value of one basis point (PV01) sensitivity, economic value of equity (EVE) limits and earnings at risk limits.

Measures are applied not only at NatWest Group level but also at sub-group consolidated and solo consolidated levels in addition to business segment and product levels.

Management and monitoring

IRRBB is generally managed by the Treasury function, which is responsible for external hedging. Treasury may net risk positions across certain portfolios (for example, fixed rate mortgages and non-maturity deposits) to reduce its external derivative hedging requirement. For other portfolios, for example Treasury debt issuance, hedging may be matched to specific transactions.

The impact of changes to market conditions is continuously monitored. For example, wholesale portfolios may be valued daily on a mark-to-market basis. Additionally, all interest rate derivatives are subject to mark to market accounting treatment. VaR calculations are based on realised market movements, so VaR reflects periods of high market volatility which potentially acts as a limit on the size of underlying positions. In addition, stress testing scenarios aim to anticipate market stresses and are designed to highlight potential areas of vulnerability, for example negative interest rates or sharply higher rates. Furthermore, NatWest Group's internal capital adequacy assessment for IRRBB allocates capital to risk positions using stressed sensitivity measures, including earnings and economic value stresses.

NatWest Group ALCo considers the balance-sheet impact of IRRBB appetite and the actions taken to manage it within set limits. ALCo also reviews the interest rate risk profile on an ongoing basis.

Models used to measure IRRBB are subject to the model risk validation framework. The framework ensures that models are independently validated, rated and approved as appropriate for use. It also establishes the periodicity for ongoing validation and a governance and control framework that includes model usage and development.

NatWest Group's management of IRRBB is also reviewed by Internal Audit, which is independent of the first and second lines of defence and is responsible for providing independent assurance to the Board.

Measurement

Calculation of risk measures varies in frequency as deemed appropriate by the Board. EVE is calculated and reported at least quarterly. Earnings at risk, VaR and PV01 for NatWest Group's overall banking book is calculated and reported at least monthly. Risk measures for wholesale market-linked activity such as money markets or liquidity portfolio management are monitored daily. Frequency of reporting may, if required, be updated in response to changes in market conditions or to assess the impact of changes in underlying positions.

NatWest Group primarily uses PV01, VaR and EVE to measure the economic value sensitivity of IRRBB.

- Value at Risk is a statistical estimate of the potential change in value of a portfolio over a specified time horizon to a given confidence level. In accordance with NatWest Group risk policy, different holding periods and confidence levels are applied to VaR, which is measured using historical simulations. Standard simulations are based on nominal interest rate gaps at the reporting date. They assume a holding period of 1 day and a confidence interval of 99 days and are modelled using at least 500 business days of historical data.
- EVE and PV01 estimate the net present value sensitivity of projected interest and principal cashflows at the reporting date to changes in the discount curve. A base-case net present value measurement using market-implied interest rates is compared to the result using a shocked interest rate curve. The difference between the results is the reported sensitivity. Most of the EVE stresses used by NatWest Group are those required by the PRA rulebook and recommended by the Basel Committee on Banking Supervision in its policy standard on IRRBB of April 2016, although NatWest Group also measures the impact of parallel 200-basis-point upward and downward rate shocks in all currencies. Other EVE stresses vary by currency, but are based on the following directional changes:
  - Parallel yield curve shocks in all rates, including up to 250 basis points in sterling.
  - Shocks to shorter-term rates, with the rate shock diminishing towards zero at a 20-year maturity, including a short-term rate shock in sterling of up to 300 basis points.
  - Rotational shocks with: (i) long-term rates up and short-term rates down (steepener) or (ii) short-term rates up and long-rates down (flattener).

  In all EVE shocks, a lower bound for overnight interest rates of -100 basis points rising to 0% for 20-year rates is assumed in any currency.

  From December 2022 NatWest Group's approach to EVE sensitivity is to include commercial margins and spread components in projected cash flows and in the rates used for discounting the cash flows. No correlation is assumed across material currencies on its balance sheet. Gains in any individual currency are weighted at 50% while losses are weighted at 100%.
- Earnings measures shock the market-implied yield curve at the reporting date. Generally, the balance sheet is assumed to remain constant, with maturing contracts replaced on like-for-like terms. The yield curve shock is generally upward or downward, although flexibility exists to undertake rotational yield curve shifts. Downward rate shocks may include an assumed lower bound for interest rates, such as negative 1% in the downward 250-basis-point shock shown. In addition to the 250-basis-point shock, NatWest Group uses upward and downward 25-basis-point and 100-basis-point rate shocks for earnings sensitivity measures.

UK IRRBBA: IRRBB risk management objectives and policies continued

NatWest Group also assesses its sensitivity to central bank policy rate basis risk. The approach considers a stress to the basis between central bank policy rates, risk-free rates and inter-bank offered rates.

Earnings sensitivity is measured over a defined time horizon, typically one to three years with a 12-month horizon used to define risk appetite.

Interest rate stresses may be varied to adapt to market conditions or reporting requirements.

Assumptions

NatWest Group's approach to assessing IRRBB incorporates assumptions in respect of customer behaviour, which affect the cash flows associated with certain instruments. The most significant assumptions are discussed below.

Non-maturity deposits

The average repricing maturity of non-maturity deposits is assessed at a portfolio level. The assessment is undertaken at least annually, but is subject to ongoing monitoring by the business segment, Treasury and Risk.

Non-maturity deposits are analysed by business segment, product type and currency. The assessment uses both expert judgement and statistical models. It considers factors including, but not necessarily limited to: (i) the historical stability of the balances; (ii) projected balances taking into account business strategy, seasonal trends, potential changes to the level of interest rates and pricing responses; (iii) potential market developments and stresses; and (iv) statistical analysis of deposit balance behaviour.

The review also considers the impact of hedging, taking into account: (i) NatWest Group's market risk appetite; (ii) its earnings at risk and economic value sensitivity; (iii) the availability of balance-sheet hedges such as fixed-rate mortgage lending; (iv) the depth of interest rate swap markets; and (v) the accounting treatment of derivative hedges. Regulatory guidance is also considered.

As a result of the assessment, a core percentage of deposits will be assigned a repricing maturity. This represents the proportion of deposits for which balances are considered stable and price elasticity in response to changes in the interest rate environment is expected to be low or zero. The non-core percentage of sight deposits will be assigned an overnight repricing maturity.

An assessment is also made of non-maturity assets, such as revolving credit card balances, administered rate overdrafts and non-performing exposures. Slightly different factors may be considered, including time in recovery for non-performing exposures.

Prepayment or early redemption risk

The risk to earnings or economic value from the prepayment of customer loans or early withdrawal of fixed-rate customer deposits is often mitigated, at least in part, by the existence of early repayment penalties and/or the loss of interest on deposits and the relatively short-term nature of the fixed-rate term for many products.

Nevertheless, some retail, business and commercial fixed rate products do provide the customer with the benefit of the option to partially or fully terminate the agreement without suffering the exit penalty that would apply to a wholesale market transaction at arm's length.

Products are segmented and assessments are made at product level. Historical customer behaviour may be used as a basis for assessing the propensity for prepayment or early redemption, which may be combined with an assessment of how customer behaviour may respond in future to changes in the external environment, including the general level of interest rates. Other factors considered include loan seasoning and burnout, whereby customers may be less likely to refinance loans that have recently drawn down or, conversely, are approaching maturity. There will also be an assessment of the business strategy, including the approach to retention of fixed-rate mortgage customers, for example. A prepayment curve is constructed for different interest rate fixture lengths and is used to measure and manage prepayment risk. Expected prepayment rates are monitored and back-tested against observations and are subject to regular, at least annual, review. From December 2022, prepayment speeds are assumed to be sensitive to the level of interest rates in EVE scenarios and are increased in the parallel down, short rates down and flattener rate shocks and reduced in the parallel up, short rates up and steepened shocks.

Application of assumptions

NatWest Group aims to apply assumptions consistently across its internal risk measurement system and externally disclosed sensitivities. Hence there are no significant differences between the assumptions used in internal risk measurement systems for EVE and the assumptions used to produce externally disclosed EVE sensitivity.

Weighting gains in any currency at 50% in EVE is a prescribed supervisory parameter. In other value metrics, such as VaR and PV01, currency gains are weighted at 100%; this also applies to earnings sensitivities.

Hedging

Hedging of Retail, Private and Business portfolios generally involves netting risk across asset and liability positions before hedging residual interest rate risk externally with interest rate swaps. The asset and liability positions are primarily accounted for on an amortised cost basis. However, interest rate swaps are accounted for at fair value, with changes in fair value recognised in the profit and loss account. Cash-flow hedge accounting is frequently applied to the hedging derivatives in order to match the timing of gains and losses associated with interest rate movements across the hedging instrument and the hedged item. Further disclosure of cash-flow hedge accounting policy is available in the NatWest Group 2022 ARA.

Hedging of Commercial lending and Treasury issuance and liquidity portfolios is frequently managed at a transactional level. Fair-value hedge accounting treatment is frequently applied. Further disclosure of the fair-value hedge accounting policy is available in the NatWest Group 2022 ARA. Hedging money market portfolios also involves use of derivatives.

A small proportion of Commercial loan origination is fixed-rate loans with zero break costs where management may involve the use of purchased options.

Repricing maturity

At 31 December 2022, the average repricing maturity assigned to core non-maturing deposits was 2.5 years.

The longest repricing maturity assigned to core non-maturing deposits was 5 years.

Annex XXXIII: Remuneration

This section contains disclosures which are required in accordance with UK regulatory requirements and the Basel Committee on Banking Supervision Pillar 3 disclosure requirements. They also take into account the European Banking Authority (EBA) guidelines on sound remuneration policies. It should be read in conjunction with the Directors' Remuneration Report starting on page 138 of the NatWest Group 2022 ARA.

UK REM A - Remuneration policy for all colleagues

The remuneration policy supports the business strategy and is designed to promote the long-term success of NatWest Group. It aims to reward the delivery of good performance provided this is achieved in a manner consistent with NatWest Group values and within acceptable risk parameters.

The remuneration policy applies the same principles to everyone, including Material Risk Takers (MRTs), with some minor adjustments where necessary to comply with local regulatory requirements. The main elements of the policy are set out below.

Base salary

The purpose is to provide a competitive level of fixed cash remuneration.

Operation

We review base salaries annually to ensure they reflect the talents, skills and competencies the individual brings to the business.

Role-based allowance

Certain MRT roles receive role-based allowances. The purpose is to provide fixed pay that reflects the skills and experience required for the role.

Operation

Role-based allowances are fixed allowances which form an element of overall fixed remuneration for regulatory purposes. They are based on the role the individual performs.

They are delivered in cash and/or shares depending on the level of the allowance and the seniority of the recipient. Shares are subject to a minimum three-year retention period.

Benefits and pension

The purpose is to provide a range of flexible and competitive benefits.

Operation

In most jurisdictions, benefits or a cash equivalent are provided from a flexible benefits account. Pension funding forms part of fixed remuneration and NatWest Group does not provide discretionary pension benefits.

Annual bonus

The purpose is to support a culture where individuals recognise the importance of helping people, families and businesses to thrive and are rewarded for superior performance. Certain junior roles are not eligible for an annual bonus. Annual bonus is offered to our more senior colleagues, including MRTs, the executive directors and members and attendees of NatWest Group's senior executive committees, as it is appropriate for them to have some variable pay at risk if performance is not at the required level.

Operation

The annual bonus pool is based on a balanced scorecard of measures including financial, customer, people and culture, climate, financial capability, enterprise and risk and control measures. Allocation from the pool depends on the performance of the business area and the individual.

We use a structured performance management framework to support individual performance assessment. This is designed to assess performance against longer-term business requirements across a range of financial and non-financial metrics. It also evaluates adherence to internal controls and risk management. We use a balanced scorecard to align with the business strategy. Each individual will have defined measures of success for their role.

We also take risk and conduct performance into account. Control functions are assessed independently of the business units that they oversee. Performance goals and remuneration are set according to the priorities of the control area, not the targets of the businesses they support. The Group Chief Risk Officer and the Group Chief Audit Executive have the authority to escalate matters to Board level if management do not respond appropriately.

Independent control functions exist for the main legal entities outside the ring fence (NWM Plc and RBS International). Multiple reporting lines are in place into the respective legal entity CEOs and the NatWest Group Control Function Head.

Awards may be granted up to a maximum of 100% of fixed pay. For awards made in respect of the 2022 performance year, immediate cash awards continue to be limited to a maximum of £2,000. In line with regulatory requirements, for MRTs, 40% of awards under £500,000 will be deferred over four, five or seven years. This rises to 60% for awards over £500,000, and awards granted to the directors of significant UK firms. For MRTs, a minimum of 50% of any variable pay is delivered in shares and a 12-month retention period applies to the shares after vesting.

The deferral period is four years for standard MRTs and Risk Manager MRTs who meet the 'non-higher paid' condition. It rises to five years for 'higher paid' Risk Manager MRTs, FCA Senior Management Functions (SMF), and PRA SMFs who meet the 'non-higher paid' condition; and to seven years for 'higher paid' PRA SMF roles. All awards are subject to malus and clawback provisions.

Guaranteed awards may only be granted for new hires in exceptional circumstances in compensation for awards forgone at their previous company and are limited to first year of service. NatWest Group does not offer sign-on awards. Retention awards are only used in truly exceptional circumstances such as major restructuring and where the individual is a 'flight risk' and is viewed as critical to the successful operation of the business or delivery of a business critical project. Whilst no performance conditions are attached to retention awards, the colleague must continue to deliver to the standard expectations of conduct, behaviour and minimum performance levels prior to the award vesting.

Severance payments and/or arrangements can be made to colleagues who leave NatWest Group in certain situations, including redundancy. Such payments are calculated by a pre-determined formula set out within the relevant social plans, policies, agreements or local laws. Where local laws permit, there is a cap on the maximum amount that can be paid.

UK REM A - Remuneration policy for all colleagues continued

Restricted Share Plan (RSP) awards

The purpose and operation of RSP awards is explained in detail in the Directors' Remuneration Report. NatWest Group provides executive directors and certain members of NatWest Group's senior executive committees with RSP awards which are delivered entirely in shares. Any awards made are subject to a performance assessment prior to grant and a further assessment against underpin criteria prior to vesting.

Shareholding requirements

The requirements promote long-term alignment between senior executives and shareholders.

Operation

Executive directors and certain members of NatWest Group's senior executive committees are required to build up and hold a shareholding equivalent to a percentage of salary. There is a restriction on the number of shares that individuals can sell until this requirement is met.

Company share plans

The purpose is to provide an easy way for individuals to hold shares in NatWest Group plc, which helps to encourage financial capability and long-term thinking and provides a direct involvement in NatWest Group's performance.

Operation

Colleagues in certain jurisdictions are offered the opportunity to contribute from salary and acquire shares in NatWest Group plc through company share plans. This includes Sharesave and the Buy As You Earn plan in the UK. Any shares held are not subject to performance conditions.

Criteria for identifying MRTs

The EBA has issued criteria for identifying MRT roles, which includes those staff whose activities have a material influence over NatWest Group's performance or risk profile. These criteria are both qualitative (based on the nature of the role) and quantitative (based on the amount a colleague is paid).
In 2022, MRTs were identified for 13 legal entities (including at parent, holding company and consolidated levels) within NatWest Group. The MRT criteria are applied for each of these entities, and consequently many MRTs are identified in relation to more than one entity.

The qualitative criteria can be summarised as: staff within the management body; senior management; other staff with key functional or managerial responsibilities including for risk management; and staff who individually, or as part of a Committee, have authority to approve new business products or to commit to credit risk exposures and market risk transactions above certain levels.

The quantitative criteria are: individuals earning £660,000 or more in the previous year; individuals earning less than £660,000 in the previous year, but more than a threshold set at the higher of £440,000 or the average total earnings of the management body and senior management for the relevant legal entity and who can impact the risk profile of a material business unit; and individuals in the top 0.3% of earners of the relevant legal entity for the previous year. In addition to the qualitative and quantitative criteria, NatWest Group has applied its own minimum standards to identify roles that are considered to have a material influence over its risk profile.

Personal hedging strategies

The conditions attached to discretionary share-based awards prohibit the use of any personal hedging strategies to lessen the impact of a reduction in the value of such awards. Recipients explicitly acknowledge and accept these conditions when any share-based awards are granted.

Risk in the remuneration process

NatWest Group's approach to remuneration promotes effective risk management through having a clear distinction between fixed remuneration (which reflects the role undertaken by an individual) and variable remuneration (which is directly linked to performance and can be risk-adjusted). Fixed pay is set at an appropriate level to discourage excessive risk-taking and which would allow NatWest Group to pay zero variable pay.

We achieve focus on risk through clear inclusion of risk in performance goals, performance reviews, the determination of variable pay pools, incentive plan design and the application of malus and clawback. The Remuneration Committee (RemCo) is supported in this by the Board Risk Committee (BRC) and the Risk function, as well as independent oversight by the Internal Audit function.

We use a robust process to assess risk performance. We consider a range of measures, specifically: capital; liquidity and funding risk; credit risk; market risk; pension risk; compliance & conduct risk; financial crime; climate risk; operational risk; business risk and reputational risk. We also consider our overall risk culture.
Remuneration arrangements are in line with regulatory requirements and we fully disclose and discuss the steps taken to ensure appropriate and thorough risk adjustment with the PRA and the FCA.

Variable pay determination

For the 2022 performance year, NatWest Group operated a robust control function-led multi-step process to assess performance and determine the appropriate bonus pool by business area and function. At multiple points throughout the process, we made reference to Group-wide business performance (from both affordability and appropriateness perspectives) and the need to distinguish between 'go-forward' and 'resolution' activities.

The process uses financial, customer, people and culture, climate, financial capability and enterprise measures to consider a balanced scorecard of performance assessments at the level of each business area or function. We then undertake risk and control assessments at the same level to ensure performance achieved without appropriate consideration of risk, risk culture and conduct controls, is not inappropriately rewarded.

BRC reviews any material risk and conduct events and, if appropriate, an underpin may be applied to the individual business and function bonus pools or to the overall bonus pool. BRC may recommend a reduction of a bonus pool if it considers that risk and conduct performance is unacceptable or that the impact of poor risk management has yet to be fully reflected in the respective inputs.

Following further review against overall performance and conduct, taking into account input from the CFO on affordability and capital and liquidity adequacy, the CEO will make a final recommendation to the RemCo, informed by all the previous steps and her strategic view of the business. The RemCo will then make an independent decision on the final bonus pool taking all of these earlier steps into account.

UK REM A - Remuneration policy for all colleagues continued

Variable pay determination continued

The assessment process for RSP awards to executive directors and other eligible senior executives uses our internal ratings scale to determine whether satisfactory performance has been delivered in the year prior to grant. A further assessment of performance against underpin criteria including risk considerations takes place before vesting.

Remuneration and culture

NatWest Group continues to assess conduct and its impact on remuneration as part of the annual Group-wide bonus pool process and also via the accountability review framework. Many colleagues receive fixed pay only, which provides them with greater security and allows them to fully focus on the needs of the customer. The RemCo will continue to review workforce remuneration and the alignment of incentives and reward with culture.

The governance of culture is clearly laid out. Senior management function roles have clearly defined accountabilities which are taken into account in their performance and pay decisions. The Board and Sustainable Banking Committee also play essential roles in building cultural priorities. Frameworks are in place to measure progress.

Accountability review process and malus/clawback

We introduced the accountability review process in 2012 to identify any material risk management, control and general policy breach failures, or employee misbehaviour and to ensure accountability for those events. This allows NatWest Group to respond to instances where new information would change the variable pay decisions made in previous years and/or the decisions to be made in the current year. Potential outcomes under the accountability review process are:

- malus - to reduce (to zero if appropriate) the amount of any unvested variable pay awards prior to payment;
- clawback - to recover awards that have already vested; and
- in-year bonus reductions - to adjust variable pay that would have otherwise been awarded for the current year.

As part of the acceptance of variable pay awards, colleagues must agree to terms that state that malus and clawback may be applied. Any variable pay awarded to MRTs is subject to clawback for seven years from the date of grant. This period can be extended to 10 years for MRTs who perform a ‘senior management function’ under the Senior Managers Regime where there are outstanding internal or regulatory investigations at the end of the normal seven-year clawback period. Awards to other colleagues (non-MRTs) are subject to clawback for 12 months from each vesting date.

During 2022 a number of issues and events were considered under the accountability review framework. The outcomes covered a range of actions including reduction (to zero where appropriate) of unvested awards through malus, in-year bonus reduction and the suspension of awards pending further investigation.

Remuneration of Material Risk Takers ('MRTs') – Overall disclosure

The quantitative disclosures below are made in accordance with regulatory requirements in relation to 704 individuals who have been identified as MRTs for one or more entities across NatWest Group plc. This provides a complete picture of MRT remuneration across the Group, agnostic of legal entity. The number of MRTs identified has decreased since last year due to a reduction in the number of quantitative MRTs following a clarification issued by the PRA in Q1 2022 that the MRT criterion used to identify the top 0.3% of earners should only be applied on an individual entity basis, and should not be used for MRT identification for consolidated and sub-consolidated entities. We have excluded pay for one individual from the tables below on the basis that, although they have been identified as an MRT in relation to a role within a subsidiary entity, they do not receive any remuneration for this role and are not an MRT in relation to their primary role for NatWest Group. Note the numbers in the tables all agree to the underlying source data, but when presented to two decimal places and aggregated, this can result in small rounding differences.

Following the publication of the updated EBA Guidelines on Remuneration Benchmarking in June 2022, in order to ensure consistency across remuneration disclosures, there has been a change of approach to our reporting of the number of MRTs and their variable pay, reflected in the tables below. The total number of MRTs now excludes colleagues who left the Group prior to year end (but their remuneration remains within the pay values reported); and all severance payments made to MRTs are now included in the variable remuneration value disclosed, even when some or all of that severance does not count towards the calculation of the ratio of fixed to variable pay.

NatWest Group has a Performance and Remuneration Committee (the RemCo). The RemCo is expected to ensure that the remuneration policies, procedures and practices being applied are appropriate for the NatWest Group. The key areas of focus for the RemCo includes:

- reviewing and recommending, or where appropriate approving, remuneration arrangements for key employees;
- approving the final Group bonus pool, and ensuring such proposals are adjusted for performance and risk and meet capital adequacy requirements; and
- approving the NatWest Group Remuneration Policy Principles.

The RemCo must be able to act independently and the non-executive directors serving on it are supported by the necessary entity-specific management information in order to carry out their duties. The RemCo met nine times in 2022.

UK REM 1 and REM 5 - Total remuneration awarded to MRTs for the financial year

					Other senior management and other MRTs split by business area					
	NWG plc NEDs	NWG plc EDs	Other senior mngt.	Other MRTs	NatWest Holdings	NatWest Markets	RBSI	Corporate functions	Control functions	Total
Fixed remuneration										
Total number of MRTs	9	2	16	677						704
Other senior management - split by business area					3	1	2	7	3	
Other MRTs - split by business area					93	94	16	112	362	
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Total fixed remuneration of MRTs	2.45	4.00	16.35	173.54	32.42	50.00	4.55	35.76	67.15	196.33
Cash-based	2.45	2.12	13.89	172.52	31.54	48.93	4.47	35.12	66.35	190.98
Share-based	—	1.88	2.45	1.02	0.88	1.07	0.09	0.64	0.80	5.35
Other instruments or forms	—	—	—	—	—	—	—	—	—	—
Variable remuneration										
Total number of MRTs	—	2	16	622						640
Other senior management - split by business area					3	1	2	7	3	
Other MRTs - split by business area					91	89	16	79	347	
Total variable remuneration of MRTs	—	3.41	13.32	89.43	22.04	31.99	2.39	18.77	27.56	106.16
Cash-based	—	0.53	3.87	50.89	10.74	16.71	1.36	10.10	15.86	55.30
Of which: deferred cash	—	—	1.38	16.62	3.35	7.11	0.41	3.35	3.77	18.00
Share-based (annual bonus)	—	0.53	4.56	38.54	8.65	15.28	1.04	8.67	9.46	43.63
Of which: deferred shares	—	—	2.07	16.62	3.35	7.11	0.41	4.04	3.77	18.69
Share-based (RSP awards)	—	2.35	4.89	—	2.64	—	—	—	2.24	7.23
Of which: deferred shares	—	2.35	4.89	—	2.64	—	—	—	2.24	7.23
Other instruments or forms	—	—	—	—	—	—	—	—	—	—
Total remuneration of MRTs	2.45	7.40	29.66	262.97	54.46	81.98	6.95	54.53	94.71	302.49

(1) The breakdown by business areas required in template UK REM5 has been combined with UK REM 1 above, as permitted under regulatory guidance for the templates.
(2) Fixed remuneration consists of salaries, allowances, pension and benefit funding.
(3) Variable remuneration consists of a combination of annual bonus and RSP awards, deferred over a four to seven year period in accordance with regulatory requirements; and (where applicable) severance payments. Under the NatWest Group bonus deferral structure, immediate cash awards are limited to £2,000 per person, with a further payment of cash and shares within Year 0.
(4) RSP awards vest subject to the extent to which performance conditions are met and can result in zero payment.
(5) Under the regulations, a notional discount is available which allows variable pay to be awarded at a level that would otherwise exceed the 1:1 ratio, provided that variable pay is delivered 'in instruments' (shares) and deferred over five years or more. The discount rate was used for remuneration awarded in respect of the 2022 performance year for two colleagues.

UK REM A - Derogations
The regulations allow some flexibility not to apply certain requirements that would normally apply to MRTs where an individual's annual variable remuneration does not exceed £44,000 and does not represent more than one third of the individual's total annual remuneration (derogations permitted under point (b) of Article 94(3) of CRD V). We have used this flexibility to disapply MRT rules relating to deferral and delivery of awards in shares for 267 MRTs in respect of performance year 2022. Total remuneration for these individuals in 2022 was £35.29 million, of which £30.24 million was fixed pay and £5.05 million was variable pay.

UK REM A - Ratio between fixed and variable remuneration
The variable component of total remuneration for MRTs at NatWest Group shall not exceed 100% of the fixed component (except where local jurisdictions apply a lower maximum ratio for variable pay). The average ratio between fixed and variable remuneration for 2022 was approximately 1 to 0.50. The majority of MRTs were based in the UK.

UK REM 2 - Guaranteed awards (including 'sign-on' awards) and severance payments

Special payments	NWG plc NEDs	NWG plc EDs	Other senior management	Other MRTs
Guaranteed awards and sign on awards				
Number of MRTs	—	—	1	2
	£m	£m	£m	£m
Total amount	—	—	1.15	0.48
Of which: paid during the financial year that are not taken into account in the bonus cap	—	—	—	—
Severance payments awarded in previous periods, paid out during the financial year				
Number of MRTs	—	—	—	4
	£m	£m	£m	£m
Total amount	—	—	—	0.79
Severance payments awarded during the financial year				
Number of MRTs	—	—	—	33
	£m	£m	£m	£m
Total amount	—	—	—	7.46
Of which: paid during the financial year	—	—	—	6.84
Of which: deferred	—	—	—	0.62
Of which: paid during the financial year that are not taken into account in the bonus cap	—	—	—	6.84
Of which: highest payment that has been awarded to a single person	—	—	—	0.81

(1) This table reports details of new hire guarantees and severance. The disclosures do not include buy-outs or retention bonuses (where these have been granted).
(2) No severance payments in excess of contractual payments, local policies, standards or statutory amounts were made to MRTs during the year, other than a litigation settlement of £360,182 to one individual.

UK REM 3 - Outstanding deferred remuneration

The table below includes deferred remuneration awarded or paid out in 2022 relating to prior performance years.

Deferred and retained remuneration	Total amount of deferred remuneration awarded for previous performance periods £m	Of which: due to vest in the financial year £m	Of which: vesting in subsequent financial years £m	Amount of performance adjustment to deferred remuneration that was due to vest in the financial year £m	Amount of performance adjustment to deferred remuneration due to vest in future financial years £m	Total amount of adjustment during the financial year due to ex post implicit adjustments* £m	Total amount of deferred remuneration awarded before the financial year actually paid out in the financial year £m	Total amount of deferred remuneration awarded for previous performance period that has vested but is subject to retention £m
NWG plc NEDs - No deferred or retained remuneration held								
NWG plc EDs								
Cash-based	—	—	—	—	—	—	—	—
Shares or equivalent interests	7.05	0.98	6.08	(0.02)	(0.07)	0.74	0.96	0.96
Share-linked or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments or forms	—	—	—	—	—	—	—	—
Other senior management								
Cash-based	0.23	0.11	0.11	—	—	—	0.11	—
Shares or equivalent interests	18.37	3.51	14.86	(0.01)	(0.05)	2.22	3.05	3.05
Share-linked or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments or forms	—	—	—	—	—	—	—	—
Other MRTs								
Cash-based	0.50	0.24	0.26	—	—	—	0.24	—
Shares or equivalent interests	70.58	29.57	41.01	0.03	0.01	7.89	29.22	29.11
Share-linked or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments or forms	—	—	—	—	—	—	—	—
Total amount	96.74	34.42	62.32	—	(0.11)	10.85	33.59	33.12

*I.e. Changes of value of deferred remuneration due to the changes of prices of instruments.

(1) Deferred remuneration reduced during the year relates to long-term incentives that lapsed when performance conditions were not met, long-term incentives and deferred awards forfeited on leaving and malus adjustments of prior year deferred awards and long-term incentives.

UK REM 4 - Total remuneration by band for all colleagues earning >€1million

Total remuneration by band for employees earning >€1 million for 2022	Number of MRTs
€1.0 million to below €1.5 million	53
€1.5 million to below €2.0 million	17
€2.0 million to below €2.5 million	6
€2.5 million to below €3.0 million	3
€3.0 million to below €3.5 million	1
€3.5 million to below €4.0 million	—
€4.0 million to below €4.5 million	1
Total	81

(1) Total remuneration in the table above includes fixed pay, pension and benefit funding and variable pay (including severance, where applicable).
(2) Where applicable, the table is based on an average exchange rate of € 1.1731748 to £1 for 2022.

NatWest Group Plc

Remuneration of Material Risk Takers ('MRTs')

The quantitative disclosures below are made in accordance with regulatory requirements in relation to 312 individuals who have been identified as MRTs for NatWest Group plc (i.e. they can impact the risk profile of the Group at a consolidated level).

Following the publication of the updated EBA Guidelines on Remuneration Benchmarking in June 2022, in order to ensure consistency across remuneration disclosures, there has been a change of approach to our reporting of the number of MRTs and their variable pay, reflected in the tables below. The total number of MRTs now excludes colleagues who left the Group prior to year end (but their remuneration remains within the pay values reported); and all severance payments made to MRTs are now included in the variable remuneration value disclosed, even when some or all of that severance does not count towards the calculation of the ratio of fixed to variable pay.

NatWest Group has a Performance and Remuneration Committee (the RemCo). The RemCo is expected to ensure that the remuneration policies, procedures and practices being applied are appropriate for the NatWest Group. The key areas of focus for the RemCo includes:

- reviewing and recommending, or where appropriate approving, remuneration arrangements for key employees;
- approving the final Group bonus pool, and ensuring such proposals are adjusted for performance and risk and meet capital adequacy requirements; and
- approving the NatWest Group Remuneration Policy Principles.

The RemCo must be able to act independently and the non-executive directors serving on it are supported by the necessary entity-specific management information in order to carry out their duties. The RemCo met nine times in 2022.

UK REM 1 and REM 5 - Total remuneration awarded to MRTs for the financial year

					Other senior management and other MRTs split by business area					
	NWG plc NEDs	NWG plc EDs	Other senior mngt.	Other MRTs	NatWest Holdings	NatWest Markets	RBSI	Corporate functions	Control functions	Total
Fixed remuneration										
Total number of MRTs	9	2	16	285						312
Other senior management - split by business area					3	1	2	7	3	
Other MRTs - split by business area					23	56	2	35	169	
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Total fixed remuneration of MRTs	2.45	4.00	16.35	100.28	13.78	37.48	2.28	21.90	41.17	123.07
Cash-based	2.45	2.12	13.89	99.26	12.90	36.42	2.20	21.26	40.37	117.72
Share-based	—	1.88	2.45	1.02	0.88	1.07	0.09	0.64	0.80	5.35
Other instruments or forms	—	—	—	—	—	—	—	—	—	—
Variable remuneration										
Total number of MRTs	—	2	16	274						292
Other senior management - split by business area					3	1	2	7	3	
Other MRTs - split by business area					22	52	2	35	163	
Total variable remuneration of MRTs	—	3.41	13.32	56.17	10.57	23.34	1.29	13.50	20.79	72.90
Cash-based	—	0.53	3.87	30.89	4.18	11.90	0.64	7.04	11.00	35.29
Of which: deferred cash	—	—	1.38	11.32	1.38	5.58	0.26	2.47	3.01	12.70
Share-based (annual bonus)	—	0.53	4.56	25.28	3.74	11.44	0.64	6.46	7.55	30.37
Of which: deferred shares	—	—	2.07	11.32	1.38	5.58	0.26	3.16	3.01	13.39
Share-based (RSP awards)	—	2.35	4.89	—	2.64	—	—	—	2.24	7.23
Of which: deferred shares	—	2.35	4.89	—	2.64	—	—	—	2.24	7.23
Other instruments or forms	—	—	—	—	—	—	—	—	—	—
Total remuneration of MRTs	2.45	7.40	29.66	156.45	24.35	60.82	3.57	35.40	61.96	195.97

(1) The breakdown by business areas required in template UK REM5 has been combined with UK REM 1 above, as permitted under regulatory guidance for the templates.
(2) Fixed remuneration consists of salaries, allowances, pension and benefit funding.
(3) Variable remuneration consists of a combination of annual bonus and RSP awards, deferred over a four to seven year period in accordance with regulatory requirements; and (where applicable) severance payments. Under the NatWest Group bonus deferral structure, immediate cash awards are limited to £2,000 per person, with a further payment of cash and shares within Year 0.
(4) RSP awards vest subject to the extent to which performance conditions are met and can result in zero payment.
(5) Under the regulations, a notional discount is available which allows variable pay to be awarded at a level that would otherwise exceed the 1:1 ratio, provided that variable pay is delivered 'in instruments' (shares) and deferred over five years or more. The discount rate was used for remuneration awarded in respect of the 2022 performance year for two colleagues.

UK REM A - Derogations

The regulations allow some flexibility not to apply certain requirements that would normally apply to MRTs where an individual's annual variable remuneration does not exceed £44,000 and does not represent more than one third of the individual's total annual remuneration (derogations permitted under point (b) of Article 94(3) of CRD V). We have used this flexibility to disapply MRT rules relating to deferral and delivery of awards in shares for 81 MRTs in respect of performance year 2022. Total remuneration for these individuals in 2022 was £11.21 million, of which £9.56 million was fixed pay and £1.65 million was variable pay.

UK REM A - Ratio between fixed and variable remuneration

The variable component of total remuneration for MRTs at NatWest Group shall not exceed 100% of the fixed component (except where local jurisdictions apply a lower maximum ratio for variable pay). The average ratio between fixed and variable remuneration for 2022 was approximately 1 to 0.56. The majority of MRTs were based in the UK.

UK REM 2 - Guaranteed awards (including 'sign-on' awards) and severance payments

Special payments	NatWest Group plc NEDs	NatWest Group plc EDs	Other senior management	Other MRTs
Guaranteed awards and sign on awards				
Number of MRTs	—	—	1	1
	£m	£m	£m	£m
Total amount	—	—	1.15	0.20
Of which: paid during the financial year that are not taken into account in the bonus cap	—	—	—	—
Severance payments awarded in previous periods, paid out during the financial year				
Number of MRTs	—	—	—	3
	£m	£m	£m	£m
Total amount	—	—	—	0.49
Severance payments awarded during the financial year				
Number of MRTs	—	—	—	18
	£m	£m	£m	£m
Total amount	—	—	—	4.12
Of which: paid during the financial year	—	—	—	3.89
Of which: deferred	—	—	—	0.23
Of which: paid during the financial year that are not taken into account in the bonus cap	—	—	—	3.89
Of which: highest payment that has been awarded to a single person	—	—	—	0.57

(1) This table reports details of new hire guarantees and severance. The disclosures do not include buy-outs or retention bonuses (where these have been granted).
(2) No severance payments in excess of contractual payments, local policies, standards or statutory amounts were made to MRTs during the year.

UK REM 3 - Outstanding deferred remuneration

The table below includes deferred remuneration awarded or paid out in 2022 relating to prior performance years.

Deferred and retained remuneration	Total amount of deferred remuneration awarded for previous performance periods £m	Of which: due to vest in the financial year £m	Of which: vesting in subsequent financial years £m	Amount of performance adjustment to deferred remuneration that was due to vest in the financial year £m	Amount of performance adjustment to deferred remuneration due to vest in future financial years £m	Total amount of adjustment during the financial year due to ex post implicit adjustments* £m	Total amount of deferred remuneration awarded before the financial year actually paid out in the financial year £m	Total amount of deferred remuneration awarded for previous performance period that has vested but is subject to retention £m
NWG plc NEDs - No deferred or retained remuneration held								
NWG plc EDs								
Cash-based	—	—	—	—	—	—	—	—
Shares or equivalent interests	7.05	0.98	6.08	(0.02)	(0.07)	0.74	0.96	0.96
Share-linked or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments or forms	—	—	—	—	—	—	—	—
Other senior management								
Cash-based	0.23	0.11	0.11	—	—	—	0.11	—
Shares or equivalent interests	18.37	3.51	14.86	(0.01)	(0.05)	2.22	3.05	3.05
Share-linked or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments or forms	—	—	—	—	—	—	—	—
Other MRTs								
Cash-based	0.46	0.20	0.26	—	—	—	0.20	—
Shares or equivalent interests	54.73	21.89	32.84	0.01	0.01	6.08	21.56	21.47
Share-linked or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments or forms	—	—	—	—	—	—	—	—
Total amount	80.85	26.69	54.15	(0.02)	(0.11)	9.04	25.88	25.48

*I.e. Changes of value of deferred remuneration due to the changes of prices of instruments.

(1) Deferred remuneration reduced during the year relates to long-term incentives that lapsed when performance conditions were not met, long-term incentives and deferred awards forfeited on leaving and malus adjustments of prior year deferred awards and long-term incentives.

UK REM 4 - Total remuneration by band for all colleagues earning >€1million

Total remuneration by band for employees earning >€1 million for 2022	Number of MRTs
€1.0 million to below €1.5 million	48
€1.5 million to below €2.0 million	17
€2.0 million to below €2.5 million	6
€2.5 million to below €3.0 million	3
€3.0 million to below €3.5 million	1
€3.5 million to below €4.0 million	—
€4.0 million to below €4.5 million	1
Total	76

(1) Total remuneration in the table above includes fixed pay, pension and benefit funding and variable pay (including severance, where applicable).
(2) Where applicable, the table is based on an average exchange rate of € 1.1731748 to £1 for 2022.

Appendix 1: CRR Roadmap

The CRR roadmap provides a view of the PRA disclosure requirements for CRR firms and how NatWest Group has met those (see "*Compliance reference*" column).

The requirements are primarily stipulated in the Disclosure (CRR) part of the PRA Rulebook, and they are split in 3 sections as follows:

- Title I General Principles (Articles 431 - 434b);
- Title II Technical Criteria on Transparency and Disclosure (Articles 435 - 451a); and
- Title III Qualifying Requirements for the Use of Particular Instruments of Methodologies (Articles 452 - 455).

According to the Level of Application section in the Disclosure (CRR) part of PRA Rulebook, large subsidiaries of NatWest Group are required to disclose information specified in the following articles: 437, 438, 440, 442, 450, 451, 451a and 453. As noted in the document introduction, those disclosures are provided in separate Pillar 3 reports. Any non-applicable disclosure tables are listed in the respective large subsidiary Pillar 3 reports.

A summary table of non-applicable disclosure tables for NatWest Group is also provided in the document introduction; refer to the "*Presentation of Information*" section.

UK CRR article	Regulatory requirements	Compliance reference
431 - Disclosure requirements and policies		
431 (1)	Institutions shall publicly disclose the information referred to in Titles II (Technical Criteria on Transparency & Disclosure) and III (Qualifying Requirements for the Use of Particular Instruments of Methodologies) in accordance with the provisions laid down in the Disclosure (CRR) part of the PRA Rulebook, subject to the exceptions referred to in Article 432.	– NatWest Group publishes Pillar 3 disclosures as required. – The disclosures required for NatWest Group's large subsidiaries are provided in separate P3 reports.
431 (2)	Institutions that have been granted permission by the competent authorities under Part Three for the instruments and methodologies referred to in Title III of this Part shall publicly disclose the information laid down therein.	– NatWest Group publishes the required information under Title III except for Advanced Operational Risk which is not applicable.
431 (3)	The management body or senior management shall adopt formal policies to comply with the disclosure requirements laid down in this Part and put in place and maintain internal processes, systems and controls to verify that the institution's disclosures are appropriate and in compliance with the requirements laid down in this Part. At least one member of the management body or senior management shall attest in writing that the relevant institution has made the disclosures required under this Part in accordance with the formal policies and internal processes, systems and controls. The written attestation and the key elements of the institution's formal policies to comply with the disclosure requirements shall be included in the institutions' disclosures. Information to be disclosed in accordance with this Part shall be subject to the same level of internal verification as that applicable to the management report included in the institution's financial report. Institutions shall also have policies in place to verify that their disclosures convey their risk profile comprehensively to market participants. Where institutions find that the disclosures required under this Part do not convey the risk profile comprehensively to market participants, they shall publicly disclose information in addition to the information required to be disclosed under this Part. Nonetheless, institutions shall only be required to disclose information that is material and not proprietary or confidential in accordance with Article 432.	– NatWest Group has a Pillar 3 policy. – Written CRO and CFO attestation statement is provided at the outset of this document.
431 (4)	All quantitative disclosures shall be accompanied by a qualitative narrative and any other supplementary information that may be necessary in order for the users of that information to understand the quantitative disclosures, noting in particular any significant change in any given disclosure compared to the information contained in the previous disclosures.	– NatWest Group provides supplementary qualitative commentary for quantitative disclosures where appropriate.

UK CRR article	Regulatory requirements	Compliance reference
431 - Disclosure requirements and policies		
431 (5)	Institutions shall, if requested, explain their rating decisions to SMEs and other corporate applicants for loans, providing an explanation in writing when asked. The administrative costs of the explanation shall be proportionate to the size of the loan.	– If requested, NatWest Group provides an explanation in writing on rating decisions to SMEs and other corporate applicants.
432: Non-material, proprietary or confidential information		
432 (1)	With the exception of the disclosures laid down in point (c) of Article 435(2) and in Articles 437 and 450, institutions may omit one or more of the disclosures listed in Titles II and III where the information provided by those disclosures is not regarded as material. Information in disclosures shall be regarded as material where its omission or misstatement could change or influence the assessment or decision of a user of that information relying on it for the purpose of making economic decisions.	– NatWest Holdings Group complies with all relevant disclosure requirements. – In addition, a list of not applicable disclosures along with the reason of their exclusion is included in the document introduction.
432 (2)	Institutions may also omit one or more items of information referred to in Titles II and III where those items include information that is regarded as proprietary or confidential in accordance with this paragraph, except for the disclosures laid down in Articles 437 and 450. Information shall be regarded as proprietary to institutions where disclosing it publicly would undermine their competitive position. Proprietary information may include information on products or systems that would render the investments of institutions therein less valuable, if shared with competitors. Information shall be regarded as confidential where the institutions are obliged by customers or other counterparty relationships to keep that information confidential.	– NatWest Group does not omit any information on the grounds that it may be proprietary or confidential.
432 (3)	In the exceptional cases referred to in paragraph 2, the institution concerned shall state in its disclosures the fact that the specific items of information are not disclosed and the reason for not disclosing those items and publish more general information about the subject matter of the disclosure requirement, except where that subject matter is, in itself, proprietary or confidential.	– Not applicable
433: Frequency and scope of disclosures		
433	Institutions shall publish the disclosures required under Titles II and III in the manner set out in Articles 433a, 433b and 433c. Annual disclosures shall be published on the same date as the date on which institutions publish their financial statements or as soon as possible thereafter. Semi-annual and quarterly disclosures shall be published on the same date as the date on which the institutions publish their financial reports for the corresponding period where applicable or as soon as possible thereafter. Any delay between the date of publication of the disclosures required under this Part and the relevant financial statements shall be reasonable.	– NatWest Group being a large institution, complies with the frequency requirements set out in Article 433a. – The annual Pillar 3 disclosures for NatWest Group and its large subsidiaries are disclosed on the same date as the Annual Report & Accounts (ARA). – The semi-annual and quarterly Pillar 3 disclosures for NatWest Group as published on the same date as the Interim Results Announcement (IMS). – The semi-annual and quarterly Pillar 3 disclosures for NatWest Group's large subsidiaries are published around WD30 to coincide with supervisory reporting remittance dates.

UK CRR article	Regulatory requirements	Compliance reference
433: Frequency and scope of disclosures		
433a (1)	Large institutions shall disclose the information outlined below with the following frequency: (a) all the information required under this Part on an annual basis; (b) on a semi-annual basis the information referred to in: (i) point (a) of Article 437; (ii) point (e) of Article 438; (iii) points (e) to (l) of Article 439; (iv) Article 440; (v) points (c), (e), (f) and (g) of Article 442; (vi) point (e) of Article 444; (vii) Article 445; (viii) point (a) and (b) of Article 448(1); (ix) point (j) to (l) of Article 449; (x) points (a) and (c) of Article 451(1); (xi) Article 451a(3); (xii) point (g) of Article 452; (xiii) points (f) to (j) of Article 453; and (xiv) points (d), (e) and (g) of Article 455; (c) on a quarterly basis the information referred to in: (i) points (d) and (h) of Article 438; (ii) the key metrics referred to in Article 447; and (iii) Article 451a(2).	– NatWest Group and its large listed subsidiaries comply with the frequency requirements set out in this article. As noted, the large subsidiaries of NatWest Group are required to provide information in relation to the following articles: 437, 438, 440, 442, 450, 451, 451a and 453
433a (2)	By way of derogation from paragraph 1, large institutions other than G-SIIs that are non-listed institutions shall disclose the information outlined below with the following frequency: (a) all the information required under this Part on an annual basis; (b) the key metrics referred to in Article 447 on a semi-annual basis.	– NatWest Group's large non-listed subsidiaries provide a reduced set of disclosures on a quarterly basis (UK KM1 and IFRS9-FL) and the appropriate disclosures specified in this article on an annual basis.
433a (3)	Large institutions that are subject to Article 92a or 92b shall disclose the information required under Article 437a on a semi-annual basis, except for the key metrics referred to in point (h) of Article 447, which are to be disclosed on a quarterly basis.	– Not applicable as NatWest Group is not a G-SIIB firm.
433a (4)	Large institutions that are LREQ firms shall disclose the information required under paragraphs (1)(a), (b) and (g), (2) and (3) of Article 451 on a quarterly basis.	– NatWest Group is subject to the minimum capital requirements for leverage therefore completes additional leverage disclosures on a quarterly basis.
433b: Disclosures by small and non-complex institutions		
433b (1)	Small and non-complex institutions shall disclose the information outlined below with the following frequency: (a) on an annual basis the information referred to in: (i) points (a), (e) and (f) of Article 435(1); (ii) point (d) of Article 438; and (iii) points (a) to (d), (h), and (i) of Article 450(1); (b) on a semi-annual basis the key metrics referred to in Article 447.	– Not applicable
433b (2)	By way of derogation from paragraph 1 of this Article, small and non-complex institutions that are non-listed institutions shall disclose the key metrics referred to in Article 447 on an annual basis.	– Not applicable
433c: Disclosures by other institutions		
433c (1)	Institutions that are not subject to Article 433a or 433b shall disclose the information outlined below with the following frequency: (a) all the information required under this Part on an annual basis; (b) the key metrics referred to in Article 447 on a semi-annual basis; (c) for such institutions that are LREQ firms, the information required under paragraphs (1)(a), (b) and (g), (2) and (3) of Article 451 on a quarterly basis.	– Not applicable

UK CRR article	Regulatory requirements	Compliance reference
433c: Disclosures by other institutions		
433c (2)	By way of derogation from paragraph 1 of this Article, other institutions that are non-listed institutions shall disclose the following information on an annual basis: (a) points (a), (e) and (f) of Article 435(1); (b) points (a), (b) and (c) of Article 435(2); (c) point (a) of Article 437; (d) points (c) and (d) of Article 438; (e) the key metrics referred to in Article 447; (f) points (a) to (d), (h) to (k) of Article 450(1).	– Not applicable
434: Means of disclosures		
434 (1)	Institutions shall disclose all the information required under Titles II and III in electronic format and in a single medium or location. The single medium or location shall be a standalone document that provides a readily accessible source of prudential information for users of that information or a distinctive section included in or appended to the institutions' financial statements or financial reports containing the required disclosures and being easily identifiable to those users.	– NatWest Group publishes its Pillar 3 disclosures in a single report. The UK CCA disclosure (the detailed Capital instruments table) is provided separately however it is published in the same location. – The Pillar 3 disclosures required for NatWest Group's large subsidiaries are provided in separate reports.
434 (2)	Institutions shall make available on their website or, in the absence of a website, in any other appropriate location an archive of the information required to be disclosed in accordance with this Part. That archive shall be kept accessible for a period of time that shall be no less than the storage period set by national law for information included in the institutions' financial reports.	– NatWest Group's Reports archive can be located at investors.natwest.com/reports-archive.
434b: Timing and means of disclosures under Article 441		
434b (1)	By way of derogation from the second paragraph of Article 433, G-SIIs shall disclose the information required under Article 441 within four months after the end of the period to which the information relates.	– Not applicable as NatWest Group is no longer a G-SIIB firm.
434b (2)	By way of derogation from Article 434(1), where a G-SII relies on the derogation in paragraph 1, it may disclose the information required under Article 441 in a separate medium or location from the standalone document mentioned in Article 434(1).	
434b (3)	If, in accordance with paragraphs 1 and 2, a G-SII does not disclose the information required under Article 441 at the same time as, and in the same medium or location as, the other information required to be disclosed under Titles II and III, it shall include in the standalone document mentioned in Article 434(1) a statement specifying when and in what medium or location the information required under Article 441 will be disclosed.	
435: Risk management objectives and policies		
435 (1)	Institutions shall disclose their risk management objectives and policies for each separate category of risk, including the risks referred to in this Title. These disclosures shall include:	See below for applicable disclosure requirements.
435 (1) (a)	the strategies and processes to manage those categories of risks;	– UK OVA, UK LIQA, UK CRA, UK MRA, UK ORA.
435 (1) (b)	the structure and organisation of the relevant risk management function including information on the basis of its authority, its powers and accountability in accordance with the institution's incorporation and governing documents;	– UK OVA, UK LIQA, UK CRA, UK MRA, UK ORA.
435 (1) (c)	the scope and nature of risk reporting and measurement systems;	– UK OVA, UK LIQA, UK MRA, UK ORA.
435 (1) (d)	the policies for hedging and mitigating risk, and the strategies and processes for monitoring the continuing effectiveness of hedges and mitigants;	– UK OVA, UK LIQA, UK CRA, UK MRA, UK ORA.

UK CRR article	Regulatory requirements	Compliance reference
435: Risk management objectives and policies		
435 (1) (e)	a declaration approved by the management body on the adequacy of risk management arrangements of the institution providing assurance that the risk management systems put in place are adequate with regard to the institution's profile and strategy;	– UK OVA, UK LIQA
435 (1) (f)	a concise risk statement approved by the management body succinctly describing the relevant institution's overall risk profile associated with the business strategy; that statement shall include: (i) key ratios and figures providing external stakeholders with a comprehensive view of the institution's management of risk, including how the risk profile of the institution interacts with the risk tolerance set by the management body; (ii) information on intragroup transactions and transactions with related parties that may have a material impact of the risk profile of the consolidated group.	– UK OVA, UK LIQA, UK CRA
435 (2)	Institutions shall disclose the following information regarding governance arrangements:	– UK OVB.
435 (2) (a)	the number of directorships held by members of the management body;	– UK OVB.
435 (2) (b)	the recruitment policy for the selection of members of the management body and their actual knowledge, skills and expertise;	– UK OVB.
435 (2) (c)	the policy on diversity with regard to selection of members of the management body, its objectives and any relevant targets set out in that policy, and the extent to which those objectives and targets have been achieved;	– UK OVB.
435 (2) (d)	whether or not the institution has set up a separate risk committee and the number of times the risk committee has met;	– UK OVB.
435 (2) (e)	the description of the information flow on risk to the management body.	– UK OVB.
436: Disclosures of the scope of application		
436	Institutions shall disclose the following information regarding the scope of application of the CRR as follows	See below for applicable disclosure requirements
436 (a)	the name of the institution to which the CRR applies;	– NatWest Group plc and its consolidated subsidiaries.
436 (b)	a reconciliation between the consolidated financial statements prepared in accordance with the applicable accounting framework and the consolidated financial statements prepared in accordance with the requirements on regulatory consolidation pursuant to Sections 2 and 3 of Title II of Part One; that reconciliation shall outline the differences between the accounting and regulatory scopes of consolidation and the legal entities included within the regulatory scope of consolidation where it differs from the accounting scope of consolidation; the outline of the legal entities included within the regulatory scope of consolidation shall describe the method of regulatory consolidation where it is different from the accounting consolidation method, whether those entities are fully or proportional	– UK LI3, UK LIA
436 (c)	a breakdown of assets and liabilities of the consolidated financial statements prepared in accordance with the requirements on regulatory consolidation pursuant to Sections 2 and 3 of Title II of Part One, broken down by type of risks as referred to under this Part;	– UK LI1
436 (d)	a reconciliation identifying the main sources of differences between the carrying value amounts in the financial statements under the regulatory scope of consolidation as defined in Sections 2 and 3 of Title II of Part One, and the exposure amount used for regulatory purposes; that reconciliation shall be supplemented by qualitative information on those main sources of differences;	– UK LI2, UK LIA

UK CRR article	Regulatory requirements	Compliance reference
436: Disclosures of the scope of application		
436 (e)	for exposures from the trading book and the non-trading book that are adjusted in accordance with Article 34 and Article 105, a breakdown of the amounts of the constituent elements of an institution's prudent valuation adjustment, by type of risks, and the total of constituent elements separately for the trading book and non-trading book positions;	– UK PV1
436 (f)	any current or expected material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities between the parent undertaking and its subsidiaries;	– UK LIB; there are no such impediments.
436 (g)	the aggregate amount by which the actual own funds are less than required in all subsidiaries that are not included in the consolidation, and the name or names of those subsidiaries;	– UK LIB
436 (h)	where applicable, the circumstances under which use is made of the derogation referred to in Article 7 or the individual consolidation method laid down in Article 9.	– UK LIB
437: Disclosure of own funds		
437	Institutions shall disclose the following information regarding their own funds:	See below for applicable disclosure requirements
437 (a)	a full reconciliation of Common Equity Tier 1 items, Additional Tier 1 items, Tier 2 items and filters and deductions applied to own funds of the institution pursuant to Articles 32 to 36, 56, 66 and 79 with the balance sheet in the audited financial statements of the institution;	– UK CC1, UK CC2
437 (b)	a description of the main features of the Common Equity Tier 1 and Additional Tier 1 instruments and Tier 2 instruments issued by the institution;	– UK CCA; published separately as a supplement in the same location where the NatWest Group P3 report is available
437 (c)	the full terms and conditions of all Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments;	– UK CCA; published separately as a supplement in the same location where the NatWest Group P3 report is available
437 (d)	a separate disclosure of the nature and amounts of the following: (i) each prudential filter applied pursuant to Articles 32 to 35; (ii) items deducted pursuant to Articles 36, 56 and 66; (iii) items not deducted pursuant to Articles 47, 48, 56, 66 and 79;	– UK CC1
437 (e)	a description of all restrictions applied to the calculation of own funds in accordance with the CRR and the instruments, prudential filters and deductions to which those restrictions apply;	– UK CC1
437 (f)	a comprehensive explanation of the basis on which capital ratios are calculated where those capital ratios are calculated by using elements of own funds determined on a basis other than the basis laid down in the CRR.	– Not applicable
437a: Disclosure of Own Funds and Eligible liabilities		
437a	Institutions that are subject to Article 92a or 92b shall disclose the following information regarding their own funds and eligible liabilities:	– Not applicable as NatWest Group is no longer a G-SIIB firm. – NatWest Group however provides MREL disclosures utilising EBA disclosure guidelines for non-GSIIB firms. Refer to tables KM2, TLAC1 and TLAC3.
437a (a)	the composition of their own funds and eligible liabilities, their maturity and their main features;	
437a (b)	the ranking of eligible liabilities in the creditor hierarchy;	
437a (c)	the total amount of each issuance of eligible liabilities instruments referred to in Article 72b and the amount of those issuances that is included in eligible liabilities items within the limits specified in Article 72b(3) and (4);	
437a (d)	the total amount of excluded liabilities referred to in Article 72a(2).	

UK CRR article	Regulatory requirements	Compliance reference
438: Disclosure of own funds requirements and risk-weighted exposure amounts		
438	Institutions shall disclose the following information regarding their compliance with Article 92 and rules 3.1(1)(a) and 3.4 of the Internal Capital Adequacy Assessment Part of the PRA Rulebook:	See below for applicable disclosure requirements
438 (a)	a summary of their approach to assessing the adequacy of their internal capital to support current and future activities;	– UK OVC
438 (b)	the amount of the additional own funds requirements based on the supervisory review and evaluation process (within the meaning of regulation 34A of the Capital Requirements Regulations) and its composition in terms of Common Equity Tier 1, additional Tier 1 and Tier 2 instruments;	– UK KM1
438 (c)	the result of the institution's internal capital adequacy assessment process;	Not applicable - this is only on demand from supervisory authority
438 (d)	the total risk-weighted exposure amount and the corresponding total own funds requirement determined in accordance with Article 92, to be broken down by the different risk categories set out in Part Three and, where applicable, an explanation of the effect on the calculation of own funds and risk-weighted exposure amounts that results from applying capital floors and not deducting items from own funds;	– UK OV1
438 (e)	the on- and off-balance-sheet exposures, the risk-weighted exposure amounts and associated expected losses for each category of specialised lending referred to in Table 1 of Article 153(5) and the on- and off-balance-sheet exposures and risk-weighted exposure amounts for the categories of equity exposures set out in Article 155(2);	– UK CR10
438 (f)	the exposure value and the risk-weighted exposure amount of own funds instruments held in any insurance undertaking, reinsurance undertaking or insurance holding company that the institutions do not deduct from their own funds in accordance with Article 49 when calculating their capital requirements on an individual, sub-consolidated and consolidated basis;	– Not applicable
438 (g)	the supplementary own funds requirement and the capital adequacy ratio of the financial conglomerate calculated in accordance with the provisions implementing Article 6 of Directive 2002/87/EC and Annex I to that Directive where method 1 or 2 set out in that Annex is applied	– Not applicable as NatWest Group is not a financial conglomerate
438 (h)	the variations in the risk-weighted exposure amounts of the current disclosure period compared to the immediately preceding disclosure period that result from the use of internal models, including an outline of the key drivers explaining those variations.	– UK CR8, UK CCR7, UK MR2-B
439: Disclosure of exposures to counterparty credit risk		
439	Institutions shall disclose the following information regarding their exposure to counterparty credit risk as referred to in Chapter 6 of Title II of Part Three:	See below for applicable disclosure requirements
439 (a)	a description of the methodology used to assign internal capital and credit limits for counterparty credit exposures, including the methods to assign those limits to exposures to central counterparties;	– UK CCRA
439 (b)	a description of policies related to guarantees and other credit risk mitigants, such as the policies for securing collateral and establishing credit reserves;	– UK CCRA
439 (c)	a description of policies with respect to General Wrong-Way risk and Specific Wrong-Way risk as defined in Article 291;	– UK CCRA
439 (d)	the amount of collateral the institution would have to provide if its credit rating were downgraded;	– UK CCRA

UK CRR article	Regulatory requirements	Compliance reference
439: Disclosure of exposures to counterparty credit risk		
439 (e)	for derivative transactions, the amount of segregated and unsegregated collateral received and posted per type of collateral; and for securities financing transactions, the total amount of collateral received and posted per type of collateral; provided in each case that: (i) institutions shall not disclose such amounts unless both the fair value of collateral posted in the form of debt securities and the fair value of collateral received in that form exceed GBP 125 billion; and (ii) for the purposes of subparagraph (i), institutions shall use the twelve month rolling arithmetic mean of the fair value of collateral received or posted (as the case may be) in the form of debt securities, determined using quarterly data calculated in a manner consistent with data reported under Article 430(g) and covering the twelve months immediately preceding the disclosure reference date;	– Not applicable - disclosure threshold is not met
439 (f)	for derivative transactions, the exposure values before and after the effect of the credit risk mitigation as determined under the methods set out in Sections 3 to 6 of Chapter 6 of Title II of Part Three, whichever method is applicable, and the associated risk exposure amounts broken down by applicable method;	– UK CCR1
439 (g)	for securities financing transactions, the exposure values before and after the effect of the credit risk mitigation as determined under the methods set out in Chapters 4 and 6 of Title II of Part Three, whichever method is used, and the associated risk exposure amounts broken down by applicable method;	– UK CCR1
439 (h)	the exposure values after credit risk mitigation effects and the associated risk exposures for credit valuation adjustment capital charge, separately for each method as set out in Title VI of Part Three;	– UK CCR2
439 (i)	the exposure value to central counterparties and the associated risk exposures within the scope of Section 9 of Chapter 6 of Title II of Part Three, separately for qualifying and non-qualifying central counterparties, and broken down by types of exposures;	– UK CCR8
439 (j)	the notional amounts and fair value of credit derivative transactions; credit derivative transactions shall be broken down by product type; within each product type, credit derivative transactions shall be broken down further by credit protection bought and credit protection sold;	– UK CCR6
439 (k)	the estimate of alpha where the institution has received the permission of the competent authorities to use its own estimate of alpha in accordance with Article 284(9);	– UK CCR1
439 (l)	separately, the disclosures included in point (e) of Article 444 and point (g) of Article 452;	– UK CCR3 (STD) & UK CCR4 (IRB)
439 (m)	for institutions using the methods set out in Sections 4 to 5 of Chapter 6 of Title II Part Three, the size of their on- and off-balance-sheet derivative business as calculated in accordance with Article 273a(1) or (2), as applicable.	– Not applicable as NatWest Group does not apply either the Original Exposure Method (OEM) or the Simplified Standardised Approach for Counterparty Credit Risk (Simplified SA-CCR)

UK CRR article	Regulatory requirements	Compliance reference
440: Disclosure of countercyclical capital buffers		
440	Institutions shall disclose the following information in relation to their compliance with the requirement for a countercyclical capital buffer referred to in regulation 2 of the Capital Requirements (Capital Buffers and Macro-prudential Measures) Regulations 2014:	See below for applicable disclosure requirements
440 (a)	(a) the geographical distribution of the exposure amounts and risk-weighted exposure amounts of its credit exposures used as a basis for the calculation of their countercyclical capital buffer;	– CCyB1
440 (b)	(b) the amount of their institution-specific countercyclical capital buffer.	– CCyB2
441: Disclosure of indicators of global systemic importance		
441 (1)	G-SIIs shall disclose, on an annual basis, the values of the indicators used for determining their score in accordance with the identification methodology referred to in regulation 23 of Part 4 of Capital Requirements (Capital Buffers and Macro-prudential Measures) Regulations 2014.	– Not applicable as NatWest Group is no longer a G-SIIB firm
442: Disclosure of exposures to credit risk and dilution risk		
442	Institutions shall disclose the following information regarding their exposure to credit risk and dilution risk:	See below for applicable disclosure requirements
442 (a)	the scope and definitions that they use for accounting purposes of ‘past due’ and ‘impaired’ and the differences, if any, between the definitions of ‘past due’ and ‘default’ for accounting and regulatory purposes;	– UK CRB
442 (b)	a description of the approaches and methods adopted for determining specific and general credit risk adjustments;	– UK CRB
442 (c)	information on the amount and quality of performing, non-performing and forborne exposures for loans, debt securities and off-balance-sheet exposures, including their related accumulated impairment, provisions and negative fair value changes due to credit risk and amounts of collateral and financial guarantees received;	– UK CR1, UK CQ1, UK CQ4, UK CQ5 – NatWest Group does not recognise collateral by possession therefore disclosures UK CQ7 and UK CQ8 are not applicable
442 (d)	an ageing analysis of accounting past due exposures;	– UK CQ3
442 (e)	the gross carrying amounts of both defaulted and non-defaulted exposures, the accumulated specific and general credit risk adjustments, the accumulated write-offs taken against those exposures and the net carrying amounts and their distribution by geographical area and industry type and for loans, debt securities and off-balance-sheet exposures;	– UK CR1, UK CQ4, UK CQ5
442 (f)	any changes in the gross amount of defaulted on- and off-balance-sheet exposures, including, as a minimum, information on the opening and closing balances of those exposures, the gross amount of any of those exposures reverted to non-defaulted status or subject to a write-off;	– UK CR2
442 (g)	the breakdown of loans and debt securities by residual maturity.	– UK CR1-A
443: Disclosure of encumbered and unencumbered assets		
443	Institutions shall disclose information concerning their encumbered and unencumbered assets. For those purposes, institutions shall use the carrying amount per exposure class broken down by asset quality and the total amount of the carrying amount that is encumbered and unencumbered. Disclosure of information on encumbered and unencumbered assets shall not reveal emergency liquidity assistance provided by central banks.	– UK AE1, UK AE2, UK AE3, UK AE4

UK CRR article	Regulatory requirements	Compliance reference
444: Disclosure of the use of the standardised approach		
444	Institutions calculating their risk-weighted exposure amounts in accordance with Chapter 2 of Title II of Part Three shall disclose the following information for each of the exposure classes set out in Article 112:	See below for applicable disclosure requirements
444 (a)	the names of the nominated ECAIs and export credit agencies and the reasons for any changes in those nominations over the disclosure period;	– UK CRD
444 (b)	the exposure classes for which each ECAI or export credit agency is used;	– UK CRD
444 (c)	a description of the process used to transfer the issuer and issue credit ratings onto items not included in the trading book;	– Not applicable
444 (e)	the exposure values and the exposure values after credit risk mitigation associated with each credit quality step as set out in Chapter 2 of Title II of Part Three, by exposure class, as well as those deducted from own funds.	– UK CR4, UK CR5, UK CCR3
445: Disclosure of exposure to market risk		
445	Institutions calculating their own funds requirements in accordance with points (b) and (c) of Article 92(3) shall disclose those requirements separately for each risk referred to in those provisions. In addition, own funds requirements for the specific interest rate risk of securitisation positions shall be disclosed separately.	– UK MR1
446: Disclosure of operational risk management		
446	Institutions shall disclose the following information about their operational risk management:	See below for applicable disclosure requirements
446 (a)	the approaches for the assessment of own funds requirements for operational risk that the institution qualifies for;	– UK ORA, UK OR1
446 (b)	where the institution makes use of it, a description of the methodology set out in Article 312(2), which shall include a discussion of relevant internal and external factors being considered in the institution's advanced measurement approach;	– Not applicable; NatWest Group applies the Standardised Approach for calculating own funds requirements for Operational Risk
446 (c)	in the case of partial use, the scope and coverage of the different methodologies used.	– Not applicable; NatWest Group applies the Standardised Approach for calculating own funds requirements for Operational Risk
447: Disclosure of key metrics		
447	Institutions shall disclose the following key metrics in a tabular format:	See below for applicable disclosure requirements
447 (a)	the composition of their own funds and their own funds requirements as calculated in accordance with Article 92;	– UK KM1
447 (b)	the total risk exposure amount as calculated in accordance with Article 92(3);	– UK KM1
447 (c)	where applicable, the amount and composition of additional own funds which the institutions are required to hold in accordance with regulation 34(1) of the Capital Requirements Regulations;	– UK KM1
447 (d)	their combined buffer requirement which the institutions are required to hold in accordance with regulation 35 of the Capital Requirements (Capital Buffers and Macro-prudential Measures) Regulations 2014;	– UK KM1
447 (e)	the following information in relation to their leverage ratio: (i) for all institutions, their leverage ratio and total exposure measure; (ii) for LREQ firms, the information in Article 451(1)(b) and (g) and Article 451(2)(b) to (d);	– UK KM1 - NatWest is an LREQ firm therefore subject to the additional disclosures required by point (ii)

UK CRR article	Regulatory requirements	Compliance reference
447: Disclosure of key metrics		
447 (f)	the following information in relation to their liquidity coverage ratio as calculated in accordance with Chapter 2 of the Liquidity Coverage Ratio (CRR) Part of the PRA Rulebook: (i) the average or averages, as applicable, of their liquidity coverage ratio based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period; (ii) the average or averages, as applicable, of their total liquid assets, after applying the relevant haircuts, included in the liquidity buffer pursuant to the Chapter 2 of the Liquidity Coverage Ratio (CRR) Part of the PRA Rulebook, based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period; (iii) the averages of their liquidity outflows, inflows and net liquidity outflows as calculated pursuant to Chapter 2 of the Liquidity Coverage Ratio (CRR) Part of the PRA Rulebook, based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period;	– UK KM1
447 (g)	the following information in relation to their net stable funding requirement as calculated in accordance with Title IV of Part Six: (i) the average or averages, as applicable, of their net stable funding ratio based on end-of-the-quarter observations over the preceding four quarters, for each quarter of the relevant disclosure period; (ii) the average or averages, as applicable, of their available stable funding based on end-of-the-quarter observations over the preceding four quarters, for each quarter of the relevant disclosure period; (iii) the average or averages, as applicable, of their required stable funding based on end-of-the-quarter observations over the preceding four quarters, for each quarter of the relevant disclosure period;	– UK KM1
447 (h)	their own funds and eligible liabilities ratios and their components, numerator and denominator, as calculated in accordance with Articles 92a and 92b and broken down at the level of each resolution group, where applicable.	– Not applicable as NatWest Group is no longer a G-SIIB firm
448: Disclosure of exposures to interest rate risk on positions not held in the trading book		
448 (1)	Institutions shall disclose the following quantitative and qualitative information on the risks arising from potential changes in interest rates that affect both the economic value of equity and the net interest income of their non-trading book activities referred to in in Chapter 9 of the Internal Capital Adequacy Assessment (ICAA) Part of the PRA Rulebook:	See below for applicable disclosure requirements
448 (1) (a)	the changes in the economic value of equity calculated under the following six supervisory shock scenarios referred to in Rule 9.7 of the ICAA Part of the PRA Rulebook for the current and previous disclosure periods: (i) parallel shock up; (ii) parallel shock down; (iii) steepener shock (short rates down and long rates up); (iv) flattener shock (short rates up and long rates down); (v) short rates shock up; (vi) short rates shock down;	– UK IRRBB1
448 (1) (b)	the changes in the net interest income calculated under the following two supervisory shock scenarios referred to in Rule 9.7 of the ICAA Part of the PRA Rulebook for the current and previous disclosure periods: (i) parallel shock up; (ii) parallel shock down;	– UK IRRBB1
448 (1) (c)	a description of key modelling and parametric assumptions used to calculate changes in the economic value of equity and in the net interest income required under points (a) and (b) of this paragraph;	– UK IRRBBA

UK CRR article	Regulatory requirements	Compliance reference
448: Disclosure of exposures to interest rate risk on positions not held in the trading book		
448 (1) (d)	an explanation of the significance of the risk measures disclosed under points (a) and (b) of this paragraph and of any significant variations of those risk measures since the previous disclosure reference date;	– UK IRRBBA
448 (1) (e)	the description of how institutions define, measure, mitigate and control the interest rate risk of their non-trading book activities for the purposes of the competent authorities' review in accordance with Chapter 9 of the ICAA Part of the PRA Rulebook, including: (i) a description of the specific risk measures that the institutions use to evaluate changes in their economic value of equity and in their net interest income; (ii) a description of the key modelling and parametric assumptions used in the institutions' internal measurement systems for the purpose of calculating changes in the economic value of equity and in net interest income, as required under points (a) and (b) of this paragraph, if those assumptions differ from those used for the purposes of Chapter 9 of the ICAA Part of the PRA Rulebook or from those specified in Annex XXXVIII of Chapter 6 of this Disclosure (CRR) Part of the PRA Rulebook, including the rationale for those differences; (iii) a description of the interest rate shock scenarios that institutions use to estimate the interest rate risk; (iv) the recognition of the effect of hedges against those interest rate risks, including internal hedges that meet the requirements laid down in Article 106(3); (v) an outline of how often the evaluation of the interest rate risk occurs;	– UK IRRBBA
448 (1) (f)	the description of the overall risk management and mitigation strategies for those risks;	– UK IRRBBA
448 (1) (g)	average and longest repricing maturity assigned to non-maturing deposits.	– UK IRRBBA
448 (2)	By way of derogation from paragraph 1 of this Article, the requirements set out in points (c) and (e)(i) to (e)(iv) of paragraph 1 of this Article for descriptions relating to economic value of equity shall not apply to institutions that use the standardised framework referred to in Rule 9.1B of the ICAA Part of the PRA Rulebook.	– Not applicable
UK CRR 449: Disclosure of exposure to securitisation positions		
449	Institutions calculating risk-weighted exposure amounts in accordance with Chapter 5 of Title II of Part Three or own funds requirements in accordance with Article 337 or 338 shall disclose the following information separately for their trading and non-trading book activities:	See below for applicable disclosure requirements
449 (a)	a description of their securitisation and re-securitisation activities, including their risk management and investment objectives in connection with those activities, their role in securitisation and re-securitisation transactions, whether they use the simple, transparent and standardised securitisation (STS) as defined in point (10) of Article 242, and the extent to which they use securitisation transactions to transfer the credit risk of the securitised exposures to third parties with, where applicable, a separate description of their synthetic securitisation risk transfer policy;	– UK SECA
449 (b)	the type of risks they are exposed to in their securitisation and re-securitisation activities by level of seniority of the relevant securitisation positions providing a distinction between STS and non-STS positions and: (i) the risk retained in own-originated transactions; (ii) the risk incurred in relation to transactions originated by third parties;	– UK SECA

UK CRR article	Regulatory requirements	Compliance reference
449: Disclosure of exposure to securitisation positions		
449 (c)	their approaches for calculating the risk-weighted exposure amounts that they apply to their securitisation activities, including the types of securitisation positions to which each approach applies and with a distinction between STS and non-STS positions;	– UK SECA
449 (d)	a list of SSPEs falling into any of the following categories, with a description of their types of exposures to those SSPEs, including derivative contracts: (i) SSPEs which acquire exposures originated by the institutions; (ii) SSPEs sponsored by the institutions; (iii) SSPEs and other legal entities for which the institutions provide securitisation-related services, such as advisory, asset servicing or management services; (iv) SSPEs included in the institutions' regulatory scope of consolidation;	– UK SECA
449 (e)	a list of any legal entities in relation to which the institutions have disclosed that they have provided support in accordance with Chapter 5 of Title II of Part Three;	– UK SECA; NatWest Group has not provided support to any securitisation transactions beyond its contractual obligations.
449 (f)	a list of legal entities affiliated with the institutions and that invest in securitisations originated by the institutions or in securitisation positions issued by SSPEs sponsored by the institutions;	– UK SECA
449 (g)	a summary of their accounting policies for securitisation activity, including where relevant a distinction between securitisation and re-securitisation positions;	– UK SECA
449 (h)	the names of the ECAIs used for securitisations and the types of exposure for which each agency is used;	– SEC-ERBA is the External Ratings-Based Approach. This is based on external credit ratings from credit rating agencies. The ratings are mapped to corresponding credit quality steps (CQS) and, along with seniority of the tranche, maturity and tranche thickness, these are used to determine the risk weight for each exposure. NatWest Group recognises ratings issued by Standard & Poor's, Moody's, Fitch, DBRS or ARC Ratings. Most transactions are rated by two or more of these rating agencies, which are formally classified as external credit assessment institutions (ECAIs).
449 (i)	where applicable, a description of the Internal Assessment Approach as set out in Chapter 5 of Title II of Part Three, including the structure of the internal assessment process and relation between internal assessment and external ratings of the relevant ECAI disclosed in accordance with point (h), the control mechanisms for the internal assessment process including discussion of independence, accountability, and internal assessment process review, the exposure types to which the internal assessment process is applied and the stress factors used for determining credit enhancement levels;	– UK SECA
449 (j)	separately for the trading book and the non-trading book, the carrying amount of securitisation exposures, including information on whether institutions have transferred significant credit risk in accordance with Articles 244 and 245, for which institutions act as originator, sponsor or investor, separately for traditional and synthetic securitisations, and for STS and non-STS transactions and broken down by type of securitisation exposures;	– UK SEC1, UK SEC2

UK CRR article	Regulatory requirements	Compliance reference
449: Disclosure of exposure to securitisation positions		
449 (k)	for the trading and the non-trading book activities, the following information: (i) the aggregate amount of securitisation positions where institutions act as originator or sponsor and the associated risk-weighted assets and capital requirements by regulatory approaches, including exposures deducted from own funds or risk weighted at 1250%, broken down between traditional and synthetic securitisations and between securitisation and re-securitisation exposures, separately for STS and non-STS positions, and further broken down into a meaningful number of risk-weight or capital requirement bands and by approach used to calculate the capital requirements ; (ii) the aggregate amount of securitisation positions where institutions act as investor and the associated risk-weighted assets and capital requirements by regulatory approaches, including exposures deducted from own funds or risk weighted at 1250%, broken down between traditional and synthetic securitisations, securitisation and re-securitisation positions, and STS and non-STS positions, and further broken down into a meaningful number of risk weight or capital requirement bands and by approach used to calculate the capital requirements;	– UK SEC3, UK SEC4
449 (l)	for exposures securitised by the institution, the amount of exposures in default and the amount of the specific credit risk adjustments made by the institution during the current period, both broken down by exposure type.	– Not applicable
450: Disclosure of remuneration policy		
450	Institutions shall disclose the following information regarding their remuneration policy and practices for those categories of staff whose professional activities have a material impact on risk profile of the institutions:	See below for applicable disclosure requirements
450 (1) (a)	information concerning the decision-making process used for determining the remuneration policy, as well as the number of meetings held by the main body overseeing remuneration during the financial year, including, where applicable, information about the composition and the mandate of a remuneration committee, the external consultant whose services have been used for the determination of the remuneration policy and the role of the relevant stakeholders;	– UK REMA
450 (1) (b)	information about the link between pay of the staff and their performance;	– UK REMA
450 (1) (c)	the most important design characteristics of the remuneration system, including information on the criteria used for performance measurement and risk adjustment, deferral policy and vesting criteria;	– UK REMA
450 (1) (d)	the ratios between fixed and variable remuneration set in accordance with rules 15.9 to 15.13 of the Remuneration Part of the PRA Rulebook;	– UK REMA
450 (1) (e)	information on the performance criteria on which the entitlement to shares, options or variable components of remuneration is based;	– UK REMA
450 (1) (f)	the main parameters and rationale for any variable component scheme and any other non-cash benefits;	– UK REMA
450 (1) (g)	aggregate quantitative information on remuneration, broken down by business area;	– UK REM5

UK CRR article	Regulatory requirements	Compliance reference
450: Disclosure of remuneration policy		
450 (1) (h)	aggregate quantitative information on remuneration, broken down by senior management and members of staff whose professional activities have a material impact on the risk profile of the institutions, indicating the following: (i) the amounts of remuneration for the financial year, split into fixed remuneration including a description of the fixed components, and variable remuneration, and the number of beneficiaries; (ii) the amounts and forms of awarded variable remuneration, split into cash, shares, share-linked instruments and other types separately for the part paid upfront and the deferred part; (iii) the amounts of deferred remuneration awarded for previous performance periods, split into the amount due to vest in the financial year and the amount due to vest in subsequent years; (iv) the amount of deferred remuneration due to vest in the financial year, and the number of beneficiaries of those awards; (v) the guaranteed variable remuneration awards during the financial year, and the number of beneficiaries of those awards; (vi) severance payments awarded in previous periods, that have been paid out during the financial year; (vii) the amounts of severance payments awarded during the financial year, split into paid upfront and deferred, the number of beneficiaries of those payments and highest payment that has been awarded to a single person;	– UK REM1, UK REM2, UK REM3
450 (1) (i)	the number of individuals that have been remunerated EUR 1 million or more per financial year, with the remuneration between EUR 1 million and EUR 5 million broken down into pay bands of EUR 500 000 and with the remuneration of EUR 5 million and above broken down into pay bands of EUR 1 million;	– UK REM4
450 (1) (k)	information on whether the institution benefits from a derogation laid down in the Remuneration Part of the PRA Rulebook at 5.3, and/or 12.2 (second subparagraph), and 15.A1(3). For the purposes of point (k) of the first subparagraph of this paragraph, institutions that benefit from such a derogation shall indicate whether they benefit from that derogation on the basis of the Remuneration Part of the PRA Rulebook at 5.3, and/or 12.2 (second subparagraph), and 15.A1(3). They shall also indicate for which of the remuneration principles they apply the derogation(s), the number of staff members that benefit from the derogation(s) and their total remuneration, split into fixed and variable remuneration.	– UK REMA
450 (2)	For large institutions, the quantitative information on the remuneration of institutions' collective management body referred to in this Article shall also be made available to the public, differentiating between executive and non-executive members. Institutions shall comply with the requirements set out in this Article in a manner that is appropriate to their size, internal organisation and the nature, scope and complexity of their activities and without prejudice to the GDPR.	– UK REM1, UK REM2, UK REM3, UK REM5
451: Disclosure of leverage ratio		
451 (1)	Institutions shall disclose the following information regarding their leverage ratio as calculated in accordance with Article 429 of Chapter 3 of the Leverage Ratio (CRR) Part and their management of the risk of excessive leverage:	See below for applicable disclosure requirements
451 (1) (a)	the leverage ratio;	– UK LR2, UK KM1
451 (1) (b)	the leverage ratio calculated as if central bank claims were required to be included in the total exposure measure;	– UK LR1, UK LR2, UK LR3
451 (1) (c)	a breakdown of the total exposure measure, as well as a reconciliation of the total exposure measure with the relevant information disclosed in published financial statements;	– UK LR2

UK CRR article	Regulatory requirements	Compliance reference
451: Disclosure of leverage ratio		
451 (1) (d)	a description of the processes used to manage the risk of excessive leverage;	– UK LRA
451 (1) (e)	a description of the factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers;	– UK LRA
451 (1) (f)	in relation to the quarterly periods up to 31 December 2022, the leverage ratio calculated as if Article 468 of the CRR did not apply for purposes of the capital measure under Article 429(3) of Chapter 3 of the Leverage Ratio (CRR) Part;	– Not applicable
451 (1) (g)	in relation to the quarterly periods up to 31 December 2024, the leverage ratio calculated as if Article 473a of the CRR did not apply for purposes of the capital measure under Article 429(3) of Chapter 3 of the Leverage Ratio (CRR) Part.	– UK KM1, IFRS9-FL, UK LR2
451 (2)	An LREQ firm must disclose each of the following:	NatWest Group is a LREQ firm
451 (2) (a)	the average exposure measure;	– UK LR2
451 (2) (b)	the average leverage ratio;	– UK LR2, UK KM1
451 (2) (c)	the average leverage ratio calculated as if central bank claims were required to be included in the total exposure measure; and	– UK LR2, UK KM1
451 (2) (d)	the countercyclical leverage ratio buffer.	– UK LR2, UK KM1
451 (3)	An LREQ firm must disclose such information as is necessary to enable users to understand changes in the firm's total exposure measure and tier 1 capital (leverage) over the quarter that have affected the firm's average leverage ratio.	– UK LRA
451 (4)	Subject to paragraph 5:	
451 (4) (a)	for the purposes of paragraph 2(a) an LREQ firm must calculate its average exposure measure for a quarter as the sum of: (i) the arithmetic mean of the firm's total exposure measure in relation to on-balance sheet assets and securities financing transactions on each day in the quarter; and (ii) the arithmetic mean of the firm's total exposure measure excluding on-balance sheet assets and securities financing transactions on the last day of each month in the quarter; and	– Effective from 1 January 2023
451 (4) (b)	for the purposes of paragraphs 2(a) and 3, an LREQ firm must calculate its average leverage ratio for a quarter as its capital measure divided by its exposure measure where the: (i) capital measure is the arithmetic mean of the firm's tier 1 capital (leverage) on the last day of each month in the quarter; and (ii) exposure measure is the sum derived in accordance with (a), unless paragraph 5 applies in which case it shall be the sum derived in accordance with that paragraph.	– UK LR2, UK KM1
451 (5)	In relation to the quarterly periods up to 1 January 2023 an LREQ firm must calculate its average exposure measure for a quarter as the sum of:	
451 (5) (a)	the arithmetic mean of the firm's total exposure measure in relation to on-balance sheet assets on each day in the quarter; and	– UK LR2
451 (5) (b)	the arithmetic mean of the firm's total exposure measure excluding on-balance sheet assets on the last day of each month in the quarter.	– UK LR2

UK CRR article	Regulatory requirements	Compliance reference
451a: Disclosure of liquidity requirements		
451a (1)	Institutions that are subject to Part Six shall disclose information on their liquidity coverage ratio, net stable funding ratio and liquidity risk management in accordance with this Article.	See below for applicable disclosure requirements
451a (2)	Institutions shall disclose the following information in relation to their liquidity coverage ratio as calculated in accordance with the Chapter 2 of the Liquidity Coverage Ratio (CRR) Part of the PRA Rulebook:	
451a (2) (a)	the average or averages, as applicable, of their liquidity coverage ratio based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period;	– UK LIQ1, UK LIQB
451a (2) (b)	the average or averages, as applicable, of their total liquid assets, after applying the relevant haircuts, included in the liquidity buffer pursuant to the Chapter 2 of the Liquidity Coverage Ratio (CRR) Part of the PRA Rulebook, based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period, and a description of the composition of that liquidity buffer;	– UK LIQ1, UK LIQB
451a (2) (c)	the averages of their liquidity outflows, inflows and net liquidity outflows as calculated in accordance with the Chapter 2 of the Liquidity Coverage Ratio (CRR) Part of the PRA Rulebook, based on end-of-the-month observations over the preceding 12 months for each quarter of the relevant disclosure period and the description of their composition.	– UK LIQ1, UK LIQB
451a (3)	Institutions shall disclose the following information in relation to their net stable funding ratio as calculated in accordance with Title IV of Part Six:	
451a (3) (a)	averages of their net stable funding ratio calculated in accordance with Chapter 2 of Title IV of Part Six for each quarter of the relevant disclosure period, based on end-of-the-quarter observations over the preceding four quarters;	– UK LIQ2
451a (3) (b)	an overview of the amount of available stable funding calculated in accordance with Chapter 3 of Title IV of Part Six for each quarter of the relevant disclosure period, comprising averages based on end-of-the-quarter observations over the preceding four quarters;	– UK LIQ2
451a (3) (c)	an overview of the amount of required stable funding calculated in accordance with Chapter 4 of Title IV of Part Six for each quarter of the relevant disclosure period, comprising averages based on end-of-the-quarter observations over the preceding four quarters.	– UK LIQ2
451a (4)	Institutions shall disclose the arrangements, systems, processes and strategies put in place to identify, measure, manage and monitor their liquidity risk in accordance with the Internal Liquidity Adequacy Assessment Part of the PRA Rulebook.	– UK LIQA
452: Disclosure of the use of the IRB approach to credit risk		
452	Institutions calculating the risk-weighted exposure amounts under the IRB Approach to credit risk shall disclose the following information:	See below for applicable disclosure requirements
452 (a)	the competent authority's permission of the approach or approved transition;	– UK CRE
452 (b)	for each exposure class referred to in Article 147, the percentage of the total exposure value of each exposure class subject to the Standardised Approach laid down in Chapter 2 of Title II of Part Three or to the IRB Approach laid down in Chapter 3 of Title II of Part Three, as well as the part of each exposure class subject to a roll-out plan; where institutions have received permission to use own LGDs and conversion factors for the calculation of risk-weighted exposure amounts, they shall disclose separately the percentage of the total exposure value of each exposure class subject to that permission; For the purposes of point (b) of this Article, institutions shall use the exposure value as defined in Article 166.	– UK CRE, UK CR6-A

UK CRR article	Regulatory requirements	Compliance reference
452: Disclosure of the use of the IRB approach to credit risk		
452 (c)	the control mechanisms for rating systems at the different stages of model development, controls and changes, which shall include information on: (i) the relationship between the risk management function and the internal audit function; (ii) the rating system review; (iii) the procedure to ensure the independence of the function in charge of reviewing the models from the functions responsible for the development of the models; (iv) the procedure to ensure the accountability of the functions in charge of developing and reviewing the models;	– UK CRE
452 (d)	the role of the functions involved in the development, approval and subsequent changes of the credit risk models;	– UK CRE
452 (e)	the scope and main content of the reporting related to credit risk models;	– UK CRE
452 (f)	a description of the internal ratings process by exposure class, including the number of key models used with respect to each portfolio and a brief discussion of the main differences between the models within the same portfolio, covering: (i) the definitions, methods and data for estimation and validation of PD, which shall include information on how PDs are estimated for low default portfolios, whether there are regulatory floors and the drivers for differences observed between PD and actual default rates at least for the last three periods; (ii) where applicable, the definitions, methods and data for estimation and validation of LGD, such as methods to calculate downturn LGD, how LGDs are estimated for low default portfolio and the time lapse between the default event and the closure of the exposure; (iii) where applicable, the definitions, methods and data for estimation and validation of conversion factors, including assumptions employed in the derivation of those variables;	– UK CRE
452 (g)	as applicable, the following information in relation to each exposure class referred to in Article 147: (i) their gross on-balance-sheet exposure; (ii) their off-balance-sheet exposure values prior to the relevant conversion factor; (iii) their exposure after applying the relevant conversion factor and credit risk mitigation; (iv) any model, parameter or input relevant for the understanding of the risk weighting and the resulting risk exposure amounts disclosed across a sufficient number of obligor grades (including default) to allow for a meaningful differentiation of credit risk; (v) separately for those exposure classes in relation to which institutions have received permission to use own LGDs and conversion factors for the calculation of risk-weighted exposure amounts, and for exposures for which the institutions do not use such estimates, the values referred to in points (i) to (iv) subject to that permission;	– UK CR6, UK CCR4
452 (h)	institutions' estimates of PDs against the actual default rate for each exposure class over a longer period, with separate disclosure of the PD range, the external rating equivalent, the weighted average and arithmetic average PD, the number of obligors at the end of the previous year and of the year under review, the number of defaulted obligors, including the new defaulted obligors, and the annual average historical default rate.	– UK CR9 – UK CR9.1 is not provided as Article 180(1)(f) CRR is not applicable; NatWest Group does not attribute the default rate observed for the external organisation's grades to the institution's grades.
453: Disclosure of the use of credit risk mitigation techniques		
453	Institutions using credit risk mitigation techniques shall disclose the following information:	See below for applicable disclosure requirements
453 (a)	the core features of the policies and processes for on- and off-balance-sheet netting and an indication of the extent to which institutions make use of balance sheet netting;	– UK CRC

UK CRR article	Regulatory requirements	Compliance reference
453: Disclosure of the use of credit risk mitigation techniques		
453 (b)	the core features of the policies and processes for eligible collateral evaluation and management;	– UK CRC
453 (c)	a description of the main types of collateral taken by the institution to mitigate credit risk;	– UK CRC
453 (d)	for guarantees and credit derivatives used as credit protection, the main types of guarantor and credit derivative counterparty and their creditworthiness used for the purpose of reducing capital requirements, excluding those used as part of synthetic securitisation structures;	– UK CRC
453 (e)	information about market or credit risk concentrations within the credit mitigation taken;	– UK CRC
453 (f)	for institutions calculating risk-weighted exposure amounts under the Standardised Approach or the IRB Approach, the total exposure value not covered by any eligible credit protection and the total exposure value covered by eligible credit protection after applying volatility adjustments; the disclosure set out in this point shall be made separately for loans and debt securities and including a breakdown of defaulted exposures;	– UK CR3
453 (g)	the corresponding conversion factor and the credit risk mitigation associated with the exposure and the incidence of credit risk mitigation techniques with and without substitution effect;	– UK CR4, UK CR7-A
453 (h)	for institutions calculating risk-weighted exposure amounts under the Standardised Approach, the on- and off-balance-sheet exposure value by exposure class before and after the application of conversion factors and any associated credit risk mitigation;	– UK CR4
453 (i)	for institutions calculating risk-weighted exposure amounts under the Standardised Approach, the risk-weighted exposure amount and the ratio between that risk-weighted exposure amount and the exposure value after applying the corresponding conversion factor and the credit risk mitigation associated with the exposure; the disclosure set out in this point shall be made separately for each exposure class;	– UK CR4
453 (j)	for institutions calculating risk-weighted exposure amounts under the IRB Approach, the risk-weighted exposure amount before and after recognition of the credit risk mitigation impact of credit derivatives; where institutions have received permission to use own LGDs and conversion factors for the calculation of risk-weighted exposure amounts, they shall make the disclosure set out in this point separately for the exposure classes subject to that permission.	– UK CR7
454: Disclosure of the use of the advanced measurement approaches to operational risk		
454	The institutions using the Advanced Measurement Approaches set out in Articles 321 to 324 for the calculation of their own funds requirements for operational risk shall disclose a description of their use of insurance and other risk transfer mechanisms for the purpose of mitigating that risk.	– Not applicable as NatWest Group applies the Standardised approach for calculating own funds for Operational Risk

UK CRR article	Regulatory requirements	Compliance reference
455: Use of internal market risk models		
455	Institutions calculating their capital requirements in accordance with Article 363 shall disclose the following information:	See below for applicable disclosure requirements
455 (a)	for each sub-portfolio covered: (i) the characteristics of the models used; (ii) where applicable, for the internal models for incremental default and migration risk and for correlation trading, the methodologies used and the risks measured through the use of an internal model including a description of the approach used by the institution to determine liquidity horizons, the methodologies used to achieve a capital assessment that is consistent with the required soundness standard and the approaches used in the validation of the model; (iii) a description of stress testing applied to the sub-portfolio; (iv) a description of the approaches used for back-testing and validating the accuracy and consistency of the internal models and modelling processes;	– UK MRB
455 (b)	the scope of permission by the competent authority;	– UK MRB
455 (c)	a description of the extent and methodologies for compliance with the requirements set out in Articles 104 and 105;	– UK MRB
455 (d)	the highest, the lowest and the mean of the following: (i) the daily value-at-risk measures over the reporting period and at the end of the reporting period; (ii) the stressed value-at-risk measures over the reporting period and at the end of the reporting period; (iii) the risk numbers for incremental default and migration risk and for the specific risk of the correlation trading portfolio over the reporting period and at the end of the reporting period;	– UK MR3
455 (e)	the elements of the own funds requirement as specified in Article 364;	– UK MR2-A
455 (f)	the weighted average liquidity horizon for each sub-portfolio covered by the internal models for incremental default and migration risk and for correlation trading;	– UK MRB
455 (g)	a comparison of the daily end-of-day value-at-risk measures to the one-day changes of the portfolio's value by the end of the subsequent business day together with an analysis of any important overshooting during the reporting period.	– UK MR4