



**NatWest Holdings Group**  
Pillar 3 Report 2019

# Pillar 3 Report 2019

<b>Contents and Forward-looking statements</b>	Page
Forward-looking statements	2
<b>Introduction</b>	
Attestation statement	3
<b>Disclosure framework</b>	4
<b>Capital, liquidity and funding</b>	
CAP 1: CAP and LR: Capital and leverage ratios - NWH Group and significant subsidiaries	12
KM1: BCBS 2 & EBA IFRS 9-FL: Key metrics - NWH Group	13
EBA IFRS 9-FL: EBA Key metrics - significant subsidiaries	15
CAP 2: Capital resources (CRR own funds template) – NWH Group and significant subsidiaries	18
CC2: Reconciliation of regulatory capital to balance sheet	24
EU OV1: CAP: RWAs and MCR summary - NWH Group and significant subsidiaries	25
EU CR8: IRB and STD: Credit risk RWAs and MCR flow statement	26
EU CCR7: CCR: IMM and Non-IMM: Counterparty credit risk RWAs and MCR flow statement	27
EU MR2_B: MR IMA and STD: Market risk RWAs and MCR flow statement	27
CAP 3: LR: Leverage exposures (CRR Delegated Act Template) – NWH Group and significant subsidiaries	28
CAP 4: CAP: Capital instruments – NWH Group and significant subsidiaries	30
CAP 5a: CAP: Countercyclical capital buffer - geographical distribution of credit exposures	31
CAP 5b: CAP: Countercyclical capital buffer requirement	31
PV1: BCBS 2: Prudential valuation adjustment	32
EBA Asset encumbrance	33
EU LIQ1: Liquidity coverage ratio	34
EU LI1: CAP: Accounting and regulatory scopes of consolidation	35
EU LI2: IRB and STD: Balance sheet to credit risk EAD bridge	36
TLAC 2: Material subgroup entity – creditor ranking at legal entity level	37
<b>Credit risk</b>	
EU CRA: IRB and STD: General qualitative information about credit risk	39
CR1: IRB and STD: RWA density by NWH Group sector cluster	40
CR2: IRB and STD: EAD, RWAs and MCR by CRR exposure class: NWH Group and significant subsidiaries	41
EU CRE_1: IRB Models: Credit RWA calculation approach by exposure class	45
EU CRE: Qualitative disclosures relating to IRB models (credit and counterparty risk)	47
EU CRE_2a: Overview of Retail IRB models	48
EU CRE_2b: Overview of Wholesale IRB models	50
CR9: IRB: IRB models back-testing	53
CR9_a: IRB: IRB models - Estimated probability of default, actual default rates and EAD outcomes versus estimates	53
CR9_a_1: IRB models - Back-testing of PD by exposure class - Retail - total credit risk	54
CR9_a_2: IRB models - Back-testing of PD by exposure class - Wholesale - total credit risk	56
CR9_b: IRB: IRB models: Back-testing of LGD by exposure class – total credit risk	58
EU CRB_B: IRB & STD: Credit risk exposures by exposure class	59
EU CRB_C: IRB & STD: Credit risk exposures by geographic region	60
EU CRB_D: IRB & STD: Credit risk exposures by industry sector	61
EU CRB_E: IRB & STD: Credit risk exposures by maturity profile	62
EU CR1_A: IRB & STD: Credit risk exposures by exposure class - Defaulted and non-defaulted split	63
Template 1: Credit quality of forborne exposures	64
Template 3: Credit quality of performing and non-performing exposures by past due days	65
Template 4: Performing and non-performing exposures and related provisions	66
Template 5: Quality of non-performing exposures by geography	67
Template 6: Credit quality of loans and advances by industry	67

## Pillar 3 Report 2019

<b>Contents and Forward-looking statements continued</b>	<b>Page</b>
<b>Credit risk continued</b>	
EU CR2_A: Changes in the stock of general and specific credit risk adjustments	68
EU CR2_B: Changes in the stock of defaulted and impaired loans and debt securities	68
EU CRC: IRB & STD: Qualitative disclosures relating to credit risk mitigation	69
EU CR3: IRB: Credit risk mitigation techniques by exposure class	70
EU CR3_a: IRB: Credit risk mitigation - incorporation within IRB parameters	71
EU CR7: IRB: Effect on the RWAs of credit derivatives used as CRM techniques	71
EU CR6_a: IRB: Exposures by exposure class and PD range - Retail	72
EU CR6_b: IRB: Exposures by exposure class and PD range - Wholesale	74
EU CR6_c: IRB: Geographical split of PD and LGD	76
EU CR10 IRB: IRB: Specialised lending	77
EU CR4: STD: Exposures and CRM effects	78
EU CR5a: STD: CQS mapping to external credit ratings	78
EU CR5: STD: Credit risk exposure class and risk-weights	79
<b>Counterparty credit risk</b>	
EU CCRA: CCR: General qualitative information	80
EU CCR1: CCR: Analysis of exposure by EAD calculation approach	80
EU CCR4: CCR IRB: Exposures by portfolio and PD scale	81
EU CCR3: CCR: STD: Exposure by regulatory portfolio and risk-weight	83
EU CCR2: CCR: Credit valuation adjustment capital charge	83
EU CCR5_A: Impact of netting and collateral held on exposure values	83
EU CCR6: CCR: Credit derivatives	83
EU CCR8: CCR: Exposures (EAD post CRM) to central counterparties	84
<b>Market risk</b>	
EU MRA: MR: Qualitative information related to market risk	85
EU MR1: MR IMA and STD: RWAs and MCR – NWH Group and significant subsidiaries	85
<b>Securitisation</b>	
SECA: SEC qualitative disclosures	86
SEC 1: Exposure, RWAs and MCR by regulatory approach	91
SEC 2: Exposure and MCR by regulatory approach and risk-weightings	91
SEC 3: Exposure by risk-weightings by underlying exposure type	91
SEC 4: Exposures by role, by on and off-balance sheet	92
SEC 6: Securitisation positions retained from origination and sponsorship - outstanding and past due	92
<b>Remuneration Disclosures</b>	
NatWest Holdings Group Remuneration Disclosure	93
<b>Appendix 1 - CRR roadmap</b>	<b>95</b>

### Forward-looking statements

This document contains 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', '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 Holdings Limited (NWH Ltd) and its parent The Royal Bank of Scotland Group plc (RBSG) future economic results, business plans and strategies. In particular, this document may include forward-looking statements relating to NWH Ltd (or RBSG) in respect of, but not limited to: its regulatory capital position and related requirements, its financial position, profitability and financial performance (including financial, capital and operational 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 alternative risk free rates and NWH Ltd's (or RBSG's) exposure to economic and political risks (including with respect to terms surrounding Brexit and climate change), operational risk, conduct risk, cyber and IT risk, key person risk and credit rating risk. Forward-looking statements are subject to a number of risks and uncertainties that might cause actual results and performance to differ materially from any expected future results or performance expressed or implied by the forward-looking statements. Factors that could cause or contribute to differences in current expectations include, but are not limited to, the final number of PPI claims and their amounts, legislative, political, fiscal and regulatory developments, accounting standards, competitive conditions, technological developments, interest and exchange rate fluctuations and general economic conditions. These and other factors, risks and uncertainties that may impact any forward-looking statement or NWH Ltd's or RBSG's actual results are discussed in RBSG's UK 2019 Annual Report and Accounts (ARA). The forward-looking statements contained in this document speak only as of the date of this document and NWH Ltd and RBSG do 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.

## Pillar 3 Report 2019

### Attestation statement

We confirm that the 2019 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 2019 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 2019 Pillar 3 Report was approved by the Board on 13 February 2020.

Katie Murray  
Chief Financial Officer  
Executive director, RBS Board

Bruce Fletcher  
Chief Risk Officer  
Member, Executive Committee

## Pillar 3 Report 2019

### Disclosure framework

The Pillar 3 disclosures made by The Royal Bank of Scotland Group plc (RBSG plc) and its consolidated subsidiaries (together RBS or RBS Group) are designed to comply with Part VIII of the Capital Requirements Regulation (CRR) and associated regulations and guidelines from the European Banking Authority (EBA). Additional disclosures are made in accordance with supervisory expectations regarding future disclosures promulgated by the Basel Committee on Banking Supervision (BCBS) and to assist the reader in understanding the activities of NWH Group.

The UK ring-fencing legislation required the separation of essential banking services from other banking activity from 1 January 2019. The Royal Bank of Scotland Group (RBS or RBS Group) placed the majority of the banking business in ring-fenced entities under an intermediate holding company, NatWest Holdings Limited (NWH Ltd). The Prudential Regulation Authority (PRA) has exercised the discretion contained in CRR to require Pillar 3 disclosures on the basis of the consolidated situation of NWH Ltd. Therefore, in this report, consolidated disclosures for NWH Ltd and its subsidiaries (referred to as NatWest Holdings Group or NWH Group) have no comparatives for year ended 2018 and templates with quarterly comparatives are presented from 31 March 2019 onwards.

NWH Group's significant subsidiaries at 31 December 2019 were National Westminster Bank Plc (NWB Plc), The Royal Bank of Scotland plc (RBS plc) and Ulster Bank Ireland Designated Activity Company (UBI DAC). RBS determines its significant subsidiaries, in accordance with the CRR requirements for disclosure, as those entities whose total risk-weighted assets (RWAs) account for 5% or more of RBS's consolidated RWAs.

### Disclosure roadmap

This document should be read in conjunction with the 2019 NWH Group Annual Report and Accounts (ARA), available at rbs.com. The CRR roadmap included in Appendix 1 of this document details where in these documents the regulatory requirements are disclosed. Refer to the Glossary for definitions of terms available on rbs.com.

As part of the Pillar 3 framework, banks are required to disclose the material risks to which they are or may be exposed. For NWH Group, relevant information can be found in the 2019 NWH Group ARA. This is supplemented by further analysis and a range of risk factors, for RBS Group as a whole, in the 2019 RBS Group ARA. These Pillar 3 disclosures provide additional information specific to NWH Group over and above that contained in the 2019 NWH Group ARA.

Key metrics for NWH Group are published as follows:

- Financial performance measures and ratios – 2019 RBS Group ARA – Strategic report – Highlights
- Key metrics – Capital, leverage and liquidity for NWH Group, NWB Plc, RBS plc and UBI DAC in their respective ARAs – Capital and Risk Management – Capital, liquidity and funding risk.

Certain Pillar 3 disclosures are included in the 2019 RBS Group ARA as follows:

- Corporate governance – Directors' remuneration report
- Strategic report – Risk overview
- Corporate governance – Report of the Board Risk Committee
- Capital and risk management – available in 2019 NWH Group ARA:
  - Risk management framework
  - Capital, liquidity and funding risk
  - Credit risk
  - Market risk
  - Operational risk
- Capital instruments – detailed terms - are found on the RBS Investor Relations website.

The following European Banking Authority (EBA) templates required to be disclosed as at 31 December 2019 are not applicable to RBS: EU INS1 - Non-deducted participations in insurance undertakings and EU CCR5-B Composition of collateral for counterparty credit risk exposure.

TLAC tables TLAC 1 - TLAC composition for G-SIBs (at resolution group level), TLAC 3 - Resolution entity – creditor ranking at legal entity level and KM 2 - Key metrics – TLAC requirements (at resolution group level) relevant to Global Systemically Important Institutions (G-SII's) are not applicable to NWH Group Pillar 3 disclosure.

The following EBA templates are not disclosed as NWH Group had no relevant reportable exposure as at 31 December 2019: CR9\_c: IRB: IRB models: Back-testing of EL by exposure class – total credit risk, EU CR10\_B IRB: IRB equities, NPL template 9 – changes in the stock of the non-performing loans and advances, EU MR2\_A: Market risk under the IMA, EU MR3: IMA values for trading portfolios - RBS and significant subsidiaries, EU MR4: Comparison of VaR estimates with gains/losses.

Throughout this document the row and column references are based on those prescribed in the EBA templates. Any tables, rows or columns which are not applicable or do not have a value have not been shown.

### Regulatory disclosure developments

Phase 1 of the revised Pillar 3 framework of the BCBS was addressed by the EBA in guidelines implemented in December 2017. The guidelines introduced more specific guidance and prescribed tables and templates, regarded by the regulators as a significant step towards enhancing the consistency and comparability of banks' regulatory disclosures. Phase 2 consolidated existing disclosure requirements, introduced a dashboard of key prudential measures and added disclosures around total loss-absorbing capital (TLAC).

During 2018, new disclosure requirements were introduced by the EBA for IFRS 9 transitional arrangements. The Prudential Regulation Authority (PRA) also requested early adoption of a small subsection of qualitative and quantitative tables from Phase 2 of the BCBS revised Pillar 3 framework. Building on this in 2019, new disclosure requirements on non-performing and forbore exposures were introduced by the EBA.

The BCBS published Phase 3 of the Pillar 3 framework in December 2018. This reflected the disclosures related to the finalisation of Basel 3 published by the committee in December 2017. The EBA is also consulting on a comprehensive Implementing Technical Standard (published October 2019) to bring all disclosure guidelines together, implement regulatory changes introduced by CRR2 (refer to the following paragraph) and align the disclosure framework with international standards.

### Regulatory framework

The European Union (EU) has implemented the initial phase of 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 will be implemented in June 2021.

The 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.

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

## Pillar 3 Report 2019

### 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.

NWH 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 both the mark-to-market (MTM) method and the internal model method (IMM) for derivative transactions. The financial collateral comprehensive method is used for securities financing transactions. The resultant Exposure at Default (EAD) is risk-weighted as for Credit risk.
- Market risk: Both the standardised approach and the internal model approach (IMA) are used.
- 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 Capital, liquidity and funding section of this document.

### Pillar 2 - Supervisory review process

Pillar 2 comprises (i) the internal capital adequacy assessment process (ICAAP) for RBS 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 RBS considers adequate to cover the risks to which it is or may be exposed.

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

Within Pillar 2A, NWH 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. NWH Group uses economic capital models to estimate Pillar 2A capital charges for operational and credit concentration risk. For more information, refer to pages 23 and 62 of the 2019 NWH Group ARA. Information regarding specific credit risk concentrations, such as sector or geography, is included within Pillar 3. Refer also to 2019 NWH Group ARA – Credit and risk management – Non-traded market risk and Pension risk.

The PRA buffer (also referred to as Pillar 2B) is based on stress testing and scenario analysis. It is used to assess the quantum and quality of capital required to be set aside to counteract the adverse impact of an extreme but plausible stress on NWH Group's capital, and to ensure capital levels in stress conditions remain above minimum requirements.

The ICAAP submission is approved by the RBS Board before it is submitted to the regulator and forms the basis of the supervisory review and the setting of the Total Capital Requirement by the PRA. Refer to page 13 of the 2019 NWH Group ARA.

### Pillar 3 - Market discipline

RBS is committed to delivering risk and capital disclosures that ensure stakeholders understand the risks faced by the NWH 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 RBS's broader disclosures framework.

NWH Group publishes its Pillar 3 disclosures as required by and in accordance with the EU and UK regulatory frameworks. Additionally RBS continues to participate in the UK Finance drive towards consistent Pillar 3 disclosures for UK banks wherever possible.

NWH Group has not omitted any disclosures on the grounds that the information may be proprietary or confidential. Certain of NWH 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 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.

### Consolidation

NWH Ltd is the parent entity of the ring-fenced bank (RFB) sub-group established to meet the requirements of ring-fencing legislation and PRA rules. The PRA has exercised the discretion contained in CRR to require the ring-fenced bodies to meet prudential requirements on a sub-consolidated basis, in respect of its RFB sub-group. Therefore, NWH Group is subject to consolidated regulatory requirements in addition to the application of requirements at an individual bank level and on a consolidated basis for RBS Group. Inclusion of an entity in the statutory consolidation is driven by NWH 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 sub-consolidation.

Where NWH Group does not have control of an entity but has more than 20% of the voting rights or capital of that entity, then it must be included in the regulatory sub-consolidation on a pro-rata basis, unless it falls into one of the excluded categories or RBS has agreed a different treatment with the PRA. Such entities will only be included in the statutory consolidation on a pro-rata basis where RBS has joint control. Entities where RBS has significant influence will be equity accounted in the statutory consolidation. For further information refer to Note 9 Related undertakings in the 2019 NWH Group ARA.

### Impediments to the transfer of capital resources and aggregate capital deficiency

All NWH 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.

### 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

## Capital and leverage

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

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

Capital management is the process by which the NWH 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 the NWH Group's business and is enacted through an end to end framework across the NWH Group, its businesses and the legal entities through which it operates.

NWH Group manages capital having regard to regulatory requirements. For significant subsidiaries, regulatory capital is monitored and reported on an individual regulated bank legal entity basis, as relevant in each jurisdiction. NWH Group regulatory capital is monitored and reported on a consolidated basis.

### Determination of capital sufficiency

In determining whether the NWH Group holds sufficient capital and other loss absorbing debt instruments, the NWH 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. The NWH 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 the NWH Group had been deemed to fail, or is 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 the NWH Group's planning horizons and parameters. This analysis examines both base and stress views.

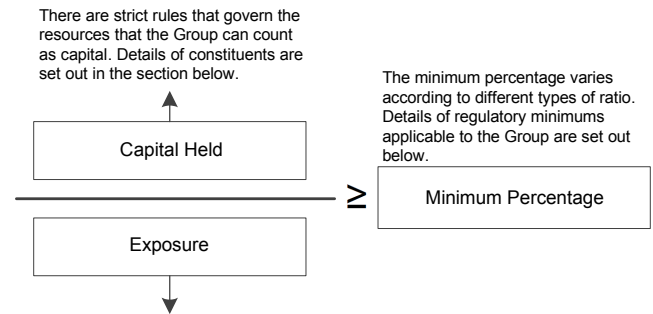
#### Regulatory vs. risk appetite view

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

## Capital sufficiency: going concern view

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:



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 exposures (largely based on accounting value with some adjustments).

### 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 the NWH Group's 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.

## Capital, liquidity and funding

In addition to capital, other specific loss absorbing instruments including senior notes issued by RBS Group may be used to cover certain gone concern capital requirements which, in the EU, 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 adequacy

The NWH 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 the NWH Group's assets and off-balance sheet positions 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 the NWH 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 macro economic environment and for institutions of systemic importance.
Bank-specific	Systemic Risk Buffer	Capital buffer to prevent and mitigate long-term non-cyclical macro-prudential or systemic risks
	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.

Type	Name	Description
Bank-specific	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 the NWH 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 NWH Group Risk (subsidiary/sub-group capital requirements in excess of their share of the NWH Group) and Risk Management and Governance scalars (which may be levied where Risk Management and Governance deficiencies have been identified by the regulator).

These minimum requirements are shown in more detail in the NWH Group ARA 2019 – Capital, liquidity and funding risk.

The assessment of Pillar 2 requirements (including the PRA buffer) is an output from the NWH Group's ICAAP, which is described in more detail on page 13 of the 2019 NWH Group ARA. Pillar 2 also utilises the output of the NWH Group's stress testing exercises which are described in more detail on pages 14 and 15 of the 2019 NWH Group ARA.

### Future changes to regulation

UK, EU and international standard and rule-making bodies have issued proposals, draft regulation and final standards on revising the level and measurement of capital adequacy ratios including the measurement of RWAs. This may affect the level of RWAs and the minimum capital that the NWH Group is required to hold in future years. Further details of prudential regulatory changes that may impact the NWH Group's capital adequacy ratio are set out on page 10.

### Leverage ratios

The NWH 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 the NWH Group's positions.

The leverage exposure is broadly aligned to the accounting value of the NWH 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 the NWH Group consists of a minimum requirement and a leverage ratio buffer. The leverage ratio requirements that the NWH Group must meet may be subject to change from developing regulation. Further details are set out on page 10.

For more information regarding the minimum capital and leverage requirements that NWH Group must meet, refer to the NWH Group 2019 ARA – Capital, liquidity and funding risk.



## Capital, liquidity and funding

### MREL: capital sufficiency under the gone concern view

The NWH 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.

### Internal MREL

In order that there is sufficient loss absorbing capacity pre-positioned across the RBS Group, the proceeds of externally issued MREL will be down-streamed to material operating subsidiaries, including NWH Group, who in turn downstreams to its 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.

In June 2018 the BoE published a Policy Statement on internal MREL and updated the MREL Statement of Policy. This policy statement sets out the framework that it will use to determine the distribution of MREL within banking groups. Under this framework, the BoE will set individual MREs for all material entities within the NWH Group and may also set individual MREs for entities within the NWH Group that are important from a resolution perspective. The framework requires that ring-fence bank sub-groups, such as NWH Group, meet MREL requirements equivalent to 90% of the equivalent NWH Group requirement, whilst other material legal entities are required to meet 75% of the equivalent NWH Group requirement.

### Interim MREL

1 January 2019	90% of the higher of: 16% of the NWH Group's RWAs; and 6% of the NWH Group's leverage exposures.
1 January 2020	90% of the higher of: The sum of two times the NWH Group's Pillar 1 requirement and one times the NWH Group's Pillar 2A add-ons; and Two times the applicable leverage ratio requirement for the NWH Group.

### End state MREL

1 January 2022 (1)	90% of the higher of: Two times the sum of the NWH Group's Pillar 1 requirement and NWH Group's Pillar 2A add-ons; and The higher of: Two times the applicable leverage ratio requirement for the NWH Group; and 6.75% of the NWH Group's leverage exposure.
--------------------	---

Note:

(1) Excludes buffers. RBS Group indicative MREL is expected to be 26.5% of RWAs from 1 January 2022 comprising underlying MREL requirement (2 x (Pillar 1 + 2A)) and CCB and CCyB buffers.

MREL may consist of capital and other loss absorbing instruments. In order for liabilities to be eligible for MREL, a number of strict conditions will be 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.

### Double leverage

Double leverage is where one or more parent entities in a group funds some of the capital in its subsidiaries by raising debt or lower forms of capital externally. In April 2018, the PRA issued a Policy Statement related to the NWH Group's assessment and mitigation of risks associated with double leverage. Associated analysis and assessments are now incorporated into the ICAAP submission and forms part of the NWH Group's risk appetite framework.

### Regulatory changes that may impact capital requirements

The NWH Group faces a number of changes in prudential regulation that may adversely impact the minimum amount of capital it must hold and consequently may increase funding costs and reduce return on equity. The nature and timing of implementation of a number of these changes are not currently final.

In the next few years, the UK and EU are expected to further develop prudential regulation mainly through the CCR2 and finalisation of Basel 3 standards, which will impact various areas including approach to calculating credit risk, market risk, leverage ratio, capital floors and operational risk RWAs.

Regulatory changes are actively monitored by the NWH 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.

The NWH 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 changes.

Key prudential regulatory developments that have been published and may impact the NWH Group are set out in page 10.

## Capital, liquidity and funding

### 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 provide cash to finance assets. Funding risk is the risk of not maintaining a diversified, stable and cost-effective funding base.

#### Regulatory oversight and liquidity framework

RBS 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 day net outflows in stress - effective from 1 October 2015.
Net stable funding ratio (NSFR)	Structural funding profile	Required and available stable funding sources less than and greater than 1 year timeline. Under CRR 2 amendments, NSFR is due to be effective from 27 June 2021.

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

Activity	Description
Individual Liquidity Adequacy Assessment Process (ILAAP)	This is RBS'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 RBS ILAAP, liquidity policies and risk management framework. This results in the settings of the Individual Liquidity Guidance, which influences the size of the liquidity portfolio.

### Asset encumbrance

NWH 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.

The reported values represent the median of the quarter end values reported to the regulator via supervisory returns over the period 1 January 2019 to 31 December 2019.

NWH Group categorises its assets into three broad groups; assets that are:

- Already encumbered and used to support funding currently in place via own asset securitisations, covered bonds and securities repurchase agreements.
- Pre-positioned with central banks as part of funding schemes and those encumbered under such schemes.
- Not currently encumbered. In this category, RBS has in place an enablement programme which seeks to identify assets which are capable of being encumbered. The programme identifies required actions to facilitate such encumbrance without impacting customer relationships or servicing.

Encumbered and unencumbered assets for the year ended 31 December 2019, based on the requirements in Part Eight of CRR and related technical standards, are set out on page 33.

## Capital, liquidity and funding

### Summary of changes to regulation that may impact the NWH Group's prudential requirements

Area of development	Key changes	Source of changes/implementation date
Securitisations	<ul style="list-style-type: none"> <li>Amendment to the methods and hierarchy for calculating risk weights for securitisation exposures, including the introduction of Simple, Transparent and Standardised securitisation category.</li> </ul>	<ul style="list-style-type: none"> <li>Implementation date 1 January 2019 for new securitisations.</li> <li>Fully implemented for all positions from 1 January 2020.</li> </ul>
Non-performing Loans	<ul style="list-style-type: none"> <li>Introduces prudential backstop for non-performing exposures insufficiently covered by provisions.</li> <li>Will apply after loans have been non-performing for three years.</li> </ul>	<ul style="list-style-type: none"> <li>Amendment to CRR published on 25 April 2019.</li> <li>Only applies to loans originated on or after 26 April 2019.</li> </ul>
Investment firms	<ul style="list-style-type: none"> <li>Change to the capital framework for investment firms.</li> <li>No change to consolidated capital requirements.</li> </ul>	<ul style="list-style-type: none"> <li>IFR<sub>(1)</sub> proposal.</li> <li>Expected implementation date – June 2021.</li> </ul>
Leverage ratio	<ul style="list-style-type: none"> <li>Changes to the design and calibration of the framework with a focus on derivative exposures and margining.</li> <li>Binding leverage ratio at individual bank level.</li> </ul>	<ul style="list-style-type: none"> <li>CRR 2<sub>(2)</sub> amendment.</li> <li>Implementation date – 27 June 2021.</li> </ul>
Large exposure framework	<ul style="list-style-type: none"> <li>Changes to the design and calibration of the capital base and large exposure limit.</li> <li>Changes to the exposure measure to incorporate SA-CCR.</li> </ul>	<ul style="list-style-type: none"> <li>CRR 2<sub>(2)</sub> amendment.</li> <li>Implementation date – 27 June 2021.</li> </ul>
Counterparty credit risk RWAs	<ul style="list-style-type: none"> <li>Introduction of new standardised approach (SA-CCR) with greater risk sensitivity and incorporation of margining into PFE.</li> <li>Changes to the treatment of exposures to central counterparties.</li> </ul>	<ul style="list-style-type: none"> <li>CRR 2<sub>(2)</sub> amendment.</li> <li>Implementation date – 27 June 2021.</li> </ul>
Net stable funding ratio (NSFR)	<ul style="list-style-type: none"> <li>Information on required and available stable funding sources less than and greater than 1 year.</li> </ul>	<ul style="list-style-type: none"> <li>CRR 2<sub>(2)</sub> amendment.</li> <li>Implementation date – 27 June 2021.</li> </ul>
Market risk RWAs	<ul style="list-style-type: none"> <li>Change from Value at Risk (VaR) to expected shortfall models.</li> <li>Implementation of a more risk-sensitive standardised approach.</li> <li>Inclusion of risk of market illiquidity.</li> </ul>	<ul style="list-style-type: none"> <li>CRR 2<sub>(2)</sub> – reporting requirement expected from 31 March 2021.</li> <li>Finalisation of Basel 3<sub>(3)</sub> will implement revised capital requirements.</li> </ul>
Mortgage risk weights for IRB	<ul style="list-style-type: none"> <li>Introduction of hybrid methodology for the purposes of PD Calibration.</li> <li>Assumption of early 1990s as a Downturn reference point and extended use of haircuts in LGD models.</li> </ul>	<ul style="list-style-type: none"> <li>PRA PS13/17.</li> <li>Implementation by 31 December 2020 (Definition of Default) and 31 December 2021 (all other items).</li> </ul>
Credit risk RWAs – IRB repair	<ul style="list-style-type: none"> <li>Additional requirements applied to CRR via Guidelines and Regulatory Technical Standards covering: PD/LGD estimation, definition of default and definition of an economic downturn.</li> </ul>	<ul style="list-style-type: none"> <li>Final draft RTS under Article 178(6) on the materiality threshold for past due credit obligations.</li> <li>GL under Article 178(7) on the application of the definition of default.</li> <li>Final draft RTS under Articles 181(3)(a) and 182(4)(a) on the nature, severity and duration of economic downturn.</li> <li>Guidelines on PD estimation, LGD estimation and the treatment of defaulted exposures (GL on PD and LGD estimation).</li> <li>Implementation by 31 December 2020 (definition of default) and 31 December 2021 (all other rules except those portfolios transitioning to Foundation IRB).</li> </ul>
Credit risk RWAs – Basel 3	<ul style="list-style-type: none"> <li>Restriction in the scope of using internal models.</li> <li>Avoidance of mechanistic reliance on external ratings.</li> <li>For model-based RWAs, adoption of “input” floors for PD and LGD.</li> </ul>	<ul style="list-style-type: none"> <li>Finalisation of Basel 3<sub>(3)</sub>.</li> <li>Expected implementation date – 2023+.</li> </ul>

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

## Capital, liquidity and funding

Area of development	Key changes	Source of changes/implementation date
Capital floors	<ul style="list-style-type: none"> <li>Aggregate output floor to limit the benefit of internal models compared to standardised approach.</li> <li>Extended transitional arrangements culminating in a floor of 72.5% by 1 January 2027.</li> </ul>	<ul style="list-style-type: none"> <li>Finalisation of Basel 3<sup>(3)</sup>.</li> <li>Expected implementation date – 2023+.</li> </ul>
Credit valuation adjustment (CVA) risk RWAs	<ul style="list-style-type: none"> <li>Alignment of CVA risk charge with revised standardised market risk framework.</li> <li>Removal of modelled CVA risk methodology.</li> </ul>	<ul style="list-style-type: none"> <li>Finalisation of Basel 3<sup>(3)</sup>.</li> <li>Expected implementation date – 2023+.</li> </ul>
Operational risk RWAs	<ul style="list-style-type: none"> <li>Revision of business indicator as proxy for size of operational risk.</li> <li>Potential incorporation of bank-specific loss data into the calculation.</li> </ul>	<ul style="list-style-type: none"> <li>Finalisation of Basel 3<sup>(3)</sup>.</li> <li>Expected implementation date – 2023+.</li> </ul>
Securities Financing Transactions	<ul style="list-style-type: none"> <li>Revision and recalibration of exposure calculation methodology.</li> <li>Introduction of minimum haircut floors.</li> </ul>	<ul style="list-style-type: none"> <li>Finalisation of Basel 3<sup>(3)</sup>.</li> <li>Expected implementation date – 2023+.</li> </ul>

### Notes:

(1) IFR refers to the Investment Firms Regulation.

(2) CRR 2 refers to Regulation 2019/876 of the European Parliament and Council of 20 May 2019 amending the Capital Requirements Regulation. Additional directives and regulations provided amendments to the Capital Requirements Directive and Banking Recovery and Resolution Directive.

(3) Finalisation of the Basel 3 standards published by BCBS on 7 December 2017. These standards will subsequently be brought into national legislation via amendments to CRR or successor legislation.

## Capital, liquidity and funding

### CAP 1: CAP and LR: Capital and leverage ratios – NWH Group and significant subsidiaries

Capital, RWAs and leverage on a PRA transitional basis for NWH Group and its significant subsidiaries (Central Bank of Ireland basis for UBI DAC) are set out below. The capital and RWA measures are on an end-point basis for the significant investment in financial institutions capital deduction at 31 December 2019 compared with 90% capital deduction and 10% RWAs at 31 December 2018. CRR transition continued to be applied to grandfathered capital instruments.

	2019				2018		
	NWH Group %	NWB Plc %	RBS plc %	UBI DAC %	NWB Plc %	RBS plc %	UBI DAC %
<b>Capital adequacy ratios - transitional (1)</b>							
CET1	15.7	15.9	13.2	26.5	17.4	13.2	27.5
Tier 1	18.5	18.6	16.6	26.5	20.4	16.0	27.5
Total	21.9	22.0	21.4	28.9	24.5	20.2	30.4
<b>Capital adequacy ratios - end point</b>							
CET1	15.7						
Tier 1	18.4						
Total	21.6						
<b>Capital - transitional</b>							
	£m	£m	£m	£m	£m	£m	£m
CET1	21,097	12,851	3,828	3,389	13,138	4,569	3,996
Tier 1	24,861	15,047	4,797	3,389	15,389	5,538	3,996
Total	29,515	17,801	6,199	3,694	18,490	6,984	4,414
<b>Capital - end point</b>							
CET1	21,097						
Tier 1	24,773						
Total	29,027						
<b>RWAs</b>							
Credit risk	113,980	67,778	23,191	11,680	63,548	28,683	13,387
Counterparty credit risk	980	605	—	127	325	—	122
Market risk	125	17	15	77	50	23	47
Operational risk	19,590	12,669	5,714	897	11,660	5,819	958
	134,675	81,069	28,920	12,781	75,583	34,525	14,514
<b>CRR leverage - transitional</b>							
Tier 1 capital	24,861	15,047	4,797	3,389	15,389	5,538	3,996
Exposure	447,851	300,438	90,981	26,893	295,483	98,264	27,259
Leverage ratio (%)	5.6	5.0	5.3	12.6	5.2	5.6	14.7
<b>CRR leverage - end point</b>							
Tier 1 capital	24,773						
Exposure	447,851						
Leverage ratio (%)	5.5						
Average Tier 1 capital	24,994						
Average exposure (2)	453,145						
Average leverage ratio (%)	5.5						
<b>UK leverage - end point</b>							
Tier 1 capital	24,773						
Exposure	397,649						
Leverage ratio (%)	6.2						
Average Tier 1 capital	24,994						
Average exposure (2)	404,081						
Average leverage ratio (%)	6.2						
Systemic risk leverage buffer (3)	2,088						
Countercyclical leverage ratio buffer (3)	1,292						

#### Notes:

- (1) The NWH Group total capital requirement (TCR) as set by the PRA is 11.2%. The TCR is the sum of Pillar 1 and Pillar 2A and does not include any capital buffers.
- (2) Based on the daily average of on-balance sheet items and three month-end average of off-balance sheet items.
- (3) The PRA minimum leverage ratio requirement is supplemented with a Systemic Risk Buffer additional leverage ratio buffer rate, currently 0.525%, and countercyclical leverage ratio buffer of 0.3250%.

## Capital, liquidity and funding

### KM1: BCBS 2 & EBA IFRS 9-FL: Key metrics – NWH Group

The table below reflects the key metrics template in the BCBS consolidated Pillar 3 framework and the EBA's IFRS 9 template. NWH Group has elected to take advantage of the transitional capital rules in respect of expected credit losses. This has a negligible effect on CET1 and would mitigate the impact on capital in adverse conditions. The transitional rules reduce the full CET1 effect by 95%, 85%, 70%, 50% and 25% in each of the first five years of IFRS 9 adoption. Capital and leverage ratios presented are based on end point CRR rules.

BCBS2 KM1	EBA IFRS 9-FL		31 December 2019 £m	30 September 2019 £m	30 June 2019 £m	31 March 2019 £m
<b>Capital</b>						
1	1	Common equity tier 1 (CET1)	21,097	21,167	21,390	22,269
1a	2	Common equity tier 1 (CET1) capital as if IFRS 9 transitional arrangements had not been applied	21,097	21,167	21,390	22,269
2	3	Tier 1 capital	24,773	24,843	25,066	25,945
2a	4	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	24,773	24,843	25,066	25,945
3	5	Total capital	29,027	28,796	28,892	29,679
3a	6	Total capital as if IFRS 9 transitional arrangements had not been applied	29,027	28,796	28,892	29,679
<b>Risk-weighted assets (amounts)</b>						
4	7	Total risk-weighted assets (RWAs)	134,675	139,577	140,571	140,029
4a	8	Total risk-weighted assets as if IFRS 9 transitional arrangements had not been applied	134,675	139,577	140,571	140,029
<b>Risk-based capital ratios as a percentage of RWA</b>						
5	9	Common equity tier 1 ratio	15.7	15.2	15.2	15.9
5a	10	Common equity tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	15.7	15.2	15.2	15.9
6	11	Tier 1 ratio	18.4	17.8	17.8	18.5
6a	12	Tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	18.4	17.8	17.8	18.5
7	13	Total capital ratio	21.6	20.6	20.6	21.2
7a	14	Total capital ratio as if IFRS 9 transitional arrangements had not been applied	21.6	20.6	20.6	21.2
<b>Additional CET1 buffer requirements as a percentage of RWA</b>						
8		Capital conservation buffer requirement	2.5	2.5	2.5	2.5
9		Countercyclical capital buffer requirement (1)	0.9	0.9	0.8	0.8
10		Bank GSIB and/or DSIB additional requirements (2)	1.5	1.5	—	—
11		Total of CET1 specific buffer requirements (8+9+10)	4.9	4.9	3.3	3.3
12		CET1 available after meeting the bank's minimum capital requirements (3)	11.2	10.7	10.7	11.4
<b>Leverage ratio</b>						
13	15	CRR leverage ratio exposure measure	447,851	450,318	448,004	445,810
		UK leverage ratio exposure measure	397,649	393,992	390,028	387,768
14	16	CRR leverage ratio	5.5	5.5	5.6	5.8
14a	17	CRR leverage ratio as if IFRS 9 transitional arrangements had not been applied	5.5	5.5	5.6	5.8
		UK leverage ratio	6.2	6.3	6.4	6.7
<b>Liquidity coverage ratio</b>						
15		Total high-quality liquid asset (HQLA)	99,950	100,457	99,472	98,543
16		Total net cash outflows	71,188	71,326	70,953	71,563
17		LCR ratio % (4)	140	141	140	138
<b>Net stable funding ratio (NSFR)</b>						
18		Total available stable funding	314,250	314,935	313,007	303,479
19		Total required stable funding	231,098	229,402	226,121	227,385
20		NSFR % (5)	136	137	138	133

#### Notes:

- (1) See CAP5a and CAP5b for more information regarding the countercyclical capital buffer requirement.
- (2) NWH Group will be subject to a Systemic Risk Buffer of 1.5% from 1 August 2019. Where the Systemic Risk Buffer is greater than the G-SII buffer, the PRA may require the consolidated group to hold a higher level of capital through the PRA buffer and Leverage Ratio Group add-on.
- (3) This represents the CET1 ratio less the CRR minimum of 4.5%.
- (4) The Liquidity coverage ratio (LCR) uses the simple average of the preceding monthly periods ending on the quarterly reporting date as specified in the table which will incrementally increase each quarter as history builds.
- (5) NSFR reported in line with CRR2 regulations finalised in June 2019.

## Capital, liquidity and funding

### Key points

#### Capital and leverage

##### NWH Group – 31 December 2019 compared with 30 September 2019

- In the quarter to December 2019, the CET1 ratio increased from 15.2% to 15.7% due to a decrease in CET1 capital, reflecting a quarterly attributable profit of £0.4 billion and a foreseeable charge £0.4 billion, offset by a decrease in RWAs.
- NatWest Holdings Limited issued a US\$0.75 billion internal Subordinated Tier 2 Notes in November 2019 .
- In the quarter to Q4 2019, RWAs decreased by £4.9 billion driven by revisions to LGD models in the corporates portfolio, refinement to the treatment of nostros and a reduction due to foreign exchange.
- The leverage ratio increased to 5.6% due to lower balance sheet and undrawn commitment exposures.
- The UK average leverage ratio is 6.2%.

##### NWB Plc – 31 December 2019 compared with 31 December 2018

- The CET1 ratio decreased to 15.9% from 17.4% primarily due to a £5.5 billion increase in RWAs. CET1 reflects the attributable profit offset by dividend paid to the entity's parent, a foreseeable charge £0.4 billion, the impact of IFRS 16 for leases and the final annual uplift in transition for significant capital investments in financial institutions.
- NWB Plc redeemed £700 million internal Subordinated Tier 2 Notes in March 2019 and issued US\$750 million Subordinated Tier 2 Notes in November 2019.
- RWAs increased by £5.5 billion primarily due to the credit risk increase of £4.2 billion. This was driven by the £1.3 billion uplift due to adoption of the IFRS 16 Leases accounting standard from 1 January 2019, increased asset size due to lending growth and the transfer in of lending portfolios from RBS plc. Counterparty credit risk RWAs increased by £0.3 billion primarily due to increased exposures. There was a £1.0 billion increase in operational risk RWAs due to the annual recalculation.
- The leverage ratio has decreased to 5.0% as a result of the decrease in Tier 1 capital and increased balance sheet exposures.

##### RBS plc – 31 December 2019 compared with 31 December 2018

- The CET1 ratio remained 13.2% reflecting attributable profit and a decrease in RWAs offset by a dividend paid to the entity's parent and an £800 million foreseeable ordinary dividend accrual.
- The decrease in RWAs was primarily due to reduced asset size driven by repayments and the transfer-out of lending portfolios to NWB Plc.
- The leverage ratio decreased to 5.3% as a result of the decrease in Tier 1 capital.

##### UBI DAC – 31 December 2019 compared with 31 December 2018

- The CET1 ratio decreased to 26.5% from 27.5% reflecting a £0.5 billion dividend paid to the entity's parent and a decrease in RWAs.
- RWAs decreased by £1.7 billion primarily due to asset quality improvements and the disposal of a loan portfolio.
- The leverage ratio decreased to 12.6% primarily driven by the decrease in capital.

## Capital, liquidity and funding

### EBA IFRS 9-FL: EBA Key metrics - significant subsidiaries

The table below shows key metrics as required by the EBA relating to IFRS 9 for NWH Group and its significant subsidiaries. NWH Group has elected to take advantage of the transitional capital rules in respect of expected credit losses. This has a negligible effect on CET1, and would mitigate the impact on capital in adverse conditions. The transitional rules reduce the full CET1 effect by 95%, 85%, 70%, 50% and 25% in each of the first five years of IFRS 9 adoption. Capital measures are on a CRR transitional basis.

		31 December 2019			
		NWH Group	NWB Plc	RBS plc	UBI DAC
		£m	£m	£m	£m
<b>Available capital (amounts) - transitional</b>					
1	Common equity tier 1	21,097	12,851	3,828	3,389
2	Common equity tier 1 capital as if IFRS 9 transitional arrangements had not been applied	21,097	12,851	3,828	3,389
3	Tier 1 capital	24,861	15,047	4,797	3,389
4	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	24,861	15,047	4,797	3,389
5	Total capital	29,515	17,801	6,199	3,694
6	Total capital as if IFRS 9 transitional arrangements had not been applied	29,515	17,801	6,199	3,694
<b>Risk-weighted assets (amounts)</b>					
7	Total risk-weighted assets	134,675	81,069	28,920	12,781
8	Total risk-weighted assets as if IFRS 9 transitional arrangements had not been applied	134,675	81,069	28,920	12,781
<b>Risk-based capital ratios as a percentage of RWAs</b>					
		%	%	%	%
9	Common equity tier 1 ratio	15.7	15.9	13.2	26.5
10	Common equity tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	15.7	15.9	13.2	26.5
11	Tier 1 ratio	18.5	18.6	16.6	26.5
12	Tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	18.5	18.6	16.6	26.5
13	Total capital ratio	21.9	22.0	21.4	28.9
14	Total capital ratio as if IFRS 9 transitional arrangements had not been applied	21.9	22.0	21.4	28.9
<b>Leverage ratio</b>					
15	CRR leverage ratio exposure measure (£m)	447,851	300,438	90,981	26,893
16	CRR leverage ratio (%)	5.6	5.0	5.3	12.6
17	CRR leverage ratio (%) as if IFRS 9 transitional arrangements had not been applied	5.6	5.0	5.3	12.6

		30 September 2019			
		NWH Group	NWB Plc	RBS plc	UBI DAC
		£m	£m	£m	£m
<b>Available capital (amounts) - transitional</b>					
1	Common equity tier 1	21,167	12,758	4,296	3,963
2	Common equity tier 1 capital as if IFRS 9 transitional arrangements had not been applied	21,167	12,758	4,296	3,963
3	Tier 1 capital	24,931	14,953	5,265	3,963
4	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	24,931	14,953	5,265	3,963
5	Total capital	29,284	17,152	6,768	4,303
6	Total capital as if IFRS 9 transitional arrangements had not been applied	29,284	17,152	6,768	4,303
<b>Risk-weighted assets (amounts)</b>					
7	Total risk-weighted assets	139,577	81,936	30,583	13,135
8	Total risk-weighted assets as if IFRS 9 transitional arrangements had not been applied	139,577	81,936	30,583	13,135
<b>Risk-based capital ratios as a percentage of RWAs</b>					
		%	%	%	%
9	Common equity tier 1 ratio	15.2	15.6	14.0	30.2
10	Common equity tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	15.2	15.6	14.0	30.2
11	Tier 1 ratio	17.9	18.2	17.2	30.2
12	Tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	17.9	18.2	17.2	30.2
13	Total capital ratio	21.0	20.9	22.1	32.8
14	Total capital ratio as if IFRS 9 transitional arrangements had not been applied	21.0	20.9	22.1	32.8
<b>Leverage ratio</b>					
15	CRR leverage ratio exposure measure (£m)	450,318	299,425	92,553	27,613
16	CRR leverage ratio (%)	5.5	5.0	5.7	14.4
17	CRR leverage ratio (%) as if IFRS 9 transitional arrangements had not been applied	5.5	5.0	5.7	14.4



## Capital, liquidity and funding

### EBA IFRS 9-FL: EBA Key metrics - significant subsidiaries continued

		30 June 2019			
		NWH Group	NWB Plc	RBS plc	UBI DAC
		£m	£m	£m	£m
<b>Available capital (amounts) - transitional</b>					
1	Common equity tier 1	21,390	12,985	4,351	3,941
2	Common equity tier 1 capital as if IFRS 9 transitional arrangements had not been applied	21,390	12,985	4,351	3,941
3	Tier 1 capital	25,154	15,180	5,320	3,941
4	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	25,154	15,180	5,320	3,941
5	Total capital	29,381	17,406	6,775	4,309
6	Total capital as if IFRS 9 transitional arrangements had not been applied	29,381	17,406	6,775	4,309
<b>Risk-weighted assets (amounts)</b>					
7	Total risk-weighted assets	140,571	80,919	31,619	13,947
8	Total risk-weighted assets as if IFRS 9 transitional arrangements had not been applied	140,571	80,919	31,619	13,947
<b>Risk-based capital ratios as a percentage of RWA</b>					
		%	%	%	%
9	Common equity tier 1 ratio	15.2	16.0	13.8	28.3
10	Common equity tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	15.2	16.0	13.8	28.3
11	Tier 1 ratio	17.9	18.8	16.8	28.3
12	Tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	17.9	18.8	16.8	28.3
13	Total capital ratio	20.9	21.5	21.4	30.9
14	Total capital ratio as if IFRS 9 transitional arrangements had not been applied	20.9	21.5	21.4	30.9
<b>Leverage ratio</b>					
15	CRR leverage ratio exposure measure (£m)	448,004	297,016	93,148	27,988
16	CRR leverage ratio (%)	5.6	5.1	5.7	14.1
17	CRR leverage ratio (%) as if IFRS 9 transitional arrangements had not been applied	5.6	5.1	5.7	14.1

		31 March 2019			
		NWH Group	NWB Plc	RBS plc	UBI DAC
		£m	£m	£m	£m
<b>Available capital (amounts) - transitional</b>					
1	Common equity tier 1	22,269	13,327	4,750	3,837
2	Common equity tier 1 capital as if IFRS 9 transitional arrangements had not been applied	22,269	13,327	4,750	3,837
3	Tier 1 capital	26,033	15,522	5,719	3,837
4	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	26,033	15,522	5,719	3,837
5	Total capital	30,167	17,743	7,139	4,221
6	Total capital as if IFRS 9 transitional arrangements had not been applied	30,167	17,743	7,139	4,221
<b>Risk-weighted assets (amounts)</b>					
7	Total risk-weighted assets	140,029	79,664	32,654	13,825
8	Total risk-weighted assets as if IFRS 9 transitional arrangements had not been applied	140,029	79,664	32,654	13,825
<b>Risk-based capital ratios as a percentage of RWA</b>					
		%	%	%	%
9	Common equity tier 1 ratio	15.9	16.7	14.5	27.8
10	Common equity tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	15.9	16.7	14.5	27.8
11	Tier 1 ratio	18.6	19.5	17.5	27.8
12	Tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	18.6	19.5	17.5	27.8
13	Total capital ratio	21.5	22.3	21.9	30.5
14	Total capital ratio as if IFRS 9 transitional arrangements had not been applied	21.5	22.3	21.9	30.5
<b>Leverage ratio</b>					
15	CRR leverage ratio exposure measure (£m)	445,810	295,787	94,550	26,285
16	CRR leverage ratio (%)	5.8	5.2	6.0	14.6
17	CRR leverage ratio (%) as if IFRS 9 transitional arrangements had not been applied	5.8	5.2	6.0	14.6

## Capital, liquidity and funding

### EBA IFRS 9-FL: EBA Key metrics - significant subsidiaries continued

		31 December 2018		
		NWB Plc	RBS plc	UBI DAC
		£m	£m	£m
<b>Available capital (amounts) - transitional</b>				
1	Common equity tier 1	13,138	4,569	3,996
2	Common equity tier 1 capital as if IFRS 9 transitional arrangements had not been applied	13,138	4,569	3,996
3	Tier 1 capital	15,389	5,538	3,996
4	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	15,389	5,538	3,996
5	Total capital	18,490	6,984	4,414
6	Total capital as if IFRS 9 transitional arrangements had not been applied	18,490	6,984	4,414
<b>Risk-weighted assets (amounts)</b>				
7	Total risk-weighted assets	75,583	34,525	14,514
8	Total risk-weighted assets as if IFRS 9 transitional arrangements had not been applied	75,583	34,525	14,514
<b>Risk-based capital ratios as a percentage of RWA</b>				
		%	%	%
9	Common equity tier 1 ratio	17.4	13.2	27.5
10	Common equity tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	17.4	13.2	27.5
11	Tier 1 ratio	20.4	16.0	27.5
12	Tier 1 ratio as if IFRS 9 transitional arrangements had not been applied	20.4	16.0	27.5
13	Total capital ratio	24.5	20.2	30.4
14	Total capital ratio as if IFRS 9 transitional arrangements had not been applied	24.5	20.2	30.4
<b>Leverage ratio</b>				
15	CRR leverage ratio exposure measure (£m)	295,483	98,264	27,259
16	CRR leverage ratio (%)	5.2	5.6	14.7
17	CRR leverage ratio (%) as if IFRS 9 transitional arrangements had not been applied	5.2	5.6	14.7

## Capital, liquidity and funding

### CAP 2: Capital resources (CRR own funds template) – NWH Group and significant subsidiaries

The table below sets out the capital resources in the prescribed template on a CRR transitional basis as relevant for the jurisdiction. The adjustments to end-point CRR are presented for NWH Group only.

	2019			Source based on reference number/ letters of the balance sheet under its regulatory scope of consolidation	NWB Plc £m	RBS plc £m	UBI DAC £m	
	NWH Group							
	PRA transitional £m	CRR prescribed residual amounts £m	CRR end-point £m					
<b>CET1 capital: instruments and reserves</b>								
1	Capital instruments and the related share premium accounts	3,263	—	3,263	(a)	3,904	20	3,604
	<i>Of which: ordinary shares</i>	3,263	—	3,263		1,678	20	2,875
2	Retained earnings	36,305	—	36,305	(b)	10,556	4,006	163
3	Accumulated other comprehensive income (and other reserves)	(10,861)	—	(10,861)	(c)	829	179	32
5a	Independently reviewed interim net profits net of any foreseeable charge or dividend	—	—	—		—	—	3
6	CET1 capital before regulatory adjustments	28,707	—	28,707		15,289	4,205	3,802
7	Additional value adjustments	(26)	—	(26)		(16)	(10)	—
8	(-) Intangible assets (net of related tax liability)	(6,313)	—	(6,313)	(d)	(963)	(85)	(1)
10	(-) Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	(757)	—	(757)	(e)	(474)	(87)	(181)
11	Fair value reserves related to gains or losses on cash flow hedges	(202)	—	(202)	(i)	(27)	(179)	(35)
12	(-) Negative amounts resulting from the calculation of expected loss amounts	(141)	—	(141)		(109)	(16)	(28)
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	—	—	—		—	—	—
15	(-) Defined-benefit pension fund assets	(171)	—	(171)	(f) & (g)	—	—	(168)
19	(-) Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions)	—	—	—		(716)	—	—
22	(-) Amount exceeding the 17.65% threshold	—	—	—		(133)	—	—
23	(-) <i>Of which: 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</i>	—	—	—		(88)	—	—
25	(-) <i>Of which: deferred tax assets arising from temporary differences</i>	—	—	—		(45)	—	—
28	Total regulatory adjustments to CET1	(7,610)	—	(7,610)		(2,438)	(377)	(413)
29	CET1 capital	21,097	—	21,097		12,851	3,828	3,389

## Capital, liquidity and funding

### CAP 2: Capital resources (CRR own funds template) – NWH Group and significant subsidiaries continued

		2019						
		NWH Group			Source based on reference number/ letters of the			
		PRA transitional	CRR prescribed residual amounts	CRR end point	balance sheet under its regulatory scope of consolidation	NWB Plc	RBS plc	UBI DAC
		£m	£m	£m		£m	£m	£m
<b>AT1 capital: instruments</b>								
30	Capital instruments and the related share premium accounts	3,676	—	3,676	(h)	2,370	969	—
31	Of which: classified as equity under applicable accounting standards	3,676	—	3,676		2,370	969	—
33	Amount of qualifying items referred to in Article 484(4) and the related share premium accounts subject to phase out from AT1	—	—	—		87	—	—
34	Qualifying tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5 CET1) issued by subsidiaries and held by third parties	88	(88)	—	(j)	—	—	—
35	<i>Of which: instruments issued by subsidiaries subject to phase out</i>	88	(88)	—		—	—	—
36	AT1 capital before regulatory adjustments	3,764	(88)	3,676		2,457	969	—
<b>AT1 capital: regulatory adjustments</b>								
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 (amount above 10% threshold and net of eligible short positions)	—	—	—		(262)	—	—
41	(-) Actual or contingent obligations to purchase own AT1 instruments	—	—	—		—	—	—
41b	Residual amounts deducted from AT1 capital with regard to deduction from Tier 2 (T2) capital during the transitional period of which: Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities	—	—	—		—	—	—
43	Total regulatory adjustments to AT1 capital	—	—	—		(262)	—	—
44	AT1 capital	3,764	(88)	3,676		2,195	969	—
45	Tier 1 capital (T1 = CET1 + AT1)	24,861	(88)	24,773		15,046	4,797	3,389
<b>T2 capital: instruments and provisions</b>								
46	Capital instruments and the related share premium accounts	4,254	—	4,254	(k)	2,708	1,402	305
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	—	—	—		368	—	—
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests phase out from T2 and AT1 instruments not included in CET1 or AT1) issued by subsidiaries	400	(400)	—	(j)	—	—	—
49	<i>Of which: instruments issued by subsidiaries subject to phase out</i>	400	(400)	—		—	—	—
50	Credit risk adjustments	—	—	—		—	—	—
51	T2 capital before regulatory adjustments	4,654	(400)	4,254		3,076	1,402	305
<b>T2 capital: regulatory adjustments</b>								
55	(-) Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions)	—	—	—		(321)	—	—
<b>T2 capital before regulatory adjustments</b>								
57	Total regulatory adjustments to T2 capital	—	—	—		(321)	—	—

## Capital, liquidity and funding

### CAP 2: Capital resources (CRR own funds template) – NWH Group and significant subsidiaries continued

	2019						
	NWH Group			Source based on reference number/ letters of the balance sheet under its regulatory scope of consolidation	NWB Plc £m	RBS plc £m	UBI DAC £m
	PRA transitional £m	CRR prescribed residual amounts £m	Final CRD IV £m				
<b>T2 capital before regulatory adjustments</b>							
58 T2 capital	4,654	(400)	4,254		2,755	1,402	305
59 Total capital (TC= T1 + T2)	29,515	(488)	29,027		17,801	6,199	3,694
60 Total risk-weighted assets	134,675	—	134,675		81,069	28,920	12,781
<b>Capital ratios and buffers</b>							
61 CET1 (as a percentage of risk exposure amount)	15.7%	—	15.7%		15.9%	13.2%	26.5%
62 T1 (as a percentage of risk exposure amount)	18.5%	—	18.4%		18.6%	16.6%	26.5%
63 Total capital (as a percentage of risk exposure amount)	21.9%	—	21.6%		22.0%	21.4%	28.9%
64 Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1)(a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	9.4%	—	9.4%		7.9%	7.9%	8.0%
65 <i>Of which: capital conservation buffer requirement</i>	2.5%	—	2.5%		2.5%	2.5%	2.5%
66 <i>Of which: counter cyclical buffer requirement</i>	0.9%	—	0.9%		0.9%	0.9%	1.0%
67 <i>Of which: systemic risk buffer requirement</i>	1.5%	—	1.5%		—	—	—
67a <i>Of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer</i>	—	—	—		—	—	—
68 CET1 available to meet buffers <sup>(1)</sup>	11.2%	—	11.2%		11.4%	8.7%	22.0%
<b>Amounts below the threshold deduction</b>							
72 Direct and indirect holdings of the capital 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)	6	—	6		—	6	—
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 10% threshold and net of eligible short positions)	1	—	1		1,407	28	1
75 Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability)	475	—	475		709	24	—
<b>Available caps on the inclusion of provisions in T2</b>							
77 Cap on inclusion of credit risk adjustments in T2 under standardised approach	190	—	190		111	24	11
79 Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	593	—	593		353	128	65
<b>Capital instruments subject to phase-out arrangements (only applicable between 1 January 2013 and 1 January 2022)</b>							
82 Current cap on AT1 instruments subject to phase out arrangements	88	(88)	—		88	—	—
83 Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	52	(52)	—		52	—	—
84 Current cap on T2 instruments subject to phase out arrangements	401	(401)	—		368	—	40
85 Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	610	(610)	—		571	—	—

#### Notes:

(1) This represents the CET1 ratio less the CRR minimum of 4.5%.

(2) The references (a)–(k) identify balance sheet components in Table CC2 that are used in the calculation of regulatory capital table CAP2. Amounts between the CC2 and CAP2 are not always directly comparable due to differences in definitions and application of CRD IV for the calculation of regulatory capital.

## Capital, liquidity and funding

### CAP 2: Capital resources (CRR own funds template) – NWH Group and significant subsidiaries continued

	2018		
	NWB Plc £m	RBS plc £m	UBI DAC £m
<b>CET1 capital: instruments and reserves</b>			
1 Capital instruments and the related share premium accounts	3,903	20	4,241
<i>Of which: ordinary shares</i>	1,678	20	3,216
2 Retained earnings	10,051	4,723	72
3 Accumulated other comprehensive income (and other reserves)	738	49	1
4 Public sector capital injections grandfathered until 1 January 2018	—	—	—
5a Independently reviewed interim net profits net of any foreseeable charge or dividend	1,208	—	76
6 CET1 capital before regulatory adjustments	15,900	4,792	4,390
7 Additional value adjustments	(18)	(7)	—
8 (-) Intangible assets (net of related tax liability)	(966)	(86)	(1)
10 (-) Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	(462)	—	(261)
11 Fair value reserves related to gains or losses on cash flow hedges	—	(49)	—
12 (-) Negative amounts resulting from the calculation of expected loss amounts	(193)	(81)	(1)
14 Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	—	—	(2)
15 (-) Defined-benefit pension fund assets	(11)	—	(129)
18 (-) Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (above the 10% threshold and net of eligible short positions)	(538)	—	—
19 (-) Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions)	(574)	—	—
22 (-) Amount exceeding the 17.65% threshold	(249)	—	—
23 (-) <i>Of which: 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</i>	—	—	—
25 (-) <i>Of which: deferred tax assets arising from temporary differences</i>	—	—	—
25a (-) Losses for the current financial period	—	—	—
26 Regulatory adjustments applied to CET1 in respect of amounts subject to pre-CRR treatment	—	—	—
26a <i>Regulatory adjustments relating to unrealised gains and losses pursuant to articles 467 and 468</i>	—	—	—
26b <i>Amount to be deducted from or added to CET1 capital with regard to additional filters and deductions required pre CRR</i>	—	—	—
27 (-) Qualifying Additional Tier 1 (AT1) deductions that exceed the AT1 capital of the institution	—	—	—
28 Total regulatory adjustments to CET1	(2,762)	(223)	(394)
29 CET1 capital	13,138	4,569	3,996

## Capital, liquidity and funding

### CAP 2: Capital resources (CRR own funds template) - NWH Group and significant subsidiaries continued

	2018		
	NWB Plc £m	RBS plc £m	UBI DAC £m
<b>AT1 capital: instruments</b>			
30 Capital instruments and the related share premium accounts	2,370	969	—
31 Of which: classified as equity under applicable accounting standards	2,370	969	—
32 Of which: classified as debt under applicable accounting standards	—	—	—
33 Amount of qualifying items referred to in Article 484(4) and the related share premium accounts subject to phase out from AT1	117	—	—
34 Qualifying tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5 CET1) issued by subsidiaries and held by third parties	—	—	—
35 <i>Of which: instruments issued by subsidiaries subject to phase out</i>	—	—	—
36 AT1 capital before regulatory adjustments	2,487	969	—
<b>AT1 capital: regulatory adjustments</b>			
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 (amount above 10% threshold and net of eligible short positions)	(236)	—	—
41 (-) Actual or contingent obligations to purchase own AT1 instruments	—	—	—
41b Residual amounts deducted from AT1 capital with regard to deduction from Tier 2 (T2) capital during the transitional period of which: Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities	—	—	—
43 Total regulatory adjustments to AT1 capital	(236)	—	—
44 AT1 capital	2,251	969	—
45 Tier 1 capital (T1 = CET1 + AT1)	15,389	5,538	3,996
<b>T2 capital: instruments and provisions</b>			
46 Capital instruments and the related share premium accounts	2,886	1,446	418
47 Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	490	—	—
48 Qualifying own funds instruments included in consolidated T2 capital (including minority interests phase out from T2 and AT1 instruments not included in CET1 or AT1) issued by subsidiaries	—	—	—
49 <i>Of which: instruments issued by subsidiaries subject to phase out</i>	—	—	—
50 Credit risk adjustments	—	—	—
51 T2 capital before regulatory adjustments	3,376	1,446	418
<b>T2 capital: regulatory adjustments</b>			
54 (-)Direct and indirect holdings of the T2 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 and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions)	(275)	—	—
56a (-) Actual or contingent obligations to purchase own AT1 instruments	—	—	—
56b (-) Residual amounts deducted from T2 capital with regard to deduction from AT1 capital during the transitional period	—	—	—
56c (-) Amount to be deducted from or added to T2 capital with regard to additional filters and deductions required pre CRR	—	—	—
<b>T2 capital before regulatory adjustments</b>			
57 Total regulatory adjustments to T2 capital	(275)	—	—

## Capital, liquidity and funding

### CAP 2: Capital resources (CRR own funds template) - NWH Group and significant subsidiaries continued

	2018		
	NWB Plc £m	RBS plc £m	UBI DAC £m
<b>T2 capital before regulatory adjustments</b>			
58 T2 capital	3,101	1,446	418
59 Total capital (TC= T1 + T2)	18,490	6,984	4,414
60 Total risk-weighted assets	75,583	34,525	14,514
<b>Capital ratios and buffers</b>			
61 CET1 (as a percentage of risk exposure amount)	17.4%	13.2%	27.5%
62 T1 (as a percentage of risk exposure amount)	20.4%	16.0%	27.5%
63 Total capital (as a percentage of risk exposure amount)	24.5%	20.2%	30.4%
64 Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1)(a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	7.3%	7.3%	6.4%
65 <i>Of which: capital conservation buffer requirement</i>	1.9%	1.9%	1.9%
66 <i>Of which: counter cyclical buffer requirement</i>	0.9%	0.9%	—
67 <i>Of which: systemic risk buffer requirement</i>	—	—	—
67a <i>Of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer</i>	—	—	—
68 CET1 available to meet buffers (1)	12.9%	8.7%	23.0%
<b>Amounts below the threshold deduction</b>			
72 Direct and indirect holdings of the capital 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)	—	6	—
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 10% threshold and net of eligible short positions)	1,426	26	3
75 Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability)	1,088	3	—
<b>Available caps on the inclusion of provisions in T2</b>			
76 Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)	—	—	—
77 Cap on inclusion of credit risk adjustments in T2 under standardised approach	112	36	12
78 Credit risk adjustments included in T2 in respect of exposures subject to internal ratings based approach (prior to the application of the cap)	—	—	—
79 Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	327	155	75
<b>Capital instruments subject to phase-out arrangements (only applicable between 1 January 2013 and 1 January 2022)</b>			
82 Current cap on AT1 instruments subject to phase out arrangements	117	—	—
83 Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	23	—	—
84 Current cap on T2 instruments subject to phase out arrangements	490	—	57
85 Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	503	—	—

#### Notes:

(1) This represents the CET1 ratio less the CRR minimum of 4.5%.

(2) The references (a)–(k) identify balance sheet components in Table CC2 that are used in the calculation of regulatory capital table CAP2. Amounts between the CC2 and CAP2 are not always directly comparable due to differences in definitions and application of CRD IV for the calculation of regulatory capital.



## Capital, liquidity and funding

### CC2: Reconciliation of regulatory capital to balance sheet

The table below sets out the reconciliation between the accounting and regulatory consolidation with references (a)-(g) showing the linkage between this table and CAP 2 own funds disclosure.

	a Balance sheet as in published financial statements as at period end £m	b Under regulatory scope of of consolidation as at period end £m	References
<b>Assets</b>			
Cash and balances at central banks	54,511	54,511	
Trading assets	632	632	
Derivative financial instruments	2,899	2,899	
Settlement balances	47	47	
Loans and advances to banks - amortised cost	8,208	8,208	
Loans and advances to customers - amortised cost	304,974	304,974	
Other financial assets	43,641	43,251	
Intangible assets	6,313	6,313	(d)
Property, plant and equipment	4,429	4,429	
Current and deferred tax assets	1,399	1,399	
<i>of which: DTAs that rely on future profitability and do no arise from temporary differences</i>	757	757	(e)
Prepayments, accrued income and other assets	1,278	1,278	
<i>of which: Defined benefit pension fund assets</i>	196	196	(f)
Assets of disposal groups	40	40	
<b>Total Assets</b>	<b>428,371</b>	<b>427,981</b>	
<b>Liabilities</b>			
Bank deposits	18,391	18,391	
Customer deposits	342,075	342,346	
Settlement balances	47	47	
Trading liabilities	244	244	
Derivatives	4,653	4,653	
Other financial liabilities	20,680	20,008	
Provisions, deferred income and other liabilities	7,762	7,773	(k)
Retirement benefit liabilities	53	53	
Current and deferred tax liabilities	371	371	
<i>of which: DTL Defined benefit pension scheme assets</i>	25	25	(g)
Subordinated liabilities	1,338	1,338	(j)
Liabilities of disposal groups	—	—	
<b>Total liabilities</b>	<b>395,614</b>	<b>395,224</b>	
<b>Shareholder's Equity</b>			
Non-controlling interests	6	6	
Owners' equity	32,751	32,751	
Called up share capital	3,263	3,263	(a)
Reserves	29,488	29,488	
<i>of which: amount eligible for retained earnings</i>	36,673	36,673	(b)
<i>of which: amount eligible for accumulated OCI &amp; other reserves</i>	(10,861)	(10,861)	(c),(i)
<i>of which: amount of other equity instruments</i>	3,676	3,676	(h)
<b>Total Shareholder's Equity</b>	<b>32,757</b>	<b>32,757</b>	

Note:

(1) The references (a) to (h) identify balance sheet components in table CC2 that are used in the calculation of regulatory capital table CAP2. Amounts between the CC2 and CAP2 are not always directly comparable due to differences in definitions and application of CRD IV for the calculation of regulatory capital.

## Capital, liquidity and funding

### EU OV1: CAP: RWAs and MCR summary – NWH Group and significant subsidiaries

The table below shows RWAs and minimum capital requirements (MCR) by risk type for NWH Group and its significant subsidiaries. MCR is calculated as 8% of RWAs.

2019	NWH Group		NWB Plc		RBS plc		UBI DAC		
	RWAs £m	MCR £m	RWAs £m	MCR £m	RWAs £m	MCR £m	RWAs £m	MCR £m	
1	Credit risk (excluding counterparty credit risk)	111,281	8,903	61,614	4,930	22,757	1,822	11,678	934
2	<i>Standardised (STD) approach</i>	14,033	1,123	3,923	314	1,792	144	899	72
4	<i>Advanced IRB approach</i>	97,248	7,780	57,691	4,616	20,965	1,678	10,779	862
6	Counterparty credit risk (CCR)	980	78	605	48	—	—	127	10
6a	<i>of which: securities financing transactions</i>	145	12	145	12	—	—	—	—
7	<i>of which: marked-to-market</i>	239	19	151	12	—	—	127	10
11	<i>of which: risk exposure amount for contributions to the default fund of a central counterparty</i>	116	9	116	9	—	—	—	—
12	<i>of which: credit valuation adjustment (CVA)</i>	480	38	193	15	—	—	—	—
14	Securitisation exposures in banking book	1,509	121	1,206	96	304	24	—	—
15	<i>IRB approach</i>	1,509	121	1,206	96	304	24	—	—
19	Market risk	125	10	17	1	15	1	77	6
20	<i>STD approach</i>	125	10	17	1	15	1	77	6
23	Operational risk - STD approach	19,590	1,567	12,669	1,014	5,714	457	897	72
27	Amounts below the thresholds for deduction (subject to 250% risk-weight)	1,190	95	4,958	397	130	10	2	—
29	<b>Total</b>	<b>134,675</b>	<b>10,774</b>	<b>81,069</b>	<b>6,486</b>	<b>28,920</b>	<b>2,314</b>	<b>12,781</b>	<b>1,022</b>

2018	NWB Plc		RBS plc		UBI DAC		
	RWAs £m	MCR £m	RWAs £m	MCR £m	RWAs £m	MCR £m	
1	Credit risk (excluding counterparty credit risk)	57,470	4,598	28,293	2,262	13,378	1,070
2	<i>STD approach</i>	4,121	330	2,817	225	935	75
4	<i>Advanced IRB approach</i>	53,349	4,268	25,476	2,037	12,443	995
6	Counterparty credit risk (CCR)	325	26	—	—	122	9
6a	<i>of which: securities financing transactions</i>	189	14	—	—	2	—
7	<i>of which: marked-to-market</i>	34	3	—	—	92	7
10	<i>of which: IMM</i>	82	7	—	—	28	2
11	<i>of which: risk exposure amount for contributions to the default fund of a central counterparty</i>	11	1	—	—	—	—
12	<i>of which: CVA</i>	9	1	—	—	—	—
14	Securitisation exposures in banking book	1,230	98	319	26	—	—
15	<i>IRB approach</i>	1,230	98	319	26	—	—
19	Market risk	50	4	23	2	47	4
20	<i>STD approach</i>	36	3	23	2	47	4
21	<i>IMA</i>	14	1	—	—	—	—
23	Operational risk - STD approach	11,660	933	5,819	466	958	77
27	Amounts below the thresholds for deduction (subject to 250% risk-weight)	4,848	388	71	6	9	1
29	<b>Total</b>	<b>75,583</b>	<b>6,047</b>	<b>34,525</b>	<b>2,762</b>	<b>14,514</b>	<b>1,161</b>

## Capital, liquidity and funding

### EU CR8: IRB and STD: Credit risk RWAs and MCR flow statement

The table below shows the drivers of movements in credit risk RWAs and MCR. RWAs include securitisations, deferred tax assets and significant investments to align with the capital management approaches of NWH Group and its segments. There were no methodology or policy changes during the period. Additionally, there were no acquisitions or disposals of subsidiaries during the period.

	a			b
	RWAs			MCR
	IRB £m	STD £m	Total RWAs £m	£m
1 At 1 January 2019	102,168	15,654	117,822	9,426
2 Asset size (1)	(658)	(381)	(1,039)	(83)
3 Asset quality (2)	(108)	—	(108)	(9)
5 Model updates (3)	(1,717)	13	(1,704)	(136)
7 Foreign exchange movements (4)	(970)	(63)	(1,033)	(83)
8 Other	42	—	42	3
9 At 31 December 2019	98,757	15,223	113,980	9,118

#### Notes:

- (1) Organic changes in portfolio size and composition (including the origination of new businesses and maturing loans) but excluding changes in portfolio size due to acquisitions and disposals of entities.
- (2) Changes in the assessed quality of assets due to changes in borrower risk, such as rating grade migration or similar effects.
- (3) Changes due to model implementation, changes in model scope, or any changes intended to address model weakness.
- (4) Changes arising from foreign currency translation movements.

#### Key points

- The RWA decrease relating to model updates was largely driven by revisions to LGD models in the corporates portfolio.
- The reduction in asset size mainly reflected asset transfers from NatWest Bank Plc to Natwest Markets Plc and a decrease in the deferred tax asset RWA threshold. There were offsetting increases attributed to lending growth across multiple products in UK Personal Banking.
- The RWA reduction in foreign exchange movements was mainly due to sterling strengthening against the euro during 2019.
- The movement in the other category mainly reflected the increase in RWAs following the adoption of IFRS 16 in January 2019. This was offset by decreases due to a revision of the treatment of nostro exposures.

## Capital, liquidity and funding

### EU CCR7: CCR: IMM and Non-IMM: Counterparty credit risk RWAs and MCR flow statement

The table below shows the drivers of movements in counterparty credit risk RWAs and MCR (excluding CVA). There were no acquisitions or disposals of subsidiaries during the period.

	a	b
	RWAs	MCR
	Non-IMM	Non-IMM
	£m	£m
1 At 1 January 2019	389	31
2 Asset size (1)	(3)	—
7 Foreign exchange movements (2)	(3)	—
8 Other	117	9
9 At 31 December 2019	500	40

Notes:

- (1) Organic changes in portfolio size and composition (including the origination of new business).  
(2) Changes arising from foreign currency retranslation movements.

#### Key point

- The increase in non-IMM RWAs under the Other category occurred during Q1 2019. It was due to a refinement in the RWA calculation in relation to the default fund contribution to central counterparty exposure.

### EU MR2\_B: MR IMA and STD: Market risk RWAs and MCR flow statement

The table below shows the drivers of movements in market risk RWAs and MCR. There were no methodology or regulatory policy changes during the period. Changes in market risk arising from foreign currency retranslation are included within movement in risk levels as they are managed together with portfolio changes.

	IMA						STD		Total	
	RWAs (1)						MCR	MCR	RWAs	MCR
	a	b	c	e	f	g				
	VaR	SVaR	IRC	Other (RNIV)	Total		RWAs	MCR	RWAs	MCR
£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	
1 At 1 January 2019	3	11	—	—	14	1	114	9	128	10
2 Movement in risk levels (2)	(3)	(11)	—	—	(14)	(1)	11	1	(3)	—
8 At 31 December 2019	—	—	—	—	—	—	125	10	125	10

Notes:

- (1) NWH Group does not use the comprehensive risk measure to calculate market risk RWAs, hence it is excluded from this table.  
(2) Movement in risk levels represents movements due to position changes.

#### Key points

- Market risk RWAs at period-end relate solely to the foreign exchange banking book charge.
- Overall, standardised RWAs remained broadly unchanged during the year.
- The RWA reduction under the internal model approach was due to the closure of legacy positions in the ring-fenced bank during Q2 2019.

## Capital, liquidity and funding

### CAP 3: LR: Leverage exposures (CRR Delegated Act Template) - NWH Group and significant subsidiaries

The tables below set out the leverage exposures in the prescribed template on a CRR transitional basis as relevant for the jurisdiction.

#### LRSum: Summary reconciliation of accounting assets and leverage ratio exposure

		2019				2018		
		NWH Group £m	NWB Plc £m	RBS plc £m	UBI DAC £m	NWB Plc £m	RBS plc £m	UBI DAC £m
1	Total assets as per published financial statements	428,371	310,954	90,602	26,075	301,624	94,497	26,448
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(391)		—				
4	Adjustment for derivative financial instruments	(2,690)	(2,171)	299	89	(669)	267	52
5	Adjustments for securities financing transactions (SFTs)	516	516	—	—	203	—	—
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	29,655	17,862	8,766	1,118	21,047	11,409	1,150
EU-6a	Adjustment for Intra-Group exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013	—	(24,024)	(8,309)	—	(23,725)	(7,687)	—
7	Other adjustments	(7,610)	(2,699)	(377)	(389)	(2,997)	(222)	(391)
8	Total leverage ratio exposure	447,851	300,438	90,981	26,893	295,483	98,264	27,259
<b>LRCOM: Leverage ratio common disclosure</b>								
On-balance sheet exposures (excluding derivatives and SFTs)								
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	414,281	296,750	90,236	25,924	296,808	94,382	25,713
2	Asset amounts deducted in determining Tier 1 capital	(7,610)	(2,699)	(377)	(412)	(2,997)	(222)	(391)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)	406,671	294,051	89,859	25,512	293,811	94,160	25,322
Derivative exposures								
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	252	852	366	163	931	105	134
5	Add-on amounts for PFE associated with all derivatives transactions (mtm method)	1,071	1,494	299	100	1,203	277	106
7	Deductions of receivable assets for cash variation margin provided in derivatives transactions	(1,114)	(1,114)	—	—	(1,526)	—	—
11	Total derivative exposures	209	1,232	665	263	608	382	240

## Capital, liquidity and funding

### CAP 3: LR: Leverage exposures (CRR Delegated Act Template) - NWH Group and significant subsidiaries continued

	2019				2018			
	NWH Group £m	NWB Plc £m	RBS plc £m	UBI DAC £m	NWB Plc £m	RBS plc £m	UBI DAC £m	
<b>Securities financing transaction exposures</b>								
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	20,682	20,677	—	—	11,900	—	547
13	Netted amounts of cash payables and cash receivable of gross SFT assets	(9,882)	(9,876)	—	—	(8,361)	—	—
14	Counterparty credit risk exposures for SFT assets	516	516	—	—	203	—	—
16	Total securities financing transaction exposures	11,316	11,317	—	—	3,742	—	547
<b>Other off-balance sheet exposures</b>								
17	Off-balance sheet exposures at gross notional amount	105,875	65,461	27,821	3,247	88,128	34,302	3,491
18	Adjustments for conversion to credit equivalent amounts	(76,220)	(47,599)	(19,055)	(2,129)	(67,081)	(22,893)	(2,341)
19	Other off-balance sheet exposures	29,655	17,862	8,766	1,118	21,047	11,409	1,150
EU-	Exemption of Intra-Group exposures (solo basis) in accordance with Article 429(7) of Regulation (EU)							
19a	No 575/2013 (on and off-balance sheet)	—	(24,024)	(8,309)	—	(23,725)	(7,687)	—
<b>Capital and total exposures</b>								
20	Tier 1 capital	24,861	15,047	4,797	3,389	15,389	5,538	3,996
21	Total leverage ratio exposure	447,851	300,438	90,981	26,893	295,483	98,264	27,259
	Leverage ratio	5.6%	5.0%	5.3%	12.6%	5.2%	5.6%	14.7%

	Leverage ratio exposures							
	2019				2018			
	NWH Group £m	NWB Plc £m	RBS plc £m	UBI DAC £m	NWB Plc £m	RBS plc £m	UBI DAC £m	
<b>LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)</b>								
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	406,671	270,134	82,216	25,512	270,147	86,855	25,322
EU-2	Trading book exposures	—	—	—	—	—	—	—
EU-3	Banking book exposures, of which:	406,671	270,134	82,216	25,512	270,147	86,855	25,322
EU-4	Covered bonds	1,678	1,340	—	338	791	—	—
EU-5	Exposures treated as sovereigns	95,026	62,353	26,410	5,015	80,132	21,297	4,258
EU-6	Exposures to regional governments, multilateral development bank, international organisations and public sector entities not treated as sovereigns	4,840	3,815	520	451	3,298	642	436
EU-7	Institutions	4,885	7,808	1,522	990	7,081	3,511	1,402
EU-8	Secured by mortgages of immovable properties	201,064	140,891	32,198	14,560	126,169	36,843	13,423
EU-9	Retail exposures	22,040	14,351	4,061	553	14,359	4,330	1,923
EU-10	Corporate	59,321	25,970	14,053	2,172	24,381	15,941	2,099
EU-11	Exposures in default	3,536	1,382	920	824	1,484	1,067	1,389
EU-12	Other exposures (e.g. equity, securitisations, and non-credit obligation assets)	14,281	12,224	2,532	609	12,452	3,224	392

## Capital, liquidity and funding

### CAP 4: CAP: Capital instruments - NWH Group and significant subsidiaries

The following table sets out the main terms and conditions of NWH Group's Tier 1 and Tier 2 capital instruments that will be treated as non-end point CRR compliant, for instance because they are legacy Tier 1 instruments or because they are Tier 2 instruments that include an incentive for the issuer to redeem. The balances are the IFRS balance sheet carrying amounts, which may differ from the amount which the instrument contributes to regulatory capital. Regulatory balances exclude, for example, issuance costs and fair value movements, while dated capital is required to be amortised on a straight-line basis over the final five years of maturity. For accounting purposes the capital instruments in the following table are included within equity or subordinated liabilities, details of which are included in Note 18 Subordinated Liabilities of the NWH Group 2019 ARA. Refer to RBS.com for more details on these and other instruments issued to third parties on an instrument-by-instrument basis.

		31 December 2019 £m	31 December 2018 £m
<b>Pillar 1 treatment - Additional Tier 1</b>			
<b>NWB Plc - debt preference shares</b>	Step-up coupon		
GB0006227051 Series A £140 million 9% (not callable)		143	145
<b>Tier 2 capital securities which contain an incentive for the issuer to redeem</b>			
<b>Pillar 1 treatment Tier 2</b>			
<b>NWB Plc - undated loan capital</b>			
XS0102480786 €100 million floating rate undated step-up notes (callable quarterly)	3 month EURIBOR plus 2.15%	9	9
XS0102480869 €400 million floating rate undated subordinated notes (callable quarterly)	3 month EURIBOR plus 2.15%	152	160
XS0102493680 £200 million 7.125% undated subordinated step-up notes (callable every five years from October 2022)	5 year UK Gilts yield plus 3.08%	55	55

## Capital, liquidity and funding

### CAP 5a: CAP: Countercyclical capital buffer - geographical distribution of credit exposures

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 NWH 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.

		UK £m	RoI £m	US £m	Sweden £m	France £m	Norway £m	Other £m	Total £m
2019									
General credit exposures	Exposure value for STD	18,823	788	337	49	138	153	2,373	22,661
	Exposure value for IRB	285,411	21,377	4,320	895	2,141	858	10,335	325,337
Securitisation exposures	Exposure value for STD	—	—	—	—	—	—	—	—
	Exposure value for IRB	7,295	—	—	—	—	—	34	7,329
Own funds	Of which: General credit exposures	6,849	873	142	32	73	45	568	8,582
	Securitisation exposures	121	—	—	—	—	—	—	121
<b>Total</b>		<b>6,970</b>	<b>873</b>	<b>142</b>	<b>32</b>	<b>73</b>	<b>45</b>	<b>568</b>	<b>8,703</b>
Own funds requirement weights		80%	10%	2%	0%	1%	1%	6%	100%
Countercyclical capital buffer rate		1.00%	1.00%	—	2.50%	0.25%	2.50%	—	0.93%
Total risk exposure (sum of general credit, trading and securitisation)									
NWB Plc		216,119	732	2,750	756	1,983	781	7,514	230,635
RBS plc		61,295	175	1,585	108	98	35	3,034	66,330
UBI DAC		429	21,030	40	66	157	44	74	21,840
Total own fund requirements									
NWB Plc		4,445	23	87	41	67	43	373	5,079
RBS plc		1,634	3	45	1	2	2	127	1,814
UBI DAC		23	834	2	2	2	1	3	867

### CAP 5b: CAP: Countercyclical capital buffer requirement

The additional countercyclical capital buffer requirement is shown below for NWH Group and its significant subsidiaries.

	NWH Group £m	NWB Plc £m	RBS plc £m	UBI DAC £m
Total risk exposure amount	134,675	81,069	28,920	12,781
Institution specific countercyclical buffer rate	0.93%	0.93%	0.91%	1.00%
Institution specific countercyclical buffer requirement	1,250	751	264	127

Note:

- (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. The Financial Policy Committee sets the UK countercyclical capital buffer rate, which is currently 1.0% (effective from November 2018). The FPC has announced an increase of the UK rate to 2.0% with effect from December 2020. The Republic of Ireland countercyclical capital buffer is currently 1.0% (effective from July 2019).



## Capital, liquidity and funding

### PV1: BCBS 2: Prudential valuation adjustment

#### Prudential valuation

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 of the CRR.

NWH Group applies prudential valuation to all positions that are subject to fair value accounting (both regulatory trading and non-trading books) classified for accounting purposes as fair value through profit or loss, including held for trading and available for sale.

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, inflation swaps and equity positions.

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 NWH Group's 2019 ARA Financial instruments – valuation (Note 10).

	a	b	f	g		h
	Equities £m	Interest rates £m	Total £m	Of which: in the trading book £m	Of which: in the non-trading book £m	£m
2019						
1 Closeout uncertainty, of which	5	17	22	—	—	22
2 <i>Mid-market value</i>	—	17	17	—	—	17
3 <i>Closeout cost</i>	—	—	—	—	—	—
4 <i>Concentration</i>	5	—	5	—	—	5
5 Early termination	—	—	—	—	—	—
6 Model risk	—	1	1	—	—	1
7 Operational risk	—	2	2	—	—	2
8 Investing and funding costs	—	—	—	—	—	—
9 Unearned credit spreads	—	—	—	—	—	—
10 Future administrative costs	—	1	1	—	—	1
11 Other	—	—	—	—	—	—
12 Total prudential valuation adjustment (PVA)	5	21	26	—	—	26
PVA excluding diversification benefit	—	35	35	—	—	35

#### Notes:

- (1) A diversification benefit is applied, where permitted under the EBA Regulatory Technical Standards on prudential valuation.
- (2) Commodities, FX and Credit have been excluded from the above table as these were nil in the current period.

## Capital, liquidity and funding

### EBA asset encumbrance

The values presented below, including totals, are based on a four-point median average across four quarters.

#### Encumbered and unencumbered assets

	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
	£m	of which notionally eligible EHQLA and HQLA	£m	of which notionally eligible EHQLA and HQLA	£m	of which EHQLA and HQLA	£m	of which EHQLA and HQLA
		£m		£m		£m		£m
Assets of the reporting institution	43,509	41,762	—	—	383,193	244,396	—	—
Equity instruments	—	—	—	—	25	—	—	—
Debt securities	6,306	6,305	6,306	6,305	39,126	35,818	39,126	35,818
of which: covered bonds	—	—	—	—	1,358	1,358	1,358	1,358
of which: asset-backed securities	—	—	—	—	974	974	974	974
of which: issued by general governments	5,631	5,631	5,631	5,631	32,619	29,290	32,619	29,290
of which: issued by financial corporations	537	537	537	537	6,684	6,657	6,684	6,657
of which: issued by non-financial corporations	—	—	—	—	17	17	17	17
Other assets	36,075	34,327	—	—	344,042	208,426	—	—

#### Collateral received

	Fair value of encumbered collateral received or own debt securities issued		Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance	
	£m	of which EHQLA and HQLA	£m	of which EHQLA and HQLA
		£m		£m
Collateral received by the reporting institution	2,131	1,754	2,159	2,159
Loans on demand	—	—	—	—
Equity instruments	—	—	—	—
Debt securities	2,131	1,754	2,159	2,159
of which: covered bonds	—	—	—	—
of which: asset-backed securities	—	—	—	—
of which: issued by general governments	1,775	1,754	1,571	1,571
of which: issued by financial corporations	—	—	441	441
of which: issued by non-financial corporations	—	—	—	—
Loans and advances other than loans on demand	—	—	—	—
Other collateral received	—	—	—	—
of which:	—	—	—	—
- Own debt securities issued other than own covered bonds or asset-backed securities	—	—	—	—
- Own covered bonds and asset-backed securities issued and not yet pledged	—	—	—	—
Total assets, collateral received and own debt securities issued	45,440	43,104	—	—

#### Sources of encumbrance

	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and asset-backed securities encumbered
	£m	£m
Carrying amount of selected financial liabilities	25,991	37,480

## Capital, liquidity and funding

### EU LIQ1: Liquidity coverage ratio

The table below shows 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. The weightings applied reflect the stress factors applicable under the EBA LCR rules. The values presented below 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). NWH Group assesses these risks as part of its Individual Liquidity Adequacy Assessment Process (ILAAP) and maintains appropriate levels of liquidity.

	Total unweighted value (average)				Total weighted value (average)			
	31 December 2019	30 September 2019	30 June 2019	31 March 2019	31 December 2019	30 September 2019	30 June 2019	31 March 2019
Number of data points used in the calculation of averages	12	9	6	3	12	9	6	3
	£m	£m	£m	£m	£m	£m	£m	£m
<b>High quality liquid assets</b>								
1 Total high-quality liquid assets (HQLA)					99,950	100,457	99,472	98,543
<b>Cash outflows</b>								
2 Retail deposits and deposits from small business customers	201,904	200,381	199,042	197,589	15,903	15,754	15,628	15,519
3 of which: stable deposits	129,587	128,814	128,129	127,056	6,479	6,441	6,406	6,353
4 of which: less stable deposits	71,941	71,210	70,582	70,215	9,047	8,957	8,891	8,848
5 Unsecured wholesale funding	120,043	120,296	119,314	119,920	53,236	53,528	53,282	54,322
6 Operational deposits (all counterparties) and deposits in networks of cooperative banks	50,376	50,355	49,922	49,581	12,281	12,276	12,168	12,083
7 Non-operational deposits (all counterparties)	69,489	69,804	69,303	70,279	40,777	41,115	41,025	42,180
8 Unsecured debt	178	137	89	60	178	137	89	60
9 Secured wholesale funding					379	459	667	
10 Additional requirements	53,580	54,561	54,801	54,979	7,495	7,577	7,480	7,400
11 Outflows related to derivative exposures and other collateral requirements	1,388	1,237	1,039	898	1,324	1,237	1,039	898
12 Outflows related to loss of funding on debt products	—	—	—	—	—	—	—	—
13 Credit and liquidity facilities	52,192	53,324	53,763	54,081	6,171	6,340	6,441	6,502
14 Other contractual funding obligations	497	512	511	509	12	15	14	12
15 Other contingent funding obligations	41,147	40,525	40,057	40,275	3,561	3,360	3,270	3,369
16 Total cash outflows					80,586	80,693	80,341	80,623
17 Secured lending (e.g. reverse repos)	8,228	7,594	7,308	7,949	—	—	—	—
18 Inflows from fully performing exposures	10,207	10,250	10,275	10,034	6,959	6,973	6,980	6,687
19 Other cash inflows	11,231	11,306	11,301	11,169	2,439	2,394	2,408	2,373
EU-19a Difference between total weighted inflows and outflows	—	—	—	—	—	—	—	—
EU-19b Excess inflows from a related specialised credit institution	—	—	—	—	—	—	—	—
20 Total cash inflows	29,667	29,150	28,884	29,152	9,398	9,367	9,387	9,060
EU-20a Fully exempt inflows	—	—	—	—	—	—	—	—
EU-20b Inflows subject to 90% cap	—	—	—	—	—	—	—	—
EU-20c Inflows subject to 75% cap	29,665	29,150	28,884	29,152	9,398	9,367	9,387	9,060
21 Liquidity buffer					99,950	100,457	99,472	98,543
22 Total net cash outflows					71,188	71,326	70,953	71,563
23 Liquidity coverage ratio (%)					140	141	140	138

## Capital, liquidity and funding

### EU LI1: CAP: Accounting and regulatory scopes of consideration

The table below provides a reconciliation between accounting and regulatory consolidation.

	2019			Regulatory consolidation £m
	Accounting balance sheet £m	Deconsolidation of non-financial entities (1) £m	Consolidation of banking associates (2) £m	
<b>Assets</b>				
Cash and balances at central banks	54,511	—	—	54,511
Trading assets	632	—	—	632
Derivatives	2,899	—	—	2,899
Settlement balances	47	—	—	47
Loans to banks - amortised cost	8,208	—	—	8,208
Loans to customers - amortised cost	304,974	—	—	304,974
Other financial assets	43,641	(390)	—	43,251
Intangible assets	6,313	—	—	6,313
Other assets	7,106	—	—	7,106
Assets of disposal groups	40	—	—	40
	<b>428,371</b>	<b>(390)</b>	<b>—</b>	<b>427,981</b>
<b>Of which: By significant subsidiary (includes Intra-Group exposures)</b>				
NWB Plc	310,954	—	—	310,954
RBS plc	90,602	—	—	90,602
UBI DAC	26,075	—	—	26,075
<b>Liabilities</b>				
Bank deposits	18,391	—	—	18,391
Customer deposits	342,075	271	—	342,346
Settlement balances	47	—	—	47
Trading liabilities	244	—	—	244
Derivatives	4,653	—	—	4,653
Other financial liabilities	20,681	(673)	—	20,008
Subordinated liabilities	1,338	—	—	1,338
Other liabilities	8,185	12	—	8,197
Liabilities of disposal groups	—	—	—	—
	<b>395,614</b>	<b>(390)</b>	<b>—</b>	<b>395,224</b>
<b>Of which: by significant subsidiary (includes Intra-Group exposures)</b>				
NWB Plc	292,928	—	—	292,928
RBS plc	84,628	—	—	84,628
UBI DAC	22,273	—	—	22,273
Non-controlling interests	6	—	—	6
Owners' equity	32,751	—	—	32,751
Total equity	<b>32,757</b>	<b>—</b>	<b>—</b>	<b>32,757</b>
<b>Of which: by significant subsidiary: (includes intra-group exposures)</b>				
NWB Plc	18,026	—	—	18,026
RBS plc	5,974	—	—	5,974
UBI DAC	3,802	—	—	3,802

#### Notes:

- (1) NWH Group can only include particular types of subsidiary undertaking in the regulatory consolidation. Non-financial undertakings are excluded from the regulatory consolidation.
- (2) NWH Group must proportionally consolidate its associates for regulatory purposes where they are classified as credit institutions or financial institutions. These will generally have been equity accounted for financial reporting purposes. A principal contributor is RBS's investment in Alawwal bank.

## Capital, liquidity and funding

### EU LI2: IRB and STD: Balance sheet to credit risk EAD bridge

The table below provides a bridge between the balance sheet and credit risk EAD by balance sheet caption.

	Balance sheet £bn	Consolidation differences (1) £bn	Regulatory consolidation £bn	Other regulatory adjustments									Total drawn EAD £bn	Undrawn and off-balance sheet EAD £bn	Total EAD £bn
				Within the scope of market risk (2) £bn	Credit provisions (3) £bn	Netting and collateral (4) £bn	Capital deduction (5) £bn	Disposal groups (6) £bn	Methodology differences and reclassifications (7) £bn						
2019															
Cash and balances at central banks	54.6	—	54.6	—	—	—	—	—	—	—	—	54.6	—	54.6	
Trading assets	0.6	—	0.6	—	—	—	—	—	—	(0.4)	0.2	—	—	0.2	
Derivatives	2.9	—	2.9	—	—	(1.2)	—	—	—	(0.4)	1.3	—	—	1.3	
Settlement balances	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Loans to banks - amortised cost	8.2	—	8.2	—	—	—	—	—	—	0.1	8.3	—	—	8.3	
Loans to customers - amortised cost	305.0	—	305.0	—	3.1	—	—	—	—	(21.1)	287.1	57.7	—	344.8	
Other financial assets	43.6	(0.4)	43.2	—	—	—	—	—	—	0.4	43.6	—	—	43.6	
Intangible assets	6.3	—	6.3	—	—	—	(6.3)	—	—	—	—	—	—	—	
Other assets	7.2	—	7.2	—	0.1	—	(1.0)	—	—	1.1	7.4	—	—	7.4	
Assets of disposal groups	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
<b>Total assets</b>	<b>428.4</b>	<b>(0.4)</b>	<b>428.0</b>	<b>—</b>	<b>3.2</b>	<b>(1.2)</b>	<b>(7.3)</b>	<b>—</b>	<b>—</b>	<b>(20.3)</b>	<b>402.5</b>	<b>57.7</b>	<b>—</b>	<b>460.1</b>	
Contingent obligations	—	—	—	—	—	—	—	—	—	—	—	2.7	—	2.7	
												60.4	—	462.8	

#### Notes:

- (1) Represents proportional consolidation of associates and deconsolidation of certain subsidiaries, as required by regulatory rules.
- (2) The exposures in regulatory trading book businesses are subject to market risk and are therefore excluded from EAD.
- (3) Impairment loss provisions on loans and advances and securities, and credit valuation adjustment on derivatives.
- (4) Includes:
  - a. Reverse repos: reflects regulatory approach for securities financing transactions including netting of collateral and cash legs.
  - b. Loans and advances: cash collateral pledged with counterparties in relation to net derivative liability positions.
  - c. Derivatives: impact of master netting arrangements.
- (5) Capital deductions are excluded as EAD only captures exposures for credit RWAs.
- (6) Amounts reclassified to balance sheet lines for EAD.
- (7) Primarily includes:
  - a. Loans and advances: offset related to cash management pooling arrangements not allowed under IFRS and standardised approach credit risk mitigation.
  - b. Settlement balances: the amount represents instruments pending settlement on which no EAD is calculated.
  - c. Derivatives: EAD valuation adjustments offset by difference between netting arrangements and netting within regulatory netting sets.
  - d. Property, plant and equipment: includes residual value of operating leases.

## Capital, liquidity and funding

### TLAC 2 : Material subgroup entity - creditor ranking at legal entity level

The table below shows the creditor ranking at legal entity level for the material sub-group entities included within the RBS resolution group, reflecting RBS's current interpretation of the CRR2 MREL rules relevant for G-SII's which entered into force on 27 June 2019.

31 December 2019		Coutts & Company				
		Creditor ranking				
2	Description of creditor ranking	Shareholders Equity	Preference Shares & Contingent Capital Notes	Subordinated Debt	Senior Non-Preferential Debt	Total
3	Total capital and liabilities net of credit risk mitigation	1,154	202	266	310	1,932
4	Subset of row 3 that are excluded liabilities	—	—	—	—	—
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	1,154	202	266	310	1,932
6	Subset of row 5 that are eligible as TLAC	1,154	202	266	310	1,932
7	Subset of row 6 with 1 year ≤ residual maturity < 2 years	—	—	—	—	—
8	Subset of row 6 with 2 years ≤ residual maturity < 5 years	—	—	—	50	50
9	Subset of row 6 with 5 years ≤ residual maturity < 10 years	—	—	266	260	526
10	Subset of row 6 with residual maturity ≥ 10 years, but excluded perpetual securities	—	—	—	—	—
11	Subset of row 6 that is perpetual securities	1,154	202	—	—	1,356

31 December 2019		NWB Plc				
		Creditor ranking				
2	Description of creditor ranking	Shareholders Equity	Preference Shares & Contingent Capital Notes	Subordinated Debt	Senior Non-Preferential Debt	Total
3	Total capital and liabilities net of credit risk mitigation	15,656	2,370	3,932	2,917	24,875
4	Subset of row 3 that are excluded liabilities	—	—	—	—	—
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	15,656	2,370	3,932	2,917	24,875
6	Subset of row 5 that are eligible as TLAC	15,656	2,370	3,932	2,917	24,875
7	Subset of row 6 with 1 year ≤ residual maturity < 2 years	—	—	300	—	300
8	Subset of row 6 with 2 years ≤ residual maturity < 5 years	—	—	—	152	152
9	Subset of row 6 with 5 years ≤ residual maturity < 10 years	—	—	2,008	2,462	4,470
10	Subset of row 6 with residual maturity ≥ 10 years, but excluded perpetual securities	—	—	—	303	303
11	Subset of row 6 that is perpetual securities	15,656	2,370	1,625	—	19,651

For the notes to these tables please refer to the following page.

## Capital, liquidity and funding

### TLAC 2 : Material subgroup entity - creditor ranking at legal entity level continued

		RBS plc					
31 December 2019		Creditor ranking					
2 Description of creditor ranking		Shareholders Equity	Preference Shares & Contingent Capital	Notes	Subordinated Debt	Senior Non-Preferential Debt	Total
3	Total capital and liabilities net of credit risk mitigation	5,005	969	—	1,402	379	7,755
4	Subset of row 3 that are excluded liabilities	—	—	—	—	—	—
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	5,005	969	—	1,402	379	7,755
6	Subset of row 5 that are eligible as TLAC	5,005	969	—	1,402	379	7,755
7	Subset of row 6 with 1 year ≤ residual maturity < 2 years	—	—	—	—	—	—
8	Subset of row 6 with 2 years ≤ residual maturity < 5 years	—	—	—	—	—	—
9	Subset of row 6 with 5 years ≤ residual maturity < 10 years	—	—	—	1,402	379	1,781
10	Subset of row 6 with residual maturity ≥ 10 years, but excluded perpetual securities	—	—	—	—	—	—
11	Subset of row 6 that is perpetual securities	5,005	969	—	—	—	5,974

		UBI DAC					
31 December 2019		Creditor ranking					
2 Description of creditor ranking		Shareholders Equity	Preference Shares & Contingent Capital	Notes	Subordinated Debt	Senior Non-Preferential Debt	Total
3	Total capital and liabilities net of credit risk mitigation	3,802	—	—	490	510	4,802
4	Subset of row 3 that are excluded liabilities	—	—	—	—	—	—
5	Total capital and liabilities less excluded liabilities (row 3 minus row 4)	3,802	—	—	490	510	4,802
6	Subset of row 5 that are eligible as TLAC	3,802	—	—	490	510	4,802
7	Subset of row 6 with 1 year ≤ residual maturity < 2 years	—	—	—	—	—	—
8	Subset of row 6 with 2 years ≤ residual maturity < 5 years	—	—	—	451	—	451
9	Subset of row 6 with 5 years ≤ residual maturity < 10 years	—	—	—	—	510	510
10	Subset of row 6 with residual maturity ≥ 10 years, but excluded perpetual securities	—	—	—	—	—	—
11	Subset of row 6 that is perpetual securities	3,802	—	—	39	—	3,841

#### Notes:

- (1) RBS will continue to be recognised as a G-SII until 1 January 2020.
- (2) Amounts shown includes balances indirectly due to Resolution Entity through NWH Ltd, a wholly-owned subsidiary of RBSG plc.

## Credit risk

### Credit risk

#### EU CRA: IRB and STD: General qualitative information about credit risk

This section details NWH Group's overall credit risk profile. Further analysis is provided in subsequent sections for credit risk, counterparty credit risk and securitisation credit risk.

The risk profile is analysed by a variety of asset concentrations, credit quality and regulatory RWA treatments, including internal model estimates for probability of default, loss given default and exposure at default.

Refer to the Glossary for definitions of terms available on rbs.com.

An overview of these models, as well as the governance process used to develop and review them, and back-testing of model performance, is also presented.

#### General information about credit risk

Credit risk is the risk of financial loss owing to the failure of a customer or counterparty to meet its obligation to settle outstanding amounts.

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

The disclosures in this section cover credit risk and counterparty credit risk. When discussed together, they are referred to as total credit risk.

Counterparty credit risk principally comprises exposures arising from derivatives and securities financing transactions. Credit risk excludes such exposures but includes loans and advances to customers, banks and central banks, as well as holdings of debt securities and equity shares.

The two subsequent sections cover credit risk and counterparty credit risk separately. Except where noted, the disclosures in these sections exclude inter-Group exposures. Further detail on securitisation credit risk is provided in the Securitisation section of this document.

### Credit risk governance and management

For a description of the main characteristics and elements of credit risk governance and management in NWH Group as well as additional credit risk disclosures, refer to page 23 of the 2019 ARA.

#### Presentation of data in the Credit risk section

The exposure at default (EAD) figures presented in this document may be either pre or post credit risk mitigation (CRM), and are labelled accordingly.

Credit risk (excluding counterparty credit risk) EAD pre CRM:

- Standardised approach – EAD before legally enforceable netting and financial collateral.
- IRB approach – EAD before legally enforceable netting only.

Credit risk (excluding counterparty credit risk) EAD post CRM:

- Standardised approach – EAD after legally enforceable netting and financial collateral.
- IRB approach – EAD after legally enforceable netting only.

Certain tables exclude inter-Group exposures.

Counterparty credit risk EAD post CRM for derivatives and securities financing transactions, under both the standardised and IRB approaches, is EAD after legally enforceable netting and collateral.

#### Other items

Non-credit obligation assets that are included in the credit risk tables contain the following categories of exposure:

- Non-credit assets – assets owned by NWH Group without associated credit risk or uncertainty related to obligor performance affecting their future value. These comprise tangible assets (such as property, plant and equipment), prepayments, accrued income, items in transit and deferred tax assets.
- Consortium investment exposures – exposures arising as a result of equity investments made by NWH Group in its capacity as a member of a consortium.
- Inter-Group exposures – exposures to NWH Group entities included in regulatory consolidation, including in the core UK group.



## Credit risk

### CR1: IRB and STD: RWA density by NWH Group sector cluster

The table below summarises NWH Group's total credit risk profile (incorporating counterparty credit risk and securitisations) by customer type. This reflects the basis on which customers are managed internally. Wholesale customers are managed on an individual basis and grouped by sector. Personal customers are managed on a portfolio basis and grouped into portfolios of similar risk. The table presents EAD post CRM, RWAs and RWA density, each split by regulatory approach i.e. IRB and STD.

2019	EAD post CRM			RWAs			RWA density		
	IRB £m	STD £m	Total £m	IRB £m	STD £m	Total £m	IRB %	STD %	Total %
<b>Sector cluster</b>									
<b>Sovereign</b>									
Central banks	15,404	42,676	58,080	418	1,187	1,605	3	3	3
Central governments	14,375	21,093	35,468	1,237	—	1,237	9	—	3
Other sovereign	1,399	567	1,966	265	11	276	19	2	14
<b>Total sovereign</b>	<b>31,178</b>	<b>64,336</b>	<b>95,514</b>	<b>1,920</b>	<b>1,198</b>	<b>3,118</b>	<b>6</b>	<b>2</b>	<b>3</b>
<b>Financial institutions (FIs)</b>									
Banks	10,173	239	10,412	2,130	89	2,219	21	37	21
Non-bank FIs <sup>(1)</sup>	4,928	1,690	6,618	2,493	657	3,150	51	39	48
SSPEs <sup>(2)</sup>	1,493	49	1,542	172	46	218	12	94	14
<b>Total FIs</b>	<b>16,594</b>	<b>1,978</b>	<b>18,572</b>	<b>4,795</b>	<b>792</b>	<b>5,587</b>	<b>29</b>	<b>40</b>	<b>30</b>
<b>Corporates</b>									
<b>Property</b>									
- UK	34,126	2,830	36,956	15,569	2,621	18,190	46	93	49
- RoI	1,370	172	1,542	863	171	1,034	63	99	67
- Western Europe	1,181	87	1,268	655	80	735	55	92	58
- US	169	3	172	91	3	94	54	100	55
- RoW	374	225	599	243	196	439	65	87	73
<b>Total property</b>	<b>37,220</b>	<b>3,317</b>	<b>40,537</b>	<b>17,421</b>	<b>3,071</b>	<b>20,492</b>	<b>47</b>	<b>93</b>	<b>51</b>
Natural resources	11,215	258	11,473	4,864	240	5,104	43	93	44
Transport	15,184	874	16,058	6,193	777	6,970	41	89	43
Manufacturing	13,966	862	14,828	6,388	632	7,020	46	73	47
Retail and leisure	15,949	1,195	17,144	8,591	1,169	9,760	54	98	57
Services	17,012	1,282	18,294	8,581	1,173	9,754	50	92	53
TMT <sup>(3)</sup>	5,535	310	5,845	3,461	298	3,759	63	96	64
<b>Total corporates</b>	<b>116,081</b>	<b>8,098</b>	<b>124,179</b>	<b>55,499</b>	<b>7,360</b>	<b>62,859</b>	<b>48</b>	<b>91</b>	<b>51</b>
<b>Personal</b>									
<b>Mortgages</b>									
- UK	160,479	8,842	169,321	13,069	3,194	16,263	8	36	10
- RoI	14,051	18	14,069	5,869	7	5,876	42	35	42
- Western Europe	—	151	151	—	53	53	—	35	35
- US	—	156	156	—	55	55	—	35	35
- RoW	—	781	781	—	279	279	—	36	36
<b>Total mortgages</b>	<b>174,530</b>	<b>9,948</b>	<b>184,478</b>	<b>18,938</b>	<b>3,588</b>	<b>22,526</b>	<b>11</b>	<b>36</b>	<b>12</b>
Other personal	30,542	2,666	33,208	13,931	1,773	15,704	46	67	47
<b>Total personal</b>	<b>205,072</b>	<b>12,614</b>	<b>217,686</b>	<b>32,869</b>	<b>5,361</b>	<b>38,230</b>	<b>16</b>	<b>42</b>	<b>18</b>
Other items	5,037	1,796	6,833	3,891	1,275	5,166	77	71	76
<b>Total</b>	<b>373,962</b>	<b>88,822</b>	<b>462,784</b>	<b>98,974</b>	<b>15,986</b>	<b>114,960</b>	<b>26</b>	<b>18</b>	<b>25</b>

#### Notes:

- (1) Comprises US agencies, insurance companies, pension funds, hedge and leverage funds, broker-dealers and non-bank subsidiaries of banks.
- (2) Securitisation special purpose entities (SSPEs) primarily relate to securitisation-related vehicles.
- (3) Telecommunications, media and technology.

## Credit risk

### CR2: IRB and STD: EAD, RWAs and MCR by CRR exposure class: NWH Group and significant subsidiaries

The table below shows credit risk (including securitisations) and counterparty credit risk separately for NWH Group and significant subsidiaries (including inter-Group exposures). It presents EAD pre and post CRM, RWAs and MCR, split by regulatory approach and exposure class.

IRB	NWH Group				NWB Plc				RBS plc				UBI DAC			
	EAD pre CRM £m	EAD post CRM £m	RWAs £m	MCR £m	EAD pre CRM £m	EAD post CRM £m	RWAs £m	MCR £m	EAD pre CRM £m	EAD post CRM £m	RWAs £m	MCR £m	EAD pre CRM £m	EAD post CRM £m	RWAs £m	MCR £m
2019																
<b>Credit risk</b>																
Central governments and central banks	34,581	34,522	2,353	188	29,013	28,954	1,748	140	35	35	1	—	5,484	5,484	600	48
Institutions	8,261	6,299	1,582	127	4,961	3,428	785	63	2,102	1,687	423	34	392	392	109	9
Corporates	113,640	103,882	52,011	4,161	56,644	50,701	28,380	2,270	34,339	30,738	15,215	1,217	5,440	5,348	3,448	275
<i>Specialised lending</i>	13,931	13,862	9,426	754	6,507	6,501	4,500	360	6,002	5,939	3,944	315	1,121	1,121	780	62
<i>SME</i>	20,451	20,021	8,570	686	9,842	9,543	4,709	377	4,013	3,909	1,851	148	1,322	1,320	743	59
<i>Other corporate</i>	79,258	69,999	34,015	2,721	40,295	34,657	19,171	1,533	24,324	20,890	9,420	754	2,997	2,907	1,925	154
Retail	215,130	215,130	37,150	2,972	164,886	164,886	23,967	1,917	31,269	31,269	5,326	426	15,107	15,107	6,502	520
<i>Secured by real estate property</i>																
- <i>SME</i>	1,291	1,291	523	42	970	970	385	31	259	259	100	8	—	—	—	—
- <i>non-SME</i>	174,529	174,529	18,939	1,516	134,944	134,944	10,755	861	23,633	23,633	1,766	142	14,050	14,050	5,869	470
<i>Qualifying revolving</i>	23,138	23,138	5,991	479	17,969	17,969	4,406	352	4,476	4,476	1,329	106	328	328	163	13
<i>Other retail</i>																
- <i>SME</i>	8,940	8,940	3,856	308	5,770	5,770	2,503	200	1,439	1,439	605	48	537	537	316	25
- <i>non-SME</i>	7,232	7,232	7,841	627	5,233	5,233	5,918	473	1,462	1,462	1,526	122	192	192	154	12
Securitisation	7,329	7,329	1,509	121	5,837	5,837	1,206	96	1,492	1,492	304	24	—	—	—	—
Non-credit obligation assets	5,847	5,847	4,152	332	3,418	3,418	2,811	225	—	—	—	—	577	577	120	10
<b>Total IRB</b>	<b>384,788</b>	<b>373,009</b>	<b>98,757</b>	<b>7,901</b>	<b>264,759</b>	<b>257,224</b>	<b>58,897</b>	<b>4,711</b>	<b>69,237</b>	<b>65,221</b>	<b>21,269</b>	<b>1,701</b>	<b>27,000</b>	<b>26,908</b>	<b>10,779</b>	<b>862</b>
<b>STD</b>																
Central governments and central banks	63,983	63,983	1,193	95	36,318	36,318	1,661	133	26,421	26,421	60	5	—	—	—	—
Regional governments and local authorities	20	20	5	—	18	18	4	—	—	—	—	—	1	1	1	—
Institutions	653	653	236	19	29,709	29,709	212	17	7,722	7,721	34	3	732	733	150	12
Corporates	7,567	7,230	6,928	554	3,277	3,071	2,960	238	717	714	678	54	615	615	598	47
Retail	2,332	2,276	1,356	109	499	499	311	25	207	202	130	10	13	13	8	1
<i>Secured by mortgages on immovable property</i>																
- residential	10,909	10,909	3,942	315	68	68	68	5	702	702	276	22	81	81	81	7
- commercial	681	663	677	54	316	316	326	26	171	153	158	13	33	33	33	3
Exposures in default	303	302	359	29	28	28	42	3	66	66	88	7	20	19	25	2
Equity exposures	25	25	27	2	1,319	1,319	3,296	264	52	52	94	8	1	1	2	—
Other exposures	1,123	1,123	500	40	4	4	1	—	942	942	404	32	17	17	3	—
<b>Total STD</b>	<b>87,596</b>	<b>87,184</b>	<b>15,223</b>	<b>1,217</b>	<b>71,556</b>	<b>71,350</b>	<b>8,881</b>	<b>711</b>	<b>37,000</b>	<b>36,973</b>	<b>1,922</b>	<b>154</b>	<b>1,513</b>	<b>1,513</b>	<b>901</b>	<b>72</b>
<b>Total IRB and STD</b>	<b>472,384</b>	<b>460,193</b>	<b>113,980</b>	<b>9,118</b>	<b>336,315</b>	<b>328,574</b>	<b>67,778</b>	<b>5,422</b>	<b>106,237</b>	<b>102,194</b>	<b>23,191</b>	<b>1,855</b>	<b>28,513</b>	<b>28,421</b>	<b>11,680</b>	<b>934</b>

## Credit risk

### CR2: IRB and STD: EAD, RWAs and MCR by CRR exposure class: NWH Group and significant subsidiaries continued

	NWH Group			NWB Plc			RBS plc			UBI DAC		
	EAD post CRM £m	RWAs £m	MCR £m	EAD post CRM £m	RWAs £m	MCR £m	EAD post CRM £m	RWAs £m	MCR £m	EAD post CRM £m	RWAs £m	MCR £m
<b>Counterparty credit risk</b>												
2019												
<b>IRB</b>												
Central governments and central banks	209	3	—	209	3	—	—	—	—	—	—	—
Institutions	265	94	8	263	93	7	—	—	—	2	1	—
Corporates	479	120	9	452	101	8	—	—	—	27	19	1
<i>Specialised lending</i>	28	19	2	10	7	1	—	—	—	16	12	1
<i>SME</i>	1	1	—	—	—	—	—	—	—	1	1	—
<i>Other corporate</i>	450	100	7	442	94	7	—	—	—	10	6	—
<b>Total IRB</b>	<b>953</b>	<b>217</b>	<b>17</b>	<b>924</b>	<b>197</b>	<b>15</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>29</b>	<b>20</b>	<b>1</b>
<b>STD</b>												
Central governments and central banks	332	—	—	332	—	—	—	—	—	—	—	—
Regional governments and local authorities	—	—	—	—	—	—	—	—	—	—	—	—
Institutions	1,174	528	42	2,069	298	24	366	—	—	219	107	9
Corporates	132	235	19	38	110	9	—	—	—	—	—	—
<b>Total STD</b>	<b>1,638</b>	<b>763</b>	<b>61</b>	<b>2,439</b>	<b>408</b>	<b>33</b>	<b>366</b>	<b>—</b>	<b>—</b>	<b>219</b>	<b>107</b>	<b>9</b>
<b>Total IRB and STD</b>	<b>2,591</b>	<b>980</b>	<b>78</b>	<b>3,363</b>	<b>605</b>	<b>48</b>	<b>366</b>	<b>—</b>	<b>—</b>	<b>248</b>	<b>127</b>	<b>10</b>

## Credit risk

### CR2: IRB and STD: EAD, RWAs and MCR by CRR exposure class: NWH Group and significant subsidiaries continued

	NWB Plc				RBS plc				UBI DAC			
	EAD pre	EAD post	RWAs	MCR	EAD pre	EAD post	RWAs	MCR	EAD pre	EAD post	RWAs	MCR
	CRM	CRM			CRM	CRM			CRM	CRM		
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
<b>IRB</b>												
2018												
<b>Credit risk</b>												
Central governments and central banks	29,217	29,150	1,845	148	46	46	1	—	4,704	4,704	471	38
Institutions	3,877	2,471	743	59	2,906	2,544	872	70	737	737	185	15
Corporates	55,451	49,521	27,758	2,221	40,155	36,660	19,116	1,529	5,095	4,985	3,258	260
<i>Specialised lending</i>	5,299	5,289	3,623	290	8,001	7,859	5,410	433	1,098	1,098	791	63
<i>SME</i>	9,893	9,508	5,053	404	4,872	4,712	2,543	203	1,155	1,152	551	44
<i>Other corporate</i>	40,259	34,724	19,082	1,527	27,282	24,089	11,163	893	2,842	2,735	1,916	153
Retail	149,764	149,764	20,505	1,640	34,892	34,892	5,483	439	16,184	16,184	8,342	667
<i>Secured by real estate property</i>												
- <i>SME</i>	1,017	1,017	377	30	307	307	112	9	—	—	—	—
- <i>non-SME</i>	121,144	121,144	8,727	698	27,089	27,089	1,958	157	15,034	15,034	7,609	608
<i>Qualifying revolving</i>	17,441	17,441	4,225	338	4,481	4,481	1,350	108	354	354	248	20
<i>Other retail</i>												
- <i>SME</i>	5,641	5,641	2,241	179	1,604	1,601	627	50	594	594	334	27
- <i>non-SME</i>	4,521	4,521	4,935	395	1,414	1,414	1,436	115	202	202	151	12
Securitisation	5,988	5,988	1,230	98	1,665	1,665	319	26	—	—	—	—
Non-credit obligation assets	3,089	3,089	2,498	200	4	4	4	—	444	444	187	15
<b>Total IRB</b>	<b>247,386</b>	<b>239,983</b>	<b>54,579</b>	<b>4,366</b>	<b>79,668</b>	<b>75,811</b>	<b>25,795</b>	<b>2,064</b>	<b>27,164</b>	<b>27,054</b>	<b>12,443</b>	<b>995</b>
<b>STD</b>												
Central governments and central banks	58,050	58,050	2,098	168	21,289	21,289	8	1	—	—	1	—
Regional governments and local authorities	14	14	3	—	2	2	—	—	2	2	2	—
Multilateral development banks	—	—	—	—	—	—	—	—	—	—	—	—
Institutions	28,737	28,737	39	3	8,966	8,966	797	64	736	736	147	12
Corporates	2,695	2,504	2,466	198	929	864	831	66	682	682	660	52
Retail	491	491	306	24	209	204	130	10	15	15	8	1
<i>Secured by mortgages on immovable property</i>												
- residential	18	18	14	1	746	746	312	25	87	87	87	7
- commercial	167	167	168	13	311	288	301	24	8	8	8	1
Exposures in default	26	26	38	3	86	86	114	9	11	11	17	1
Equity exposures	1,375	1,375	3,766	302	55	55	101	8	3	3	8	1
Other exposures	353	353	71	6	1,058	1,058	294	24	32	32	6	1
<b>Total STD</b>	<b>91,926</b>	<b>91,735</b>	<b>8,969</b>	<b>718</b>	<b>33,651</b>	<b>33,558</b>	<b>2,888</b>	<b>231</b>	<b>1,576</b>	<b>1,576</b>	<b>944</b>	<b>76</b>
<b>Total IRB and STD</b>	<b>339,312</b>	<b>331,718</b>	<b>63,548</b>	<b>5,084</b>	<b>113,319</b>	<b>109,369</b>	<b>28,683</b>	<b>2,295</b>	<b>28,740</b>	<b>28,630</b>	<b>13,387</b>	<b>1,071</b>

## Credit risk

### CR2: IRB and STD: EAD, RWAs and MCR by CRR exposure class: NWH Group and significant subsidiaries continued

Counterparty credit risk	NWB Plc			RBS plc			UBI DAC		
	EAD post CRM £m	RWAs £m	MCR £m	EAD post CRM £m	RWAs £m	MCR £m	EAD post CRM £m	RWAs £m	MCR £m
2018									
<b>IRB</b>									
Central governments and central banks	160	5	—	—	—	—	—	—	—
Institutions	601	189	15	—	—	—	2	1	—
Corporates	47	23	2	—	—	—	47	36	3
<i>Specialised lending</i>	10	7	1	—	—	—	35	27	2
<i>SME</i>	—	—	—	—	—	—	1	1	—
<i>Other corporate</i>	37	16	1	—	—	—	11	8	1
<b>Total IRB</b>	<b>808</b>	<b>217</b>	<b>17</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>49</b>	<b>37</b>	<b>3</b>
<b>STD</b>									
Central governments and central banks	523	—	—	—	—	—	—	—	—
Institutions	2,029	93	8	114	—	—	178	85	7
Corporates	15	15	1	—	—	—	—	—	—
<b>Total STD</b>	<b>2,567</b>	<b>108</b>	<b>9</b>	<b>114</b>	<b>—</b>	<b>—</b>	<b>178</b>	<b>85</b>	<b>7</b>
<b>Total IRB and STD</b>	<b>3,375</b>	<b>325</b>	<b>26</b>	<b>114</b>	<b>—</b>	<b>—</b>	<b>227</b>	<b>122</b>	<b>10</b>

#### Key points

- NWB Plc** – Credit risk exposures decreased during the year primarily due to reductions in Sovereigns, mainly reflecting a fall in cash placements with central banks and a revision of the treatment of nostro exposures. There was an offsetting increase due to lending growth in UK Personal Banking, which also resulted in an increase in RWAs.
- RBS plc** – The EAD post CRM and RWA decreases were mainly driven by repayments and reduced limits in Commercial Banking.
- UBI DAC** – The EAD post CRM decreased largely due to reductions in the UBI DAC mortgage portfolio. A further reduction in RWAs was attributed to PD and LGD updates including the impact of PD calibration for mortgages.

## Credit risk

### EU CRE\_1: IRB Models: Credit RWA calculation approach by exposure class

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. RBS Group has been granted permission by the PRA and other European regulators to use the AIRB approach to calculate RWAs for the majority of its credit and counterparty credit risk exposures.

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

The IRB permission allows RBS 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 RBS Group's internal model method permission – refer to page 52.

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.

RBS 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.
- On a transitional basis: pending an application by RBS Group to its regulators to transition to the IRB approach in accordance with its strategy. In addition, the CRR also contains specific discretions for regulators to permit the use of the standardised approach on a permanent basis. RBS Group has these permissions for areas such as UK sovereign exposures and inter-Group exposures.

## Credit risk

### EU CRE\_1: IRB models: Credit RWA calculation approach by exposure class continued

The table below shows total credit risk EAD and RWAs (including counterparty credit risk) under both IRB and STD approaches, on an IRB exposure class basis, as well as the percentage split between the two approaches.

Exposure class	EAD post CRM							RWAs						
	Total credit and counterparty credit risk £m	STD						Total credit and counterparty credit risk £m	STD					
		% of total	AIRB £m	Permanent portfolios % of total	£m	Portfolios subject to an IRB rollout plan % of total	£m		% of total	AIRB £m	Permanent portfolios % of total	£m	Portfolios subject to an IRB rollout plan % of total	£m
2019														
Central governments and central banks	99,018	35	34,731	65	64,287	—	—	3,544	66	2,356	34	1,188	—	—
Institutions	7,788	84	6,564	16	1,224	—	—	1,868	90	1,676	10	192	—	—
Corporates	113,106	92	104,361	8	8,745	—	—	60,664	86	52,131	14	8,533	—	—
<i>Specialised lending</i>	15,746	88	13,890	12	1,856	—	—	11,301	84	9,445	16	1,856	—	—
SME	21,475	93	20,022	7	1,453	—	—	9,878	87	8,571	13	1,307	—	—
Other	75,885	93	70,449	7	5,436	—	—	39,485	86	34,115	14	5,370	—	—
Retail	228,540	94	215,130	6	13,410	—	—	42,694	87	37,150	13	5,544	—	—
<i>Secured by real estate property</i>														
- SME	1,356	95	1,291	5	65	—	—	547	96	523	4	24	—	—
- non-SME	185,610	94	174,529	6	11,081	—	—	23,076	82	18,939	18	4,137	—	—
Qualifying revolving	23,311	99	23,138	1	173	—	—	6,130	98	5,991	2	139	—	—
<i>Other retail</i>														
- SME	10,010	89	8,940	11	1,070	—	—	4,501	86	3,856	14	645	—	—
- Non-SME	8,253	88	7,232	12	1,021	—	—	8,440	93	7,841	7	599	—	—
Equities	25	—	—	100	25	—	—	27	—	—	100	27	—	—
Non-credit obligation assets	6,978	84	5,847	16	1,131	—	—	4,654	89	4,152	11	502	—	—
<b>Total</b>	<b>455,455</b>	<b>81</b>	<b>366,633</b>	<b>20</b>	<b>88,822</b>	<b>—</b>	<b>—</b>	<b>113,451</b>	<b>86</b>	<b>97,465</b>	<b>14</b>	<b>15,986</b>	<b>—</b>	<b>—</b>

## Credit risk

### EU CRE: Qualitative disclosures relating to IRB models (credit and counterparty risk)

#### Advanced IRB models

RBS 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.

RBS 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 permit the use of expert judgement overrides, which are subject to Credit Risk approval.

#### Retail IRB models

Table EU CRE\_2a presents an overview of the Retail IRB models used to calculate RWAs for UK and Republic of Ireland Retail customers and small business brands. Most Retail models are statistical models developed using logistic or linear regression techniques.

#### 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.
- RBS 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 point-in-time by design, meaning they predict the probability of default under current economic conditions. 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 RBS Group. All Retail PD models produce both a best estimate measure, used for portfolio reporting and forecasting, and a downturn estimate, which is an input to RWA calculations. The downturn estimate is designed to consider normal volatility in actual default rates and is floored at 0.03%, as mandated by regulation.
- To ensure that the Retail PD models remain point-in-time, they are calibrated regularly using observed default data covering the most recent performance period for the underlying portfolio.
- 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 RBS 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.



## Credit risk

### EU CRE\_2a: Overview of Retail IRB models

Portfolio	RWAs (£m)	Model type	Number of models	IRB exposure class	IRB model segmentation	Model characteristics
Mortgages	18,939	PD	4	Retail – Secured by real estate	Separate models are in place for the United Kingdom and Republic of Ireland. Within the United Kingdom, there are separate models for standard and non-standard products.	Key United Kingdom model drivers include the internal behaviour score of the related current account and loan-to-value (LTV).
		LGD	2	SME		For United Kingdom portfolios, 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	Retail – Secured by real estate non-SME		EAD estimate is determined by account limit.
Personal unsecured loans and current accounts	10,201	PD	3	Retail – Other non-SME	Product level PD and EAD models are in place, with loans common across all regions and current account models split combined across the United Kingdom and Republic of Ireland. LGD models are combined across products and split across the United Kingdom and Republic of Ireland.	Model estimates are mainly based on internal behavioural data, with some also using external credit bureau data.
		LGD	2			Models estimate the probability of loss on a defaulted account, which is converted into an LGD estimate.
		EAD	2	Retail – Qualifying revolving		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 limit.
Small business loans and current accounts	4,277	PD	2	Retail – Other SME	For PD and EAD, separate models are in place for loans and current accounts, common across all regions. LGD models are split across the United Kingdom and Republic of Ireland.	Model estimates are mainly based on internal behaviour score.
		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	3,439	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 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	328	PD	1	Retail – Other SME	PD, EAD and LGD models developed for use within the UK Lombard brand.	Statistical 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	Retail – Other non-SME		EAD for leasing is the present value of lease payments per regulatory requirements.

## Credit risk

### Wholesale IRB models

Table EU CRE\_2b presents the Wholesale IRB models RBS Group uses to calculate RWAs.

### Probability of default/customer credit grade models

- As part of the credit assessment process, RBS Group assigns each customer a credit grade reflecting the customer's PD. RBS Group maintains and uses a number of credit grading models which consider risk characteristics relevant to the customer, incorporating both quantitative and qualitative inputs. RBS 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 and 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 investment funds and quasi-government entities are considered less material models.
- The majority of the PD model suite discriminates risk levels well and is stable; current observed default rates are generally lower than model estimates. This reflects prudent calibrations and the combined effect of the models being largely through-the-cycle in nature and above-average credit cycle conditions experienced throughout 2019 for the majority of sectors and regions.
- PDs are floored at 0.03% (except for the sovereign asset 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.
- 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.

## Credit risk

### EU CRE\_2b: Overview of Wholesale IRB models

Portfolio	RWAs (£m)	Model type	Number of models	IRB exposure class	IRB model segmentation	Model characteristics
Sovereign and quasi-government entities	5,698	PD	4	Central governments and central banks	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, housing association and UK university: expert-driven scorecard models using qualitative and in some cases quantitative inputs.
		LGD	2	Institutions Corporate - Other		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	3,079	PD	7	Central governments and central banks Institutions Corporate – Other	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. Broker dealer: a mix of external rating replication and calibration to internal 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	Equity IRB		Bank models and a single NBF1 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	24,588	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, US & Republic of Ireland) with turnover between £50 million and £500 million, and that are not externally rated.  LGD: single global LGD model is used for large and mid-large corporate 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	1			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. A 35% LGD floor is applied for certain countries due to scarcity of loss data.

## Credit risk

### EU CRE\_2b: Overview of Wholesale IRB models continued

Portfolio	RWAs (£m)	Model type	Number of models	IRB exposure class	IRB model segmentation	Model characteristics
Corporations : Turnover below £50 million	13,277	PD	1	Corporates – SME	United Kingdom and Republic of Ireland 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. Separate long-run average default rate calibrations exist for Great Britain and Ulster Bank customers, based on internal and external data and taking into account differences between industry and sectors.
		LGD	4	Corporate – Other Equity IRB		For the UK portfolio, a statistical model is used based on long-run internal loss outcomes with key model drivers being security, together with customer and facility attributes.  For the RoI portfolio, LGD is based on a framework which uses an unsecured recovery rate model and a suite of secured recovery rate models. The framework accounts for the value of collateral linked to each facility, together with costs and haircuts associated with the recovery of collateral.
Shipping	16	PD	1	Corporates – Specialised lending	Global PD and LGD model for ship finance customers meeting the CRR specialised lending definition.	Expert-driven scorecard model based on a mix of qualitative and quantitative inputs.
		LGD	1			Simple model based on benchmarks (which are different for different ship types) calibrated to internal loss data.
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.

## Credit risk

### IRB modelling 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 framework that establishes responsibilities and minimum requirements applying to each stage of the modelling lifecycle:
  - Data sourcing and preparation.
  - Model specification.
  - Model approval.
  - Model implementation.
  - Model monitoring and performance assessment.
- Detailed standards that define the approaches and activities undertaken at each of these stages.
- Defined structures and individually delegated authorities that approve or oversee each stage.
- Model development teams that are part of the independent risk management function, separate from the functions responsible for originating or renewing exposures.
- An independent Model Risk function that is organisationally separate from the model development teams and sets validation standards.
- All activities are independently reviewed by the dedicated Independent Model Validation team that also undertake a formal regular validation for each model.

The framework aims to ensure RBS Group model risk is managed appropriately and that the approaches deployed continue to meet 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 is 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. Interim adjustments may be applied whilst the remediation activity is undertaken if management believe the underperformance may lead to insufficient capital requirements for the portfolio.

Because IRB models are used in the calculation of credit risk regulatory capital requirements, once they have been approved through internal governance, they need to follow the appropriate regulatory approval or notification process before being implemented.

### 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.

Based on the review findings, the relevant model approver will consider whether a model or model change can be approved and whether any conditions need to be imposed, including those relating to the remediation of material issues raised through the review process.

Model Risk Management sets standards for all independent reviews and conducts the majority of them. They also provide technical oversight of model performance monitoring.

### Internal Audit

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.

### EAD calculation methods for counterparty credit risk

For counterparty credit risk, RWAs are calculated under the IRB or standardised approaches. The PD and LGD values for the IRB approach are estimated from the above wholesale IRB models, while EAD estimates are calculated using one of the following methods.

#### Internal model method (IMM)

RBS Group has permission from the PRA to use an internal model for calculating EADs for certain derivatives.

The IMM calculates EAD as the product of effective expected positive exposure (EEPE) or stressed EEPE, whichever is the higher, and the regulatory prescribed alpha multiplier. The alpha multiplier, which was 1.4 for both 2019 and for 2018, uplifts the EAD. It is indicative of the robustness of an institution's approach and governance framework for managing counterparty credit risk.

In accordance with the CRR requirements, the EAD for over-the-counter derivatives is adjusted for wrong-way risk (for more information on wrong-way risks, refer to page 80), collateral and an increased margin period of risk, when appropriate.

#### Mark-to-market (mtm) method

For derivatives that fall outside the IMM and for exchange-traded derivatives where RBS Group does not have permission to use the IMM to calculate EAD for regulatory capital purposes, it calculates counterparty credit risk exposures using the mtm method. Exposure is calculated as the positive mtm value of outstanding contracts plus a potential future exposure. Exposure is adjusted for collateral, including any haircuts applied to collateral in accordance with regulatory requirements.

#### Financial collateral comprehensive method

RBS Group uses the financial collateral comprehensive method for calculating EAD on securities financing transactions. Exposure is adjusted for collateral, after volatility adjustments are applied.

## Credit risk

### CR9: IRB: IRB models back-testing Probability of default and exposure at default

Wholesale credit grading models are hybrid models. They exhibit a degree of cyclical that reflects broader credit conditions, but not the full cyclical of a more point-in-time methodology. In contrast, retail PD models are point-in-time models and estimate the probability of default under current economic conditions, resulting in more variable estimates.

Refer to EU CRE\_2: IRB models for more details on the methodology and characteristics of the models.

### CR9\_a: IRB: IRB models - Estimated probability of default, actual default rates and EAD outcomes versus estimates

The table below compares, across a two-year period, the PD estimates for the current year with the actual realised default rate across the year.

- For wholesale exposures, the estimate shown is the averaged obligor PD. For retail exposures, it is the averaged account-level PD.

- For wholesale exposures, estimated PDs are through-the-cycle whilst actual PDs are point-in-time.
- Exposures in default at the end of the previous year are excluded from the PD estimates because their probability of default is 100%.
- The default rate is the number of defaults observed during the year, divided by the number of obligors or accounts at the end of the previous year.
- The EAD ratio represents the total EAD estimated at the end of the previous year, against the total actual exposure at the time of default, for the defaulted exposures.

	PD				EAD	
	Estimate at	Actual	Estimate at	Actual	Estimated to	Estimated to
	2018	2019	2017	2018	actual ratio	actual ratio
	%	%	%	%	2019	2018
					%	%
Retail						
- SME	2.15	1.92	2.32	1.89	111	114
- Secured by real estate non-SME	0.82	0.54	0.77	0.58	102	103
- Qualifying revolving	1.28	1.13	1.33	1.17	115	115
- Other	4.02	4.33	3.79	4.16	109	109
Central governments and central banks	0.08	—	n/a	n/a	—	n/a
Institutions	0.54	—	n/a	n/a	—	n/a
Corporates	1.98	1.06	n/a	n/a	110	n/a
Equities	1.25	—	n/a	n/a	—	n/a

#### Key points

- The actual default experience in 2019 for all retail asset classes was below estimated outcomes except for retail - other.
- Improved economic conditions in the Republic of Ireland caused actual default rates for retail exposures secured by real estate non-SME to fall, while the estimated PDs, calibrated to historical experience in the UK and Ireland rose slightly.
- The underestimation in the retail - other asset class decreased compared to the previous year. This class consisted mainly of fixed-rate personal loans in the UK.

#### Back-testing of PD by exposure band

To enhance disclosure on the PD analysis, the two tables below provide a further breakdown by exposure class and asset quality band: Table EU CR9\_a\_1 for retail classes and Table EU CR9\_a\_2 for wholesale classes.

The EU CR9\_a tables include the following:

- The PDs estimated for 2019 as at the end of 2018, on both an EAD-weighted and obligor-weighted basis.
- The actual default rates for 2019 and the average annual default rates across the five-year period covering 2015-2019 – both on an obligor-weighted basis.
- The number of obligors at 2019 and 2018 year-ends respectively. These numbers differ slightly from the obligor numbers in EU CR6 and EU CCR4 due to the application of specific modelling filters or due to scope differences.
- The total default count in 2019.
- number of clients defaulting in 2019 that did not have committed facilities granted at the end of 2018. These newly-funded clients are not included in the actual 2019 default rates.

## Credit risk

### CR9\_a\_1: IRB models – back-testing of PD by exposure class – Retail – total credit risk

In the table below, defaults are recognised at an individual account level for the retail classes. Obligors therefore relate to accounts in the table and the two terms are equivalent in this context.

Exposure class	AQ band	PD range	PD estimate at		Defaulted rates actual		Number of obligors		Number of defaulted obligors	
			EAD weighted 2018 %	Obligor weighted 2018 %	Obligor weighted 2019 %	Obligor weighted 2015-2019 %	2018	2019	All 2019	of which: newly funded obligors during the year 2019
2019										
Retail - SME	AQ01	0% to 0.034%	—	—	—	0.09%	1	415	—	—
Retail - SME	AQ02	0.034% to 0.048%	0.05%	0.05%	—	—	389	2,248	—	—
Retail - SME	AQ03	0.048% to 0.095%	0.07%	0.08%	0.05%	0.05%	39,080	27,303	20	—
Retail - SME	AQ04	0.095% to 0.381%	0.16%	0.17%	0.16%	0.19%	438,121	433,705	707	—
Retail - SME	AQ05	0.381% to 1.076%	0.74%	0.68%	0.61%	0.59%	311,848	273,817	1,913	19
Retail - SME	AQ06	1.076% to 2.153%	1.46%	1.58%	1.54%	1.43%	220,391	196,841	3,523	122
Retail - SME	AQ07	2.153% to 6.089%	3.29%	3.43%	2.70%	2.79%	166,566	180,296	5,095	605
Retail - SME	AQ08	6.089% to 17.222%	9.89%	9.70%	10.06%	9.43%	54,133	56,418	5,574	130
Retail - SME	AQ09	17.222% to 100%	31.86%	33.74%	28.52%	29.29%	28,635	28,211	8,233	66
Retail - SME	AQ10	100%	—	—	—	—	26,992	25,013	—	—
<b>Total - Retail - SME</b>			<b>2.73%</b>	<b>2.15%</b>	<b>1.92%</b>	<b>1.97%</b>	<b>1,286,155</b>	<b>1,224,267</b>	<b>25,065</b>	<b>942</b>
Retail - Secured by real estate non-SME	AQ01	0% to 0.034%	0.03%	0.03%	—	0.00%	184	12,848	—	—
Retail - Secured by real estate non-SME	AQ02	0.034% to 0.048%	0.04%	0.04%	0.01%	0.07%	14,612	4,589	1	—
Retail - Secured by real estate non-SME	AQ03	0.048% to 0.095%	0.08%	0.08%	0.10%	0.07%	57,295	34,186	62	2
Retail - Secured by real estate non-SME	AQ04	0.095% to 0.381%	0.22%	0.21%	0.16%	0.15%	769,844	730,997	1,268	18
Retail - Secured by real estate non-SME	AQ05	0.381% to 1.076%	0.56%	0.57%	0.32%	0.37%	341,769	431,598	1,115	20
Retail - Secured by real estate non-SME	AQ06	1.076% to 2.153%	1.52%	1.53%	0.87%	0.69%	18,152	18,732	159	1
Retail - Secured by real estate non-SME	AQ07	2.153% to 6.089%	3.79%	3.75%	2.62%	2.54%	9,776	9,758	257	1
Retail - Secured by real estate non-SME	AQ08	6.089% to 17.222%	10.65%	10.74%	8.66%	10.55%	12,270	11,264	1,065	2
Retail - Secured by real estate non-SME	AQ09	17.222% to 100%	28.35%	28.31%	17.62%	17.74%	15,984	15,073	2,834	17
Retail - Secured by real estate non-SME	AQ10	100%	—	—	—	—	25,271	21,898	—	—
<b>Total - Retail - Secured by real estate non-SME</b>			<b>0.81%</b>	<b>0.82%</b>	<b>0.54%</b>	<b>0.64%</b>	<b>1,265,157</b>	<b>1,290,943</b>	<b>6,761</b>	<b>61</b>

## Credit risk

### CR9\_a\_1: IRB models – back-testing of PD by exposure class – Retail – total credit risk continued

Exposure class	AQ band	PD range	PD estimate at		Default rates actual		Number of obligors		Number of defaulted obligors	
			EAD weighted 2018 %	Obligor weighted 2018 %	Obligor weighted 2019 %	Obligor weighted 2015-2019 %	2018	2019	All 2019	of which: newly funded obligors during the year 2019
2019										
Retail - Qualifying revolving	AQ01	0% to 0.034%	0.03%	0.03%	0.02%	0.02%	4,794,295	5,395,832	931	8
Retail - Qualifying revolving	AQ02	0.034% to 0.048%	0.04%	0.04%	0.04%	0.05%	1,043,501	1,345,379	513	56
Retail - Qualifying revolving	AQ03	0.048% to 0.095%	0.06%	0.06%	0.07%	0.08%	1,229,033	622,010	806	4
Retail - Qualifying revolving	AQ04	0.095% to 0.381%	0.23%	0.23%	0.18%	0.20%	2,179,987	2,744,704	3,954	56
Retail - Qualifying revolving	AQ05	0.381% to 1.076%	0.62%	0.60%	0.52%	0.50%	4,226,301	3,681,976	22,149	196
Retail - Qualifying revolving	AQ06	1.076% to 2.153%	1.52%	1.50%	1.49%	1.45%	1,809,880	1,778,732	27,237	283
Retail - Qualifying revolving	AQ07	2.153% to 6.089%	3.68%	3.61%	2.80%	2.84%	1,688,421	1,486,732	52,293	5,085
Retail - Qualifying revolving	AQ08	6.089% to 17.222%	9.27%	9.66%	8.61%	7.85%	501,413	463,548	44,670	1,486
Retail - Qualifying revolving	AQ09	17.222% to 100%	34.86%	32.71%	31.88%	28.32%	169,987	149,404	55,915	1,715
Retail - Qualifying revolving	AQ10	100%	—	—	—	—	390,132	397,125	—	—
<b>Total - Retail - Qualifying revolving</b>			<b>1.42%</b>	<b>1.28%</b>	<b>1.13%</b>	<b>1.21%</b>	<b>18,032,950</b>	<b>18,065,442</b>	<b>208,468</b>	<b>8,889</b>
Retail - Other	AQ01	0% to 0.034%	—	—	—	—	—	—	—	—
Retail - Other	AQ02	0.034% to 0.048%	—	—	—	—	—	—	—	—
Retail - Other	AQ03	0.048% to 0.095%	—	—	—	—	—	—	—	—
Retail - Other	AQ04	0.095% to 0.381%	0.28%	0.27%	0.26%	0.58%	8,075	7,383	37	16
Retail - Other	AQ05	0.381% to 1.076%	0.77%	0.77%	0.80%	0.70%	348,056	350,927	3,288	499
Retail - Other	AQ06	1.076% to 2.153%	1.46%	1.52%	1.96%	1.83%	170,719	160,400	3,878	540
Retail - Other	AQ07	2.153% to 6.089%	3.66%	3.80%	4.50%	3.82%	138,134	198,113	7,696	1,478
Retail - Other	AQ08	6.089% to 17.222%	9.52%	9.68%	9.61%	9.72%	65,125	89,227	7,485	1,224
Retail - Other	AQ09	17.222% to 100%	39.28%	41.33%	42.98%	44.37%	33,614	38,784	14,867	419
Retail - Other	AQ10	100%	—	—	—	—	57,836	68,570	—	—
<b>Total - Retail - Other</b>			<b>3.90%</b>	<b>4.02%</b>	<b>4.33%</b>	<b>3.68%</b>	<b>821,559</b>	<b>913,404</b>	<b>37,251</b>	<b>4,176</b>



## Credit risk

### CR9\_a\_2: IRB models – back-testing of PD by exposure class – Wholesale – total credit risk

Exposure class	AQ band	PD range	Equivalent S&P Rating	PD estimate at		Default rates actual		Number of obligors		Number of defaulted obligors	
				EAD weighted 2018 %	Obligor weighted 2018 %	Obligor weighted 2019 %	Obligor weighted 2015-2019 %	2018	2019	All 2019	of which: newly funded obligors during the year 2019
2019											
Central governments and central banks	AQ01	0% to 0.034%	AAA to AA	0.01%	0.02%	—	n/a	37	34	—	—
Central governments and central banks	AQ02	0.034% to 0.048%	AA-	0.04%	0.04%	—	n/a	2	2	—	—
Central governments and central banks	AQ03	0.048% to 0.095%	A+ to A-	0.06%	0.06%	—	n/a	7	5	—	—
Central governments and central banks	AQ04	0.095% to 0.381%	BBB+ to BBB-	0.23%	0.23%	—	n/a	1	1	—	—
Central governments and central banks	AQ05	0.381% to 1.076%	BB+ to BB-	—	—	—	n/a	—	—	—	—
Central governments and central banks	AQ06	1.076% to 2.153%	B+	—	—	—	n/a	—	—	—	—
Central governments and central banks	AQ07	2.153% to 6.089%	B to B-	2.50%	2.50%	—	n/a	1	—	—	—
Central governments and central banks	AQ08	6.089% to 17.222%	CCC+	—	—	—	n/a	—	—	—	—
Central governments and central banks	AQ09	17.222% to 100%	CCC to CC	—	—	—	n/a	—	—	—	—
Central governments and central banks	AQ10	100%	D	n/a	n/a	n/a	n/a	—	—	—	—
Total - Central governments and central banks				0.01%	0.08%	—	n/a	48	42	—	—
Institutions	AQ01	0% to 0.034%	AAA to AA	0.03%	0.03%	—	n/a	61	52	—	—
Institutions	AQ02	0.034% to 0.048%	AA-	0.04%	0.04%	—	n/a	64	62	—	—
Institutions	AQ03	0.048% to 0.095%	A+ to A-	0.07%	0.07%	—	n/a	72	69	—	—
Institutions	AQ04	0.095% to 0.381%	BBB+ to BBB-	0.14%	0.19%	—	n/a	182	161	—	—
Institutions	AQ05	0.381% to 1.076%	BB+ to BB-	0.54%	0.61%	—	n/a	54	36	—	—
Institutions	AQ06	1.076% to 2.153%	B+	1.40%	1.57%	—	n/a	18	16	—	—
Institutions	AQ07	2.153% to 6.089%	B to B-	2.78%	3.23%	—	n/a	18	12	—	—
Institutions	AQ08	6.089% to 17.222%	CCC+	14.48%	14.48%	—	n/a	2	—	—	—
Institutions	AQ09	17.222% to 100%	CCC to CC	20.77%	30.72%	—	n/a	2	3	—	—
Institutions	AQ10	100%	D	n/a	n/a	n/a	n/a	—	—	—	—
Total - Institutions				0.13%	0.54%	—	n/a	473	411	—	—

## Credit risk

### CR9\_a\_2: IRB models – back-testing of PD by exposure class – Wholesale – total credit risk continued

Exposure class	AQ band	PD range	Equivalent S&P Rating	PD estimate at		Default rates actual		Number of obligors		Number of defaulted obligors	
				EAD weighted 2018 %	Obligor weighted 2018 %	Obligor weighted 2019 %	Obligor weighted 2015-2019 %	2018	2019	All 2019	of which: newly funded obligors during the year 2019
2019											
Corporates	AQ01	0% to 0.034%	AAA to AA	0.03%	0.03%	—	n/a	373	427	—	—
Corporates	AQ02	0.034% to 0.048%	AA-	0.04%	0.04%	—	n/a	218	183	—	—
Corporates	AQ03	0.048% to 0.095%	A+ to A-	0.07%	0.07%	—	n/a	649	644	—	—
Corporates	AQ04	0.095% to 0.381%	BBB+ to BBB-	0.21%	0.26%	0.20%	n/a	6,113	5,663	12	—
Corporates	AQ05	0.381% to 1.076%	BB+ to BB-	0.67%	0.70%	0.35%	n/a	19,093	18,265	68	1
Corporates	AQ06	1.076% to 2.153%	B+	1.53%	1.53%	0.71%	n/a	16,598	15,295	120	3
Corporates	AQ07	2.153% to 6.089%	B to B-	3.25%	3.10%	1.56%	n/a	12,821	11,050	222	22
Corporates	AQ08	6.089% to 17.222%	CCC+	9.88%	10.16%	6.83%	n/a	1,912	1,685	132	2
Corporates	AQ09	17.222% to 100%	CCC to CC	25.96%	28.11%	16.34%	n/a	571	546	95	2
Corporates	AQ10	100%	D	n/a	n/a	n/a	n/a	2,529	2,100	—	—
<b>Total - Corporates</b>				<b>0.97%</b>	<b>1.98%</b>	<b>1.06%</b>	<b>n/a</b>	<b>60,877</b>	<b>55,858</b>	<b>649</b>	<b>30</b>
Equities	AQ01	0% to 0.034%	AAA to AA	—	—	—	n/a	—	—	—	—
Equities	AQ02	0.034% to 0.048%	AA-	—	—	—	n/a	—	—	—	—
Equities	AQ03	0.048% to 0.095%	A+ to A-	—	—	—	n/a	—	—	—	—
Equities	AQ04	0.095% to 0.381%	BBB+ to BBB-	—	—	—	n/a	—	—	—	—
Equities	AQ05	0.381% to 1.076%	BB+ to BB-	—	—	—	n/a	—	—	—	—
Equities	AQ06	1.076% to 2.153%	B+	1.25%	1.25%	—	n/a	1	—	—	—
Equities	AQ07	2.153% to 6.089%	B to B-	—	—	—	n/a	—	—	—	—
Equities	AQ08	6.089% to 17.222%	CCC+	—	—	—	n/a	—	—	—	—
Equities	AQ09	17.222% to 100%	CCC to CC	—	—	—	n/a	—	—	—	—
Equities	AQ10	100%	D	n/a	n/a	n/a	n/a	—	—	—	—
<b>Total - Equities</b>				<b>1.25%</b>	<b>1.25%</b>	<b>—</b>	<b>n/a</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>

## Credit risk

### Loss given default

Both estimated and actual LGDs are EAD-weighted. Corporate exposures where EAD varies more can give rise to significant movements when compared year-on-year.

More generally, differences between estimates and actuals can arise when comparing regulatory capital downturn estimates to actual outcomes that have been realised in non-downturn conditions.

### Corporates

In the corporates exposure class, the actual LGD includes all defaulted client cases that closed during the year, excluding disposal and run-off portfolios.

The estimated LGDs are the average pre-default downturn estimates for these defaults, with actual LGDs being the averaged observed outcomes, time-discounted to reflect actual workout periods.

Closure of a defaulted customer case occurs when none of the defined default criteria have been met. This may include instances where debt is repaid, fully or partially written off, or returned to the performing book.

### Retail

In the retail exposure classes, estimated LGDs relate to loss estimates on defaulted exposures over defined outcome periods, which vary by exposure class, from 36 to 72 months. These periods align with the collections and recoveries process. The actual losses included in the table below relate to the corresponding defaulted exposures, which reached the relevant outcome period during 2019.

### CR9\_b: IRB: IRB models: Back-testing of LGD by exposure class – total credit risk

IRB exposure class	2019		2018	
	LGD - estimated %	LGD - actual %	LGD - estimated %	LGD - actual %
<b>Retail</b>				
- SME	70.08	62.88	70.09	58.28
- Secured by real estate non-SME	32.90	16.80	31.31	18.48
- Qualifying revolving	80.43	70.89	75.47	69.00
- Other	78.37	72.66	81.33	75.66
<b>Corporates</b>	40.14	23.59	n/a	n/a

### Key points

- The reduction in the actual LGD of the retail – other asset class was due to a methodology change which now includes proceeds from debt sales when calculating losses.
- Data for Republic of Ireland SME losses, included for the first time in 2019, was a key contributor to the year-on-year movement in actual LGDs.
- Changes in the portfolio mix increased LGD estimates for qualifying revolving exposures.
- The reduction in actual LGD in the secured by real estate non-SME asset class was driven by improved economic conditions in the Republic of Ireland and also Ulster Bank loan sales.

## Credit risk

### Credit risk (excluding counterparty credit risk)

This section provides more detailed analysis of credit risk exposures (excluding counterparty credit risk).

### Risk profile by asset concentrations

#### EU CRB\_B: IRB & STD: Credit risk exposures by exposure class

The table below shows credit risk EAD pre and post CRM on a period end and 12 month average basis, analysed by regulatory approach and exposure class. It excludes counterparty credit risk and securitisations.

2019	EAD pre CRM		EAD post CRM	
	Period end £m	Average £m	Period end £m	Average £m
<b>IRB</b>				
Central governments and central banks	34,581	36,234	34,522	36,164
Institutions	8,261	8,149	6,299	6,221
Corporates	113,640	115,527	103,882	105,668
<i>Specialised lending</i>	<i>13,931</i>	<i>14,531</i>	<i>13,862</i>	<i>14,404</i>
<i>SME</i>	<i>20,451</i>	<i>20,924</i>	<i>20,021</i>	<i>20,430</i>
<i>Other corporate</i>	<i>79,258</i>	<i>80,072</i>	<i>69,999</i>	<i>70,834</i>
Retail	215,130	208,749	215,130	208,749
<i>Secured by real estate property</i>				
- <i>SME</i>	1,291	1,328	1,291	1,328
- <i>non-SME</i>	174,529	168,720	174,529	168,720
<i>Qualifying revolving</i>	23,138	22,696	23,138	22,696
<i>Other retail</i>				
- <i>SME</i>	8,940	9,067	8,940	9,067
- <i>non-SME</i>	7,232	6,938	7,232	6,938
Equities	—	5	—	5
Non-credit obligation assets	5,847	6,066	5,847	6,066
<b>Total IRB</b>	<b>377,459</b>	<b>374,730</b>	<b>365,680</b>	<b>362,873</b>
<b>STD</b>				
Central governments and central banks	63,983	71,529	63,983	71,523
Regional governments and local authorities	20	19	20	19
Institutions	653	585	653	585
Corporates	7,567	7,121	7,230	6,804
Retail	2,332	2,362	2,276	2,336
Secured by mortgages on immovable property				
- residential	10,909	10,636	10,909	10,635
- commercial	681	2,638	663	2,611
Exposures in default	303	319	302	318
Equity exposures	25	29	25	29
Other exposures	1,123	1,174	1,123	1,174
<b>Total STD</b>	<b>87,596</b>	<b>96,412</b>	<b>87,184</b>	<b>96,034</b>
<b>Total IRB and STD</b>	<b>465,055</b>	<b>471,142</b>	<b>452,864</b>	<b>458,907</b>

## Credit risk

### EU CRB\_C: IRB & STD: Credit risk exposures by geographic region

The table below shows credit risk EAD post CRM analysed by geography, split by regulatory approach and exposure class. It excludes counterparty credit risk and securitisations. Geographical analysis is based on country of operation of the customer.

2019	UK £m	Other RoI £m	Western Europe £m	US £m	Rest of world £m	Total £m
<b>IRB</b>						
Central governments and central banks	189	3,158	19,421	8,740	3,014	34,522
Institutions	1,225	22	1,587	3,313	152	6,299
Corporates	83,239	5,635	9,018	4,132	1,858	103,882
<i>Specialised lending</i>	<i>11,672</i>	<i>1,005</i>	<i>849</i>	<i>35</i>	<i>301</i>	<i>13,862</i>
<i>SME</i>	<i>18,480</i>	<i>1,492</i>	<i>18</i>	<i>10</i>	<i>21</i>	<i>20,021</i>
<i>Other corporate</i>	<i>53,087</i>	<i>3,138</i>	<i>8,151</i>	<i>4,087</i>	<i>1,536</i>	<i>69,999</i>
Retail	199,697	15,120	132	46	135	215,130
<i>Secured by real estate property</i>						
- SME	1,286	1	2	—	2	1,291
- non-SME	160,479	14,050	—	—	—	174,529
<i>Qualifying revolving</i>	<i>22,501</i>	<i>347</i>	<i>122</i>	<i>43</i>	<i>125</i>	<i>23,138</i>
<i>Other retail</i>						
- SME	8,402	530	3	2	3	8,940
- non-SME	7,029	192	5	1	5	7,232
Equities	—	—	—	—	—	—
Non-credit obligation assets	4,688	580	502	—	77	5,847
<b>Total IRB</b>	<b>289,038</b>	<b>24,515</b>	<b>30,660</b>	<b>16,231</b>	<b>5,236</b>	<b>365,680</b>
Proportion	80%	7%	8%	4%	1%	100%
<b>STD</b>						
Central governments and central banks	63,466	—	—	—	517	63,983
Regional governments and local authorities	19	1	—	—	—	20
Institutions	579	—	65	4	5	653
Corporates	5,399	617	513	141	560	7,230
Retail	2,138	1	66	8	63	2,276
Secured by mortgages on immovable property						
- residential	9,537	101	164	156	951	10,909
- commercial	517	33	107	3	3	663
Exposures in default	257	9	—	11	25	302
Equity exposures	—	1	6	—	18	25
Other exposures	1,053	20	50	—	—	1,123
<b>Total STD</b>	<b>82,965</b>	<b>783</b>	<b>971</b>	<b>323</b>	<b>2,142</b>	<b>87,184</b>
Proportion	96%	1%	1%	—	2%	100%
<b>Total IRB and STD</b>	<b>372,003</b>	<b>25,298</b>	<b>31,631</b>	<b>16,554</b>	<b>7,378</b>	<b>452,864</b>
Proportion	81%	6%	7%	4%	2%	100%
Of which: by significant subsidiary (excludes inter-Group exposures)						
NWB Plc	248,068	710	25,279	13,087	4,146	291,290
RBS plc	86,993	168	1,798	2,959	1,047	92,965
UBI DAC	455	24,199	2,382	199	454	27,689

## Credit risk

### EU CRB\_D: IRB& STD: Credit risk exposures by industry sector

The table below shows credit risk EAD post CRM analysed by industry, split by regulatory approach and exposure class. It excludes counterparty credit risk and securitisations. Industry analysis reflects the sector classification used by NWH Group for risk management purposes.

	Sovereign			Financial institutions			Corporates							Personal		Other	Total
	Central banks	Central governments	Other sovereign	Banks	Non-bank	SSPEs	Property	Natural resources	Transport	Manufacturing	Retail and leisure	Services	TMT	Mortgages	Other personal	Not allocated	
2019	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
<b>IRB</b>																	
Central governments and central banks	15,196	14,356	789	4,141	—	—	—	—	—	—	—	40	—	—	—	—	34,522
Institutions	—	—	477	5,761	1	—	24	—	36	—	—	—	—	—	—	—	6,299
Corporates	—	—	42	4	4,004	40	31,751	10,510	14,052	11,497	12,950	13,725	5,221	—	85	1	103,882
<i>Specialised lending</i>	—	—	14	—	(278)	—	10,972	1,954	82	289	16	589	221	—	3	—	13,862
<i>SME</i>	—	—	—	—	997	—	2,045	521	2,319	4,168	3,998	5,399	570	—	4	—	20,021
<i>Other corporate</i>	—	—	28	4	3,285	40	18,734	8,035	11,651	7,040	8,936	7,737	4,430	—	78	1	69,999
Retail	—	—	13	1	119	—	2,245	72	612	2,044	2,320	2,503	215	174,529	30,457	—	215,130
<i>Secured by real estate property</i>																	
- SME	—	—	—	—	5	—	540	5	64	166	267	218	19	—	7	—	1,291
- non-SME	—	—	—	—	—	—	—	—	—	—	—	—	—	174,529	—	—	174,529
<i>Qualifying revolving</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23,138	—	23,138
<i>Other retail</i>																	
- SME	—	—	13	1	114	—	1,705	67	548	1,878	2,053	2,284	196	—	81	—	8,940
- non-SME	—	—	—	—	—	—	—	—	—	—	—	1	—	—	7,231	—	7,232
Non-credit obligation assets	—	19	78	—	36	—	127	31	306	55	92	14	53	—	—	5,036	5,847
<b>Total IRB</b>	<b>15,196</b>	<b>14,375</b>	<b>1,399</b>	<b>9,907</b>	<b>4,160</b>	<b>40</b>	<b>34,147</b>	<b>10,613</b>	<b>15,006</b>	<b>13,596</b>	<b>15,362</b>	<b>16,282</b>	<b>5,489</b>	<b>174,529</b>	<b>30,542</b>	<b>5,037</b>	<b>365,680</b>
<b>STD</b>																	
Central governments and central banks	42,344	21,092	547	—	—	—	—	—	—	—	—	—	—	—	—	—	63,983
Regional governments and local authorities	—	—	20	—	—	—	—	—	—	—	—	—	—	—	—	—	20
Multilateral development banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Institutions	—	—	—	74	124	—	—	—	—	—	—	—	—	—	—	455	653
Corporates	—	—	—	7	432	45	2,352	158	810	575	929	975	289	10	583	65	7,230
Retail	—	—	—	86	5	—	198	47	30	222	11	173	5	48	1,451	—	2,276
<i>Secured by mortgages on immovable property</i>																	
- residential	—	—	—	10	117	5	454	—	—	31	18	18	7	9,775	474	—	10,909
- commercial	—	—	—	—	65	—	222	36	—	7	212	57	2	—	62	—	663
Exposures in default	—	—	—	—	2	—	24	12	15	16	13	9	1	115	95	—	302
Equity exposures	—	—	—	—	1	—	—	—	18	—	—	—	6	—	—	—	25
Other exposures	—	—	—	—	—	—	54	4	2	5	1	47	—	—	—	1,010	1,123
<b>Total STD</b>	<b>42,344</b>	<b>21,092</b>	<b>567</b>	<b>177</b>	<b>746</b>	<b>50</b>	<b>3,304</b>	<b>257</b>	<b>875</b>	<b>856</b>	<b>1,184</b>	<b>1,279</b>	<b>310</b>	<b>9,948</b>	<b>2,665</b>	<b>1,530</b>	<b>87,184</b>
<b>Total IRB and STD</b>	<b>57,540</b>	<b>35,467</b>	<b>1,966</b>	<b>10,084</b>	<b>4,906</b>	<b>90</b>	<b>37,451</b>	<b>10,870</b>	<b>15,881</b>	<b>14,452</b>	<b>16,546</b>	<b>17,561</b>	<b>5,799</b>	<b>184,477</b>	<b>33,207</b>	<b>6,567</b>	<b>452,864</b>

## Credit risk

### EU CRB\_E: IRB & STD: Credit risk exposures by maturity profile

The table below shows credit risk EAD post CRM analysed by residual maturity, split by regulatory approach and exposure class. It excludes counterparty credit risk and securitisations. Exposures with no stated maturity, principally equities, are reported within the >5 years band.

2019	On demand £m	<=1 year £m	>1 year £m	<=5 years £m	>5 years £m	Total £m
<b>IRB</b>						
Central governments and central banks	1,412	16,394	9,090	7,626	34,522	
Institutions	3,900	506	1,522	371	6,299	
Corporates	7,261	20,095	55,907	20,619	103,882	
<i>Specialised lending</i>	79	2,091	9,031	2,661	13,862	
<i>SME</i>	2,567	4,456	8,700	4,298	20,021	
<i>Other corporate</i>	4,615	13,548	38,176	13,660	69,999	
Retail	25,992	2,274	13,262	173,602	215,130	
<i>Secured by real estate property</i>						
- <i>SME</i>	160	95	327	709	1,291	
- <i>non-SME</i>	—	1,498	6,078	166,953	174,529	
<i>Qualifying revolving</i>	23,138	—	—	—	23,138	
<i>Other retail</i>						
- <i>SME</i>	2,691	352	1,805	4,092	8,940	
- <i>non-SME</i>	3	329	5,052	1,848	7,232	
Non-credit obligation assets	—	127	5,328	392	5,847	
<b>Total IRB</b>	<b>38,565</b>	<b>39,396</b>	<b>85,109</b>	<b>202,610</b>	<b>365,680</b>	
Proportion	11%	11%	23%	55%	100%	
<b>STD</b>						
Central governments and central banks	461	3,299	46,834	13,389	63,983	
Regional governments and local authorities	19	—	1	—	20	
Institutions	75	455	123	—	653	
Corporates	426	1,312	4,576	916	7,230	
Retail	743	149	824	560	2,276	
<i>Secured by mortgages on immovable property</i>						
- residential	13	947	3,173	6,776	10,909	
- commercial	23	84	493	63	663	
Exposures in default	43	167	59	33	302	
Items associated with particularly high risk	—	—	—	—	—	
Equity exposures	—	—	—	25	25	
Other exposures	—	22	1,060	41	1,123	
<b>Total STD</b>	<b>1,803</b>	<b>6,435</b>	<b>57,143</b>	<b>21,803</b>	<b>87,184</b>	
Proportion	2%	7%	66%	25%	100%	
<b>Total IRB and STD</b>	<b>40,368</b>	<b>45,831</b>	<b>142,252</b>	<b>224,413</b>	<b>452,864</b>	
Proportion	9%	10%	31%	50%	100%	
Of which: by significant subsidiary (excludes inter-Group exposures)						
NWB Plc	27,829	22,654	72,081	168,726	291,290	
RBS plc	8,225	6,384	48,515	29,841	92,965	
UBI DAC	2,375	4,232	5,927	15,155	27,689	

## Credit risk

### Risk profile by credit quality

#### EU CR1\_A: IRB and STD: Credit risk exposures by exposure class – Defaulted and non-defaulted split

The table below shows gross carrying values of credit risk exposures and specific credit risk adjustments (SCRA) analysed by credit quality, split by regulatory approach and exposure class. It excludes counterparty credit risk and securitisations. Gross carrying value comprises both on and off-balance sheet exposures including SCRA. The table has been prepared on an accounting basis adjusted for regulatory consolidation.

Exposure class	a		b		c		e		g	
	Gross carrying values		2019		SCRA (2)	Year-to-date Accumulated write-offs	Net value			
	Defaulted exposures (1)	Non-defaulted exposures	£m	£m				£m	£m	£m
<b>IRB</b>										
1 Central governments and central banks	—	34,733	2	—	—	34,731				
2 Institutions	—	8,353	21	—	—	8,332				
3 Corporates	2,096	140,734	1,168	378	—	141,662				
4 <i>Specialised lending</i>	453	13,886	234	177	—	14,105				
5 <i>SME</i>	670	22,344	360	74	—	22,654				
<i>Other corporate</i>	973	104,504	574	127	—	104,903				
6 Retail	3,870	219,807	2,309	383	—	221,368				
<i>Secured by real estate property</i>										
8 - <i>SME</i>	26	1,302	13	1	—	1,315				
9 - <i>non-SME</i>	2,531	172,413	926	76	—	174,018				
10 <i>Qualifying revolving</i>	606	31,315	552	187	—	31,369				
<i>Other retail</i>										
12 - <i>SME</i>	269	8,145	236	79	—	8,178				
13 - <i>non-SME</i>	438	6,632	582	40	—	6,488				
Non-credit obligation assets	—	5,035	—	—	—	5,035				
15 Total IRB	5,966	408,662	3,500	761	—	411,128				
<i>Of which: Loans</i>	5,445	272,174	3,368	732	—	274,251				
<i>Debt securities</i>	—	20,822	2	—	—	20,820				
<i>Other assets</i>	8	18,037	11	—	—	18,034				
<i>Off-balance sheet exposures</i>	513	97,629	119	29	—	98,023				
<b>STD</b>										
16 Central governments and central banks	—	64,640	4	—	—	64,636				
17 Regional governments and local authorities	—	215	—	—	—	215				
21 Institutions	—	711	—	—	—	711				
22 Corporates	103	8,954	75	9	—	8,982				
24 Retail	80	6,053	19	—	—	6,114				
<i>Secured by mortgages on immovable property:</i>										
26 - residential	175	11,831	6	1	—	12,000				
27 - commercial	11	875	2	—	—	884				
28 Exposures in default (3)	369	—	44	10	—	325				
33 Equity exposures	—	25	—	—	—	25				
34 Other exposures	—	1,010	—	—	—	1,010				
35 Total STD	369	94,314	106	10	—	94,577				
<i>Of which: Loans</i>	339	22,533	98	4	—	22,774				
<i>Debt securities</i>	—	21,062	2	—	—	21,060				
<i>Other assets</i>	1	42,610	2	—	—	42,609				
<i>Off-balance sheet exposures</i>	29	8,109	4	6	—	8,134				
37 Total: Loans	5,784	294,707	3,466	736	—	297,025				
38 Debt securities	—	41,884	4	—	—	41,880				
Other assets	9	60,647	13	—	—	60,643				
39 Off-balance sheet exposures	542	105,738	123	35	—	106,157				
36 Total IRB and STD	6,335	502,976	3,606	771	—	505,705				

#### Notes:

(1) Defaulted exposures are those with a PD of one and past due exposures of one day or more on the payment of a credit obligation.

(2) SCRA includes ECL for defaulted and non-defaulted customers.

(3) The breakdown of the standardised exposures in default is reported by the exposure class that corresponded to the exposure before default.



## Credit risk

This section contains disclosures on non-performing exposures (NPEs), forborne exposures (FBEs) and foreclosed assets in accordance with EBA guidelines issued in 2018. The aim of the newly introduced tables is to facilitate effective management of NPEs and achieve a sustainable reduction in NPEs in credit institutions' balance sheets. Previously reported templates 'EU CR1-B – Credit quality of exposures by industry or counterparty types' and 'EU CR1-C – Credit quality of exposures by geography' have been replaced with the new Template 5: Quality of non-performing exposures by geography' and 'Template 6: Credit quality of loans and advances by industry. In line with EBA guidelines, only templates mandatory for all institutions are disclosed. RBS monitors its gross non-performing loan (NPL) ratio to ensure that it is not required to disclose the additional templates for institutions with an NPL ratio above 5%. Template 9 - 'Collateral obtained by taking possession and execution processes' is not disclosed, as the value of collateral obtained by taking possession is not recognised in the Bank's balance sheet in accordance with adopted accounting standards.

### Template 1: Credit quality of forborne exposures

The table below provides a breakdown of 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.

	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
	Performing forborne	Non-performing forborne	Of which : defaulted	Of which : impaired	On performing forborne exposures	On non-performing forborne exposures			
1 Loans and advances	3,195	3,388	2,904	2,886	(74)	(958)		4,575	2,265
2 Central banks	—	—	—	—	—	—		—	—
3 General governments	—	—	—	—	—	—		—	—
4 Credit institutions	—	—	—	—	—	—		—	—
5 Other financial corporations	4	2	2	2	—	—		3	1
6 Non-financial corporations	2,034	833	706	706	(52)	(294)		1,617	399
7 Households	1,157	2,553	2,196	2,178	(22)	(664)		2,955	1,865
8 Debt Securities	—	—	—	—	—	—		—	—
9 Loan commitments given	285	34	26	26	—	—		121	14
10 Total	3,480	3,422	2,930	2,912	(74)	(958)		4,696	2,279

## Credit risk

### Template 3: Credit quality of performing and non-performing exposures by past due days

The table below provides a breakdown of performing and non-performing exposures by portfolio, exposure class and days past due buckets.

	a	b	c	d	e	f	g	h	i	j	k	l	
	Gross carrying amount/nominal amount												
	Performing exposures	Of which: Not past due or past due ≤ 30 days	Of which: Past due > 30 days ≤ 90 days	Non-performing exposures	Of which: Unlikely to pay that are not past due or are past due ≤ 90 days	Of which: Past due > 90 days ≤ 180 days	Of which: Past due > 180 days ≤ 1 year	Of which: Past due > 1 year ≤ 2 years	Of which: Past due > 2 years ≤ 5 years	Of which: Past due > 5 years ≤ 7 years	Of which: Past due > 7 years	Of which: defaulted	
1	Loans and advances	363,493	362,744	749	6,876	3,232	698	748	825	806	239	328	6,258
2	Central banks	56,922	56,922	—	—	—	—	—	—	—	—	—	—
3	General governments	3,049	3,049	—	—	—	—	—	—	—	—	—	—
4	Credit institutions	5,153	5,153	—	—	—	—	—	—	—	—	—	—
5	Other financial corporations	15,247	15,240	7	11	3	—	3	4	1	—	—	11
6	Non-financial corporations	95,121	94,869	252	2,104	1,234	120	128	229	187	69	137	1,928
7	Of which SMEs	24,563	24,511	52	887	423	49	74	108	136	41	56	827
8	Households	188,001	187,511	490	4,761	1,995	578	617	592	618	170	191	4,319
9	Debt securities	42,942	42,942	—	—	—	—	—	—	—	—	—	—
10	Central banks	—	—	—	—	—	—	—	—	—	—	—	—
11	General governments	35,406	35,406	—	—	—	—	—	—	—	—	—	—
12	Credit institutions	5,398	5,398	—	—	—	—	—	—	—	—	—	—
13	Other financial corporations	2,128	2,128	—	—	—	—	—	—	—	—	—	—
14	Non-financial corporations	10	10	—	—	—	—	—	—	—	—	—	—
15	Off-balance-sheet exposures	105,313	—	—	562	—	—	—	—	—	—	—	538
16	Central banks	—	—	—	—	—	—	—	—	—	—	—	—
17	General governments	1,607	—	—	—	—	—	—	—	—	—	—	—
18	Credit institutions	598	—	—	—	—	—	—	—	—	—	—	—
19	Other financial corporations	2,164	—	—	—	—	—	—	—	—	—	—	—
20	Non-financial corporations	57,248	—	—	241	—	—	—	—	—	—	—	234
21	Households	43,696	—	—	321	—	—	—	—	—	—	—	304
22	Total	511,748	405,686	749	7,438	3,232	698	748	825	806	239	328	6,796

Note:  
(1) The gross NPL ratio for NWH Group is 2.19% (Loans and advances classified as held for sale, cash balances at central banks and other demand deposits are excluded from this calculation).

## Credit risk

### Template 4: Performing and non-performing exposures and related provisions

The table below provides a breakdown of 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.

	a	b	c	d	e	f	g						n		o		
	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions									Collateral and financial guarantees received	
	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			On performing exposures	On non-performing exposures			
	Total	Of which stage 1	Of which stage 2	Total	Of which stage 2	Of which stage 3	Total	Of which stage 1	Of which stage 2	Total	Of which stage 2	Of which stage 3					
1	Loans and advances	363,493	337,013	26,480	6,876	654	6,212	(968)	(290)	(678)	(2,551)	(33)	(2,517)	242,680	3,765		
2	<i>Central banks</i>	56,922	56,922	—	—	—	—	(1)	(1)	—	—	—	—	—	—		
3	<i>General governments</i>	3,049	3,048	1	—	—	—	—	—	—	—	—	—	2,166	—		
4	<i>Credit institutions</i>	5,153	5,089	64	—	—	—	(1)	(1)	—	—	—	—	250	—		
5	<i>Other financial corporations</i>	15,247	15,085	162	11	—	11	(7)	(5)	(2)	(5)	—	(5)	12,696	5		
6	<i>Non-financial corporations</i>	95,121	84,145	10,976	2,104	128	1,976	(342)	(144)	(198)	(972)	(2)	(970)	58,014	896		
7	<i>Of which SMEs</i>	24,563	21,022	3,541	887	59	827	(131)	(48)	(83)	(373)	(1)	(372)	14,069	344		
8	<i>Households</i>	188,001	172,724	15,277	4,761	526	4,225	(617)	(139)	(478)	(1,574)	(31)	(1,542)	169,554	2,864		
9	Debt securities	42,942	42,933	9	—	—	—	(4)	(4)	—	—	—	—	—	—		
10	<i>Central banks</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
11	<i>General governments</i>	35,406	35,406	—	—	—	—	(2)	(2)	—	—	—	—	—	—		
12	<i>Credit institutions</i>	5,398	5,398	—	—	—	—	(1)	(1)	—	—	—	—	—	—		
13	<i>Other financial corporations</i>	2,128	2,119	9	—	—	—	(1)	(1)	—	—	—	—	—	—		
14	<i>Non-financial corporations</i>	10	10	—	—	—	—	—	—	—	—	—	—	—	—		
15	Off-balance-sheet exposures	105,313	99,872	5,441	562	21	529	(44)	(13)	(31)	(46)	—	(46)	15,040	47		
16	<i>Central banks</i>	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
17	<i>General governments</i>	1,607	1,607	—	—	—	—	—	—	—	—	—	—	359	—		
18	<i>Credit institutions</i>	598	592	6	—	—	—	—	—	—	—	—	—	2	—		
19	<i>Other financial corporations</i>	2,164	2,072	92	—	—	—	(1)	(1)	—	—	—	—	126	—		
20	<i>Non-financial corporations</i>	57,248	54,544	2,704	241	7	234	(15)	(8)	(7)	(20)	—	(20)	10,035	31		
21	<i>Households</i>	43,696	41,057	2,639	321	14	295	(28)	(4)	(24)	(26)	—	(26)	4,518	16		
22	Total	511,748	479,818	31,930	7,438	675	6,741	(1,016)	(307)	(709)	(2,597)	(33)	(2,563)	257,720	3,812		

## Credit risk

### Template 5: Quality of non-performing exposures by geography

The table below provides a breakdown of 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.

	a	b	c	d	e	f	g
	Gross carrying/ nominal amount	Of which non-performing	Of which defaulted	Of which subject to impairment	Accumulated impairment	Provisions on off-balance-sheet commitments and financial guarantees given	Accumulated negative changes in fair value due to credit risk on non- performing exposures
1 On-balance-sheet exposures	413,311	6,876	6,258	413,021	(3,523)	—	—
2 UK	357,570	4,531	3,999	357,280	(2,559)	—	—
3 RoI	22,758	2,107	2,021	22,758	(760)	—	—
4 Other Western Europe	13,021	165	165	13,021	(126)	—	—
5 US	14,513	11	11	14,513	(8)	—	—
6 Rest of the World	5,449	62	62	5,449	(70)	—	—
7 Off-balance-sheet exposures	105,875	562	538	—	—	(90)	—
8 UK	85,018	424	401	—	—	(83)	—
9 RoI	2,875	32	31	—	—	(4)	—
10 Other Western Europe	11,061	104	104	—	—	(2)	—
11 US	5,439	—	—	—	—	(1)	—
12 Rest of the World	1,482	2	2	—	—	—	—
13 Total	519,186	7,438	6,796	413,021	(3,523)	(90)	—

### Template 6: Credit quality of loans and advances by industry

Table below provides a breakdown of 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.

	a	b	c	d	e	f
	Gross carrying amount	of which non-performing	Of which defaulted	Of which loans and advances subject to impairment	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non-performing exposures
1 Agriculture, forestry and fishing	3,683	69	49	3,683	(42)	—
2 Mining and quarrying	1,204	33	33	1,204	(25)	—
3 Manufacturing	8,205	110	102	8,205	(94)	—
4 Electricity, gas, steam and air conditioning supply	3,013	17	17	3,013	(17)	—
5 Water supply	2,456	5	5	2,456	(7)	—
6 Construction	5,729	349	344	5,729	(187)	—
7 Wholesale and retail trade	14,036	272	208	14,036	(252)	—
8 Transport and storage	5,915	136	136	5,915	(110)	—
9 Accommodation and food service activities	5,115	176	146	5,115	(83)	—
10 Information and communication	3,118	14	14	3,118	(24)	—
11 Financial and insurance activities	2	—	—	2	—	—
12 Real estate activities	26,723	385	371	26,685	(215)	—
13 Professional, scientific and technical activities	5,094	79	79	5,094	(51)	—
14 Administrative and support service activities	5,467	219	218	5,467	(106)	—
15 Public administration and defense, compulsory social security	25	4	4	25	—	—
16 Education	615	9	7	615	(5)	—
17 Human health services and social work activities	4,836	201	169	4,836	(70)	—
18 Arts, entertainment and recreation	1,343	16	15	1,343	(12)	—
19 Other services	646	10	11	646	(14)	—
20 Total	97,225	2,104	1,928	97,187	(1,314)	—

## Credit risk

### EU CR2\_A: Changes in the stock of general and specific credit risk adjustments

The table below shows the drivers of movements in SCRA held against defaulted or impaired loans, debt securities and contingent liabilities.

There is no general credit risk adjustment under NWH Group's IFRS 9 framework. The table has been prepared on an accounting basis adjusted for regulatory consolidation.

	Accumulated SCRA £m
1 At 1 January 2019	2,594
2 Increases due to amounts set aside for estimated loan losses during the period	1,197
3 Decreases due to amounts reversed for estimated loan losses during the period	(342)
4 Decreases due to amounts taken against accumulated credit risk adjustments	(771)
5 Transfers between credit risk adjustments	—
6 Impact of exchange rate differences	(25)
7 Business combinations, including acquisitions and disposals of subsidiaries	—
8 Other adjustments	(90)
9 At 31 December 2019	2,563
10 Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	n/a
11 Specific credit risk adjustments directly recorded to the statement of profit or loss	n/a

### EU CR2\_B: Changes in the stock of defaulted and impaired loans and debt securities

The table below shows the drivers in movements in gross carrying value defaulted exposure held against loans and debt securities. It has been prepared on an accounting basis adjusted for regulatory consolidation.

	Gross carrying value defaulted exposure £m
At 1 January 2019	7,287
Loans and debt securities that have defaulted or impaired since the last reporting period	3,515
Returned to non-defaulted status	(1,695)
Amounts written-off	(771)
Other changes	(2,028)
At 31 December 2019	<u>6,308</u>

## Credit risk

### Risk profile by credit risk mitigation techniques

#### Recognition of credit risk mitigation in the calculation of RWAs

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 NWH 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.

Table EU CR3\_a indicates how different risk mitigants are incorporated into IRB risk parameters.

#### EU CRC: IRB and STD: Qualitative disclosures relating to credit risk mitigation

##### Credit risk mitigation

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

Risk mitigation techniques, as set out in the appropriate credit policies, are used in the management of credit portfolios across NWH 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 NWH 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. NWH 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

NWH 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 NWH Group can identify, locate, and segregate them from other assets on which it does not have a claim. NWH 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 NWH 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.
- Financial collateral – Refer to the Counterparty credit risk section on page 80.

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

The key sector where NWH Group provides asset-backed lending is commercial real estate and residential mortgages. The valuation approach is detailed below.

**Commercial real estate valuations** – NWH Group has a panel of chartered surveying firms that cover the spectrum of geography and property sectors in which NWH Group takes collateral. Suitable values for particular assets are contracted through a single service agreement to ensure consistency of quality and advice. Valuations are 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 one year old and every three years a formal independent valuation 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 assets but demands annual Red Book valuations for distressed higher-value assets.

##### Personal

NWH Group takes collateral in the form of residential property to mitigate the credit risk arising from mortgages. NWH Group values residential property during the loan underwriting process by either appraising properties individually or valuing them collectively using statistically valid models. NWH Group updates residential property values quarterly using the relevant residential property index, namely:

Region	Index used
UK	Halifax quarterly regional house price index
Northern Ireland	UK House Price Index (published by the Land Registry)
Republic of Ireland	Central Statistics Office residential property price index

##### Counterparty credit risk

NWH Group mitigates counterparty credit risk arising from both derivative transactions and repurchase agreements through collateralisation and through the use of market standard documentation, enabling netting.

Amounts owed by NWH Group to a counterparty are netted against amounts the counterparty owes NWH Group, in accordance with relevant regulatory and internal policies. However, generally, this is only done if a netting agreement is in place. A legal opinion to the effect that the agreement is enforceable in the relevant jurisdiction is also required.

Collateral may consist of either cash or securities. Additional collateral may be called should the net value of the obligations to NWH Group rise or should the value of the collateral itself fall. The majority of agreements are subject to daily collateral calls with collateral valued using internal valuation methodologies.

NWH Group restricts counterparty credit exposures by setting limits that take into account the potential adverse movement of an exposure after adjusting for the impact of netting and collateral (where applicable). For further information on credit risk mitigation, refer to Table EU CR3\_a.

## Credit risk

### EU CR3: IRB: Credit risk mitigation techniques by exposure class

The table below shows net carrying values of credit risk exposures analysed by use of different credit risk mitigation techniques, split by regulatory approach, balance sheet caption and exposure class, as required by the CRR. It excludes counterparty credit risk and securitisations.

The EBA guidelines require net carrying values to be analysed by exposure values of the secured assets, irrespective of the level of collateralisation. Unsecured exposure represents loans that have no security or collateral attached

	a	c	d	e	Total secured £m	Total £m
	Unsecured net carrying value £m	Collateral £m	Guarantees £m	Credit derivatives £m		
2019						
<b>IRB</b>						
Central governments and central banks	34,614	117	—	—	117	34,731
Institutions	6,382	1,942	8	—	1,950	8,332
Corporates	69,024	71,309	1,329	—	72,638	141,662
<i>Specialised lending</i>	(1,192)	14,917	380	—	15,297	14,105
<i>SME</i>	4,918	17,593	143	—	17,736	22,654
<i>Other corporate</i>	65,298	38,799	806	—	39,605	104,903
Retail	46,035	175,333	—	—	175,333	221,368
<i>Secured by real estate property</i>						
- <i>SME</i>	—	1,315	—	—	1,315	1,315
- <i>non-SME</i>	—	174,018	—	—	174,018	174,018
<i>Qualifying revolving</i>	31,369	—	—	—	—	31,369
<i>Other retail</i>						
- <i>SME</i>	8,178	—	—	—	—	8,178
- <i>non-SME</i>	6,488	—	—	—	—	6,488
Non-credit obligation assets	5,035	—	—	—	—	5,035
<b>Total IRB</b>	<b>161,090</b>	<b>248,701</b>	<b>1,337</b>	<b>—</b>	<b>250,038</b>	<b>411,128</b>
<i>Of which: Loans</i>	<i>54,488</i>	<i>218,915</i>	<i>848</i>	<i>—</i>	<i>219,763</i>	<i>274,251</i>
<i>Debt securities</i>	<i>20,820</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>20,820</i>
<i>Other assets</i>	<i>17,338</i>	<i>692</i>	<i>4</i>	<i>—</i>	<i>696</i>	<i>18,034</i>
<i>Off-balance sheet exposures</i>	<i>68,444</i>	<i>29,094</i>	<i>485</i>	<i>—</i>	<i>29,579</i>	<i>98,023</i>
<i>Defaulted</i>	<i>932</i>	<i>2,527</i>	<i>19</i>	<i>—</i>	<i>2,546</i>	<i>3,478</i>
<b>STD</b>						
Central governments and central banks	64,636	—	—	—	—	64,636
Regional governments and local authorities	215	—	—	—	—	215
Institutions	711	—	—	—	—	711
Corporates	8,378	529	1	—	530	8,908
Retail	5,836	207	—	—	207	6,043
<i>Secured by mortgages on immovable property</i>						
- residential	—	11,830	—	—	11,830	11,830
- commercial	—	871	3	—	874	874
Exposures in default	323	2	—	—	2	325
Equity exposures	25	—	—	—	—	25
Other exposures	1,010	—	—	—	—	1,010
<b>Total STD</b>	<b>81,134</b>	<b>13,439</b>	<b>4</b>	<b>—</b>	<b>13,443</b>	<b>94,577</b>
<i>Of which: Loans</i>	<i>10,967</i>	<i>11,807</i>	<i>—</i>	<i>—</i>	<i>11,807</i>	<i>22,774</i>
<i>Debt securities</i>	<i>21,060</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>—</i>	<i>21,060</i>
<i>Other assets</i>	<i>42,524</i>	<i>82</i>	<i>3</i>	<i>—</i>	<i>85</i>	<i>42,609</i>
<i>Off-balance sheet exposures</i>	<i>6,583</i>	<i>1,550</i>	<i>1</i>	<i>—</i>	<i>1,551</i>	<i>8,134</i>
<i>Defaulted</i>	<i>323</i>	<i>2</i>	<i>—</i>	<i>—</i>	<i>2</i>	<i>325</i>
<b>Total IRB and STD</b>	<b>242,224</b>	<b>262,140</b>	<b>1,341</b>	<b>—</b>	<b>263,481</b>	<b>505,705</b>
<b>Total: Loans</b>	<b>65,455</b>	<b>230,722</b>	<b>848</b>	<b>—</b>	<b>231,570</b>	<b>297,025</b>
Debt securities	41,880	—	—	—	—	41,880
Other assets	59,862	774	7	—	781	60,643
Off-balance sheet exposures	75,027	30,644	486	—	31,130	106,157
Defaulted	1,255	2,529	19	—	2,548	3,803

## Credit risk

### EU CR3\_a: IRB: Credit risk mitigation - incorporation within IRB parameters

	LGD	PD	EAD
Real estate (commercial and residential)	✓		
Other physical collateral	✓		
Third party guarantees	✓		
Credit derivatives	✓		
Parental guarantees (connected parties)		✓	
Financial collateral			
- trading book			✓
- non-trading book	✓		
Netting (on and off-balance sheet)			✓
Receivables	✓		
Life policies	✓		
Credit insurance	✓		

### EU CR7: IRB: Effect on the RWAs of credit derivatives used as CRM techniques

The table below illustrates the effect of credit derivatives on the calculation of IRB approach capital requirements by IRB exposure class. The table excludes counterparty credit risk and securitisations.

	2019	
	a	b
	Pre-credit derivatives RWAs £m	Actual RWAs £m
<b>Exposures under IRB</b>		
Central governments and central banks	2,353	2,353
Institutions	1,582	1,582
Corporates - SMEs	8,570	8,570
Corporates - Specialised lending	9,426	9,426
Corporates - Other	34,015	34,015
Retail - Secured by real estate SMEs	523	523
Retail - Secured by real estate non-SMEs	18,939	18,939
Retail - Qualifying revolving	5,991	5,991
Retail - Other SMEs	3,856	3,856
Retail - Other non-SMEs	7,841	7,841
Other non-credit obligation assets	4,152	4,152
<b>Total</b>	<b>97,248</b>	<b>97,248</b>



## Credit risk

### NWH Group profile by RWA calculation approach

NWH Group uses the PD/LGD slotting and standardised approaches to calculate RWAs for credit risk exposures.

### IRB approach: PD/LGD

#### EU CR6\_a: IRB: Exposures by exposure class and PD range – Retail

The table below shows the key parameters used to calculate MCR for credit risk exposures in Retail exposure classes under the IRB approach, split by PD range. It excludes exposures calculated under the supervisory slotting approach, equities under the simple risk-weight approach and non-credit assets. It also excludes counterparty credit risk and securitisations. A maturity adjustment is not a component of the IRB RWA formula for retail exposures and is therefore not reported in this table. Original on-balance sheet gross exposure includes SCRA.

In accordance with regulatory requirements, for defaulted exposures, RWAs are calculated as the difference between the LGD for an economic downturn and the best estimate LGD. This is the unexpected loss amount for which capital must be held. Retail EAD models estimate EAD directly, so CCFs are not reported in this table for retail exposure classes.

	a	b	d	e	f	g	i	l	j	k	l
	PD Range	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	RWAs	RWA density	Expected loss	IFRS 9 ECL Provisions
	%	£m	£m	£m	%		%	£m	%	£m	£m
2019											
Retail - Secured by real estate SME	0.00 to <0.15	—	55	38	0.12	4,700	60	5	14	—	—
Retail - Secured by real estate SME	0.15 to <0.25	—	—	—	—	—	—	—	—	—	—
Retail - Secured by real estate SME	0.25 to <0.50	8	11	17	0.41	1,548	51	4	25	—	—
Retail - Secured by real estate SME	0.50 to <0.75	50	2	51	0.62	1,055	41	14	27	—	—
Retail - Secured by real estate SME	0.75 to <2.50	835	41	861	1.17	12,360	42	312	36	4	1
Retail - Secured by real estate SME	2.50 to <10.0	238	11	245	4.43	3,461	43	125	51	5	2
Retail - Secured by real estate SME	10.0 to <100.00	50	1	51	25.21	802	44	41	80	6	2
Retail - Secured by real estate SME	100.00 (default)	26	—	28	100.00	538	56	22	79	14	8
<b>Total - Retail - Secured by real estate SME</b>		<b>1,207</b>	<b>121</b>	<b>1,291</b>	<b>4.79</b>	<b>24,464</b>	<b>43</b>	<b>523</b>	<b>41</b>	<b>29</b>	<b>13</b>
Retail - Secured by real estate non-SME	0.00 to <0.15	37,762	3,622	41,488	0.13	334,287	10	1,271	3	6	2
Retail - Secured by real estate non-SME	0.15 to <0.25	7,103	138	7,217	0.16	71,084	18	457	6	2	4
Retail - Secured by real estate non-SME	0.25 to <0.50	66,239	10,045	75,486	0.32	569,376	11	4,937	7	28	18
Retail - Secured by real estate non-SME	0.50 to <0.75	35,455	102	35,687	0.59	251,623	14	4,934	14	34	22
Retail - Secured by real estate non-SME	0.75 to <2.50	7,770	106	7,936	1.15	58,866	14	1,615	20	13	14
Retail - Secured by real estate non-SME	2.50 to <10.0	1,599	18	1,622	6.03	13,579	12	752	46	13	17
Retail - Secured by real estate non-SME	10.0 to <100.00	2,449	5	2,472	26.86	20,641	15	2,201	89	102	69
Retail - Secured by real estate non-SME	100.00 (default)	2,522	9	2,621	100.00	21,898	24	2,772	106	418	780
<b>Total - Retail - Secured by real estate non-SME</b>		<b>160,899</b>	<b>14,045</b>	<b>174,529</b>	<b>2.29</b>	<b>1,341,354</b>	<b>12</b>	<b>18,939</b>	<b>11</b>	<b>616</b>	<b>926</b>
Retail - Qualifying revolving	0.00 to <0.15	48	7,348	10,839	0.04	8,298,308	53	179	2	3	3
Retail - Qualifying revolving	0.15 to <0.25	269	461	751	0.23	441,969	66	63	8	1	2
Retail - Qualifying revolving	0.25 to <0.50	901	7,088	2,851	0.37	2,613,442	65	347	12	7	12
Retail - Qualifying revolving	0.50 to <0.75	429	4,998	1,609	0.65	1,676,653	67	310	19	7	12
Retail - Qualifying revolving	0.75 to <2.50	1,698	4,884	3,418	1.41	2,735,188	70	1,245	36	34	48
Retail - Qualifying revolving	2.50 to <10.0	2,030	763	2,857	4.74	1,606,319	74	2,597	91	101	132
Retail - Qualifying revolving	10.0 to <100.00	346	51	469	22.36	296,434	74	915	195	76	81
Retail - Qualifying revolving	100.00 (default)	341	265	344	100.00	397,125	86	335	97	268	262
<b>Total - Retail - Qualifying revolving</b>		<b>6,062</b>	<b>25,858</b>	<b>23,138</b>	<b>2.85</b>	<b>18,065,438</b>	<b>62</b>	<b>5,991</b>	<b>26</b>	<b>497</b>	<b>552</b>

## Credit risk

### CR6\_a: IRB: Exposures by exposure class and PD range – Retail continued

	a	b	d	e	f	g	i	j	k	l	
	PD Range %	Original on-balance sheet gross exposure £m	Off-balance sheet exposures pre CCF £m	EAD post CRM and post CCF £m	Average PD %	Number of obligors	Average LGD %	RWAs £m	RWA density %	Expected loss £m	IFRS 9 ECL Provisions £m
2019											
Retail - Other SME	0.00 to <0.15	—	639	740	0.12	293,486	62	105	14	1	1
Retail - Other SME	0.15 to <0.25	—	—	—	—	—	—	—	—	—	—
Retail - Other SME	0.25 to <0.50	166	186	498	0.35	234,539	55	125	25	1	1
Retail - Other SME	0.50 to <0.75	576	35	675	0.63	88,638	44	196	29	2	1
Retail - Other SME	0.75 to <2.50	4,223	401	4,716	1.29	336,524	46	1,972	42	30	14
Retail - Other SME	2.50 to <10.0	1,505	98	1,695	4.22	166,960	47	939	55	35	16
Retail - Other SME	10.0 to <100.00	298	17	337	23.47	50,839	56	334	99	44	26
Retail - Other SME	100.00 (default)	269	—	279	100.00	23,851	68	185	66	175	177
<b>Total - Retail - Other SME</b>		<b>7,037</b>	<b>1,376</b>	<b>8,940</b>	<b>5.57</b>	<b>1,194,837</b>	<b>49</b>	<b>3,856</b>	<b>43</b>	<b>288</b>	<b>236</b>
Retail - Other non-SME	0.00 to <0.15	—	—	—	—	—	—	—	—	—	—
Retail - Other non-SME	0.15 to <0.25	2	—	2	0.17	235	75	1	29	—	—
Retail - Other non-SME	0.25 to <0.50	68	—	68	0.35	10,009	70	29	43	—	—
Retail - Other non-SME	0.50 to <0.75	281	—	285	0.64	37,491	68	174	61	1	1
Retail - Other non-SME	0.75 to <2.50	3,970	—	4,049	1.40	538,438	74	3,823	94	50	58
Retail - Other non-SME	2.50 to <10.0	1,751	—	1,799	4.98	191,060	79	2,341	130	83	79
Retail - Other non-SME	10.0 to <100.00	560	—	577	26.04	74,412	81	1,140	197	142	59
Retail - Other non-SME	100.00 (default)	438	—	452	100.00	69,982	85	333	74	360	385
<b>Total - Retail - Other non-SME</b>		<b>7,070</b>	<b>—</b>	<b>7,232</b>	<b>10.39</b>	<b>921,627</b>	<b>76</b>	<b>7,841</b>	<b>108</b>	<b>636</b>	<b>582</b>
<b>Total - Retail all portfolios</b>		<b>182,275</b>	<b>41,400</b>	<b>215,130</b>	<b>2.77</b>	<b>21,547,720</b>	<b>21</b>	<b>37,150</b>	<b>17</b>	<b>2,066</b>	<b>2,309</b>

## Credit risk

### EU CR6\_b: IRB: Exposures by exposure class and PD range – Wholesale

The table below shows the key parameters used to calculate MCR for credit risk exposures in Wholesale exposure classes under the IRB approach, split by PD range. It excludes exposures calculated under the supervisory slotting approach, equities under the simple risk-weight approach and non-credit assets. It also excludes counterparty risk and securitisations. The average maturity used in the RWA calculation is capped at five years in accordance with regulatory requirements. The corporates – specialised lending exposure class includes only exposures modelled under the PD/LGD method (relating to shipping). For specialised lending exposures under the supervisory slotting approach, refer to EU CR10. Original on-balance sheet gross exposure includes SCRA.

		a	b	c	d	e	f	g	h	i	j	k	l
	PD Range	Original on-balance sheet exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	Expected loss	IFRS 9 ECL provisions
	%	£m	£m	%	£m	%		%	years	£m	%	£m	£m
2019													
Central governments and central banks	0.00 to <0.15	34,484	190	28	34,522	0.01	41	45	2.00	2,353	7	2	2
Central governments and central banks	0.15 to <0.25	—	—	—	—	0.23	1	55	1.42	—	—	—	—
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 <10.0	—	—	—	—	—	—	—	—	—	—	—	—
Central governments and central banks	10.0 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
Central governments and central banks	100.00 (default)	—	—	—	—	—	—	—	—	—	—	—	—
<b>Total - Central governments and central banks</b>		<b>34,484</b>	<b>190</b>	<b>28</b>	<b>34,522</b>	<b>0.01</b>	<b>42</b>	<b>45</b>	<b>2.00</b>	<b>2,353</b>	<b>7</b>	<b>2</b>	<b>2</b>
Institutions	0.00 to <0.15	3,493	205	50	3,542	0.10	225	43	1.09	778	22	1	20
Institutions	0.15 to <0.25	2,187	465	64	2,530	0.17	99	36	1.17	706	28	3	1
Institutions	0.25 to <0.50	170	14	42	178	0.41	30	26	2.89	62	35	—	—
Institutions	0.50 to <0.75	4	15	37	(9)	0.64	18	81	1.18	(15)	161	—	—
Institutions	0.75 to <2.50	26	25	29	33	1.21	20	28	1.66	21	62	—	—
Institutions	2.50 to <10.0	24	3	41	25	2.65	36	45	1.09	30	117	—	—
Institutions	10.0 to <100.00	—	—	100	—	40.96	77	52	4.99	—	—	—	—
Institutions	100.00 (default)	—	—	—	—	—	—	—	—	—	—	—	—
<b>Total - Institutions</b>		<b>5,904</b>	<b>727</b>	<b>58</b>	<b>6,299</b>	<b>0.15</b>	<b>505</b>	<b>40</b>	<b>1.18</b>	<b>1,582</b>	<b>25</b>	<b>4</b>	<b>21</b>
Corporates - Specialised lending	0.00 to <0.15	—	—	—	—	—	—	—	—	—	—	—	—
Corporates - Specialised lending	0.15 to <0.25	—	—	—	—	—	—	—	—	—	—	—	—
Corporates - Specialised lending	0.25 to <0.50	—	—	—	—	—	—	—	—	—	—	—	—
Corporates - Specialised lending	0.50 to <0.75	—	—	—	—	—	—	—	—	—	—	—	—
Corporates - Specialised lending	0.75 to <2.50	1	—	100	—	1.81	14	1	5.00	—	—	—	—
Corporates - Specialised lending	2.50 to <10.0	—	—	—	—	—	—	—	—	—	—	—	—
Corporates - Specialised lending	10.0 to <100.00	8	—	—	9	14.48	3	36	1.00	16	185	—	1
Corporates - Specialised lending	100.00 (default)	2	1	102	3	100.00	1	30	4.99	—	—	1	—
<b>Total - Corporates - Specialised lending</b>		<b>11</b>	<b>1</b>	<b>102</b>	<b>12</b>	<b>34.95</b>	<b>18</b>	<b>34</b>	<b>2.00</b>	<b>16</b>	<b>138</b>	<b>1</b>	<b>1</b>

## Credit risk

### EU CR6\_b: IRB: Exposures by exposure class and PD range – Wholesale continued

		a	b	c	d	e	f	g	h	i	j	k	l
	PD Range	Original on-balance sheet exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	Expected loss	IFRS 9 ECL provisions
2019	%	£m	£m	%	£m	%		%	years	£m	%	£m	£m
Corporates - SME	0.00 to <0.15	16	5	58	19	0.11	41	36	3.40	6	30	—	—
Corporates - SME	0.15 to <0.25	376	109	65	448	0.22	1,160	29	3.56	136	30	—	2
Corporates - SME	0.25 to <0.50	2,123	726	56	2,535	0.41	6,304	25	3.11	720	28	3	5
Corporates - SME	0.50 to <0.75	2,542	824	49	2,948	0.64	5,130	23	2.81	975	33	4	6
Corporates - SME	0.75 to <2.50	7,973	2,596	47	9,219	1.31	14,617	24	2.68	4,017	44	28	34
Corporates - SME	2.50 to <10.0	3,247	877	43	3,667	3.52	6,547	22	2.33	1,820	50	30	31
Corporates - SME	10.0 to <100.00	511	67	49	550	15.72	1,021	25	2.37	722	131	21	17
Corporates - SME	100.00 (default)	618	43	28	635	100.00	1,471	40	2.68	174	27	256	265
<b>Total - Corporates - SME</b>		<b>17,406</b>	<b>5,247</b>	<b>48</b>	<b>20,021</b>	<b>5.00</b>	<b>36,291</b>	<b>24</b>	<b>2.70</b>	<b>8,570</b>	<b>43</b>	<b>342</b>	<b>360</b>
Corporates - Other	0.00 to <0.15	18,399	26,955	45	30,361	0.06	1,546	42	3.48	7,835	26	7	7
Corporates - Other	0.15 to <0.25	6,449	7,744	41	9,573	0.19	1,097	42	2.66	4,216	44	8	7
Corporates - Other	0.25 to <0.50	6,142	5,230	44	8,318	0.39	1,477	39	2.52	4,878	59	13	19
Corporates - Other	0.50 to <0.75	3,502	1,863	47	4,391	0.64	1,319	36	2.73	2,994	68	10	18
Corporates - Other	0.75 to <2.50	9,012	4,502	50	11,140	1.32	8,060	34	2.56	9,035	81	49	53
Corporates - Other	2.50 to <10.0	4,500	1,917	45	5,302	3.39	6,041	27	2.09	4,425	83	49	44
Corporates - Other	10.0 to <100.00	242	105	46	285	14.92	561	28	2.25	612	214	14	8
Corporates - Other	100.00 (default)	577	182	35	629	100.00	692	45	1.92	20	3	282	418
<b>Total - Corporates - Other</b>		<b>48,823</b>	<b>48,498</b>	<b>45</b>	<b>69,999</b>	<b>1.56</b>	<b>20,793</b>	<b>39</b>	<b>2.93</b>	<b>34,015</b>	<b>49</b>	<b>432</b>	<b>574</b>
Equities	0.00 to <0.15	—	—	—	—	—	—	—	—	—	—	—	—
Equities	0.15 to <0.25	—	—	—	—	—	—	—	—	—	—	—	—
Equities	0.25 to <0.50	—	—	—	—	—	—	—	—	—	—	—	—
Equities	0.50 to <0.75	—	—	—	—	—	—	—	—	—	—	—	—
Equities	0.75 to <2.50	—	—	—	—	—	1	—	—	—	—	—	—
Equities	2.50 to <10.0	—	—	—	—	—	—	—	—	—	—	—	—
Equities	10.0 to <100.00	—	—	—	—	—	—	—	—	—	—	—	—
Equities	100.00 (default)	—	—	—	—	—	—	—	—	—	—	—	—
<b>Total - Equities</b>		<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Total - Wholesale all portfolios</b>		<b>106,628</b>	<b>54,663</b>	<b>45</b>	<b>130,853</b>	<b>1.62</b>	<b>57,650</b>	<b>38</b>	<b>2.57</b>	<b>46,536</b>	<b>36</b>	<b>781</b>	<b>958</b>

## Credit risk

### EU CR6\_c: IRB: Geographical split of PD and LGD

The table below shows weighted-average PD and LGD for credit risk, analysed by geography, split by exposure class. It excludes exposures calculated under the supervisory slotting approach, equities under the simple risk-weight approach and non-credit assets. It also excludes counterparty credit risk and securitisations.

	Total		UK		RoI		Other Western Europe		US		Rest of World	
	PD %	LGD %	PD %	LGD %	PD %	LGD %	PD %	LGD %	PD %	LGD %	PD %	LGD %
2019												
Central governments and central banks	0.01	45	0.01	50	0.06	45	0.01	45	0.01	45	0.03	45
Institutions	0.15	40	0.20	24	0.15	45	0.13	39	0.13	45	0.36	52
Corporates	2.33	36	2.41	34	3.19	36	2.48	44	0.26	48	1.12	45
<i>Specialised lending</i>	34.95	34	—	—	—	—	1.28	50	—	—	34.95	34
<i>SME</i>	5.00	24	4.92	24	5.60	26	45.43	19	2.35	8	1.60	29
<i>Other corporate</i>	1.56	39	1.53	37	2.05	40	2.39	44	0.26	48	0.85	45
Retail	2.77	21	2.19	21	10.50	31	3.53	60	2.65	58	3.22	59
<i>Secured by real estate property</i>												
- <i>SME</i>	4.79	43	4.77	43	11.79	43	11.91	39	28.52	42	9.53	40
- <i>non SME</i>	2.29	12	1.54	11	10.88	28	—	—	—	—	—	—
<i>Qualifying revolving</i>	2.85	62	2.84	62	3.95	72	2.22	60	1.69	58	2.32	59
<i>Other retail</i>												
- <i>SME</i>	5.57	49	5.56	48	5.68	72	3.63	53	8.63	48	5.66	48
- <i>non-SME</i>	10.39	76	10.42	76	8.21	72	32.54	75	32.44	80	21.33	77
Equities	—	—	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>2.33</b>	<b>28</b>	<b>2.33</b>	<b>24</b>	<b>7.58</b>	<b>34</b>	<b>0.72</b>	<b>44</b>	<b>0.10</b>	<b>46</b>	<b>0.48</b>	<b>46</b>

## Credit risk

### EU CR10: IRB: IRB specialised lending

The table below shows EAD post CRM (exposure amount) for IRB specialised lending exposures subject to the supervisory slotting approach (income-producing real estate and project finance portfolios), analysed by type of lending and regulatory category. It excludes counterparty credit risk and securitisations. For specialised lending exposures under the PD/LGD method (relating to shipping), refer to EU CR6\_b.

2019 Regulatory categories	Remaining maturity	On-balance sheet amount £m	Off-balance sheet amount £m	Risk-weight %	Exposure amount £m	RWAs £m	Expected loss £m
1 - Strong	Less than 2.5 years	2,577	421	50	2,837	1,419	—
	Equal to or more than 2.5 years	4,660	1,179	70	5,621	3,935	22
2 - Good	Less than 2.5 years	2,442	320	70	2,717	1,902	11
	Equal to or more than 2.5 years	1,767	131	90	1,870	1,683	15
3 - Satisfactory	Less than 2.5 years	160	6	115	166	191	5
	Equal to or more than 2.5 years	135	10	115	145	166	4
4 - Weak	Less than 2.5 years	26	—	250	26	65	2
	Equal to or more than 2.5 years	19	—	250	20	49	2
5 - Default	Less than 2.5 years	243	9	—	252	—	128
	Equal to or more than 2.5 years	194	4	—	196	—	98
Total	Less than 2.5 years	5,448	756		5,998	3,577	146
	Equal to or more than 2.5 years	6,775	1,324		7,852	5,833	141

### Standardised approach

#### Calculation of RWAs under the standardised approach

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

#### Recognition of credit risk mitigation in the calculation of RWAs

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 NWH 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 and Table EU CR3\_a indicates how different risk mitigants are incorporated into IRB risk parameters.

## Credit risk

### EU CR4: STD: Exposures 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.

2019	a		b		c		d	e	f
	Exposures pre CCF and CRM		Exposures post CCF and CRM					RWA	RWA
	On-balance sheet £m	Off-balance sheet £m	On-balance sheet £m	Off-balance sheet £m			£m	density %	
1 Central governments and central banks	63,721	914	63,751	232	1,193	2			
2 Regional governments and local authorities	20	196	20	—	5	25			
4 Multilateral development banks	—	—	—	—	—	—			
6 Institutions	534	177	653	—	236	36			
7 Corporates	6,968	1,749	6,695	535	6,928	96			
8 Retail	2,333	3,710	2,251	25	1,356	60			
9 Secured by mortgages on immovable property									
- residential	10,722	1,108	10,725	184	3,942	36			
- commercial	600	255	532	131	677	102			
10 Exposures in default	297	28	301	1	359	119			
11 Items associated with particularly high risk	—	—	—	—	—	—			
12 Covered bonds	—	—	—	—	—	—			
15 Equity exposures	25	—	25	—	27	107			
16 Other exposures	1,010	—	1,123	—	500	45			
17 Total	86,230	8,137	86,076	1,108	15,223	17			

### EU CR5a: STD: CQS mapping to external credit ratings

Under the STD approach, NWH 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, NWH 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

## Credit risk

### EU CR5: STD: Credit risk exposure class and risk-weights

The table below analyses credit risk EAD post CRM under the standardised approach by risk-weight, split by exposure class. It excludes counterparty credit risk and securitisations. Exposure classes with no exposure are excluded.

EAD post CRM	Risk-weight																Of which:			
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150% (1)	250%	370%	1250%	Others	Deducted	Total	Unrated		
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	
2019																				
1 Central governments and central banks	63,479	—	—	—	29	—	—	—	—	—	—	475	—	—	—	—	63,983	628		
2 Regional governments and local authorities	—	—	—	—	19	—	—	—	—	1	—	—	—	—	—	—	20	20		
3 Multilateral development banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
4 Institutions	—	—	—	—	301	—	352	—	—	—	—	—	—	—	—	—	653	4		
5 Corporates	95	—	—	—	179	—	93	—	—	6,811	52	—	—	—	—	—	7,230	2,510		
6 Retail	—	—	—	—	279	—	—	—	1,911	—	—	—	—	—	86	—	2,276	—		
7 Secured by mortgages on immovable property																				
- residential	—	—	—	—	—	10,712	—	—	—	196	1	—	—	—	—	—	10,909	10,908		
- commercial	—	—	—	—	—	—	—	—	—	632	31	—	—	—	—	—	663	663		
10 Exposures in default	—	—	—	—	—	—	—	—	—	188	114	—	—	—	—	—	302	299		
11 Items associated with particularly high risk	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
12 Covered bonds	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
14 Equity exposures	—	—	—	—	—	—	—	—	—	24	—	1	—	—	—	—	25	1		
15 Other exposures	527	—	—	—	45	—	26	—	—	466	—	—	—	—	59	—	1,123	1,123		
16 Total EAD post CRM	64,101	—	—	—	852	10,712	471	—	1,911	8,318	198	476	—	—	145	—	87,184	16,156		
17 EAD pre CRM	64,102	—	—	—	851	10,712	471	—	1,966	8,673	198	476	—	—	147	—	87,596	16,298		

Note:

(1) Credit risk EAD post CRM with a 150% risk-weight relates to legacy assets.



## Counterparty credit risk

### Counterparty credit risk

#### EU CCRA: CCR: General qualitative information

##### Definition and framework

Counterparty credit risk relates to derivative contracts (including over-the-counter (OTC) derivatives and exchange-traded derivatives), 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 NWH Group's credit risk framework. Refer to the Credit risk section in the 2019 ARA for more information.

##### 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 maximum potential future exposure of transactions, based on 95th percentile confidence levels. The utilisations recorded against the limits also reflect the nature of the relevant documentation and the anticipated close-out periods in the event of default.

For CCPs, utilisations are calculated in the same way as for other collateralised counterparties, and a credit limit is set. Additional limits are 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 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.

#### EU CCR1: CCR: Analysis of exposure by EAD calculation approach

The table below shows the methods used to calculate counterparty credit risk exposure and RWAs. It excludes CVA charges, securitisations and exposures cleared through a CCP.

	a	b	c	e	f	g
	Notional	Replacement cost/current market value	Potential future exposure	Multiplier	EAD post-CRM	RWA
	£m	£m	£m		£m	£m
2019						
1 Mark-to-market method	n/a	228	432	n/a	468	225
9 Financial collateral comprehensive method (for SFTs)	n/a	n/a	n/a	n/a	1,179	142
11 Total	n/a	n/a	n/a	n/a	1,647	367

##### Key point

- Exposures were mainly with large financial institutions driven by structural hedging and liquidity risk management activities.

#### Collateral required in the event of a credit rating downgrade

NWH 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 2019, a simultaneous one-notch long-term and associated short-term downgrade in the credit ratings of all rated entities within NWH Group by all major ratings agencies would have required NWH Group to post estimated additional collateral of £0.2 billion, without taking mitigating management actions into account. A two-notch downgrade would have required £0.7 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.

NWH 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 NWH Group has transacted non-cleared derivative trades. The charge is calculated using the standardised approach, which is based on the external credit rating of the counterparty.

#### Wrong-way risk

Wrong-way risk represents the risk of loss that arises when the risk factors driving the exposure to a counterparty are materially positively correlated 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.

This risk is immaterial for counterparty credit risk exposures in NWH Group.

## Counterparty credit risk

### IRB Approach PD & LGD approach

#### EU CCR4: CCR IRB: Exposures by portfolio and PD scale

The table below shows a detailed view of counterparty credit risk positions subject to the IRB approach by exposure class and PD scale. It excludes CVA charges, securitisations and exposures cleared through a CCP. Counterparty credit risk exposures are managed on a portfolio basis, hence, it is not meaningful to report valuation adjustments and provisions at the regulatory exposure class level.

	PD scale	a	b	c	d	e	f	g
		EAD post CRM and post-CCF £m	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWAs £m	RWA density %
2019								
Central governments and central banks	0.00 to <0.15	209	0.01	1	50	0.88	3	2
Central governments and central banks	0.15 to <0.25	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—
<b>Total - Central governments and central banks</b>		<b>209</b>	<b>0.01</b>	<b>1</b>	<b>50</b>	<b>0.88</b>	<b>3</b>	<b>2</b>
Institutions	0.00 to <0.15	9	0.11	5	50	0.06	2	21
Institutions	0.15 to <0.25	256	0.22	8	50	0.07	87	34
Institutions	0.25 to <0.50	—	—	—	—	—	—	—
Institutions	0.50 to <0.75	—	—	—	—	—	—	—
Institutions	0.75 to <2.50	—	—	—	—	—	—	—
Institutions	2.50 to <10.00	—	—	—	—	—	—	—
Institutions	10.00 to <100.00	—	—	—	—	—	—	—
Institutions	100.00 (Default)	—	—	—	—	—	—	—
<b>Total - Institutions</b>		<b>265</b>	<b>0.22</b>	<b>13</b>	<b>50</b>	<b>0.07</b>	<b>89</b>	<b>34</b>
Corporates - SME	0.00 to <0.15	—	—	—	—	—	—	—
Corporates - SME	0.15 to <0.25	—	—	—	—	—	—	—
Corporates - SME	0.25 to <0.50	1	0.45	1	83	3.83	1	159
Corporates - SME	0.50 to <0.75	—	—	—	—	—	—	—
Corporates - SME	0.75 to <2.50	—	—	—	—	—	—	—
Corporates - SME	2.50 to <10.00	—	—	—	—	—	—	—
Corporates - SME	10.00 to <100.00	—	—	—	—	—	—	—
Corporates - SME	100.00 (Default)	—	100.00	1	25	5.00	—	—
<b>Total - Corporates - SME</b>		<b>1</b>	<b>33.53</b>	<b>2</b>	<b>59</b>	<b>4.22</b>	<b>1</b>	<b>106</b>

## Counterparty credit risk

### EU CCR4: CCR IRB: Exposures by portfolio and PD scale continued

		a	b	c	d	e	f	g
		EAD post CRM and post-CCF £m	Average PD %	Number of obligors	Average LGD %	Average maturity Years	RWAs £m	RWA density %
2019	PD scale							
Corporates - Specialised lending	Strong	26	—	12	—	4.98	18	70
Corporates - Specialised lending	Good	1	—	1	—	5.00	1	90
Corporates - Specialised lending	Satisfactory	—	—	—	—	—	—	—
Corporates - Specialised lending	Weak	—	—	—	—	—	—	—
Corporates - Specialised lending	Default	—	—	—	—	—	—	—
Total - Corporates - Specialised lending (1)		27	—	13	—	4.98	19	71
Corporates - Other	0.00 to <0.15	334	0.04	101	48	1.75	46	14
Corporates - Other	0.15 to <0.25	114	0.18	5	50	2.00	37	32
Corporates - Other	0.25 to <0.50	2	0.41	2	49	3.82	2	91
Corporates - Other	0.50 to <0.75	—	—	—	—	—	—	—
Corporates - Other	0.75 to <2.50	—	—	1	—	—	—	—
Corporates - Other	2.50 to <10.00	—	3.00	2	35	3.50	—	112
Corporates - Other	10.00 to <100.00	—	—	—	—	—	—	—
Corporates - Other	100.00 (Default)	—	—	—	—	—	—	—
Total - Corporates - Other		450	0.08	111	49	1.37	85	19
Total - Wholesale all portfolios		952	0.14	140	50	1.01	197	21

Note:

(1) For these specialised lending exposures, the supervisory slotting method is used to calculate RWAs, rather than the PD/LGD method.

#### Key points

- Exposures were mainly with large financial institutions and large corporates driven by structural hedging and liquidity risk management activities.
- The low risk-weighted exposures were mainly with central governments and central banks.

## Counterparty credit risk

### EU CCR3: CCR: STD: Exposures by regulatory portfolio and risk-weight

Exposure class	Risk-weight						Total £m	Of which: Unrated £m
	0% £m	2% £m	20% £m	50% £m	75% £m	100% £m		
2019								
1 Central governments and central banks	332	—	—	—	—	—	332	—
6 Institutions	—	846	61	169	—	—	1,076	—
7 Corporates	—	—	—	99	—	34	132	—
11 Total	332	846	61	268	—	34	1,540	—

#### Key point

- The exposures were primarily securities financing transaction, central counterparty and inter-Group exposures.

### EU CCR2: CCR: Credit valuation adjustment capital charge

The table below shows the CVA charge split by approach.

	2019	
	a Exposure amount £m	b RWAs £m
3 All portfolios subject to the standardised CVA capital charge	291	480

#### Key point

- The majority of the charge relates to inter-Group exposures.

### EU CCR5\_A: Impact of netting and collateral held on exposure values

The table below shows the effect of netting and collateral by exposure type.

2019	a	b	c	d	e
	Gross positive fair value £m	Netting benefits £m	Netted current credit exposure £m	Collateral held £m	Net credit exposure £m
1 Derivatives	9,088	9,039	48	48	—
2 SFTs	37,000	—	37,000	36,485	516
4 Total	46,088	9,039	37,048	36,533	516

#### Key points

- Exposures were mainly driven by structural hedging and liquidity risk management activities.
- Securities financing transactions assist with liquidity management in relation to regulatory liquidity requirements and collateral management.

### EU CCR6: CCR: Credit derivatives

The table below presents credit derivatives bought and sold by notional and fair values. The notional value shown in the table represents a legacy position.

	2019	
	a Protection bought £m	b Protection sold £m
<b>Notionals</b>		
Single-name credit default swaps	24	—
Index credit default swaps	—	—
Total return swaps	—	—
Other credit derivatives	—	—
Total notionals	24	—
Of which: Own credit portfolio - notionals (1)	24	—
<b>Fair values</b>		
Positive fair value (asset)	15	—
Negative fair value (liability)	—	—

#### Note:

- (1) Comprises trades held in the regulatory banking book used for hedging and credit management.

## Counterparty credit risk

### EU CCR8: CCR: Exposures (EAD post CRM) to central counterparties

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

		2019	
		a	b
		EAD	RWA
		post-CRM	
		£m	£m
1	Exposures to QCCPs (total)	n/a	133
2	Exposures for trades at QCCPs (excluding OTC initial margin and default fund contributions)	846	17
Of which:			
3	(i) OTC derivatives	686	14
5	(iii) Securities financing transactions	160	3
9	Pre-funded default fund contributions	98	116

#### Key point

- Exposures were mainly driven by structural hedging and liquidity risk management activities.

## Market risk

### Market risk

#### EU MRA: MR: Qualitative information related to market risk

##### Definition and framework

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. There is no material traded market risk in NWH Group.

At 31 December 2019, NWH Group solely uses the standardised or non-modelled approach to calculate its market risk capital requirements.

Since H1 2019, the internal model approach (IMA) has not been used for NWB Plc and an application has been made to the PRA for the IMA permission for this legal entity to be formally removed.

##### Market risk governance and management

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

For more information on the governance and management, mitigation, monitoring and reporting of market risk, refer to the Market risk section of the NWH Group 2019 ARA.

#### 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.

#### EU MR1: MR IMA and STD: RWAs and MCR – NWH Group and significant subsidiaries

The table below shows market risk RWAs and MCR by calculation method and type of risk for NWH Group and significant subsidiaries.

	NWH Group		NWB Plc		RBS plc		UBI DAC	
	a	b	a	b	a	b	a	b
	RWAs £m	MCR £m	RWAs £m	MCR £m	RWAs £m	MCR £m	RWAs £m	MCR £m
2019								
STD	125	10	17	1	15	1	77	6
3 Foreign exchange position risk (outright products)	125	10	17	1	15	1	77	6
Internal model approach	—	—	—	—	—	—	—	—
VaR	—	—	—	—	—	—	—	—
SVaR	—	—	—	—	—	—	—	—
Total	125	10	17	1	15	1	77	6

	NWB Plc		RBS plc		UBI DAC	
	a	b	a	b	a	b
	RWAs £m	MCR £m	RWAs £m	MCR £m	RWAs £m	MCR £m
2018						
STD	36	3	23	2	47	4
3 Foreign exchange position risk (outright products)	36	3	23	2	47	4
Internal model approach	14	1	—	—	—	—
VaR	3	—	—	—	—	—
SVaR	11	1	—	—	—	—
Total	50	4	23	2	47	4

#### Key points

##### NWH Group

- NWH Group's RWA exposure includes the position in NatWest Holdings Limited and its subsidiaries. At period-end, RWAs relate solely to the foreign exchange banking book charge.

##### NWB Plc

- The RWA reduction under the internal model approach (IMA) was due to the closure of residual trading activity.
- The reduction related to the foreign exchange charge chiefly reflected changes in US dollar positions relating to payments between NWH and RBS Group entities.

##### RBS plc

- The RWA reduction chiefly reflected changes in euro positions over the period.

##### UBI DAC

- The RWA increase was mainly due to changes in foreign exchange hedging activity relating to transfer pricing costs during Q3 2019.

# Securitisation

## Securitisation

### SECA: SEC qualitative disclosures

#### Framework, roles and definitions

This section presents descriptive information on NWH Group's securitisation activities and related risk management processes and accounting policies, followed by quantitative disclosures on its exposures to securitisations.

#### 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 tranching, 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 (further details on page 89). 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.

**Securitized 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).

#### Objectives and roles

By participating in securitisation activity, NWH 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, NWH 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. For details of CRR rules governing the calculation of regulatory capital required in respect of securitisations, refer to page 89.

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

**Originator** – To diversify its sources of funding and manage its balance sheet, NWH Group securitises assets it has purchased or originated. As an originator NWH Group may be exposed to credit risk and market risk on the underlying assets, particularly if the structure of the transaction does not transfer these risks to third parties. Even if these risks have been transferred, it may nevertheless be exposed to credit and market risks to the extent it retains exposure to the securitisation, for example, by providing the SSPE with a liquidity facility or entering into derivative transactions.

**Investor** – To generate financial returns, NWH Group may:

- Purchase securities issued by an SSPE; or
- Lend to an SSPE, often by providing a liquidity facility that the SSPE can use if it is unable to issue securities, particularly commercial paper.

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

**Sponsor** – NWH 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.

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

**Other administrative roles** – As a 'contractual party', NWH 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 NWH 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. NWH Group may also incur other types of risk in the course of its exposure to securitisation activity.

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

## Securitisation

Types of risk	Definition and how the risk may arise	How NWH Group monitors and manages the risk
Credit risk	<p>The risk of loss arising from the failure of a customer or counterparty (or, in the case of a securitisation, an SSPE) to meet its obligations to settle outstanding amounts.</p> <p>Securitisation may expose NWH Group to credit risk for any of several reasons.</p> <p>If NWH 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, NWH Group is exposed to the risk that the SSPE will fail to meet its obligations to settle outstanding amounts to NWH 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.</p> <p>When NWH 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.</p> <p>Credit risk is heightened if the assets in the SSPE are not diversified by sector, geography or borrower.</p>	<p>NWH 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, NWH 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.</p> <p>As an originator, if the securitisation structure does not transfer substantial credit risk to a third party, NWH Group manages it as if the securitisation had never taken place. NWH 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 NWH Group.</p> <p>NWH 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 credit default swaps, but also 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.</p>
Non-traded market risk	<p>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.</p>	<p>NWH Group manages this risk in accordance with its policy on non-traded market risk, including structural interest rate risk. For further information, refer to the Non-traded market risk section of the 2019 ARA.</p>
Liquidity and funding risk	<p>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. NWH Group may sponsor securitisations and, as sponsor, may provide liquidity facilities to the SSPE. If the SSPE utilises these facilities, NWH Group will need to fund them, giving rise to the risk that it will not be able to do so.</p>	<p>NWH Group manages these risks in accordance with its policy on liquidity and funding risk. For further information, refer to Liquidity management and Funding risk management in the Capital, liquidity and funding risk section of the 2019 ARA.</p>



## Securitisation

Types of risk	Definition and how the risk may arise	How NWH Group monitors and manages the risk
Legal risk	<p>The risk that NWH 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 NWH 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.</p> <p>This risk is heightened in the case of re-securitisations, as NWH Group needs to gather information surrounding each of the original transactions, together with an understanding of their interaction within the re-securitisation.</p>	<p>NWH 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, NWH 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.</p>
Compliance & conduct risk	<p>Compliance risk is the risk that the behaviour of NWH Group towards customers fails to comply with laws, regulations, rules standards and codes of conduct. Conduct risk is the risk that the conduct of NWH 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 NWH 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.</p>	<p>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 NWH Group. This risk falls under the governance of the Mandatory Change Advisory Committee, which meets monthly with representatives from all franchises and functions. For further information, refer to the Compliance &amp; conduct risk section of the 2019 ARA.</p>
Reputational risk	<p>The risk to NWH Group's public image from a failure to meet stakeholders' expectations in relation to performance, conduct or business profile. Stakeholders include customers, investors, employees, suppliers, government, regulators, special interest and consumer groups, media and the general public.</p> <p>Reputational risk can arise from the conduct of employees; activities of customers and the sectors and countries in which they operate; provision of products and transactions; as well as operations and infrastructure.</p>	<p>NWH Group manages reputational risk in accordance with its reputational risk management framework. For further information, refer to the Reputational risk section of the 2019 ARA.</p>
Operational risk	<p>The risk of loss resulting from inadequate or failed internal processes, people and systems, or external events.</p> <p>This risk arises from day-to-day operations and is relevant to every aspect of the business.</p>	<p>NWH Group manages operational risk in accordance with its operational risk management framework. For further information, refer to Operational risk section of the 2019 ARA.</p>

## Securitisation

### Regulatory treatment

NWH 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, NWH 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, NWH Group does not hold any capital against the underlying assets. However, if it is not achieved, capital must be held against the underlying assets as if the securitisation had never taken place.

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

In the case of securitisation positions in the non-trading book, NWH Group calculates regulatory capital for credit risk. Depending on the nature of the instrument there may also be capital requirements for counterparty credit risk.

### Calculation of risk-weighted exposures

The regulatory framework for securitisation allows RWA calculation using either the standardised or the IRB approach. The choice of approach depends on the credit framework adopted by the firm under Pillar 1 for the underlying portfolio of securitised exposures.

NWH Group categorises securitised exposures according to risk-weight bands when calculating RWAs. Under the CRR, unrated positions are classified under the highest risk-weight band: 1,250%. Risk-weight bands are shown in Tables SEC 2 and SEC 3.

The IRB method used by NWH Group is the ratings based approach (RBA).

When assessing debt issued by SSPEs under the RBA, NWH 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).

When assessing unrated exposures funded through an ABCP conduit, (whether a legacy NWH Group -sponsored conduit or an ABCP conduit sponsored by other institutions), NWH Group is permitted to use the Internal Assessment Approach (IAA) under its IRB waiver.

Under the RBA, ECAI ratings are mapped to the corresponding credit quality step (CQS) in order to determine the risk weights for the facilities relating to each transaction. The mapping used is shown in Table EU CR5a in the Credit risk section.

### New securitisation framework

A new securitisation framework has been introduced through amendments to the CRR and the introduction of a new Securitisation Regulation. The new framework has been used for the calculation of risk-weighted exposures for positions which were originated during 2019. All positions will move onto the new framework on 1 January 2020 when the transitional provisions end. NWH Group applies the hierarchy as set out in the CRR and applies one of the new methodologies, SEC-IRBA, SEC-SA or SEC-ERBA as required.

SEC-IRBA is the internal ratings based approach and has only been used on own-originated transactions. SEC-SA is the standardised approach, which uses the standardised credit risk treatment of the underlying exposures as the main input into the formula. SEC-ERBA is similar to the RBA detailed above, using external ratings from the listed credit rating agencies, plus additional data requirements. Lower risk weights apply to positions which qualify as Simple, Transparent and Standardised securitisations.

## Securitisation

### Summary of accounting policies including derecognition

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

### Recognition of sales

Securitisation vehicles are assessed for consolidation in accordance with NWH Group's published accounting policy Basis of Consolidation (refer to page 85 of the 2019 ARA). The transfer of assets to a securitisation vehicle is treated as a sale if the securitised assets are derecognised from the consolidated balance sheet in accordance with NWH Group's published accounting policy Derecognition (refer to page 88 of the 2019 ARA).

NWH Group applies its accounting policies Provisions; Loan commitments; and Financial guarantee contracts (set out on pages 86 and 89 of the 2019 ARA) to contractual commitments, such as liquidity lines, that could require it to provide financial support for securitised assets.

### Key assumptions for valuing securitisation positions

Securitisation positions are valued using external information, such as market data for recent transactions, price information from third-party managers and advisors, and asset performance data provided to all bond holders at interest payment dates.

### Synthetic securitisations

Synthetic securitisations are assessed using the same approach as non-synthetic securitisations. Any derivatives are treated in accordance with NWH Group's published accounting policy Derivatives and hedging (refer to pages 88 of the 2019 ARA).

### Assets awaiting securitisation

Financial assets are valued using NWH Group's accounting policy for Financial instruments (refer to page 88 of the 2019 ARA). At both 31 December 2019 and 31 December 2018, no assets were categorised as awaiting securitisation.

### Implicit support

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

### Securitisation and re-securitisation exposures

Additional information detailing accounting policies and treatment of securitisations and re-securitisations can be found on page 89 of the 2019 ARA.

### Types of transactions

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

**Residential mortgages and commercial real estate loans** – NWH 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** – NWH Group selectively securitises other loans that it originates, principally those to corporates and small and medium-sized enterprises.

### SSPEs used by NWH Group

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

The transactions in which NWH Group has originated all the assets and continues to administer the associated SSPEs comprise the following:

- Ardmore & Dunmore (Irish residential mortgages SSPEs);

Following synthetic securitisations in previous years primarily of loans to corporates, SMEs and commercial mortgages, in 2019, NWH Group completed a synthetic securitisation of project finance loans of £1.1billion. No gain or loss was recognised on the transfer of these assets.

### Notes on the following tables

Tables SEC 1 to SEC 4 show total securitisation positions, as discussed under Regulatory treatment of securitisation on page 89. The exposures included those retained from NWH Group's own securitised assets, investments in SSPE notes, credit lines to SSPEs and derivative transactions with SSPEs.

The term 'exposure amount' used in the following tables refers to EAD, which is calculated according to CRR rules.

## Securitisation

### Securitisation exposures: retained and purchased

#### SEC 1: Exposure, RWAs and MCR by regulatory approach

The table below shows exposures, RWAs, MCR and capital deductions.

	Aggregate amounts of securitisation positions retained or purchased				Of which, re-securitisation positions retained or purchased			
	Exposure amount £m	RWAs £m	MCR £m	Of which: deduction from capital £m	Exposure amount £m	RWAs £m	MCR £m	Of which: deduction from capital £m
2019 - non-trading book								
Total	7,329	1,509	121	—	—	—	—	—

Note:

(1) There is no trading book exposure for NWH Group in securitisations.

#### Key point

- Exposure and RWAs primarily comprise portfolios of loans to corporates or SMEs, commercial mortgages and residential mortgages portfolios.

#### SEC 2: Exposure and MCR by regulatory approach and risk-weightings

The table below shows exposures and MCR according to risk-weight bands. Unrated positions are included within the 1,250% band.

	Aggregate amounts of securitisation positions retained or purchased		Of which, re-securitisation positions retained or purchased	
	Exposure amount Total (IRB) £m	Minimum capital requirements Total (IRB) £m	Exposure amount Total (IRB) £m	Minimum capital requirements Total (IRB) £m
<b>Risk-weight bands</b>				
2019 - non-trading book				
≤ 10%		5,082	30	—
> 10% ≤ 20%		1,511	23	—
> 20% ≤ 50%		505	20	—
> 50% ≤ 100%		79	6	—
> 100% ≤ 350%		141	30	—
> 350% ≤ 650%		—	—	—
1250%		11	12	—
		7,329	121	—

#### SEC 3: Exposure by risk-weightings by underlying exposure type

The table below shows exposures by underlying exposure type and risk-weight bands. Unrated positions are included within the 1,250% band.

	Residential mortgages	Commercial mortgages	Credit card receivables	Leasing	Loans to corporates or SMEs	Consumer loans	Trade receivables	Auto receivables	Re-securitisation	Other assets	Total
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
<b>Risk-weight bands</b>											
2019 - non-trading book											
≤ 10%	1,266	1,287	—	—	2,495	—	—	34	—	—	5,082
> 10% ≤ 20%	120	65	—	—	1,326	—	—	—	—	—	1,511
> 20% ≤ 50%	32	181	—	—	292	—	—	—	—	—	505
> 50% ≤ 100%	—	—	—	—	79	—	—	—	—	—	79
> 100% ≤ 350%	—	—	—	—	141	—	—	—	—	—	141
> 350% ≤ 650%	—	—	—	—	—	—	—	—	—	—	—
1250%	—	—	—	—	11	—	—	—	—	—	11
	1,418	1,533	—	—	4,344	—	—	34	—	—	7,329

## Securitisation

### Securitisation exposures: retained and purchased SEC 4: Exposures by role, by on and off-balance sheet

The table below shows underlying exposures by:

- The role of NWH Group;
- On and off-balance sheet categories; and
- Underlying exposure type.

The off-balance sheet category represents the part of a liquidity facility that has not been utilised (undrawn) and derivative exposures.

Underlying exposure type	As originator		As sponsor		As investor		Total	
	On-balance sheet (1) £m	Off-balance sheet £m	On-balance sheet £m	Off-balance sheet £m	On-balance sheet £m	Off-balance sheet £m	On-balance sheet £m	Off-balance sheet £m
2019 - non-trading book								
Residential mortgages	—	—	—	—	1,418	—	1,418	—
Commercial mortgages	1,533	—	—	—	—	—	1,533	—
Credit card receivables	—	—	—	—	—	—	—	—
Leasing	—	—	—	—	—	—	—	—
Loans to corporates or SMEs	4,344	—	—	—	—	—	4,344	—
Consumer loans	—	—	—	—	—	—	—	—
Auto receivables	—	—	—	—	34	—	34	—
Other assets	—	—	—	—	—	—	—	—
	5,877	—	—	—	1,452	—	7,329	—

Note:

- (1) The synthetic securitisations which NWH Group has originated have been presented as on-balance sheet in SEC 4 to reflect that for accounting purposes NWH Group retains the balances on-balance sheet.

### Securitisation exposures: retained and purchased Securitisation outstanding amounts SEC 6: Securitisation positions retained from origination and sponsorship - outstanding and past due

The table below shows outstanding and related past due exposures pertaining to NWH Group's retained positions where NWH Group was the originator or sponsor. Where the originated securitisation was through a joint venture or through similar arrangements, the entire asset pool information is also disclosed separately below.

2019	Total		Non-trading exposures					Trading exposures					Memorandum: Entire asset pool	
	Exposures £m	Of which past due £m	Originator		Sponsor		Of which past due £m	Originator		Of which past due £m	Exposures £m	Of which past due £m		
			Traditional £m	Synthetic £m	Traditional £m	Total £m		Traditional £m	Synthetic £m				Total £m	
Residential mortgages	—	—	—	—	—	—	—	—	—	—	—	—	—	
Commercial mortgages	1,533	—	—	1,533	—	1,533	—	—	—	—	—	1,533	—	
Loans to corporates or SMEs	4,373	—	—	4,373	—	4,373	—	—	—	—	—	4,373	—	
Other assets	—	—	—	—	—	—	—	—	—	—	—	—	—	
	5,906	—	—	5,906	—	5,906	—	—	—	—	—	5,906	—	

Notes:

- (1) For securitisations where NWH Group acted as investor, as disclosed in Table SEC 4, information on underlying assets is not readily available and therefore excluded in the table above.
- (2) Outstanding and related past due exposures are based on pool amounts – which are sourced from investor reports. NWH Group does not hold this information in its internal systems.
- (3) None of the retained positions in 2019 relating to originated securitisations were part of a joint venture. Therefore, the outstanding amount for the entire asset pool is the same as the NWH Group share.

# NatWest Holdings Group Remuneration Disclosure

## Remuneration of MRTs

Information on the remuneration policy and remuneration paid to MRTs of RBS Group can be found in the Directors' Remuneration Report and Other Remuneration Disclosures section of the RBS Group's 2019 Annual Report.

The quantitative disclosures below are made in accordance with Article 450 of the EU Capital Requirements Regulation, the Basel Committee on Banking Supervision Pillar 3 disclosure requirements and the EBA guidelines on sound remuneration policies in relation to 365 employees who have been identified as MRTs for NatWest Holdings Limited. NatWest Holdings Limited (NWH) is the holding company of The Royal Bank of Scotland plc, National Westminster Bank Plc, and Ulster Bank Limited (together the NWH Sub Group) and other subsidiary and associated undertakings including Ulster Bank Ireland DAC and Coutts & Co (together the NWH Group).

Information on the:

- decision making process used to determine remuneration policy;
- external remuneration consultants;
- the link between pay and performance; and
- the most important design characteristics of the remuneration system (including information on the performance measurement and risk adjustment criteria, deferral policy and vesting criteria);

is aligned to that disclosed for RBS Group.

The NWH Group has a number of Performance and Remuneration Committees (the NWH RemCos). The NWH RemCos are expected to ensure that the remuneration policies, procedures and practices being applied are appropriate for the relevant entities within the NWH Group.

The key areas of focus for the NWH RemCos include: reviewing and recommending, or where appropriate ratifying, remuneration arrangements for key employees; providing input on the proposed bonus pool for relevant entities, ensuring such proposals are adjusted for performance and risk and meet capital adequacy requirements of those entities; and inputting to and subsequently adopting the RBS Group Remuneration Policy Principles.

The NWH RemCos must be able to act independently and the non-executive directors serving on these committees are supported by the necessary entity-specific management information in order to carry out their duties.

### Definitions for tables

NWH Sub Group EDs	Executive directors of companies within the NWH Sub Group
Other NWH EDs	Executive directors of other subsidiaries within the NWH Group
NWH Sub Group NEDs	Non-executive directors of companies within the NWH Sub Group
Other NWH NEDs	Non-executive directors of other subsidiaries within the NWH Group

## 1. Number of MRTs by business area

Number of beneficiaries	Senior mgmt	Other MRTs	Total
NWH Sub Group EDs	3	—	3
Other NWH EDs	4	—	4
NWH Sub Group NEDs	—	14	14
Other NWH NEDs	—	16	16
Corporate Functions	6	43	49
Control Functions	2	125	127
Commercial Banking	1	43	44
Personal Banking	1	80	81
Private Banking	—	27	27
<b>Total</b>	<b>17</b>	<b>348</b>	<b>365</b>

One individual above holds MRT criteria for NWH but has their primary role at RBS Group. This individual holds MRT criteria for NWH because they have functional oversight for NWH management.

Note that remuneration for this individual has been excluded from the remaining tables in this disclosure because any remuneration the individual receives (both fixed and variable) is paid in relation to their core role and is not linked to their MRT status for NWH. Information on their remuneration is included in the other MRT disclosures provided as part of the RBS Group 2019 Annual Report on rbs.com.

## 2. Aggregate remuneration expenditure

Aggregate remuneration expenditure in respect of 2019 performance was as follows:

Aggregate remuneration	Senior mgmt	Other MRTs	Total
Number of beneficiaries	17	347	364
	£m	£m	£m
NWH Sub Group EDs	9.56	—	9.56
Other NWH EDs	3.12	—	3.12
NWH Sub Group NEDs	—	3.30	3.30
Other NWH NEDs	—	1.08	1.08
Corporate Functions	10.10	22.69	32.79
Control Functions	3.67	42.43	46.10
Commercial Banking	1.00	22.08	23.08
Personal Banking	2.44	19.61	22.05
Private Banking	—	9.02	9.02
<b>Total</b>	<b>29.89</b>	<b>120.21</b>	<b>150.10</b>

## 3. Amounts and form of fixed and variable remuneration

Fixed remuneration consisted of salaries, allowances, pension and benefit funding.

Fixed remuneration	Senior mgmt	Other MRTs	Total
Number of beneficiaries	17	347	364
	£m	£m	£m
NWH Sub Group EDs	5.86	—	5.86
Other NWH EDs	1.87	—	1.87
NWH Sub Group NEDs	—	3.30	3.30
Other NWH NEDs	—	1.08	1.08
Corporate Functions	6.89	14.99	21.89
Control Functions	2.07	29.35	31.42
Commercial Banking	0.60	13.28	13.88
Personal Banking	1.44	15.80	17.24
Private Banking	—	5.74	5.74
<b>Total</b>	<b>18.73</b>	<b>83.54</b>	<b>102.27</b>

## Variable remuneration awarded for 2019 performance

Variable remuneration consisted of a combination of annual bonus and long-term incentive awards, deferred over a three to seven year period in accordance with regulatory requirements. Under the RBS Group bonus deferral structure, immediate cash awards are limited to £2,000 per employee.

Long-term incentive awards vest subject to the extent to which performance conditions are met and can result in zero payment.

Annual bonus	Senior mgmt	Other MRTs	Total
Number of beneficiaries	7	286	293
	£m	£m	£m
<b>NWH Sub Group EDs</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Other NWH EDs</b>	<b>—</b>	<b>—</b>	<b>—</b>
Cash remuneration	0.00	—	0.00
Deferred bonds	0.22	—	0.22
Deferred shares	1.03	—	1.03
	1.25	—	1.25
<b>NWH Sub Group NEDs</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Other NWH NEDs</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Corporate Functions</b>	<b>0.01</b>	<b>0.08</b>	<b>0.09</b>
Cash remuneration	0.01	0.08	0.09
Deferred bonds	0.11	1.93	2.04
Deferred shares	0.99	5.69	6.68
	1.11	7.70	8.81
<b>Control Functions</b>	<b>—</b>	<b>0.24</b>	<b>0.24</b>
Cash remuneration	—	0.24	0.24
Deferred bonds	—	5.16	5.16
Deferred shares	—	7.68	7.68
	—	13.08	13.08
<b>Commercial Banking</b>	<b>0.00</b>	<b>0.08</b>	<b>0.08</b>
Cash remuneration	0.00	0.08	0.08
Deferred bonds	0.06	1.94	2.00
Deferred shares	0.34	6.78	7.12
	0.40	8.80	9.20
<b>Personal Banking</b>	<b>—</b>	<b>0.13</b>	<b>0.13</b>
Cash remuneration	—	0.13	0.13
Deferred bonds	—	1.82	1.82
Deferred shares	—	1.86	1.86
	—	3.81	3.81
<b>Private Banking</b>	<b>—</b>	<b>0.05</b>	<b>0.05</b>
Cash remuneration	—	0.05	0.05
Deferred bonds	—	1.09	1.09
Deferred shares	—	2.14	2.14
	—	3.28	3.28
<b>Total</b>	<b>2.76</b>	<b>36.67</b>	<b>39.43</b>

## NatWest Holdings Group Remuneration Disclosure

Long-term incentives	Senior mgmt	Other MRTs	Total
	£m	£m	£m
Number of beneficiaries	9	—	9
NWH Sub Group EDs	3.70	—	3.70
Other NWH EDs	—	—	—
NWH Sub Group NEDs	—	—	—
Other NWH NEDs	—	—	—
Corporate Functions	2.10	—	2.10
Control Functions	1.60	—	1.60
Commercial Banking	—	—	—
Personal Banking	1.00	—	1.00
Private Banking	—	—	—
Total	8.40	—	8.40

### 4. Outstanding deferred remuneration through 2019

The table below includes deferred remuneration awarded or paid out in 2019 in respect of prior performance years. Deferred remuneration reduced during the year relates to long-term incentives lapsed when performance conditions are not met, long-term incentives and deferred awards forfeited on leaving and malus adjustments of prior year deferred awards and long-term incentives.

Category of deferred remuneration	Senior mgmt	Other MRTs	Total
	£m	£m	£m
Unvested from prior year	38.27	58.57	96.84
Awarded during year	12.42	39.25	51.67
Paid out (retained)	0.48	4.89	5.37
Paid out (released)	3.57	31.51	35.08
Reduced from prior years	8.78	8.68	17.46
Unvested at year end	37.85	52.75	90.60

### 5. Guaranteed Awards (including 'Sign-on' awards) and Severance Payments

NWH Group does not offer 'Sign-on awards'. Guaranteed awards may only be granted to new hires in exceptional circumstances in compensation for awards foregone in their previous company and are limited to the first year of service. No new hire guarantees were awarded to MRTs in respect of the 2019 performance year.

Severance payments and / or arrangements can be made to employees who leave NWH 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 awarded.

No severance payments were made to MRTs during the year in excess of contractual payments, local policies, standards or statutory amounts, other than payments to two individuals of €25,000 and £180,000. None of the individuals were senior management and each payment was made in commercial settlement of potential legal proceedings related to the termination of employment. Severance payments made do not reward failure or misconduct in line with regulatory requirements. Where required, remuneration is constrained within the limit of variable to fixed remuneration in accordance with EBA guidelines.

### 6. Ratio between fixed and variable remuneration

The variable component of total remuneration for MRTs of NWH Group shall not exceed 100% of the fixed component. The average ratio between fixed and variable remuneration for 2019 is approximately 1 to 0.52. The majority of MRTs are based in the UK.

Ratio of fixed to variable	Senior mgmt	Other MRTs	Total
	ratio	ratio	ratio
Number of beneficiaries	16	286	302
NWH Sub Group EDs	1:0.63	—	1:0.63
Other NWH EDs	1:0.67	—	1:0.67
NWH Sub Group NEDs	—	—	—
Other NWH NEDs	—	—	—
Corporate Functions	1:0.52	1:0.52	1:0.52
Control Functions	1:0.77	1:0.47	1:0.49
Commercial Banking	1:0.67	1:0.70	1:0.70
Personal Banking	1:0.70	1:0.29	1:0.33
Private Banking	—	1:0.59	1:0.59
Consolidated	1:0.62	1:0.49	1:0.52

### 7. Discount Rate

Under CRD IV 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 at least 25% of variable pay is delivered 'in instruments' (shares) and deferred over five years or more. The discount rate was not used for remuneration awarded in respect of the 2019 performance year.

### Total remuneration by band for all employees earning >€1 million

€ million	Number of employees
	2019
€1.0 - €1.5	20
€1.5 - €2.0	4
€2.0 - €2.5	4
€2.5 - €3.0	1
€3.0 - €3.5	1
More than €3.5	0
Total	30

#### Notes:

- Total remuneration in the table above includes fixed pay, pension and benefit funding and variable pay.
- Where applicable, the table is based on an average exchange rate of €1.14 to £1 for 2019.
- As noted earlier in this report, one individual has been excluded from the remuneration tables in this disclosure because any remuneration they receive is paid in relation to their core role and is not linked to their MRT status for NWH. Information on their remuneration is included in the other MRT disclosures provided as part of the RBS Group 2019 Annual Report on rbs.com.

## Appendix 1 – CRR roadmap

The following table provides a reference signposting for part 8 of the Capital Requirements Regulation (CRR) covering Pillar 3 disclosures.

CRR ref	High-level summary	Compliance reference
<b>Scope of disclosure requirements</b>		
431 (1)	Requirement to publish Pillar 3 disclosures.	NWH Group publishes Pillar 3 disclosures as required.
431 (2)	Firms with permission to use specific operational risk methodologies must disclose operational risk information.	NWH Group ARA: Capital and risk management - Operational risk section.
431 (3)	Institution must have a policy covering frequency of disclosures. Their verification, comprehensiveness and appropriateness.	NWH Group has a Pillar 3 policy.
431 (4)	Explanation of ratings decision upon request.	If requested, NWH Group provides an explanation in writing on rating decisions to SMEs and other corporate applicants.
<b>CRR 432: Non-material, proprietary or confidential information</b>		
432 (1)	Institutions may omit information that is not material if certain conditions are respected.	NWH Group complies with all relevant disclosure requirements.
432 (2)	Institutions may omit information that is proprietary or confidential if certain conditions are respected.	NWH Group does not omit any information on the grounds that it may be proprietary or confidential.
432 (3)	Where 432 (1) and (2) apply this must be stated in the disclosures, and more general information must be disclosed.	N/A
432 (4)	Use of 432 (1) or (2) is without prejudice to scope of liability for failure to disclose material information.	N/A
<b>CRR 433: Frequency of disclosure</b>		
433	Disclosures must be published once a year at a minimum, and more frequently if necessary.	Required disclosures are published annually at a minimum, with quarterly disclosures for key elements and metrics including Own Funds, RWA, Capital Requirements and Leverage.
<b>CRR 434: Means of disclosures</b>		
434 (1)	To include all disclosures in one appropriate medium, or provide clear cross-references.	Majority of the disclosure requirements are covered by the Pillar 3 Report. Other disclosures including certain qualitative requirements are covered within the NWH Group ARA and RBS Group ARA. Signposting is used to direct users to relevant pages or sections.
434 (2)	Disclosures made under other requirements (e.g. accounting) can be used to satisfy Pillar 3 if appropriate.	This reference guide sets out the cross-references.
<b>CRR 435: Risk management objectives and policies</b>		
435 (1)	Disclose information on:	
435 (1) (a)	The strategies and processes to manage those risks.	RBS Group ARA: Corporate governance – Report of the Group Board Risk Committee. Additional information on risk strategies and management processes found throughout this document and specifically ARA: Capital and risk management section.
435 (1) (b)	Structure and organisation of risk management function.	NWH Group ARA: Capital and risk management – Risk management framework. Additional information on risk management structure processes found throughout this document, and specifically NWH Group ARA: Capital and risk management section.
435 (1) (c)	Risk reporting and measurement systems.	NWH Group ARA: Capital and risk management - Risk management framework. Additional information on the scope and nature of risk reporting and measurement systems found throughout this document, and NWH Group ARA: Capital and risk management section.



## Appendix 1 – CRR roadmap

CRR ref	High-level summary	Compliance reference
<b>CRR 435: Risk management objectives and policies</b>		
435 (1) (d)	Hedging and mitigating risk - policies and processes.	NWH Group ARA: Capital and risk management - Risk management framework; Credit risk; Non-traded market risk; Pension risk, pages; Operational risk; and, Accounting policies - Derivatives and Hedging.
435 (1) (e)	Adequacy of risk management arrangements.	RBSG Group ARA: Corporate Governance – Report of the Group Audit Committee and Board Risk Committee.
435 (1) (f)	Concise risk statement approved by the Board	NWH Group ARA: Capital and risk management - Risk management framework.
435 (2)	Information on governance arrangements, including information on Board composition and recruitment, and risk committees.	Refer to sub-articles below.
435 (2) (a)	Number of directorships held by directors.	RBS Group ARA: Corporate governance – Our Board.
435 (2) (b)	Recruitment policy of the Board, their experience and expertise.	RBS Group ARA: Corporate governance – Report of the Group Nominations and Governance Committee <a href="https://www.rbs.com/about/board-and-governance.html">rbs.com/about/board-and-governance.html</a>
435 (2) (c)	Policy on diversity of Board membership and results against targets.	RBS Group ARA: Corporate governance – Report of the Group Nominations and Governance Committee.
435 (2) (d)	Disclosure of whether a dedicated risk committee is in place, and number of meeting in the year.	RBS Group ARA: Corporate governance – Report of the Group Board Risk Committee.
435 (2) (e)	Description of information flow risk to Board.	RBS Group ARA: Report on the Group Board Risk Committee & NWH Group ARA: Capital and risk management - Risk management framework.
<b>CRR 436: Scope of application</b>		
436	See sub paragraphs below.	
436 (a)	Name of institution.	NatWest Holding Group and its consolidated subsidiaries.
436 (b)	Difference in basis of consolidation for accounting and prudential purposes, naming entities that are:	EU LI1, CAP 2 & Consolidation.
436 (b) (i)	Fully consolidated;	NWH Group ARA: Note 5 Investments in Group undertakings and Note 9 Related undertakings.
436 (b) (ii)	Proportionally consolidated;	
436 (b) (iii)	Deducted from own funds;	
436 (b) (iv)	Neither consolidated nor deducted.	
436 (c)	Impediments to transfer of funds between parent and subsidiaries.	There are no such impediments. Refer to Pillar 3 – Presentation of information.
436 (d)	Capital shortfalls in any subsidiaries outside of scope of consolidation.	Entities outside the scope of consolidation are appropriately capitalised.
<b>CRR 437: Own funds</b>		
436 (e)	Making use of articles on derogations from a) prudential requirements or b) liquidity requirements for individual subsidiaries/entities.	N/A
437 (1)	Requirement to disclose following information regarding own funds:	
437 (1) (a)	Reconciliation of regulatory values for Common Equity Tier 1 items, Additional Tier 1 items, Tier 2 items and filters and deductions to statutory balance sheet;	EU LI1 & CAP 2.
437 (1) (b)	Description of the main features of Capital Instruments issued by institution;	Pillar 3 Capital Instruments Common Disclosure template available on RBS Investor Relations website <a href="http://www.investors.rbs.com">www.investors.rbs.com</a>

## Appendix 1 – CRR roadmap

CRR ref	High-level summary	Compliance reference
<b>CRR 437: Own funds</b>		
437 (1) (c)	Full terms and conditions of Capital Instruments issued by institution;	Pillar 3 Capital Instruments Common Disclosure template available on RBS Investor Relations website <a href="http://www.investors.rbs.com">www.investors.rbs.com</a>
437 (1) (d)	Disclosure of the nature and amounts of the following:	CAP 2.
437 (1) (d) (i)	each prudential filter applied;	
437 (1) (d) (ii)	each capital deduction applied;	
437 (1) (d) (iii)	items not deducted from capital;	
437 (1) (e)	a description of all restrictions applied to the calculation of own funds in accordance with this Regulation and the instruments, prudential filters and deductions to which those restrictions apply;	CAP 2.
437 (1) (f)	where institutions disclose capital ratios calculated using elements of own funds determined on a different basis.	N/A
437 (2)	EBA shall develop draft implementing technical standards to specify uniform templates for disclosure.	EBA published technical standards introducing Common Disclosure Templates for Own Funds; available on CAP 2.
<b>CRR 438: Capital requirements</b>		
438	See sub paragraphs below.	
438 (a)	Summary of institution's approach to assessing adequacy of capital levels.	Pillar 3 - Presentation of Information & NWH Group ARA: Capital and risk management - Risk management framework.
438 (b)	Result of ICAAP on demand from authorities.	N/A
438 (c)	Capital requirement amounts for credit risk for each Standardised approach exposure class.	CR2.
438 (d)	Capital requirements amounts for credit risk for each Internal Ratings Based Approach exposure class.	CR2, EU OV1 & CR10-B & EU CR8.
438 (d) (i)		
438 (d) (ii)		
438 (d) (iii)		
438 (d) (iv)		
438 (e)	Capital requirements amounts for market risk or settlement risk, or large exposures where they exceed limits.	EU OV1 & EU MR1.
438 (f)	Capital requirement amounts for operational risk, separately for the basic indicator approach, the Standardised approach, and the advanced measurement approaches as applicable.	NWH Group uses Standardised approach; EU OV1 includes operational risk capital requirements.
438 (endnote)	Requirement to disclose specialised lending exposures and equity exposures in the banking book falling under the simple risk weight approach.	EU CR10.
<b>CRR 439: Exposure to counterparty credit risk</b>		
439	See sub paragraphs below.	
439 (a)	Description of process to assign internal capital and credit limits to CCR exposures.	CCR - EAD calculation methods for counterparty credit risk & counterparty credit limit setting.
439 (b)	Discussion of process to secure collateral and establishing reserves.	CCR – Counterparty credit risk management & Credit Valuation Adjustments & NWH Group ARA: Notes on the Consolidated Accounts - 10 Financial Instruments – valuation.

## Appendix 1 – CRR roadmap

CRR ref	High- level summary	Compliance reference
<b>CRR 439: Exposure to counterparty credit risk</b>		
439 (c)	Discussion of management of wrong-way exposures	CCR – Wrong-way risks.
439 (d)	Disclosure of collateral to be provided (outflows) in the event of a ratings downgrade.	EAD calculation methods for counterparty credit risk & Counterparty credit limit setting.
439 (e)	Derivation of net derivative credit exposure.	EU CCR5_A
439 (f)	Exposure values for mark-to-market, original exposure, standardised and internal model methods.	EU CCR1, EU CCR2 & EU CCR8.
439 (g)	Notional value of credit derivative hedges and current credit exposure by type of exposure.	EU CCR_6
439 (h)	Notional amounts of credit derivative transactions for own credit, intermediation, bought and sold, by product type.	EU CCR_6
439 (i)	Estimate of alpha, if applicable.	EAD calculation methods for counterparty credit risk.
<b>CRR 440: Capital buffers</b>		
440 (1)	See sub paragraphs below.	N/A
440 (1) (a)	Geographical distribution of relevant credit exposures.	CAP 5a.
440 (1) (b)	Amount of the institution specific countercyclical capital buffer.	CAP 5b.
440 (2)	EBA will issue technical implementation standards related to 440 (1).	NWH Group follows the current standards.
<b>CRR 441: Indicators of global systemic importance</b>		
441 (1)	Disclosure of the indicators of global systemic importance.	GSIB indicators as of and for the year ended 31 December 2019 will be published in April 2020 on <a href="http://www.investors.rbs.com">www.investors.rbs.com</a> .
441 (2)	EBA will issue technical implementation standards related to 441 (1).	NWH Group follows the current standards.
<b>CRR 442: Credit risk adjustments</b>		
442	See sub paragraphs below.	
442 (a)	Disclosure of bank's definitions of past due and impaired.	NWH Group ARA: Capital and Risk Management and Notes on the consolidated accounts - 12 Loan impairment provisions
442 (b)	Approaches for calculating credit risk adjustments.	NWH Group ARA: Accounting policies: 14 Impairment: expected credit losses
442 (c)	Disclosure of EAD by exposure class.	EU CRB_B.
442 (d)	Disclosures of EAD by geography and exposure class.	EU CRB_C.
442 (e)	Disclosures of EAD by industry and exposure class.	EU CRB_D.
442 (f)	Disclosures of EAD by residual maturity and exposure class.	EU CRB_E.
442 (g)	Breakdown of impaired, past due, specific and general credit adjustments, and impairment charges for the period, by exposure class or counterparty type.	EU CR1_A, NPL templates: Template1, Template 3, Template 4
442 (g) (i)		
442 (g) (ii)		
442 (g) (iii)		
442 (g) (ii)		NWH Group ARA: Capital and risk management - Segmental loans and impairment metrics.
442 (g) (iii)		
442 (h)	Impaired, past due exposures, by geographical area, and amounts of specific and general impairment for each geography.	NPL template: Template 5  NWH Group ARA: Capital and risk management - Segmental loans and impairment metrics.
442 (i)	Reconciliation of changes in specific and general credit risk adjustments.	EU CR2-A.
442 (i) (i- v)		
442 Endnote	Specific credit risk adjustments recorded to income statement are disclosed separately.	EU CR2-A

## Appendix 1 – CRR roadmap

CRR ref	High-level summary	Compliance reference
<b>CRR 443: Unencumbered assets</b>		
443	Disclosures on unencumbered assets.	EBA Asset Encumbrance.
<b>CRR 444: Use of ECAIs</b>		
444	See sub paragraphs below.	
444 (a)	Names of the ECAIs used in the calculation of Standardised approach RWAs, and reasons for any changes.	Credit risk: Standardised approach.
444 (b)	Exposure classes associated with each ECAI.	Credit risk: Standardised approach.
444 (c)	Process for translating external ratings into credit quality steps.	Credit risk: Standardised approach.
444 (d)	Mapping of external rating to credit quality steps.	EU_CR5a.
444 (e)	Exposure value pre and post-credit risk mitigation, by CQS.	Majority of exposure where ECAI ratings are used to calculate the risk-weight are within central governments and banks exposure class. Refer to EU CR5 and EU_CCR3 for risk-weights.
<b>CRR 445: Exposure to market risk</b>		
445	Disclosure of position risk, large exposures exceeding limits, FX, settlement and commodities risk.	EU_MR1 for Specific Interest Rate Risk of Securitisation Positions; and, Market Risk components including position risk, foreign exchange risk and IMM.  Settlement Risk is included within EU_OV1.
<b>CRR 446: Operational risk</b>		
446	Scope of approaches used to calculate operational risk.	NWH Group uses the standardised approach, refer to EU OV1 and NWH Group ARA: Capital and risk management - Operational risk
<b>CRR 447: Exposures in equities not included in the trading book</b>		
447		
447 (a)	Differentiation between exposures based on their objectives, and an overview of the accounting techniques and valuation methodologies used.	NWH Group ARA: Capital and risk management - Credit risk and Non-traded market risk.  For further detail on accounting refer to NWH Group ARA: Accounting policies - 13 Financial Instruments.
447 (b)	Comparison between the balance sheet value, fair value and market price where materially different.	N/A
447 (c)	The types, nature and amounts of exchange-traded exposures, private equity exposures in sufficiently diversified portfolios, and other exposures.	N/A
447 (d)	The cumulative realised gains or losses arising from sales and liquidations in the period.	
447 (e)	The total unrealised gains or losses, the total latent revaluation gains or losses, and any of these amounts included in the original or additional own funds.	
<b>CRR 448: Exposure to interest rate risk on positions not included in the trading book</b>		
448		
448 (a)	For Non-Traded Interest Rate Risk, the nature and frequency of measurement.	NWH Group ARA: Capital and risk management - Non-Traded Market Risk - Interest rate risk.
448 (b)	The variation in earnings, economic value or other relevant measure used by the management for upward and downward rate shocks according to management's method for measuring the interest rate risk, broken down by currency.	NWH Group ARA: Capital and risk management - Non-Traded Market Risk - Interest rate risk.
<b>CRR 449: Exposure to securitisation positions</b>		
449	Exposure to securitisations positions.	NWH Group has no correlation trading portfolio.
449 (a)	Objectives in relation to securitisation activity.	Securitisation – Objectives and roles.

## Appendix 1 – CRR roadmap

CRR ref	High-level summary	Compliance reference
CRR 449: Exposure to securitisation positions		
449	Exposure to securitisations positions.	NWH Group has no correlation trading portfolio.
449 (a)	Objectives in relation to securitisation activity.	Securitisation – Objectives and roles.
449 (b)	Nature of other risks in securitised assets, including liquidity.	Securitisation – Risk management.
449 (c)	Risks in re-securitisation activity stemming from seniority of underlying securitisations and ultimate underlying assets.	Securitisation – Risk management.
449 (d)	The roles played by institutions in the securitisation process.	Securitisation – Objectives and roles.
449 (e)	Indication of the extent of involvement in these roles.	Securitisation – Objectives and roles. SEC 4.
449 (f)	Processes in place to monitor changes in credit and market risks of securitisation exposures, and how the processes differ for re-securitisation exposures.	Securitisation – Risk management.
449 (g)	Description of the institution's policies with respect to hedging and unfunded protection, and identification of material hedge counterparties.	Securitisation – Risk management.
449 (h)	Approaches to calculation of RWA for securitisations mapped to types of exposures.	Securitisation – Calculation of risk-weighted exposures.
449 (i)	Types of SSPEs used to securitise third-party exposures, and list of SSPEs.	Securitisation – SSPEs used by NWH Group SEC 4 & SEC 6.
449 (j)	Summary of accounting policies for securitisations.	Securitisation – Summary of accounting policies.
449 (j) (i)	Treatment of sales or financings;	Securitisation – Recognition of sales
449 (j) (ii)	Recognition of gains on sales;	Securitisation – Recognition of sales
449 (j) (iii)	Approach to valuing securitisation positions;	Securitisation - Key assumptions for valuing securitisation positions
449 (j) (iv)	Treatment of synthetic securitisations;	Securitisation - Synthetic securitisations
449 (j) (v)	Valuation of assets awaiting securitisations;	Securitisation - Assets awaiting securitisation
449 (j) (vi)	Recognition of arrangements that could require the bank to provide support to securitised assets.	Securitisation - Implicit support
449 (k)	Names of ECAIs used for securitisations.	Securitisation – Calculation of risk-weighted exposures.
449 (l)	Full description of Internal Assessment Approach.	Securitisation – Summary of Internal Assessment Approach.
449 (m)	Explanation of changes in quantitative disclosures.	SEC 1 & SEC 6.
449 (n)	Banking and trading book securitisation exposures:	
449 (n) (i)	Amount of outstanding exposures securitised;	SEC 6.
449 (n) (ii)	On balance sheet securitisation retained or purchased, and off-balance sheet exposures;	SEC 4.
449 (n) (iii)	Amount of assets awaiting securitisation;	Securitisation - Assets awaiting securitisation.
449 (n) (iv)	Early amortisation treatment; aggregate drawn exposures, capital requirements;	NWH Group has no securitisation positions treated subject to early amortisation treatment.
449 (n) (v)	Deducted or 1,250%-weighted securitisation positions;	SEC 1, SEC 2 & SEC 3.
449 (n) (vi)	Amount of exposures securitised and recognised gains or losses on sales.	SEC 1.
449 (o)	Banking and trading book securitisations by risk band:	
449 (o) (i)	Retained and purchased exposure and associated capital requirements, broken down by risk-weight bands;	SEC 1 & SEC 2.
449 (o) (ii)	Retained and purchased re-securitisation exposures before and after hedging and insurance; exposure to financial guarantors broken down by guarantor credit worthiness.	SEC 1.
449 (p)	Impaired assets and recognised losses related to banking book securitisations, by exposure type.	SEC 6.
449 (q)	Exposure and capital requirements for trading book securitisations, separately into traditional.	N/A
449 (r)	Whether the institution has provided non-contractual financial support to securitisation vehicles.	Securitisation – Implicit support.

## Appendix 1 – CRR roadmap

CRR ref	High-level summary	Compliance reference
<b>CRR 450: Remuneration policy</b>		
450	Remuneration	RBS Group ARA: Governance - Directors' remuneration report and Other remuneration disclosures and as set out in this document on page 93.
450 (1) (a)	Decision-making process for determining remuneration policy	Further detail on compliance with CRD IV and remuneration from <a href="https://www.rbs.com/rbs/about/board-and-governance.html">rbs.com/rbs/about/board-and-governance.html</a>
450 (1) (b)	Link between pay and performance;	
450 (1) (c)	Design characteristics of the remuneration system, criteria for performance measurement, risk adjustment, deferral policy and vesting criteria;	
450 (1) (d)	Ratios between fixed and variable remuneration;	
450 (1) (e)	Performance criteria on which entitlement to shares, options or variable components of remuneration is based;	
450 (1) (f)	Parameters and rationale for variable components schemes and other non-cash benefits;	
450 (1) (g)	Aggregate quantitative information on remuneration;	
450 (1) (h)	Aggregate quantitative information on remuneration, broken down by senior management and members staff with significant impact on risk profile of the institution:	
450 (1) (h) (i)	The amounts of remuneration for the financial year, split into fixed and flexible and number of beneficiaries;	
450 (1) (h) (ii)	The amounts and forms of variable remuneration;	
450 (1) (h) (iii)	The amounts of outstanding deferred remuneration, split into vested and unvested;	
450 (1) (h) (iv)	The amounts of deferred remuneration awarded during the financial year, paid out and reduced through performance adjustments;	
450 (1) (h) (v)	New sign-on and severance payments made during the financial year, number of beneficiaries;	
450 (1) (h) (vi)	The amount of severance payments awarded during the financial year, number of beneficiaries and highest award;	
450 (1) (i)	The number of individuals been remunerated EUR 1 million or more, between EUR 1 and 5 million and of EUR 5 million or above;	
450 (1) (j)	Upon demand from the Member State or competent authority, total remuneration for each member of management body or senior management;	
450 (2)	For significant institutions, internal organisation and the nature, scope and the complexity of their activities and other quantitative information as per the article;	
<b>CRR 451: Leverage</b>		
451 (1)	See sub paragraphs below.	
451 (1) (a)	Leverage ratio, and breakdown of total exposure measure,	CAP 3.
451 (1) (b)	including reconciliation to financial statements, and derecognised fiduciary items.	CAP 3.
451 (1) (c)		N/A
451 (1) (d)	Description of the risk management approach to mitigate excessive leverage.	NWH Group ARA: Capital and risk management – Capital Management.
451 (1) (e)	Factors that impacted the leverage ratio during the year.	Capital, liquidity and funding – Key points.
451 (2)	EBA to publish implementation standards for points above.	NWH Group follows the current standards.
<b>CRR 452: Use of the IRB Approach to credit risk</b>		
452	See sub paragraphs below.	
452 (a)	Permission for use of the IRB approach from authority.	EU CRE_1: IRB Models.
452 (b)	Explanation of:	
452 (b) (i)	Internal rating scales, mapped to external ratings;	EU CR9_A_2 & ARA: Capital and risk management - Credit Risk. Asset quality.
452 (b) (ii)	Use of internal ratings for purposes other than capital requirement calculations;	EU CRE: Qualitative disclosures relating to IRB models.
452 (b) (iii)	Management and recognition of credit risk mitigation;	Credit risk – Risk profile by credit risk mitigation technique.
452 (b) (iv)	Controls around ratings systems.	Credit risk – IRB modelling governance & Independent model validation.
452 (c)	Ratings processes for each IRB asset class.	EU CRE: Qualitative disclosures relating to IRB models (credit and counterparty risk), including EU CRE_2a & EU CRE_2b.
452 (c) (i)		
452 (c) (ii)		
452 (c) (iii)		
452 (c) (iv)		
452 (c) (v)		

## Appendix 1 – CRR roadmap

CRR ref	High-level summary	Compliance reference
<b>CRR 452: Use of the IRB Approach to credit risk</b>		
452 (d)	Exposure values by IRB exposure class, separately for Advanced and Foundation IRB.	CR2 and numerous other tables throughout the report.
452 (e)	Disclosure by exposure classes, separately by obligor grade:	EU CR6_b & EU_CCR4.
452 (e) (i)	Total exposure, separating drawn and undrawn exposure	EU CR6_b & EU_CCR4.
452 (e) (ii)	Exposure-weighted average risk weight	EU CR6_b & EU_CCR4.
452 (e) (iii)	Undrawn commitments and the exposure-weighted average Credit Conversion Factor (CCF)	EU CR6_b.
452 (f)	The requirements laid out in 452(e) for the Retail exposure class.	EU CR6_a.
452 (g)	Actual specific credit risk adjustments by exposure class.	EU_CR6_a & EU_CR6_b.
452 (h)	Commentary on drivers of losses in preceding period.	EU CR9, EU CR9_A, EU CR9_B.
452 (i)	Predicted against actual losses for sufficient period, and historical analysis to help assess the performance of the rating system over a sufficient period.	EU_CR9_a; EU_CR9_a_1; EU_CR9_a_2; EU_CR9_b;
452 (j)	For all IRB exposure classes, where applicable, PD and LGD by each country where the bank operates.	EU_CR6_C.
452 (j) (i)		
452 (j) (ii)		
<b>CRR 453: Use of credit risk mitigation techniques</b>		
453	See sub paragraphs below.	
453 (a)	Use of on and off-balance sheet netting.	EU CRC: IRB and STD: Qualitative disclosures relating to credit risk mitigation. Wholesale IRB models - Exposure at default models. EU LI2.
453 (b)	How collateral valuation is managed.	EU CRC: IRB and STD: Qualitative disclosures relating to credit risk mitigation.
453 (c)	Description of types of collateral used by NWH Group.	EU CRC: IRB and STD: Qualitative disclosures relating to credit risk mitigation.
453 (d)	Guarantor and credit derivative counterparty, creditworthiness.	Recognition of credit risk mitigation in the calculation of RWAs.
453 (e)	Market or credit risk concentrations within risk mitigation exposures.	EU CRC: IRB and STD: Qualitative disclosures relating to credit risk mitigation.
453 (f)	Standardised or Foundation IRB approach, exposure value covered by eligible collateral.	EU_CR4.
453 (g)	Exposures covered by guarantees, credit derivatives or collateral.	EU_CR3.
<b>CRR 454: Use of the Advanced Measurement Approaches to operational risk</b>		
454	Description of the use of insurance or other risk transfer mechanisms to mitigate operational risk.	N/A
<b>CRR 455: Use of Internal Market Risk Models</b>		
455		
455(a)	See sub paragraphs below.	
455(a)(i)	Characteristics of the market risk models.	NWH Group no longer has positions under the internal model approach (IMA) and intends to request permission to cancel its waiver to use the IMA.
455 (a) (ii)	Methodology for all-price risk measure and incremental risk charge.	N/A
455 (a) (iii)	Descriptions of stress tests applied to the portfolios.	N/A
455 (a) (iv)	Methodology for back-testing and validating the models.	N/A
455 (b)	Scope of permission for use of the models.	N/A
455 (c)	Policies and processes to determine trading book classification, and to comply with prudential valuation requirements.	Market Risk qualitative information PV1.
455 (d)	High/Low/Mean values over the year of VaR, SVaR, all-price risk measure and incremental risk charge.	N/A
455 (d) (i)		
455 (d) (ii)		
455 (d) (iii)		
455 (e)	The elements of the own fund calculation.	N/A
455 (f)	Weighted average liquidity horizons of portfolios covered by models.	N/A
455 (g)	Comparison of end-of-day VaR measures compared with one-day changes in portfolio's value.	N/A