VIRGIN MONEY UK

Pillar 3 Disclosures 2021

Inside this year's report

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Executive summary

1.1 Introduction
This document presents the consolidated Pillar 3 disclosures of Virgin Money UK PLC ('Virgin Money' or 'the Company'), together with its subsidiary undertakings (which comprise 'the Group') as at 30 September 2021. This report should be read in conjunction with the Virgin Money UK PLC Annual Report & Accounts. The analysis presented within the Pillar 3 disclosures provides detail on aspects of the Group's risk profile and, along with detail on the Risk Management Framework (RMF), supports the Group's position as a strongly capitalised firm which employs robust systems and processes in order to assess, manage and mitigate risk.

The numbers presented within this report are on a consolidated basis, with Virgin Money UK PLC numbers shown in the body of the report and CB Group consolidated numbers shown in Appendix 1.

1.2 Group at a glance
The Group's business model draws on Our Purpose of 'Making you happier about money' and internal guiding principles to use our unique combination of resources to deliver our core activities as a bank, aligned to the environment we operate in. Our strategic priorities remain as follows:

- **Pioneering growth** – reshaping the balance sheet mix, growing our margin accretive assets and low-cost relationship deposits;
- **Delighting customers and colleagues** – enhancing the customer experience, encouraging digital adoption and delivering Our Purpose;
- **Super straightforward efficiency** – realising transformation synergies, digitising and simplifying the business and streamlining our operating model; and
- **Discipline and sustainability** – maintaining a disciplined risk approach, optimising the Group's risk-weighted assets (RWA) and delivering sustainable returns.

Further information on our Purpose can be found in the Strategic report within the Group's 2021 Annual Report & Accounts.

1.3 Summary of risk profile
Effective management of risk is a key capability for a successful financial services provider and is fundamental to the Group's strategy. The Group has continued to advance and strengthen its risk management capabilities, evolving in line with industry developments and best practice.

The Board is responsible for determining the nature and extent of the risks it is willing to take in order to achieve its strategic objectives.

As part of its viability assessment under the UK Corporate Governance Code (the Code) requirements, the Directors have performed a robust assessment of the risks facing the Group, including those that would threaten its business model and future performance, solvency, liquidity or reputation.

1.4 Principal risks

The Group's principal risks are those which could result in events or circumstances that might threaten the Group's business model, future performance, solvency, liquidity and reputation. The table below sets out the Group's principal risks and for further information on the mitigating actions and future focus for each risk, refer to pages 46 to 49 in the Group's 2021 Annual Report & Accounts.

Principal risk	Description
Credit risk *Group's 2021 Annual Report & Accounts Pages 153 to 182*	The risk of loss of principal or interest stemming from a borrower's failure to meet contractual obligations to the Group in accordance with their agreed terms. Credit risk manifests at both a portfolio and transactional level.
Financial risk *Group's 2021 Annual Report & Accounts Pages 183 to 206*	Financial risk includes capital risk, funding risk, liquidity risk, market risk and pension risk, all of which have the ability to impact the financial performance of the Group, if managed improperly.
Model risk *Group's 2021 Annual Report & Accounts Page 207*	The potential for adverse consequences from decisions based on incorrect or misused model outputs and reports.
Regulatory and compliance risk *Group's 2021 Annual Report & Accounts Page 208*	The risk of failing to comply with relevant laws and regulatory requirements, not keeping regulators informed of relevant issues, not responding effectively to information requests, not meeting regulatory deadlines or obstructing the regulator.
Conduct risk *Group's 2021 Annual Report & Accounts Page 209*	The risk of undertaking business in a way that is contrary to the interests of customers, resulting in inappropriate customer outcomes or detriment, regulatory censure, redress costs and/or reputational damage.
Operational risk *Group's 2021 Annual Report & Accounts Pages 210 to 211*	The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.
Technology risk *Group's 2021 Annual Report & Accounts Page 212*	The risk of loss resulting from inadequate or failed information technology processes. Technology risk includes cyber security, IT resilience, information security, data risk and payment risk.
Financial crime and fraud risk *Group's 2021 Annual Report & Accounts Page 213*	The risk that the Group's products and services will be used to facilitate financial crime against the Group, its customers or third parties. This includes money laundering, counter terrorist financing, sanctions, fraud and bribery and corruption.
Strategic and enterprise risk *Group's 2021 Annual Report & Accounts Page 214*	The risk of significant loss of earnings or damage arising from decisions or actions that impact the long-term interests of the Group's stakeholders or from an inability to adapt to external developments, including potential execution risk as a result of transformation activity.
People risk *Group's 2021 Annual Report & Accounts Page 215*	The risk of not having sufficiently skilled and motivated colleagues, who are clear on their responsibilities and accountabilities and behave in an ethical way.

1.5 Cross-cutting risks

Operational resilience and climate risk are treated as cross-cutting risks in the Group's RMF, manifesting through the established principal risk framework.

Operational resilience – Defined as the ability of the Group to protect and sustain its most critical functions and underlying assets, while adapting to expected or unexpected operational stress or disruption and having the capacity to recover from issues as and when they arise. Further information can be found on page 216 of the Risk report within the Group's 2021 Annual Report & Accounts.

Climate risk – The Group is exposed to physical and transition risks arising from climate change both in terms of its own operations but also, importantly, in relation to the Businesses and Personal customers it services.

Further information on climate risk is available in the Group's inaugural Task Force for Climate-Related Disclosures (TCFD) report, shown on pages 217 to 234 in the Group's 2021 Annual Report & Accounts. The report is structured across the TCFD framework's four thematic areas: governance, strategy, risk management and metrics and targets. The report conveys the progress made in assessing climate-related risks and opportunities whilst recognising the Group's ambition to continue to increase the extent of our disclosures on environmental measures.

1.6 Emerging risks

The Group considers an emerging risk to be any risk which has a material unknown and unpredictable component, with the potential to significantly impact the future performance of the Group.

Amendments have been made to the emerging risk classifications reported in the Group's 2020 Annual Report and Accounts, with technology and cyber risk renamed and repositioned as resilience risk, and critical infrastructure repositioned as third-party risk. New ways of working and changing skill requirements is a new emerging risk, recognising the changes to workforce dynamics brought about by COVID-19.

The Group's external emerging risks are:

- Political and economic risks;
- Regulatory change;
- Climate risk; and
- Third-party risk.

The internal emerging risks are:

- Data stewardship;
- Resilience risk; and
- New ways of working and changing skill requirements.

For further information on these, refer to pages 42 to 45 of the Group's 2021 Annual Report & Accounts.

1.7 Key ratios

The key ratios for the Group are presented below.

Table 1: Key ratios

	2021	2020
Common Equity Tier 1 (CET1) ratio	**14.9%**	13.4%
Tier 1 capital ratio	**17.8%**	17.2%
Total capital ratio	**22.0%**	20.2%
CRD IV leverage ratio[1]	**5.1%**	4.8%
UK leverage ratio[1]	**5.2%**	4.9%
Liquidity coverage ratio	**151%**	140%
	£m	£m
RWA	**24,232**	24,399
Total assets	**89,100**	90,259

(1) IFRS 9 transitional capital arrangements have been applied to the leverage ratio calculation.

The Group's CET1 capital increased by £345m during the year, primarily due to statutory profit after tax of £474m, a reduction in intangible assets of £118m and the beneficial effect of the Capital Requirements Regulation (CRR) Quick Fix amendments in relation to software assets of £151m. During the year, the Prudential Regulation Authority (PRA) announced that this relief would be removed on 1 January 2022.

These increases were partially offset by an increase of £107m in the deferred tax recognised on tax losses carried forward, an increase in the defined benefit fund pension asset of £81m, and the reduction in IFRS 9 provisions recognised in the year reduced the transitional relief available by £176m.

The Group continues to maintain a significant buffer to its Capital Requirements Directive IV (CRD IV) minimum CET1 requirement, with excess CET1 of 5.7%, being a buffer equivalent to £1,384m.

The Group's leverage ratio is 5.1% which exceeds the Basel Committee's proposed minimum of 3%. The Group is also subject to the UK leverage ratio framework, which came into force on 1 January 2016 and is relevant to PRA regulated banks and building societies with consolidated retail deposits equal to or greater than £50bn. The Group's UK leverage ratio is 5.2%, which exceeds the PRA minimum of 3.25%.

Further details on the Group's capital ratios, RWA and leverage ratio are presented in section 4.

Overview

2.1 Basis of preparation and frequency of disclosures

This document sets out the 2021 Pillar 3 disclosures for the Group, comprising Virgin Money UK PLC (the Company), and its controlled entities, including Clydesdale Bank PLC (the Bank), in accordance with the rules laid out in the CRR (Part 8).

Disclosures for CB Group consolidated are presented in Appendix 1, which aligns with the requirement from the PRA to report ring-fenced bodies at a sub-consolidated level.

Throughout the document, unless otherwise specified, credit risk exposures are defined as the aggregate of drawn (on-balance sheet) balances, undrawn (off-balance sheet) commitments and contingent liabilities prior to the application of credit risk mitigation, and credit conversion factors, and after IFRS 9 provisions.

The disclosures may therefore differ from similar information in the Group's 2021 Annual Report & Accounts for the year ended 30 September 2021, which is prepared in accordance with International Financial Reporting Standards (IFRS). The information in these disclosures is prepared in accordance with regulatory requirements and may therefore not be directly comparable with that information.

Unless otherwise stated, all figures are as at 30 September 2021, the Group's financial year-end, with comparative figures as at 30 September 2020.

The Group has a policy for complying with Pillar 3 disclosures in line with the European Banking Authority (EBA) guidelines on materiality, proprietary and confidential information, and disclosure frequency. These disclosures are published annually, and concurrently with the Group's 2021 Annual Report & Accounts, in accordance with regulatory guidelines. The Group publishes specific information more frequently where it is required under EBA guidelines.

No disclosures have been omitted on the basis of them being regarded as proprietary or confidential.

Omissions of disclosures within this report on grounds of materiality are:

- disclosures relating to 'Exposures in equities not included in the trading book'. See note 3.16 in the Group's 2021 Annual Report & Accounts for further information on valuation and key assumptions and methodologies used in valuation;
- separate disclosure of the geographical distribution of credit risk exposures to areas outside of the UK. Such exposures are not material and have been classified as 'other geographical areas' within Table 19; and
- additional credit risk mitigation, credit risk adjustment and capital buffer disclosures in relation to CB Consol. These disclosures are materially the same as those provided for the Group. Further information is provided in Appendix 1.

In December 2016, the EBA published final guidelines on Pillar 3 disclosures following the revised international Basel Committee on Banking Supervision (BCBS) Pillar 3 requirements (issued January 2015). These guidelines came into force on 31 December 2017 for Globally and Other Systemically Important Institutions (G-SII and O-SII), and any other institution that has been advised by competent authorities to make every effort to comply with the guidelines. While the Group does not fall into these categories, where appropriate, these templates have been adopted and disclosed within this report.

The Group continues to enhance the quality of its disclosures to ensure they provide relevant and timely information. Recent improvements have focused on additional remuneration disclosures, additional non-performing and forborne disclosures and, following Internal Ratings-Based (IRB) accreditation in March 2020, inclusion of EU CR10.

The Group continues to apply relevant relief measures introduced by regulatory and supervisory bodies to help address and alleviate various COVID-19 driven financial impacts. These include amendments to the CRR through the 'Quick Fix' package in June 2020, which introduced a number of beneficial modifications, including changes to IFRS 9 transitional arrangements for capital and the accelerated implementation of revised small and medium-sized enterprises (SME) supporting factors under CRR II.

2.2 Scope of disclosures

The Pillar 3 disclosures in this document relate to the Group, except for Appendix 1 which contains the disclosures required for CB Consol.

In line with Part 8 of the CRR, the FY21 Pillar 3 Report will be prepared for Virgin Money UK PLC Consolidated and CB Group Consolidated, which represents the ring-fenced sub-group under PRA ring-fencing requirements, therefore complying with PRA requirements.

Overall, there are no material differences between the bases of consolidation of the Group for accounting and prudential purposes. All the Group's subsidiary undertakings are included in the data provided in the Pillar 3 disclosures. During 2018, the Group established two joint ventures: Salary Finance Loans Limited (SF Ltd) and Virgin Money Unit Trust Manager Limited (VMUTM Ltd). For regulatory purposes, the Group fully consolidates SF Ltd and for VMUTM Ltd applies a proportional consolidation approach with both joint ventures being accounted for in the consolidated financial statements using the equity method.

Full details of the Group's subsidiaries are provided in note 6.2 of the Group's 2021 Annual Report & Accounts for the year ended 30 September 2021, which is available on the Group's website.

The Group's capital resources are presented in section 4 page 16 of this document. Capital resources for CB Consol are presented in Appendix 1.

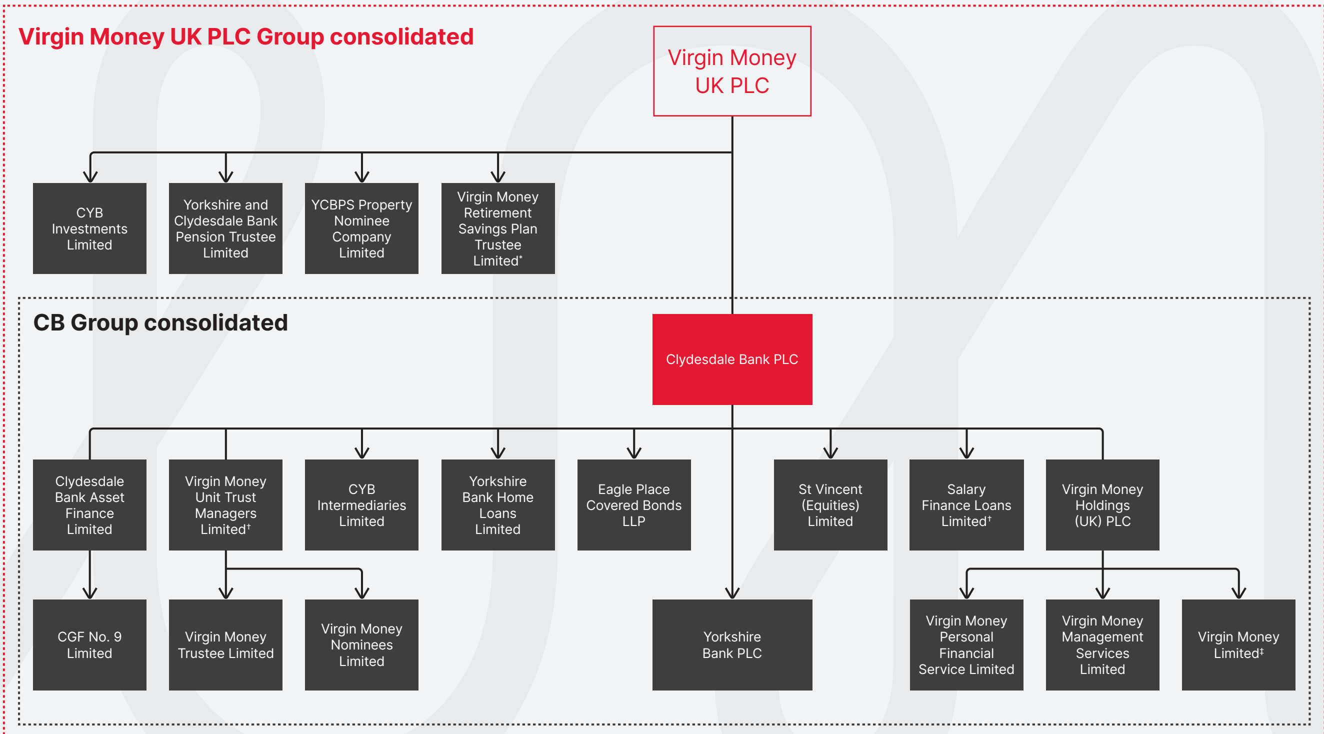
The following companies are securitisation vehicles established in connection with the Group's securitisation programmes. Although the share capital of these securitisation vehicles is not owned by the Group, these vehicles are included in the consolidated financial statements as they are controlled by the Group:

Lanark Holdings Limited;
Lanark Trustees Limited;
Lanark Funding Limited;
Lanark Master Issuer plc;
Lannraig Holdings Limited;
Lannraig Funding Limited;
Lannraig Master Issuer plc;
Lannraig Trustees Limited;
Gosforth Mortgages Trustee 2015-1 Limited(1);
Gosforth Mortgages Trustee 2016-1 Limited(1);
Gosforth Mortgages Trustee 2016-2 Limited(1);
Gosforth Mortgages Trustee 2017-1 Limited;
Gosforth Mortgages Trustee 2018-1 Limited;
Gosforth Funding 2015-1 plc(1);
Gosforth Funding 2016-1 plc(1);
Gosforth Funding 2016-2 plc(1);
Gosforth Funding 2017-1 plc;
Gosforth Funding 2018-1 plc;
Gosforth Holdings 2015-1 Limited(1);
Gosforth Holdings 2016-1 Limited(1);
Gosforth Holdings 2016-2 Limited(1);
Gosforth Holdings 2017-1 Limited;
Gosforth Holdings 2018-1 Limited.

These are not presented in the Prudential Group Structure chart below but form part of CB Consol.

Dormant and non-trading companies, and entities outside of prudential consolidation groups are excluded from the chart.

There are no current or foreseen material practical or legal impediments to the transfer of capital resources or the repayment of liabilities between consolidated entities within the Group, with the exception of assets and liabilities of the Group's securitisation vehicles (including the covered bond vehicles), Salary Finance and Red Grey Square Funding LLP (see notes 5.3 and 6.2 to the financial statements in the Group's 2021 Annual Report & Accounts for further details) which are not immediately available to other members of the Group.



* Renamed from YCB DC Trustee Limited on 16 November 2020.
† Entities are 50% owned. ‡ Previously Virgin Money PLC.

(1) Vehicles in liquidation.

2.3 Key matters arising during the year

The Group continued to lend under the UK Government-backed loan schemes, which were launched in 2020 in order to support customers through COVID-19. The initial schemes (Bounce Back Loan Scheme (BBLS), Coronavirus Business Interruption Loan Scheme and Coronavirus Large Business Interruption Loan Scheme) were replaced in April 2021 by the Recovery Loan Scheme, which is set to remain open for applications until 30 June 2022.

Solvency Stress Test (SST)

The Group participated in the Bank of England (BoE) UK-wide SST for the first time during 2021 and is due to receive the outcome in December 2021. Results from the stress tests, which are due to be published by the BoE by the end of 2021, will be used by the Financial Policy Committee (FPC) to assess the stress testing severity required to threaten resilience and test the Group's ability to absorb losses and continue to lend.

Minimum capital requirements

For the year ended 30 September 2021, the Group used the standardised approach for operational risk, market risk and credit valuation adjustment. Retail mortgages RWA are calculated using an Advanced Internal Ratings-Based (AIRB) approach, the majority of the business portfolios use a Foundation Internal Ratings-Based (FIRB) approach and Income Producing Real Estate uses the IRB Slotting Approach. The AIRB approach allows internal models for Probability of Default (PD), Loss Given Default (LGD) and Exposures at Default (EAD) to be used to calculate RWA values. The FIRB approach allows internal models for PD combined with regulator defined parameters to be used to calculate RWA values. All other portfolios use the standardised approach, which uses standard risk-weighting percentages prescribed within the CRR and PRA implementing rules. The disclosures in this document are based on these approaches.

Heritage Clydesdale Bank and heritage Virgin Money have separate advanced IRB models for retail mortgages, therefore modelling methodologies are not currently aligned. Consequently, presenting data for these models in a single table is considered inappropriate, and potentially misleading. Templates EU CR6 and EU CR9, which disclose information on credit risk exposures by exposure class and by the PD range and back-testing of PD per exposure class, are presented separately for heritage Clydesdale Bank and Virgin Money within the 2021 Pillar 3 report.

2.4 Review and challenge

These disclosures have been subject to internal verification and are reviewed by the Board Risk Committee (Risk Committee) and the Board Audit Committee (Audit Committee) on behalf of the Board. The disclosures have not been, and are not required to be, subject to independent external audit and do not constitute any part of the Group's 2021 Annual Report & Accounts.

Reviews by the Board

The effectiveness of the Group's internal control systems is reviewed regularly by the Risk Committee and the Audit Committee. The Risk Committee is responsible for providing oversight and advice to the Board in relation to current and potential future risk exposures. The Audit Committee assists the Board in discharging its responsibilities with regard to external and internal audit activities and controls including reviewing audit reports, internal controls and risk management systems.

The Group's risk management and internal control systems are regularly reviewed by the Board and are consistent with the guidance on Risk Management, Internal Control and Related Financial and Business Reporting issued by the Financial Reporting Council and compliant with the requirements of the CRD IV. These risk management and internal controls systems have been in place for the year under review and up to the date of the approval of the Group's 2021 Annual Report & Accounts.

Control effectiveness

A review of the effectiveness of controls is regularly undertaken across the Group, providing an assessment and statement on the effectiveness of the Group's control environment. This provides assurance to the Board Risk Committee that no new material control issues have been identified and that robust management actions are in place to address specific known gaps.

Bribery and corruption

In compliance with the Bribery Act 2010, the Group has in place risk assessments, policies and guidelines on interacting with customers, suppliers and agents, including specific policies for gifts and hospitality. Certain senior managers are required to assess money laundering risks and the adequacy of related internal controls within their areas of responsibility on an ongoing basis.

Formal anti-bribery and corruption training is required for all colleagues, the Executive Leadership Team and Directors.

Overall assessment

The Group has further enhanced the RMF over the past year. Principal risk and cross-cutting risk categories are unchanged from those disclosed in FY20. Risk's operating model has continued to evolve during the year, with changes made to support a purer oversight function, that is appropriately positioned to support the Group's ambitions to be the UK's best digital bank.

The control environment remains stable with the 2021 Control Effectiveness Statement providing assurance that controls requiring improvement are escalated appropriately and have adequate action plans in place.

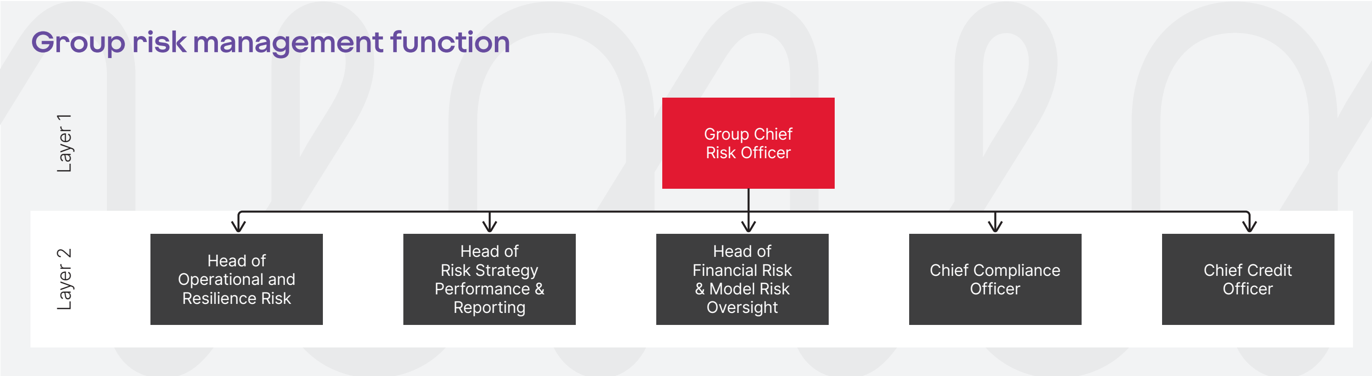
The Risk Committee, in conjunction with the Audit Committee, concluded that the Group's risk management and internal control framework in relation to the Group's risk profile and strategy was effective and adequate, and was recommended to and approved by the Board. The Executive Risk Committee held ten meetings during the year.

For further information on the Group's approach to risk management refer to pages 144 to 152 of the Risk report section of the Group's 2021 Annual Report & Accounts.

Risk management

3.1 Risk management

The Group's Risk management structure in 2021 is as follows:



Further information regarding the Group's risk management can be in the following pages of the Group's 2021 Annual Report & Accounts:

- **Risk culture** – page 148
- **Risk strategy** – page 148
- **Risk appetite** – page 149
- **Risk governance and oversight** – page 149
- **Governance committees** – page 150
- **Three lines of defence** – page 151
- **Risk policies and procedures** – page 151
- **Risk management and internal controls** – page 151
- **Risk management framework** – pages 151 to 152
- **Stress testing** – page 152

3.2 The Board and governance

The number of directorships held by Executive and Non-Executive Directors, including those in Virgin Money UK PLC, are shown below. In line with the relevant rules[1], directorships in organisations which don't pursue predominantly commercial objectives have been excluded. In addition, where a Director has a number of directorships within one group these are counted as a single directorship.

Table 2: Directorships held

Name	Total directorships held
Clifford Abrahams (Executive)[2]	1
David Bennett (Non-Executive)	4
Paul Coby (Non-Executive)	1
David Duffy (Executive)	1
Geeta Gopalan (Non-Executive)	4
Elena Novokreshchenova (Non-Executive)[3]	1
Darren Pope (Non-Executive)	4
Amy Stirling (Non-Executive)	3
Tim Wade (Non-Executive)	3

(1) PRA Rulebook General Organisational Requirements 5.4 (having regard to General Organisational Requirements 5.5 and 5.6) and Financial Conduct Authority Handbook Senior Management Arrangements, Systems and Controls (SYSC) 4.3A.5R (having regard to SYSC 4.3A.6R and 4.3A.7R).

(2) Joined the Board on 8 March 2021.

(3) Joined the Board on 22 March 2021.

Risk management continued

Board recruitment
The Governance and Nomination Committee is responsible for considering the recruitment of new Directors and it adopts a formal, rigorous and transparent procedure with due regard to diversity, including gender and ethnicity. Before commencing the recruitment process, the Committee evaluates the balance of skills, knowledge, experience, independence and diversity on the Board and, in light of this evaluation, prepares a description of the role and capabilities required. In identifying suitable candidates, the Committee:

- uses open advertising or the services of external advisers to facilitate the search for the Chairman or Non-Executive Director roles;
- considers candidates from different genders, ethnicities and a wide range of backgrounds;
- considers candidates on merit and against objective criteria ensuring that appointees have sufficient time to devote to the position, in light of other potential significant positions; and
- engages from time to time with the Group's major shareholders in future skills requirements and ideas for potential candidates.

The Governance and Nomination Committee reviewed the structure, size and composition of the Board and Board Committees including skills, experience, independence, knowledge and diversity and considered the longer-term succession of Board and Board Committee members relative to tenure, mix and diversity of skills and the Group's strategy, future, challenges and opportunities and reported the outcome and recommendations to the Board.

The skills, experience and contribution of each Director is described within the Governance report on pages 66 to 73 in the Group's 2021 Annual Report & Accounts.

Board diversity
The Board Diversity and Inclusion Policy (Policy), which has been adopted by the Board and is available on our website at www.virginmoneyukplc.com/corporatesustainability/inclusion, sets out the Board's approach to diversity and inclusion in the composition of the Board and covers at a high level the approach to diversity and inclusion across the broader workforce. The Policy confirms that Board appointments are made on the basis of individual competence and merit, taking into account the skills, experience, independence and knowledge required. This is measured against the objective criteria set by the Governance and Nomination Committee for a particular appointment and that additionally, when recruiting Board members, careful consideration is also given to the broader diversity benefits each candidate can bring to overall Board composition. This includes considering a combination of demographics, skills, experience, race, age, gender, educational and professional background and other relevant personal attributes to ensure the Board benefits from a range of perspectives which supports good decision making and avoids the risk of 'group think'.

The Board has approved targets set out in the Policy relating to gender and ethnic diversity. The implementation of the Policy and progress towards achieving the targets is reviewed at least annually. In 2021 we achieved the target set by the Hampton Alexander Review, as set out in the policy, to have a minimum of 33% women's representation on the Board (as at 30 September 2021 – 33.3%) and also achieved our target to meet the recommendation of the Parker Review to have at least one Director of colour by 2024 (as at 30 September 2021 – one Director).

The Board remains committed to driving progress in the diversity of its membership in the widest sense and will aim to continue to meet the Hampton-Alexander and Parker Review Committee targets factoring this into succession planning and future Board appointments. In addition, the independence and tenure of the Directors on our Board, as illustrated in the charts on page 67 of the Group's 2021 Annual Report & Accounts, achieves an appropriate balance in the context of Code requirements.

The Group supports the Women in Finance Charter and has a target of 45-55% women in senior management roles by 2025. We currently have 42% of female colleagues holding senior management positions in the top two layers of the Company as at 30 September 2021. A Culture Dashboard is monitored by the Board which enables the Board to track progress on both gender diversity and broader inclusion metrics and commitments.

Board consideration of risk matters
The Board discharges some of its responsibilities through, and is supported by, its Committees which provide oversight and make recommendations on the matters delegated to them by the Board. The Board Risk Committee assists the Board in setting the Group's risk appetite and ensuring that the Group maintains an effective RMF. The Committee also supports the Board by assessing key current and emerging risks and their mitigation, and by leading the development and embedding of a culture that supports risk awareness and the fair treatment of customers. During the period to 30 September 2021, the Committee held seven scheduled meetings, two scheduled joint Audit and Risk Committee meetings and four additional meetings to consider prudential regulatory related matters.

The Chief Risk Officer presents a report at each Risk Committee meeting that provides a view of the principal and emerging risks faced by the Group and is invited to provide his perspectives on the risk profile of the Group. Subject matter experts are invited to Committee meetings to present on a variety of topics including deep dive analysis on specific risk matters. Updates are provided to the Board following each Committee meeting summarising challenges and key decisions. These updates are supported by the Chief Risk Officer's Report to the Board.

3.3 Principal risks

The Group's principal risks are summarised in section 1, with further detail provided through references to the relevant pages within the Risk report on pages 147 to 216 of the Group's 2021 Annual Report & Accounts.

3.4 Stress testing

Stress testing is an important and widely recognised risk management tool, used to assess the vulnerability of financial institutions and identify risks under adverse economic scenarios. The Group uses stress testing in strategic, capital and liquidity planning, and to inform risk appetite, risk mitigation and contingency planning. The Group undertakes stress testing using specific idiosyncratic scenarios and following the Basel Committee principles which utilise, where appropriate, scenarios provided by the BoE. The Board and senior management are actively involved in the stress testing process, reviewing, challenging and approving all aspects of stress testing, from the consideration of scenarios to be tested, to the outcomes and mitigating actions. The involvement of the Board and senior management is considered essential for the effective operation of stress testing and the manner in which the results inform strategic planning and risk appetite. Reverse stress testing is also undertaken to assess the types of risk that would pose fundamental threats to the viability of the Group's business model. The Group has participated in the BoE UK-wide SST for the first time during 2021. Results from the stress tests will be used by the FPC to assess the stress testing severity required to threaten resilience and test the Group's ability to absorb losses and continue to lend.

Capital resources

4.1 Own funds

The table below shows the composition of the Group's regulatory capital position as at 30 September 2021 and 30 September 2020 on a CRD IV basis. The table follows the disclosure format required by the EBA Implementing Technical Standard on Disclosure for Own Funds, with only items applicable to the Group being shown.

The capital resources of CB Consol is presented in Appendix 1.

Table 3: Capital composition

As at 30 September		2021 £m	2020 £m
	Common Equity Tier 1 capital: instruments and reserves		
1	Capital instruments and the related share premium accounts	**149**	147
1a	*Of which: ordinary shares*	**144**	144
1b	*Of which: share premium*	**5**	3
2	Retained earnings	**3,943**	4,133
3	Accumulated other comprehensive income (and other reserves)	**71**	(43)
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	**362**	(21)
6	**Common Equity Tier 1 capital before regulatory adjustments**	**4,525**	4,216
	Common Equity Tier 1 capital: regulatory adjustments		
7	Additional value adjustments	**(5)**	(6)
8	Intangible assets	**(219)**	(488)
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences	**(258)**	(151)
11	Fair value reserves related to gains or losses on cash flow hedges	**(10)**	80
15	Defined benefit pension fund assets	**(551)**	(470)
25a	Losses for the current financial year	**–**	(220)
	Adjustment under IFRS9 transitional arrangements	**134**	310
28	**Total regulatory adjustments to Common Equity Tier 1**	**(909)**	(945)
29	**Common Equity Tier 1 capital**	**3,616**	3,271
	Additional Tier 1 capital: instruments		
30	Capital instruments and the related share premium accounts	**697**	915
31	*Of which: classified as equity under applicable accounting standards*	**697**	915
36	**Additional Tier 1 capital before regulatory adjustments**	**697**	915
44	**Additional Tier 1 capital**	**697**	915
45	**Tier 1 capital**	**4,313**	4,186
	Tier 2 capital: instruments and provisions		
46	Capital instruments and the related share premium accounts	**1,019**	749
51	Tier 2 capital before regulatory adjustment	**1,019**	749
58	Tier 2 capital	**1,019**	749
59	**Total capital**	**5,332**	4,935
60	**Total risk-weighted assets**	**24,232**	24,399

Table 3: Capital composition continued

As at 30 September		2021	2020
	Capital ratios and buffers (%)		
61	Common Equity Tier 1	**14.9%**	13.4%
62	Tier 1	**17.8%**	17.2%
63	Total capital	**22.0%**	20.2%
64	Institution specific buffer requirement[1]	**7.0%**	7.0%
65	*Of which: capital conservation buffer requirement*	**2.5%**	2.5%
66	*Of which: countercyclical buffer requirement*	**0.0%**	0.0%
67	*Of which: systemic risk buffer requirement*	**0.0%**	0.0%
67a	*Of which: Global Systemically Important Institution or Other Systemically Important Institution buffer*	**0.0%**	0.0%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	**10.4%**	8.9%
	Applicable caps on the inclusion of provisions in Tier 2 (£m)		
77	Cap on inclusion of credit risk adjustments in Tier 2 under standardised approach	**£73m**	£73m
79	Cap on inclusion of credit risk adjustments in Tier 2 under internal ratings-based approach	**£94m**	£95m

(1) CET1 requirement in accordance with article 92 (1)(a) plus capital conservation and countercyclical buffer requirements plus a systemic risk buffer, plus systemically important institution buffer expressed as a percentage of total risk exposure amount.

Significant movements in capital and related deductions are described in section 4.2.

Tier 1 capital
Tier 1 capital comprises:

- ordinary shares;
- share premium;
- retained earnings;
- accumulated other comprehensive income (and other reserves);
- Additional Tier 1 (AT1) instruments; and
- adjustments as set out by the regulatory requirements governing capital resources.

Accumulated other comprehensive income (and other reserves) represents adjustments for asset revaluation, cash flow hedge and fair value through other comprehensive income reserve.

Additional details of the perpetual capital notes are included in Appendices 3 and 4, as well as and note 4.1 to the Group's 2021 Annual Report & Accounts.

Tier 2 capital
Tier 2 capital comprises:

- subordinated loan debt; and
- adjustments as set out by the regulatory requirements governing capital resources.

Subordinated loan debt is unsecured and ranks below the claims of all depositors and other ordinary creditors. Additional details of the subordinated notes are included in Appendices 3 and 4, as well as note 3.12 to the Group's 2021 Annual Report & Accounts.

Full terms and conditions for the Group's marketed debt securities are available on the Group's website at www.virginmoneyukplc.com/investor-relations.

Capital resources continued

4.2 Movements in capital

The Group's CET1 ratio has increased from 13.4% to 14.9% in the year to 30 September 2021. This was driven by increases to retained earnings, and the combined benefit of reduced intangible assets and the effect of the CRR quick fix amendments in relation to software assets. These benefits were offset by increases in deductions relating to deferred tax on carried forward losses, and a reduction in IFRS 9 transitional relief following the reduction in provisions during the year.

In September 2021, the Group announced its intention to redeem £230m of Additional Tier 1 Notes in November 2021. As such, the AT1 balance has reduced by £218m, being the book value of these instruments.

Over the period, there were also increases in Tier 2 capital. The Group issued an additional £300m of Tier 2 capital in May 2021 in the form of Fixed Rate Reset Callable Tier 2 Notes due 2031. In addition, during the year the Group purchased £30m of Fixed Rate Reset Callable Subordinated Tier 2 Notes due 2026.

Table 4: Capital flow statement(1)

	2021 £m	2020 £m
Common Equity Tier 1 capital(2)		
Common Equity Tier 1 capital at 1 October	**3,271**	3,204
Share capital and share premium	**2**	1
Retained earnings and other reserves (including special purpose entities)	**449**	(37)
Prudent valuation adjustment	**1**	(1)
Intangible assets	**269**	24
Deferred tax assets relying on future profitability	**(107)**	(5)
Negative amounts resulting from the calculation of expected losses	**–**	88
Defined benefit pension fund assets	**(81)**	(213)
AT1 foreseeable distribution	**2**	–
Foreseeable dividend on ordinary shares	**(14)**	–
IFRS 9 transitional adjustments	**(176)**	210
Total Common Equity Tier 1 capital	**3,616**	3,271
AT1 capital		
AT1 capital at 1 October	**915**	915
Other equity investments no longer qualifying as AT1	**(218)**	–
Total AT1 capital at 30 September	**697**	915
Total Tier 1 capital	**4,313**	4,186
Tier 2 capital		
Tier 2 capital at 1 October	**749**	721
Capital instruments issued: subordinated debt	**298**	472
Capital instruments purchased: subordinated debt	**(30)**	(444)
Amortisation of issue costs	**2**	–
Total Tier 2 capital	**1,019**	749
Total capital at 30 September	**5,332**	4,935

(1) The table shows the capital position on a CRD IV 'fully loaded' basis and transitional IFRS 9 basis.

(2) CET1 capital is comprised of shares issued and related share premium, retained earnings and other reserves less specified regulatory adjustments.

Several deductions and prudential regulatory adjustments are applied in calculating regulatory capital under CRD IV.

The most significant of these are:

- defined benefit pension fund assets: the IAS 19 valuation of defined benefit pension schemes is included in accounting reserves, but the rules do not permit this to count as regulatory capital and it is deducted. At 30 September 2021, the IAS 19 valuation was a surplus of £847m (2020: £723m surplus) resulting in the movement of £81m which is net of tax;
- deferred tax assets relying on future profitability: at 30 September 2020, £151m was deducted from CET1 capital and this increased to £258m at 30 September 2021;
- intangible assets: at 30 September 2020, £488m was deducted from CET1 capital and this decreased to £219m as at 30 September 2021. Of the £269m movement, £151m arose as a result of the 'Quick Fix' amendment allowing relief on software assets which the PRA will remove from January 2022. Excluding this relief, the Group's CET1 capital ratio would be 14.4%;
- cash flow hedge reserve: this has decreased during the year from £80m to (£10m), giving rise to an equal and opposite movement in CET1 adjustments; and
- IFRS 9 transitional relief decreased from £310m at 30 Sept 2020 to £134m at 30 Sept 2021, accounting for the £176m movement. This was mainly driven by the reduction in the IFRS 9 provisions during the year, with £17m arising from the annual scaling factor reduction.

The following table shows the capital, RWA and leverage positions with and without the application of transitional arrangements for IFRS 9 or analogous ECLs.

Table 5: Template IFRS 9-FL – Comparison of institutions' own funds and capital and leverage ratios

		A	C	E
		30 September 2021	31 March 2021	30 September 2020
	Available capital (£m)			
1	Common Equity Tier 1 (CET1) capital	**3,616**	3,477	3,271
2	Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**3,482**	3,165	2,961
3	Tier 1 capital	**4,313**	4,392	4,186
4	Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**4,179**	4,080	3,876
5	Total capital	**5,332**	5,112	4,935
6	Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**5,235**	4,894	4,720
	Risk-weighted assets (£m)			
7	Total risk-weighted assets	**24,232**	24,152	24,399
8	Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**24,156**	24,018	24,246
	Capital ratios (%)			
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	**14.9%**	14.4%	13.4%
10	Common Equity Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**14.4%**	13.2%	12.2%
11	Tier 1 (as a percentage of risk exposure amount)	**17.8%**	18.2%	17.2%
12	Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**17.3%**	17.0%	16.0%
13	Total capital (as a percentage of risk exposure amount)	**22.0%**	21.2%	20.2%
14	Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**21.7%**	20.4%	19.5%
	Leverage ratio			
15	Leverage ratio total exposure measure (£m)	**84,306**	84,658	86,490
16	Leverage ratio (%)	**5.1%**	5.2%	4.8%
17	Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied (%)	**5.0%**	4.8%	4.5%

Capital resources continued

4.3 Reconciliation of statutory equity to regulatory capital

Table 6: Reconciliation of statutory equity to regulatory capital

As at 30 September	2021 £m	2020 £m
Statutory total equity	**5,473**	4,932
Less pension regulatory adjustments	**(551)**	(470)
Less prudent valuation adjustment	**(5)**	(6)
Less intangible assets	**(219)**	(488)
Less deferred tax assets relying on future profitability	**(258)**	(151)
IFRS 9 transitional adjustment	**134**	310
Less cash flow hedge	**(10)**	80
AT1 foreseeable distribution	**(19)**	(21)
Foreseeable dividend on ordinary shares	**(14)**	–
Other equity investments no longer qualifying as AT1	**(218)**	–
Regulatory Tier 1 capital	**4,313**	4,186
Statutory Tier 2 subordinated debt	**1,019**	749
Regulatory Tier 2 subordinated debt	**1,019**	749

4.4 Leverage ratio

Management of excessive leverage

The leverage ratio is monitored against a Board-approved Risk Appetite Statement (RAS), with the responsibility for managing the ratio delegated to the Asset and Liability Committee (ALCO), which monitors it monthly. The Group's capital risk policy standard provides the framework for how capital is managed within the Group and one of its objectives is to ensure that excessive leverage is not taken.

The leverage ratio is the ratio of Tier 1 capital to total exposures. Exposures are defined as the total on- and off-balance sheet exposures after the application of credit conversion factors. This follows the definition given in the Delegated Act amending CRR article 429, and includes deductions applied to Tier 1 capital.

Tables 7, 8 and 9 show the leverage ratio disclosure templates required by the EBA's Implementing Technical Standards on disclosure of the leverage ratio.

Table 7: LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

		2021 £m	2020 £m
1	Total assets as per published financial statements	**89,100**	90,259
2	Adjustments for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	**(1)**	(1)
4	Adjustments for derivative financial instruments	**91**	81
5	Adjustments for securities financing transactions (SFTs)	**2,235**	2,072
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	**2,884**	2,892
EU-6b	Adjustment for exposures excluded from the leverage ratio exposure measure(1)	**(9,094)**	(8,088)
7	Other adjustments	**(909)**	(725)
8	**Total leverage ratio exposure**	**84,306**	86,490

(1) In accordance with Article 429 (14) of Regulation (EU) No 575/2013

Table 8: LRCom – Leverage ratio common disclosure

		2021 £m	2020 £m
	On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	**88,959**	89,940
2	(Asset amounts deducted in determining Tier 1 capital)	**(909)**	(725)
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)**	**88,050**	89,215
	Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	**94**	179
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	**213**	313
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	**(76)**	(93)
11	**Total derivative exposures**	**231**	399
	Securities financing transaction exposures		
14	Counterparty credit risk exposure for Securities Financing Transaction (SFT) assets	**2,235**	2,072
16	**Total securities financing transaction exposures**	**2,235**	2,072
	Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	**16,829**	16,781
18	(Adjustments for conversion to credit equivalent amounts)	**(13,945)**	(13,889)
19	**Other off-balance sheet exposures**	**2,884**	2,892
	Capital and total exposures		
EU-19b	(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on- and off-balance sheet))	**(9,094)**	(8,088)
20	Tier 1 capital	**4,313**	4,186
21	**Total leverage ratio exposures**	**84,306**	86,490
	Leverage ratio		
22	Leverage ratio	**5.1%**	4.8%
	Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	**Transitional**	Transitional

Capital resources continued

Table 9: LRSpl – Split-up of on-balance sheet exposures

		2021 £m	2020 £m
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), *of which*:	**80,006**	81,852
EU-3	Banking book exposures, *of which*:	**80,006**	81,852
EU-4	Covered bonds	**1,356**	1,442
EU-5	Exposures treated as sovereigns	**3,820**	3,864
EU-6	Exposures to regional governments, multilateral development banks, international organisations and public sector entities NOT treated as sovereigns	**151**	169
EU-7	Institutions	**733**	894
EU-8	Secured by mortgages of immovable properties	**60,564**	61,269
EU-9	Retail exposures	**5,632**	5,318
EU-10	Corporate	**5,379**	5,316
EU-11	Exposures in default	**778**	593
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	**1,593**	2,987

The Group's leverage ratio is 5.1% (2020: 4.8%), which exceeds the CRD IV minimum of 3%.

The UK leverage ratio framework results in an increase in the leverage ratio from 5.1% under CRD IV to 5.2% on the PRA modified basis. This is above the PRA's minimum requirement of 3.25%.

On 4 May 2020, the PRA published a modification by consent for banks subject to the UK Leverage Ratio Part of the PRA Rulebook to exclude loans under the Bounce Back Loan scheme from the leverage ratio total exposure measure. Bounce back loans have therefore been excluded from the UK leverage exposure value used in the leverage ratio calculation.

On 14 November 2018, the PRA published a policy statement – 'UK leverage ratio: Applying the framework to systemic ring-fenced bodies and reflecting the systemic risk buffer', confirming that from 1 January 2019, the UK leverage ratio framework will apply on a sub-consolidated basis to ring-fenced bodies in scope.

In June 2021 the Financial Policy Committee and PRA published consultations (CP14/21) on their proposed changes to the UK leverage ratio framework, with feedback and final policy published in October (PS21/21). The changes, effective from 1 January 2022, will simplify the framework with the Group being subject to the UK leverage ratio only rather than the two leverage ratio definitions that currently exist. The Group exceeds the 3.25% leverage ratio requirements.

Leverage ratios are disclosed for CB Consol in Appendix 1.

Capital requirements

5.1 Capital management

The Group's capital risk policy standard provides the framework for the manner in which capital is managed within the Group. Further information on this is available on pages 184 to 191 of the Group's 2021 Annual Report & Accounts.

Regulatory capital developments

The regulatory landscape for capital is subject to a number of changes which leads to uncertainty on eventual outcomes.

COVID-19 regulatory capital developments

Following the BoE's announcements in 2020 regarding supervisory and prudential policy measures to address the challenges of COVID-19, the timescales for implementing updates relating to definition of default, mortgage Hybrid PD and LGD were extended and the Group no longer expects the adoption of hybrid mortgage models in FY22.

The Group continues to apply relevant relief measures introduced by regulatory and supervisory bodies to help address and alleviate various COVID-19 driven financial impacts. These include amendments to the CRR introduced by the 'Quick Fix' package in June 2020, which introduced a number of beneficial modifications, including changes to IFRS 9 transitional arrangements for capital and the accelerated implementation of revised SME supporting factors under CRR II.

IRB approach to UK mortgage risk weights

In July 2021, the PRA issued a policy statement in response to the consultation setting out proposals to introduce certain floors in respect of the IRB approach to UK mortgage risk weights. In response to the feedback the PRA received, including useful quantitative data that enabled the PRA to better gauge the distribution of risks weights across mortgage exposures the PRA made two changes to the draft policy: it will not introduce the proposed 7% minimum risk weight expectation on individual UK mortgage exposures; and mortgage exposures classified as in default will be excluded from the 10% minimum risk weight expectation.

Instead the PRA will consider the calibration of the incoming Probability of Default and Loss Given Default parameter floors for mortgages as part of the PRA's Basel 3.1 implementation.

UK implementation of Basel Standards

In July 2021, the PRA published Policy Statement 17/21 which provided feedback to Consultation Paper 5/21 with the same title: 'Implementation of Basel standards' with the publication of Policy Statement 22/21 (PS22/21) in October containing final rules. The policy statements cover a range of areas including: definition of capital; market risk; collective investment undertakings; counterparty credit risk; operational risk; large exposures; Liquidity Coverage Ratio (LCR); Net Stable Funding Ratio; reporting; and disclosure. These standards will be effective in the UK from 1 January 2022.

PS22/21 confirms the PRA's treatment to fully deduct software assets from CET1 capital, applicable from 1 January 2022. This is a reversal of the preferential treatment permitted under the CRR Quick Fix which came into force from December 2020 whereby the CET1 deduction was replaced with a simple approach based on a prudential amortisation of software assets calibrated over a maximum period of three years. The PRA's view is that intangible assets are not sufficiently loss absorbent on a going concern basis to warrant recognition as CET1 capital.

Capital and leverage disclosures include this intangible asset relief, however, narrative to quantify the impact of a full deduction (excluding the relief) will be included.

Basel 3.1

The Basel Committee published its final reforms to the Basel III framework in December 2017. The amendments include changes to the standardised approaches to credit and operational risks and the introduction of a new RWA output floor. The reforms are due to be subject to a transition period from 2023 to 2028. There are a number of areas within Basel 3.1 subject to national discretion and choice.

The PRA is due to release a Consultation Paper on UK implementation in the second half of 2022 with the final reforms now not expected to be introduced until after March 2023. Uncertainties therefore remain for a number of topics that will be subject to revisions under Basel 3.1. In response the Group has undertaken an assessment across a range of scenarios for potential outcomes to assist with planning.

5.2 Minimum capital requirements

Under the Bank Recovery and Resolution Directive the Group is required to hold additional loss-absorbing instruments to support an effective resolution. The minimum requirements for own funds and eligible liabilities (MREL) establishes a minimum amount of equity and eligible debt to recapitalise the bank. An analysis of the Group's current MREL position is provided below:

Table 10: MREL

	2021 £m	2020 £m
Total capital resources[1]	**5,332**	4,935
Eligible senior unsecured securities issued by Virgin Money UK PLC[2]	**2,408**	2,002
Total MREL resources	**7,740**	6,937
Risk-weighted assets	**24,232**	24,399
MREL ratio	**31.9%**	28.4%

(1) This table shows the capital position on a CRD IV 'fully loaded' basis and transitional IFRS 9 basis.

(2) Excludes instruments with less than one year to maturity.

Capital requirements continued

In January 2021, the BoE published industry interim and end-state MREL that will apply to the Group.

In 2021, the Group is subject to a binding interim MREL requirement of 18% of risk-weighted assets, or 20.5% of risk-weighted assets when including its combined buffer requirements. From 1 January 2022, the Group expects to have to meet an end-state MREL requirement of 22.1% of risk-weighted assets, or 24.6% of risk-weighted assets when including its combined buffer requirements.

Following further issuance over the period, the Group's IFRS 9 transitional MREL ratio improved to 31.9% as at 30 September 2021 (2020: 28.4%). This represents prudent headroom of 7.3% or c.£1.8bn over the Group's expected 1 January 2022 MREL Requirement.

Monitoring

The capital plan is approved by the Board on an annual basis. ALCO monitors the capital plan and forecast positions on a monthly basis. This ensures that performance trends are appropriately reviewed and that there is transparency of the impact on capital ratios, risk appetite and the future outlook.

To determine minimum capital requirements under the CRD IV Framework, as shown within the table below, the Group has applied the IRB approach to its mortgage and business portfolios and the standardised approach to measure credit risk for all other portfolios and operational risk. Under this approach the Group calculates its Pillar 1 capital requirement based on 8% of total RWA. This covers credit risk, operational risk, counterparty credit risk and Credit Valuation Adjustment (CVA). The table below sets out the risk-weighted assets and Pillar 1 capital requirements of the Group.

Table 11: EU OV1 – Overview of risk-weighted assets

		RWA		Minimum capital requirements
		2021 £m	2020 £m	2021 £m
1	Credit risk (excluding CCR)	**21,235**	21,181	**1,699**
2	*Of which: the standardised approach*	**5,536**	5,335	**443**
3	*Of which: the FIRB approach*[(1)]	**5,689**	6,362	**455**
4	*Of which: the AIRB approach*	**10,010**	9,484	**801**
6	Counterparty credit risk (CCR)	**208**	354	**16**
7	*Of which: mark-to-market*	**105**	179	**8**
12	*Of which: CVA*	**103**	175	**8**
23	Operational risk	**2,481**	2,557	**198**
25	*Of which: standardised approach*	**2,481**	2,557	**198**
27	Amounts below the thresholds for deduction (subject to 250% risk weight)	**308**	307	**25**
29	**Total**	**24,232**	24,399	**1,938**

(1) Business exposures are reported under the FIRB approach. Following approval received in March 2020, specialised lending exposures moved from the standardised approach to an IRB slotting basis and this is also reported under the FIRB approach.

Refer to Table 15 in section 6 for a summary of the Group's RWA and capital requirements under Pillar 1.

Table 12: Capital requirements

	2021	
Minimum requirements	CET1	Total capital
Pillar 1[(1)]	4.5%	8.0%
Pillar 2A[(2)]	2.2%	3.9%
Total capital requirement	**6.7%**	**11.9%**
Capital conservation buffer	2.5%	2.5%
UK countercyclical capital buffer	0.0%	0.0%
Total (excluding PRA buffer)[(3)]	**9.2%**	**14.4%**

(1) The minimum amount of total capital under Pillar 1 of the regulatory framework is determined as 8% of RWA, of which at least 4.5% of RWA is required to be covered by CET1 capital.

(2) On 7 May 2020, the PRA announced that Pillar 2A capital requirements for banks would be converted from an RWA percentage to a fixed amount. This change was made on the basis that the PRA does not believe that RWA are a good approximation for the evolution of the risks captured in Pillar 2A in a stress.

(3) The Group may be subject to a PRA buffer as set by the PRA but is not permitted to disclose the level of any buffer. A PRA buffer can consist of two components:

- a risk management and governance buffer that is set as a scalar of the Pillar 1 and Pillar 2A requirements; and
- a buffer relating to the results of the BoE stress tests.

The Group continues to maintain a significant buffer to its CRD IV minimum CET1 requirement, with excess CET1 of £1,384m or 5.7% RWA.

The Group's total capital Pillar 2A requirement has reduced from 4.4% at September 2020 to 3.9% at September 2021 following revisions made by the PRA during the year. In October 2021, further revisions were made to the Group's Pillar 2A requirement, reducing the total requirement further to 3.1%, with the CET1 requirement similarly reducing from 2.2% to 1.7%.

The regulatory capital buffer framework is intended to ensure firms maintain a sufficient amount of capital above their regulatory minimum in order to withstand periods of stress. The UK has implemented the provisions on capital buffers outlined in the CRD to create combined capital buffers including a Capital Conservation Buffer, a Countercyclical Capital Buffer (CCyB), a Global Systemically Important Institution G-SII Buffer, and a Systemic Risk Buffer (SRB) for ring-fenced banks. The Group's capital planning process considers the impact of all relevant capital buffers.

The UK CCyB is dependent upon the BoE's view of credit conditions in the economy and will be set between 1% and 2% in a standard risk environment. On 11 March 2020, as part of a package of measures to support the economy from the impact of COVID-19, the FPC announced a reduction in the UK CCyB to 0% with immediate effect. During July 2021, the FPC provided guidance to maintain the 0% rate until at least December 2021. As any increases to CCyB will have a 12-month implementation period, any subsequent increase would not take effect until the end of 2022 at the earliest.

Currently, the Group does not meet the criteria for designation as a systemically important institution, or the threshold for systemic risk: therefore the Group is not subject to either a G-SII buffer or SRB.

Capital requirements continued

Table 13: Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

		2021											
		General credit exposures		Trading book exposures		Securitisation exposures		Own funds requirements					
		Exposure value for SA 010	Exposure value for IRB 020	Sum of long and short positions of trading book exposures for SA 030	Value of trading book exposures for internal models 040	Exposure value for SA 050	Exposure value for IRB 060	Of which general credit exposures 070	Of which trading book exposures 080	Of which securitisation exposures 090	Total 100	Own funds requirements weights 110	Countercyclical capital buffer rates 120
Breakdown by country:		£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	Weighting	%
010	UK	**8,498**	**71,002**	**–**	**–**	**–**	**–**	**1,713**	**–**	**–**	**1,713**	**1.00**	**0.0%**
020	**Total**	**8,498**	**71,002**	**–**	**–**	**–**	**–**	**1,713**	**–**	**–**	**1,713**	**1.00**	**0.0%**

		2020											
		General credit exposures		Trading book exposures		Securitisation exposures		Own funds requirements					
		Exposure value for SA 010	Exposure value for IRB 020	Sum of long and short positions of trading book exposures for SA 030	Value of trading book exposures for internal models 040	Exposure value for SA 050	Exposure value for IRB 060	Of which general credit exposures 070	Of which trading book exposures 080	Of which securitisation exposures 090	Total 100	Own funds requirements weights 110	Countercyclical capital buffer rates 120
Breakdown by country:		£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	Weighting	%
010	UK	8,449	72,151	–	–	–	–	1,709	–	–	1,709	1.00	0.0%
020	**Total**	8,449	72,151	–	–	–	–	1,709	–	–	1,709	1.00	0.0%

Table 14: Amount of institution-specific CCyB

		2021 £m
010	**Total risk exposure amount**	**24,232**
020	Institution-specific countercyclical capital buffer rate	**0%**
030	Institution-specific countercyclical capital buffer requirement	**–**

		2020 £m
010	**Total risk exposure amount**	24,399
020	Institution-specific countercyclical capital buffer rate	0%
030	Institution-specific countercyclical capital buffer requirement	–

Credit risk

6.1 Credit risk exposures analysis by exposure class

Credit risk is the risk that a borrower or counterparty fails to pay the interest or capital due on a loan or other financial instrument. As at 30 September 2021, the total credit risk exposures of the Group amounted to £104,145m (2020: £104,935m).

The first full financial year post the onset of COVID-19 saw relative stability in the lending book, as the Group continued to focus efforts on supporting customers through this challenging period at a time when demand for new origination was more muted. As a result, total gross loans and advances to customers decreased by £0.3bn from £72.9bn to £72.6bn.

The overall capital requirement for credit risk has increased by 0.2% from £1,720m in 2020 to £1,724m in 2021.

During the year, the Group continued to lend under the various government-backed loan schemes for businesses, in addition to offering payment holidays across business, personal and mortgage divisions. Further details on the government-backed loan schemes offered during the year are shown in the credit risk section of the Group's 2021 Annual Report & Accounts.

The table below shows movements in credit risk RWA from 1 October 2020 to 30 September 2021.

Table 15: EU CR8 – RWA flow statements of credit risk exposures

		2021			
		A	B		
		IRB RWA amounts £m	IRB capital requirement £m	STD RWA amounts £m	STD capital requirement £m
1	**RWA as at the end of the previous reporting period**	**15,846**	**1,268**	**5,642**	**452**
2	Asset size	**(553)**	**(44)**	**152**	**12**
3	Asset quality	**(644)**	**(52)**	**16**	**1**
4	Model updates(1)	**1,086**	**87**	**–**	**–**
5	Methodology and policy	**(36)**	**(3)**	**151**	**12**
8	Other	**–**	**–**	**(117)**	**(9)**
9	**RWA as at the end of the reporting period**	**15,699**	**1,256**	**5,844**	**468**

(1) Model updates include the mortgage quarterly PD calibrations.

In the table above, methodology and policy movement is largely driven by the inclusion of a £151m RWA uplift in relation to the CRR Quick Fix amendments in respect of intangible assets, which became effective from December 2020 reporting.

In addition, the migration of the heritage Virgin Money House Price Index from Markit to MIAC, which now aligns the source of the indexation across both heritages, resulted in a £161m RWA uplift in February 2021. Offsetting this was the move to using Effective Maturity within the FIRB calculations, which resulted in a £197m reduction in RWA (previously only residual maturity had been used). This was implemented in November 2020 following PRA approval.

Model updates includes a £344m uplift in RWA specific to COVID-19 related PMAs and a net £742m uplift specific to PD recalibrations.

Credit risk exposures by exposure class are shown in the table below, together with the associated average credit risk exposure (calculated using the previous four quarters exposure per the EBA's Common Reporting returns). The table also includes risk-weighted assets and minimum capital requirements under Pillar 1 for each of the respective exposure classes.

The exposure amounts disclosed are pre-application of credit risk mitigation and pre-application of credit conversion factors, unless otherwise stated. This contrasts with the exposures disclosed within the Risk report in the Group's 2021 Annual Report & Accounts for the year ended 30 September 2021, which are disclosed pre-application of credit risk mitigation and post-application of credit conversion factors.

Table 16: EU CRB-B – Total and average net amount of exposures

		2021			
		A	B		
		Net value of exposures at the end of the period £m	Average net exposures over the period £m	Risk-weighted assets £m	Minimum capital requirements £m
3	Corporates	10,032	10,657	5,689	455
4	*Of which: Specialised lending*	561	570	418	33
5	*Of which: SMEs*	7,626	7,800	3,661	293
6	Retail	61,146	61,745	10,010	801
7	*Secured by real estate property*	61,146	61,745	10,010	801
9	*Non-SMEs*	61,146	61,745	10,010	801
15	**Total IRB approach**	71,178	72,402	15,699	1,256
16	Central governments or central banks	11,119	11,494	–	–
17	Regional governments or local authorities	402	369	13	1
18	Public sector entities	473	482	5	–
19	Multilateral development banks	1,355	1,331	–	–
21	Institutions	742	793	153	12
22	Corporates	1,100	829	235	19
23	*Of which: SMEs*	159	111	99	8
24	Retail	16,135	15,694	4,240	339
26	Secured by mortgages on immovable property	513	567	114	9
27	*Of which: SMEs*	228	191	50	4
28	Exposures in default	92	74	73	6
28a	*Of which: SMEs*	–	–	1	–
29	Items associated with particularly high risk	–	–	–	–
29a	*Of which: SMEs*	–	–	–	–
30	Covered bonds	1,356	1,417	136	11
33	Equity exposures	19	12	19	2
34	Other items	765	780	856	69
35	**Total standardised approach**	34,071	33,842	5,844	468
36	**Total**	105,249	106,244	21,543	1,724

		2020			
		A	B		
		Net value of exposures at the end of the period £m	Average net exposures over the period £m	Risk-weighted assets £m	Minimum capital requirements £m
3	Corporates	11,190	10,394	6,362	509
4	*Of which: Specialised lending*	592	300	439	439
5	*Of which: SMEs*	7,923	7,745	4,072	326
6	Retail	61,548	62,037	9,484	759
7	*Secured by real estate property*	61,548	62,037	9,484	759
9	*Non-SMEs*	61,548	62,037	9,484	759
15	**Total IRB approach**	72,738	72,431	15,846	1,268
16	Central governments or central banks	11,168	11,085	–	–
17	Regional governments or local authorities	418	384	13	1
18	Public sector entities	502	465	5	–
19	Multilateral development banks	1,268	1,180	–	–
21	Institutions	905	796	186	15
22	Corporates	496	506	210	17
23	*Of which: SMEs*	122	173	81	6
24	Retail	15,098	15,053	4,090	327
26	Secured by mortgages on immovable property	620	843	144	12
27	*Of which: SMEs*	279	505	64	5
28	Exposures in default	60	72	62	5
28a	*Of which: SMEs*	1	5	1	–
29	Items associated with particularly high risk	–	10	–	–
29a	*Of which: SMEs*	–	9	–	–
30	Covered bonds	1,442	1,473	144	12
33	Equity exposures	13	10	14	1
34	Other items	746	905	774	62
35	**Total standardised approach**	32,736	32,782	5,642	452
36	**Total**	105,474	105,213	21,488	1,720

The items included in Other exposures that attract a capital charge include items in the course of collection, fixed assets, prepayments, other debtors and deferred tax assets which have not been deducted.

RWA have remained stable over the period, primarily reflecting the limited change in gross lending year on year, as the Group has continued to focus efforts on supporting customers through this challenging period, when demand for new origination has been more muted.

In May 2021, Credit Policy was updated to exclude all BBLS from the aggregated £25k rating threshold calculation. As a result we saw £600m of gross exposures moving from FIRB into Standardised Corporate Exposure classes.

The management of RWA is subject to ongoing activities to optimise the use of capital.

The table below shows credit risk exposure by customer industry classification, including SME exposures. The regulatory SME definition is based on customers with an annual turnover not exceeding EUR 50m. This is consistent with the SME definition in CRR article 501, which states that among the criteria listed in Commission Recommendation 2003/361/EC (concerning the definition of micro, small and medium-sized enterprises) only the annual turnover is to be taken into account. The table is based on the customer industry identifier used for credit risk purposes and may differ from classifications used for other external reports.

Table 17: EU CRB-D – Concentration of exposures by industry

		2021										
		Government admin-istration & defence £m	Agriculture, forestry, fishing & mining £m	Financial investment & insurance £m	Real estate – con-struction £m	Manufac-turing £m	Personal lending £m	Real estate – mortgage £m	Wholesale and retail trade £m	All other business £m	Non-customer assets £m	Total £m
3	Corporates	–	1,912	110	239	1,260	–	–	1,253	5,258	–	10,032
4	Retail	–	–	–	–	–	–	61,146	–	–	–	61,146
6	**Total IRB approach**	–	1,912	110	239	1,260	–	61,146	1,253	5,258	–	71,178
7	Central governments or central banks	1,495	–	9,624	–	–	–	–	–	–	–	11,119
8	Regional governments or local authorities	402	–	–	–	–	–	–	–	–	–	402
9	Public sector entities	453	–	–	–	–	–	–	–	20	–	473
10	Multilateral development banks	–	–	1,355	–	–	–	–	–	–	–	1,355
12	Institutions	–	–	742	–	–	–	–	–	–	–	742
13	Corporates	–	34	27	99	65	–	–	136	739	–	1,100
14	Retail	–	–	–	–	–	16,135	–	–	–	–	16,135
15	Secured by mortgages on immovable property	–	1	2	–	–	–	–	2	508	–	513
16	Exposures in default	–	–	–	4	2	67	–	5	14	–	92
18	Covered bonds	–	–	1,356	–	–	–	–	–	–	–	1,356
21	Equity exposures	–	–	–	–	–	–	–	–	19	–	19
22	Other exposures	123	–	88	–	–	–	–	–	–	554	765
23	**Total standardised approach**	2,473	35	13,194	103	67	16,202	–	143	1,300	554	34,071
24	**Total**	2,473	1,947	13,304	342	1,327	16,202	61,146	1,396	6,558	554	105,249
	Of which: SMEs	–	1,779	113	174	856	–	–	1,020	4,071	–	8,013

		2020										
		Government admin-istration & defence £m	Agriculture, forestry, fishing & mining £m	Financial investment & insurance £m	Real estate – con-struction £m	Manufac-turing £m	Personal lending £m	Real estate – mortgage £m	Wholesale and retail trade £m	All other business £m	Non-customer assets £m	Total £m
3	Corporates	–	2,028	157	314	1,531	–	–	1,506	5,654	–	11,190
4	Retail	–	–	–	–	–	–	61,548	–	–	–	61,548
6	**Total IRB approach**	–	2,028	157	314	1,531	–	61,548	1,506	5,654	–	72,738
7	Central governments or central banks	2,211	–	8,957	–	–	–	–	–	–	–	11,168
8	Regional governments or local authorities	418	–	–	–	–	–	–	–	–	–	418
9	Public sector entities	483	–	–	–	–	–	–	–	19	–	502
10	Multilateral development banks	–	–	1,268	–	–	–	–	–	–	–	1,268
12	Institutions	–	–	905	–	–	–	–	–	–	–	905
13	Corporates	–	11	26	31	19	–	–	29	380	–	496
14	Retail	–	–	–	–	–	15,098	–	–	–	–	15,098
15	Secured by mortgages on immovable property	–	1	2	–	–	–	5	1	611	–	620
16	Exposures in default	–	–	–	–	–	58	–	–	2	–	60
18	Covered bonds	–	–	1,442	–	–	–	–	–	–	–	1,442
21	Equity exposures	–	–	–	–	–	–	–	–	13	–	13
22	Other exposures	123	–	148	–	–	–	–	–	–	475	746
23	**Total standardised approach**	3,235	12	12,748	31	19	15,156	5	30	1,025	475	32,736
24	**Total**	3,235	2,040	12,905	345	1,550	15,156	61,553	1,536	6,679	475	105,474
	Of which: SMEs	–	1,845	111	184	951	–	–	1,121	4,111	–	8,323

6.2 Credit risk exposure: Analysis by residual maturity

Table 18: EU CRB-E – Maturity of exposures

		2021					
		A	B	C	D	E	F
		Net exposure value					
		On demand £m	≤ 1 year £m	>1 year, ≤ 5 years £m	> 5 years £m	No stated maturity £m	Total £m
3	Corporates	–	4,232	4,842	958	–	10,032
4	Retail	–	993	2,314	57,839	–	61,146
6	**Total IRB approach**	–	5,225	7,156	58,797	–	71,178
7	Central governments or central banks	–	9,369	115	1,357	278	11,119
8	Regional governments or local authorities	–	389	3	10	–	402
9	Public sector entities	–	147	55	271	–	473
10	Multilateral development banks	–	40	255	1,060	–	1,355
12	Institutions	–	204	79	–	459	742
13	Corporates	–	151	549	400	–	1,100
14	Retail	–	15,315	671	149	–	16,135
15	Secured by mortgages on immovable property	–	7	302	204	–	513
16	Exposures in default	–	59	31	2	–	92
18	Covered bonds	–	164	965	227	–	1,356
21	Equity exposures	–	–	19	–	–	19
22	Other exposures	–	–	–	–	765	765
23	**Total standardised approach**	–	25,845	3,044	3,680	1,502	34,071
24	**Total**	–	31,070	10,200	62,477	1,502	105,249

		2020					
		A	B	C	D	E	F
		Net exposure value					
		On demand £m	≤ 1 year £m	>1 year, ≤ 5 years £m	> 5 years £m	No stated maturity £m	Total £m
3	Corporates	–	4,167	5,226	1,797	–	11,190
4	Retail	–	943	2,271	58,334	–	61,548
6	**Total IRB approach**	–	5,110	7,497	60,131	–	72,738
7	Central governments or central banks	–	9,459	115	1,339	255	11,168
8	Regional governments or local authorities	–	405	3	10	–	418
9	Public sector entities	–	116	116	270	–	502
10	Multilateral development banks	–	–	140	1,128	–	1,268
12	Institutions	–	153	–	193	559	905
13	Corporates	–	124	114	258	–	496
14	Retail	–	14,217	753	128	–	15,098
15	Secured by mortgages on immovable property	–	74	305	241	–	620
16	Exposures in default	–	53	5	2	–	60
18	Covered bonds	–	140	993	309	–	1,442
21	Equity exposures	–	–	13	–	–	13
22	Other exposures	–	–	–	–	746	746
23	**Total standardised approach**	–	24,741	2,557	3,878	1,560	32,736
24	**Total**	–	29,851	10,054	64,009	1,560	105,474

The maturity of exposures is shown on a contractual basis rather than the actual redemptions experienced by the Group. Undrawn values have been allocated to the contractual maturity of the underlying exposure.

6.3 Credit risk exposure analysis by geography

Table 19: EU CRB-C – Geographical breakdown of exposures

		2021			2020		
		A	M	N	A	M	N
		UK £m	Other geographical areas £m	Total £m	UK £m	Other geographical areas £m	Total £m
3	Corporates	**9,965**	**67**	**10,032**	11,134	56	11,190
4	Retail	**61,057**	**89**	**61,146**	61,455	93	61,548
6	**Total IRB approach**	**71,022**	**156**	**71,178**	72,589	149	72,738
7	Central governments or central banks	**11,004**	**115**	**11,119**	11,053	115	11,168
8	Regional governments or local authorities	**402**	**–**	**402**	418	–	418
9	Public sector entities	**116**	**357**	**473**	116	386	502
10	Multilateral development banks	**–**	**1,355**	**1,355**	–	1,268	1,268
12	Institutions	**742**	**–**	**742**	905	–	905
13	Corporates	**1,100**	**–**	**1,100**	496	–	496
14	Retail	**16,127**	**8**	**16,135**	15,089	9	15,098
15	Secured by mortgages on immovable property	**513**	**–**	**513**	620	–	620
16	Exposures in default	**92**	**–**	**92**	60	–	60
18	Covered bonds	**1,356**	**–**	**1,356**	1,442	–	1,442
21	Equity exposures	**19**	**–**	**19**	13	–	13
22	Other exposures	**765**	**–**	**765**	746	–	746
23	**Total standardised approach**	**32,236**	**1,835**	**34,071**	30,958	1,778	32,736
24	**Total**	**103,258**	**1,991**	**105,249**	103,547	1,927	105,474

Credit risk exposures arising on lending outside of the UK are not material and have been classified as Other geographical areas. The geographical location is based on the physical location of the counterparty with which the Group deals. In some cases this may differ from the location of the counterparty's ultimate parent company. Exposures arising on supranational bonds issued by multilateral development banks are held as part of the Group's liquidity buffer. In line with guidance issued by the EBA, these have been classified to the geographical area 'Other' irrespective of the location of the issuer.

Table 20: EU CR1-A – Credit quality of exposures by exposure class and instrument

		2021						
		A	B	C	D	E	F	G
		Gross carrying values of						
		Defaulted exposures £m	Non-defaulted exposures £m	Specific credit risk adjustments[1] £m	General credit risk adjustments £m	Accumulated write-offs £m	Credit risk adjustment charges of the period £m	Net values (a+b-c-d) £m
3	Corporates	**196**	**10,039**	**203**	**–**	**17**	**(64)**	**10,032**
4	*Of which: Specialised lending*	**14**	**554**	**7**	**–**	**10**	**(20)**	**561**
5	*Of which: SMEs*	**150**	**7,623**	**147**	**–**	**3**	**(48)**	**7,626**
6	Retail	**555**	**60,676**	**85**	**–**	**2**	**(44)**	**61,146**
7	*Secured by real estate property*	**555**	**60,676**	**85**	**–**	**2**	**(44)**	**61,146**
9	*Non-SMEs*	**555**	**60,676**	**85**	**–**	**–**	**(44)**	**61,146**
15	**Total IRB approach**	**751**	**70,715**	**288**	**–**	**19**	**(108)**	**71,178**
16	Central governments or central banks	**–**	**11,119**	**–**	**–**	**–**	**2**	**11,119**
17	Regional governments or local authorities	**–**	**402**	**–**	**–**	**–**	**–**	**402**
18	Public sector entities	**–**	**473**	**–**	**–**	**–**	**–**	**473**
19	Multilateral development banks	**–**	**1,355**	**–**	**–**	**–**	**–**	**1,355**
21	Institutions	**–**	**743**	**1**	**–**	**–**	**–**	**742**
22	Corporates	**–**	**1,105**	**5**	**–**	**–**	**2**	**1,100**
23	*Of which: SMEs*	**–**	**161**	**2**	**–**	**–**	**–**	**159**
24	Retail	**–**	**16,219**	**84**	**–**	**95**	**(37)**	**16,135**
26	Secured by mortgages on immovable property	**–**	**513**	**–**	**–**	**–**	**–**	**513**
27	*Of which: SMEs*	**–**	**228**	**–**	**–**	**–**	**–**	**228**
28	Exposures in default	**104**	**–**	**12**	**–**	**12**	**5**	**92**
28a	*Of which: SMEs*	**1**	**–**	**–**	**–**	**10**	**5**	**–**
30	Covered bonds	**–**	**1,356**	**–**	**–**	**–**	**–**	**1,356**
33	Equity exposures	**–**	**19**	**–**	**–**	**–**	**–**	**19**
34	Other exposures	**–**	**765**	**–**	**–**	**–**	**–**	**765**
35	**Total Standardised approach**	**104**	**34,069**	**102**	**–**	**107**	**(28)**	**34,071**
36	**Total**	**855**	**104,784**	**390**	**–**	**126**	**(136)**	**105,249**
37	*Of which: Loans*	**855**	**98,941**	**390**	**–**	**126**	**(136)**	**99,406**
38	*Of which: Debt securities*	**–**	**4,619**	**–**	**–**	**–**	**–**	**4,619**
39	*Of which: Off-balance sheet exposures*	**20**	**17,065**	**58**	**–**	**–**	**–**	**17,027**

(1) Fair Values and NPV values are excluded from specific credit risk adjustments column and they have been updated for the IFRS 9 Transitional Relief impact.

Table 20: EU CR1-A – Credit quality of exposures by exposure class and instrument continued

		2020						
		A	B	C	D	E	F	G
		Gross carrying values of						
		Defaulted exposures £m	Non-defaulted exposures £m	Specific credit risk adjustments[1] £m	General credit risk adjustments £m	Accumulated write-offs £m	Credit risk adjustment charges of the period £m	Net values (a+b-c-d) £m
3	Corporates	290	11,190	290	–	21	179	11,190
4	*Of which: Specialised lending*	30	599	37	–	–	36	592
5	*Of which: SMEs*	114	7,994	185	–	5	89	7,923
6	Retail	392	61,285	129	–	3	95	61,548
7	*Secured by real estate property*	392	61,285	129	–	3	95	61,548
9	*Non-SMEs*	392	61,285	129	–	–	95	61,548
15	**Total IRB approach**	682	72,475	419	–	24	274	72,738
16	Central governments or central banks	–	11,168	–	–	–	–	11,168
17	Regional governments or local authorities	–	418	–	–	–	–	418
18	Public sector entities	–	502	–	–	–	–	502
19	Multilateral development banks	–	1,268	–	–	–	–	1,268
21	Institutions	–	906	1	–	–	1	905
22	Corporates	–	499	3	–	–	1	496
23	*Of which: SMEs*	–	123	1	–	–	–	122
24	Retail	–	15,182	84	–	34	221	15,098
26	Secured by mortgages on immovable property	–	620	–	–	–	(1)	620
27	*Of which: SMEs*	–	279	–	–	–	(1)	279
28	Exposures in default	68	–	8	–	2	–	60
28a	*Of which: SMEs*	1	–	–	–	–	–	1
30	Covered bonds	–	1,442	–	–	–	–	1,442
33	Equity exposures	–	13	–	–	–	–	13
34	Other exposures	–	746	–	–	–	–	746
35	**Total Standardised approach**	68	32,764	96	–	36	222	32,736
36	**Total**	750	105,239	515	–	60	496	105,474
37	*Of which: Loans*	750	98,604	515	–	60	496	98,839
38	*Of which: Debt securities*	–	5,350	–	–	–	–	5,350
39	*Of which: Off-balance sheet exposures*	42	16,767	56	–	–	–	16,753

(1) Fair Values and NPV values are excluded from specific credit risk adjustments column and they have been updated for the IFRS 9 Transitional Relief impact.

The Group decreased its credit provisions during the year in response to the improving economic outlook. This is evidenced by the decrease in columns C and F in the above table year-on-year. Provision coverage has also reduced, however in recognition of the fact uncertainties do still exist, levels remain prudently above those in place pre-pandemic.

6.4 Credit risk exposures analysis by industry or counterparty type

Table 21: CR1-B – Credit quality of exposures by industry or counterparty types

		2021					
		Original value					
		A	B	C	E	F	G
		Gross carrying values of					
		Defaulted exposures £m	Non-defaulted exposures £m	Specific credit risk adjustments[1] £m	Accumulated write-offs £m	Credit risk adjustment charges of the period £m	Net values £m
1	Government administration and defence	**–**	**2,473**	**–**	**–**	**–**	**2,473**
2	Agriculture, forestry, fishing and mining	**42**	**1,928**	**23**	**1**	**(15)**	**1,947**
3	Financial investment and insurance	**1**	**13,305**	**2**	**–**	**2**	**13,304**
4	Real estate – construction	**6**	**344**	**8**	**1**	**1**	**342**
5	Manufacturing	**37**	**1,324**	**34**	**1**	**–**	**1,327**
6	Personal lending	**77**	**16,221**	**96**	**95**	**(37)**	**16,202**
7	Real estate – mortgage	**555**	**60,676**	**85**	**2**	**(44)**	**61,146**
8	Wholesale and retail trade	**40**	**1,386**	**30**	**3**	**(13)**	**1,396**
9	All other business	**97**	**6,573**	**112**	**23**	**(30)**	**6,558**
10	Non-customer assets	**–**	**554**	**–**	**–**	**–**	**554**
11	**Total**	**855**	**104,784**	**390**	**126**	**(136)**	**105,249**

		2020					
		Original value					
		A	B	C	E	F	G
		Gross carrying values of					
		Defaulted exposures £m	Non-defaulted exposures £m	Specific credit risk adjustments[1] £m	Accumulated write-offs £m	Credit risk adjustment charges of the period £m	Net values £m
1	Government administration and defence	–	3,235	–	–	–	3,235
2	Agriculture, forestry, fishing and mining	36	2,043	39	–	13	2,040
3	Financial investment and insurance	1	12,907	3	–	–	12,905
4	Real estate – construction	2	350	7	–	3	345
5	Manufacturing	63	1,528	41	1	21	1,550
6	Personal lending	65	15,183	92	34	221	15,156
7	Real estate – mortgage	392	61,290	129	3	95	61,553
8	Wholesale and retail trade	39	1,541	44	1	25	1,536
9	All other business	152	6,688	161	22	118	6,679
10	Non-customer assets	–	475	–	–	–	475
11	**Total**	750	105,240	516	61	496	105,474

(1) Fair value and net present value are excluded from specific credit risk adjustments above and they have been updated for the IFRS 9 transitional relief impact.

6.5 Impaired lending provisions

6.5.1 Definition

The Group uses a combination of strategies and statistical models that utilise internal and external data to measure the exposure to credit risk within the portfolios and to calculate the level of expected credit losses (ECL). This is supplemented by management judgement in the form of post-model adjustments (PMAs) where necessary.

The calculated model ECL is determined using the following classifications:

Classification	ECL calculation period	Description
Stage 1	12 months	A loan that is not credit-impaired on initial recognition and has not experienced a significant increase in credit risk (SICR) since initial recognition.
Stage 2	Lifetime	A loan that has experienced a SICR since initial recognition but is not yet deemed to be credit-impaired.
Stage 3	Lifetime	If the loan is credit-impaired.

Within the Group's 2021 Annual Report & Accounts, further detail on measuring credit risk is available on page 157.

6.5.2 Managing impaired exposures and impairment provisions

Provisioning policy and adequacy reviews

The Group's impairment provisions are calculated in line with the requirements of IFRS 9 which provides for ECL based on the credit risk categorisation of the exposure. Full details are provided in the Risk report of the Group's 2021 Annual Report & Accounts. Following the adoption of IFRS 9 for 2019 reporting, all provisions are classed as specific credit risk adjustments.

Reporting

The formal reporting of impaired lending, provisions and associated relevant asset quality metrics and trends is completed on a monthly basis and distributed to the appropriate portfolio managers, senior managers, Executive Committees, Risk Committee and Board. The Group reviews, at least biannually, its provision reserves against actual experience to identify whether its policies have resulted in over or under provisioning across the economic cycle. The responsibility for the review rests with the Risk function which reports its findings and recommendations to the Risk Committee, and the Board.

Management of customers experiencing financial difficulties

Information and analysis on the measures adopted by the Group to support customers experiencing financial difficulties are detailed within the Credit risk section of the Group's 2021 Annual Report & Accounts.

6.6 Analysis of past due advances to customers

Steady improvement in wider economic conditions as the year progressed supported a reduction in the Group's impairment provision from £735m at 30 September 2020 to £504m as at 30 September 2021. This reduction was driven mainly by more favourable macroeconomic inputs to the IFRS 9 models which led to the modelled ECL provision falling by £252m in the year. While the post-pandemic outlook is undoubtedly more positive than previously indicated, the Group has nevertheless maintained PMAs of £207m to address the residual risk of further deterioration for certain customers as government support is withdrawn as currently planned over the coming year. Although broadly stable at a total level year on year, there has been a shift in composition of PMAs across the product portfolios, with a reduction in PMAs held for the mortgage and personal lending books, offset by the establishment of a targeted PMA for the business lending portfolio. See the credit risk section of the Group's Annual Report & Accounts for further information.

The EBA published guidelines on the disclosure of non-performing and forborne exposures in December 2018 which introduced ten additional reporting templates. The Group has a gross non-performing loan ratio which is less than 5%, therefore six of the ten templates are not applicable. Furthermore, Template 9 – 'Collateral obtained by taking possession and execution processes' is not applicable as the Group does not hold any collateral obtained by taking possession.

Tables 22-27 have been prepared in accordance with Financial Reporting (FINREP) regulations.

Table 25 provides an overview of the changes in the stock of specific credit risk adjustments.

Table 26 provides an ageing analysis of accounting on-balance sheet past-due exposures regardless of their impairment status.

Table 22: Credit quality of performing and non-performing exposures by past due days

		2021											
		Gross carrying amount/nominal amount											
		Performing exposures			Non-performing exposures								
		£m	Not past due or past due ≤ 30 days £m	Past due > 30 days ≤ 90 days £m	£m	Unlikely to pay that are not past due or are past due ≤ 90 days £m	Past due > 90 days ≤ 180 days £m	Past due > 180 days ≤ 1 year £m	Past due > 1 year ≤ 2 years £m	Past due > 2 years ≤ 5 years £m	Past due > 5 years ≤ 7 years £m	Past due > 7 years £m	Of which defaulted £m
		A	B	C	D	E	F	G	H	I	J	K	L
1	**Loans and advances**	**74,352**	**74,205**	**147**	**1,083**	**729**	**126**	**74**	**80**	**63**	**5**	**7**	**1,011**
2	Central banks	**2,521**	**2,520**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
3	General governments	**3**	**3**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
4	Credit institutions	**200**	**200**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
5	Other financial corporations	**238**	**238**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
6	Non-financial corporations	**7,322**	**7,311**	**11**	**228**	**180**	**25**	**4**	**8**	**10**	**–**	**–**	**228**
7	*Of which: SMEs*	**5,675**	**5,667**	**7**	**166**	**139**	**15**	**4**	**2**	**6**	**–**	**–**	**166**
8	Households	**64,068**	**63,933**	**136**	**855**	**549**	**101**	**70**	**72**	**53**	**5**	**7**	**783**
9	**Debt securities**	**4,353**	**4,353**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
10	Central banks	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
11	General governments	**1,066**	**1,066**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
12	Credit institutions	**3,257**	**3,257**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
13	Other financial corporations	**30**	**30**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
14	Non-financial corporations	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
15	**Off-balance sheet exposures**	**17,054**	**–**	**–**	**30**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**25**
16	Central banks	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
17	General governments	**368**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
18	Credit institutions	**9**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
19	Other financial corporations	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
20	Non-financial corporations	**2,957**	**–**	**–**	**15**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**15**
21	Households	**13,720**	**–**	**–**	**15**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**10**
22	**Total**	**95,759**	**78,558**	**147**	**1,113**	**729**	**126**	**74**	**80**	**63**	**5**	**7**	**1,036**

Table 22: Credit quality of performing and non-performing exposures by past due days continued

		2020											
		Gross carrying amount/nominal amount											
		Performing exposures			Non-performing exposures								
		£m	Not past due or past due ≤ 30 days £m	Past due > 30 days ≤ 90 days £m	£m	Unlikely to pay that are not past due or are past due ≤ 90 days £m	Past due > 90 days ≤ 180 days £m	Past due > 180 days ≤ 1 year £m	Past due > 1 year ≤ 2 years £m	Past due > 2 years ≤ 5 years £m	Past due > 5 years ≤ 7 years £m	Past due > 7 years £m	Of which defaulted £m
		A	B	C	D	E	F	G	H	I	J	K	L
1	**Loans and advances**	75,177	75,027	150	978	625	111	102	74	55	5	6	907
2	Central banks	2,639	2,639	–	–	–	–	–	–	–	–	–	–
3	General governments	3	3	–	–	–	–	–	–	–	–	–	–
4	Credit institutions	351	351	–	–	–	–	–	–	–	–	–	–
5	Other financial corporations	330	330	–	1	–	–	1	–	–	–	–	1
6	Non-financial corporations	7,552	7,534	18	270	242	3	4	10	10	1	–	270
7	*Of which: SMEs*	5,801	5,785	16	128	117	2	4	5	–	–	–	128
8	Households	64,302	64,170	132	707	383	108	97	64	45	4	6	636
9	**Debt securities**	5,080	5,080	–	–	–	–	–	–	–	–	–	–
10	Central banks	–	–	–	–	–	–	–	–	–	–	–	–
11	General governments	1,762	1,762	–	–	–	–	–	–	–	–	–	–
12	Credit institutions	3,318	3,318	–	–	–	–	–	–	–	–	–	–
13	Other financial corporations	–	–	–	–	–	–	–	–	–	–	–	–
14	Non-financial corporations	–	–	–	–	–	–	–	–	–	–	–	–
15	**Off-balance sheet exposures**	16,741	–	–	49	–	–	–	–	–	–	–	49
16	Central banks	–	–	–	–	–	–	–	–	–	–	–	–
17	General governments	367	–	–	–	–	–	–	–	–	–	–	–
18	Credit institutions	10	–	–	–	–	–	–	–	–	–	–	–
19	Other financial corporations	–	–	–	–	–	–	–	–	–	–	–	–
20	Non-financial corporations	3,224	–	–	34	–	–	–	–	–	–	–	–
21	Households	13,140	–	–	15	–	–	–	–	–	–	–	15
22	**Total**	96,998	80,107	150	1,027	625	111	102	74	55	5	6	956

Table 23: Performing and non-performing exposures and related provisions

		2021														
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
		Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions							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					
		£m	Of which stage 1 £m	Of which stage 2 £m	£m	Of which stage 2 £m	Of which stage 3 £m	£m	Of which stage 1 £m	Of which stage 2 £m	£m	Of which stage 2 £m	Of which stage 3 £m	Accumulated partial write-off £m	On performing exposures £m	On non-performing exposures £m
1	**Loans and advances**	**74,352**	**64,280**	**10,071**	**1,083**	**122**	**960**	**(399)**	**(112)**	**(287)**	**(105)**	**(12)**	**(92)**	**–**	**62,432**	**849**
2	Central banks	**2,520**	**2,520**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
3	General governments	**3**	**1**	**1**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
4	Credit institutions	**200**	**200**	**–**	**–**	**–**	**–**	**(1)**	**(1)**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
5	Other financial corporations	**238**	**225**	**13**	**–**	**–**	**–**	**(3)**	**(1)**	**(1)**	**–**	**–**	**–**	**–**	**28**	**–**
6	Non-financial corporations	**7,322**	**5,296**	**2,026**	**228**	**31**	**197**	**(164)**	**(60)**	**(104)**	**(40)**	**(6)**	**(35)**	**–**	**4,509**	**118**
7	*Of which: SMEs*	**5,675**	**3,896**	**1,778**	**166**	**10**	**157**	**(79)**	**(25)**	**(53)**	**(25)**	**–**	**(25)**	**–**	**3,908**	**87**
8	Households	**64,069**	**56,038**	**8,031**	**855**	**91**	**763**	**(231)**	**(50)**	**(182)**	**(65)**	**(6)**	**(57)**	**–**	**57,895**	**731**
9	**Debt securities**	**4,353**	**4,353**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
10	Central banks	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
11	General governments	**1,066**	**1,066**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
12	Credit institutions	**3,257**	**3,257**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
13	Other financial corporations	**30**	**30**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
14	Non-financial corporations	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
15	**Off-balance sheet exposures**	**17,054**	**15,967**	**1,088**	**30**	**–**	**30**	**8**	**2**	**6**	**–**			**–**	**–**	**–**
16	Central banks	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**			**–**	**–**	**–**
17	General governments	**368**	**359**	**10**	**–**	**–**	**–**	**–**	**–**	**–**	**–**			**–**	**–**	**–**
18	Credit institutions	**9**	**8**	**1**	**–**	**–**	**–**	**–**	**–**	**–**	**–**			**–**	**–**	**–**
19	Other financial corporations	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**			**–**	**–**	**–**
20	Non-financial corporations	**2,957**	**2,194**	**763**	**15**	**–**	**15**	**8**	**2**	**6**	**–**			**–**	**–**	**–**
21	Households	**13,720**	**13,406**	**314**	**15**	**–**	**15**	**–**	**–**	**–**	**–**			**–**	**–**	**–**
22	**Total**	**95,759**	**84,600**	**11,159**	**1,113**	**122**	**990**	**(391)**	**(110)**	**(281)**	**(105)**	**(12)**	**(92)**	**–**	**62,432**	**849**

Table 23: Performing and non-performing exposures and related provisions continued

		2020														
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
		Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions							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					
		£m	Of which stage 1 £m	Of which stage 2 £m	£m	Of which stage 2 £m	Of which stage 3 £m	£m	Of which stage 1 £m	Of which stage 2 £m	£m	Of which stage 2 £m	Of which stage 3 £m	Accumulated partial write-off £m	On performing exposures £m	On non-performing exposures £m
1	**Loans and advances**	75,177	62,428	12,749	978	115	863	(597)	(138)	(459)	(141)	(6)	(135)	–	63,053	678
2	Central banks	2,639	2,639	–	–	–	–	–	–	–	–	–	–	–	–	–
3	General governments	3	3	–	–	–	–	–	–	–	–	–	–	–	–	–
4	Credit institutions	351	351	–	–	–	–	–	–	–	–	–	–	–	–	–
5	Other financial corporations	330	293	37	1	–	1	(2)	(1)	(1)	–	–	–	–	55	1
6	Non-financial corporations	7,552	4,269	3,283	270	21	249	(218)	(49)	(169)	(69)	–	(69)	–	4,482	98
7	*Of which: SMEs*	5,801	2,844	2,957	128	–	128	(136)	(25)	(110)	(26)	–	(26)	–	3,460	75
8	Households	64,302	54,873	9,429	707	94	613	(377)	(88)	(289)	(72)	(6)	(66)	–	58,516	579
9	**Debt securities**	5,080	5,080	–	–	–	–	–	–	–	–	–	–	–	–	–
10	Central banks	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11	General governments	1,762	1,762	–	–	–	–	–	–	–	–	–	–	–	–	–
12	Credit institutions	3,318	3,318	–	–	–	–	–	–	–	–	–	–	–	–	–
13	Other financial corporations	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14	Non-financial corporations	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15	**Off-balance sheet exposures**	16,741	15,075	1,666	49	–	49	–	–	–	–			–	–	–
16	Central banks	–	–	–	–	–	–	–	–	–	–			–	–	–
17	General governments	367	361	6	–	–	–	–	–	–	–			–	–	–
18	Credit institutions	10	8	2	–	–	–	–	–	–	–			–	–	–
19	Other financial corporations	–	–	–	–	–	–	–	–	–	–			–	–	–
20	Non-financial corporations	3,224	1,959	1,265	34	–	34	–	–	–	–			–	–	–
21	Households	13,140	12,747	393	15	–	15	–	–	–	–			–	–	–
22	**Total**	96,998	82,583	14,415	1,027	115	912	(597)	(138)	(459)	(141)	(6)	(135)	–	63,053	678

Table 24: Credit quality of forborne exposures

		2021							
		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	
		Performing forborne £m	Non-performing forborne £m	Of which defaulted £m	Of which impaired £m	On performing forborne exposures £m	On non-performing forborne exposures £m	£m	Of which collateral and financial guarantees received on non-performing exposures with forbearance measures £m
1	Loans and advances	**661**	**647**	**548**	**582**	**(22)**	**(43)**	**993**	**481**
2	*Central banks*	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
3	*General governments*	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
4	*Credit institutions*	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
5	*Other financial corporations*	**–**	**–**	**–**	**–**	**–**	**–**	**1**	**1**
6	*Non-financial corporations*	**314**	**166**	**166**	**155**	**(14)**	**(26)**	**249**	**68**
7	*Households*	**347**	**481**	**382**	**427**	**(8)**	**(17)**	**743**	**412**
8	Debt securities	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
9	Loan commitments given	**32**	**3**	**3**	**2**	**–**	**–**	**–**	**–**
10	**Total**	**693**	**650**	**551**	**584**	**(22)**	**(43)**	**993**	**481**

		2020							
		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	
		Performing forborne £m	Non-performing forborne £m	Of which defaulted £m	Of which impaired £m	On performing forborne exposures £m	On non-performing forborne exposures £m	£m	Of which collateral and financial guarantees received on non-performing exposures with forbearance measures £m
1	Loans and advances	624	543	447	481	(33)	(69)	530	263
2	*Central banks*	–	–	–	–	–	–	–	–
3	*General governments*	–	–	–	–	–	–	–	–
4	*Credit institutions*	–	–	–	–	–	–	–	–
5	*Other financial corporations*	–	1	1	1	–	–	–	–
6	*Non-financial corporations*	301	205	205	198	(21)	(52)	199	54
7	*Households*	323	337	241	282	(12)	(17)	331	209
8	Debt securities	–	–	–	–	–	–	–	–
9	Loan commitments given	44	14	14	14	–	–	–	–
10	**Total**	668	557	461	495	(33)	(69)	530	263

Table 25: EU CR2-A: Changes in the stock of general and specific credit risk adjustments

	A	B	A	B
	2021 £m	2021 £m	2020 £m	2020 £m
	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
Opening balance	**735**	**–**	362	–
Increases due to origination and acquisition	**142**	**–**	103	–
Decreases due to derecognition	**(139)**	**–**	(53)	–
Changes due to change in credit risk (net)	**(174)**	**–**	393	–
Changes due to modifications without derecognition (net)	**(5)**	**–**	4	–
Changes due to update in the institution's methodology for estimation (net)	**–**	**–**	14	–
Decrease in allowance account due to write-offs	**(69)**	**–**	(106)	–
Other adjustments[1]	**6**	**–**	18	–
Closing balance[2]	**496**	**–**	735	–
Recoveries of previously written-off amounts recorded directly to the statement of profit or loss	**(30)**	**–**	(26)	–
Amounts written-off directly to the statement of profit or loss	**102**	**–**	84	–
Gains or losses on derecognition of debt instruments	**23**	**–**	(37)	–

(1) Other adjustments relate to transfers to net present value provision amortisation, fair value accounting adjustments and cash recoveries.

(2) Closing balance differs to Table 27, with the difference relating to the non-inclusion of undrawn commitments as per FINREP rules.

Table 26: EU CR2-B – Changes in the stock of defaulted and impaired loans and debt securities

		A	A
		2021 £m	2020 £m
		Gross carrying value defaulted exposures	Gross carrying value defaulted exposures
1	**Opening balance**	**862**	807
2	Loans and debt securities that have defaulted or impaired since the last reporting period	**734**	384
3	Returned to non-defaulted status	**(253)**	(93)
4	Amounts written-off	**(126)**	(158)
5	Other changes	**(260)**	(78)
6	**Closing balance**	**957**	862

6.7 Analysis by industry sector

Table 27: IFRS 9 impairment provisions held on credit exposures by allocation and industry

	2021			
	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m
Agriculture, forestry, fishing and mining	**4.5**	**11.8**	**3.8**	**20.1**
Asset and lease financing	**3.2**	**1.7**	**1.8**	**6.7**
Financial, investment and insurance	**0.9**	**1.2**	**0.1**	**2.2**
Instalment loans to individuals and other personal lending (including credit cards)	**41.1**	**118.1**	**34.8**	**194.0**
Manufacturing	**9.0**	**25.6**	**8.3**	**42.9**
Other commercial and industrial	**45.3**	**76.5**	**21.8**	**143.6**
Real estate – construction	**3.0**	**4.1**	**0.7**	**7.8**
Real estate – mortgage	**4.0**	**64.4**	**18.7**	**87.1**
Total	**111.0**	**303.4**	**90.0**	**504.4**

	2020			
	Stage 1 £m	Stage 2 £m	Stage 3 £m	Total £m
Agriculture, forestry, fishing and mining	5.8	22.6	6.6	35.0
Asset and lease financing	1.8	4.8	7.6	14.2
Financial, investment and insurance	0.7	1.4	0.1	2.2
Instalment loans to individuals and other personal lending (including credit cards)	70.3	193.6	37.4	301.3
Manufacturing	4.7	33.0	6.1	43.8
Other commercial and industrial	37.9	109.3	52.9	200.1
Real estate – construction	0.9	5.0	1.3	7.2
Real estate – mortgage	14.0	95.3	22.1	131.4
Total	136.1	465.0	134.1	735.2

6.8 Analysis by geography

All past due but not impaired loans and advances to customers and impaired loans and advances to customers are categorised as being in the United Kingdom. All closing impairment provisions, the net charge to the income statement, and advances written-off in respect of loans and advances to customers are categorised as being in the United Kingdom.

6.9 Use of External Credit Assessment Institutions (ECAI)

The Group makes limited use of credit assessments by ECAI in assigning risk weights to credit risk exposures under the standardised and FIRB approaches. This typically applies in the case of certain central government, central bank and institutional exposures. The appropriate risk weight to apply to the credit risk exposure is determined by assigning the exposure to the relevant credit quality step under CRR Part 3, Title II, Chapter 2 (Standardised Credit Risk), based on the EBA's mapping of credit assessments to credit quality steps. Where appropriate, the Group makes use of credit ratings provided by Fitch Ratings.

6.10 Credit risk mitigation

For further information on credit risk mitigation, refer to pages 154 to 182 of the Group's 2021 Annual Report & Accounts.

6.10.1 Analysis of credit risk mitigation techniques

Table 28 shows the use of credit risk mitigation techniques broken down by exposure class. The exposure amount within this table is disclosed after, where applicable, on- or off-balance sheet netting. Exposures secured represent the carrying amount of the exposure, irrespective of the level of collateralisation. Exposures unsecured represents the carrying amount of exposures with no security or collateral attached.

The Group applies detailed lending policies and standards which outline the approach to lending, underwriting, concentration limits and product terms. See the Credit risk section of the Risk report in the Group's 2021 Annual Report & Accounts for further information on credit risk mitigation techniques.

6.10.2 Derivatives

The Group maintains control limits on net open derivative positions. At any one time, exposure to credit risk is limited to the current fair value of instruments that are favourable to the Group (i.e. assets where their fair value is positive), which, in relation to derivatives, may only be a small fraction of the contract, or notional values used to express the volume of instruments outstanding. This credit risk is managed as part of the customers' overall exposure together with potential exposures from market movements.

Master netting agreements

The Group further restricts its exposure to credit losses by entering into master netting arrangements with counterparties with whom it undertakes a significant volume of transactions. Master netting arrangements do not generally result in an offset of balance sheet assets and liabilities, as transactions are usually settled on a gross basis. However, credit risk associated with the favourable contracts is reduced by a master netting arrangement to the extent that, if any counterparty failed to meet its obligations in accordance with the agreed terms, all amounts with the counterparty are terminated and settled on a net basis. Derivative financial instrument contracts are typically subject to the International Swaps and Derivatives Association (ISDA) master netting agreements, as well as Credit Support Annexes, where relevant, around collateral arrangements attached to those ISDA agreements. Derivative exchange or clearing counterparty agreements exist where contracts are settled via an exchange or clearing house.

Table 28: EU CR3 – CRM techniques – overview

	2021				
	A	B	C	D	E
Exposure classes	Exposures unsecured – carrying amount £m	Exposures to be secured £m	Exposures secured by collateral £m	Exposures secured by financial guarantees £m	Exposures secured by credit derivatives £m
Corporates	4,439	5,528	4,954	574	–
Retail	–	61,146	61,146	–	–
Total IRB approach	4,439	66,674	66,100	574	–
Central governments or central banks	11,119	–	–	–	–
Regional governments or local authorities	261	3	3	–	–
Public sector entities	472	–	–	–	–
Multilateral development banks	1,355	–	–	–	–
Institutions	742	–	–	–	–
Corporates	336	763	41	722	–
Retail	16,111	25	25	–	–
Secured by mortgages on immovable property	–	513	513	–	–
Exposures in default	67	25	–	25	–
Covered bonds	1,356	–	–	–	–
Equity exposures	19	–	–	–	–
Other exposures	765	–	–	–	–
Total standardised approach	32,603	1,329	582	747	–
Total exposures	37,042	68,003	66,682	1,321	–
Of which: Loans	31,214	68,002	66,682	1,321	–
Of which: Debt securities	4,620	–	–	–	–
Of which: Defaulted	142	658	623	35	–
Of which: SMEs	2,588	5,379	4,871	533	–

Exposure classes	2020 A Exposures unsecured – carrying amount £m	B Exposures to be secured £m	C Exposures secured by collateral £m	D Exposures secured by financial guarantees £m	E Exposures secured by credit derivatives £m
Corporates[1]	4,778	6,337	5,339	998	–
Retail	–	61,548	61,548	–	–
Total IRB approach	4,778	67,885	66,887	998	–
Central governments or central banks	11,168	–	–	–	–
Regional governments or local authorities	263	–	–	–	–
Public sector entities	501	–	–	–	–
Multilateral development banks	1,268	–	–	–	–
Institutions	904	–	–	–	–
Corporates	300	196	25	170	–
Retail	15,098	–	–	–	–
Secured by mortgages on immovable property	–	620	620	–	–
Exposures in default	59	1	–	1	–
Covered bonds	1,442	–	–	–	–
Equity exposures	13	–	–	–	–
Other exposures	746	–	–	–	–
Total standardised approach	31,762	817	645	171	–
Total exposures	36,540	68,702	67,532	1,169	–
Of which: Loans	29,873	68,702	67,532	1,169	–
Of which: Debt securities	5,349	–	–	–	–
Of which: Defaulted	177	482	477	5	–
Of which: SMEs	2,611	5,673	5,143	531	–

(1) The 2020 comparative numbers have been updated to reflect the inclusion of both Other Physical Collateral and Receivables. In doing so there was a £1.3bn switch from Unsecured Exposures to Secured Exposures, as can be seen within columns A, B and C above.

Lending backed by government guarantees in response to COVID-19 can be seen within the 'Exposures secured by financial guarantees' column above.

Following PRA approval in 2020, the Group moved to recognise asset finance and invoice finance collateral, being other physical collateral and receivables respectively, as being eligible collateral from a credit risk mitigation perspective in relation to the FIRB approach, which is captured within the 'Exposures secured by collateral' column above.

The below table shows a breakdown of exposures under the standardised approach pre- and post-application of credit conversion factors (CCF) and credit risk mitigation (CRM) but after, where applicable, on- or off-balance sheet netting. For retail exposures secured by mortgages, the protection effect of mortgage collateral is intrinsically part of the definition of the original exposure class.

Table 29: EU CR4 – Standardised approach – credit risk exposure and CRM effects

		2021					
		A	B	C	D	E	F
		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
Exposure classes		On-balance sheet amount £m	Off-balance sheet amount £m	On-balance sheet amount £m	Off-balance sheet amount £m	RWA £m	RWA density[1] %
1	Central governments or central banks	**11,118**	**1**	**12,353**	**–**	**–**	**0.0%**
2	Regional government or local authority	**13**	**251**	**13**	**50**	**13**	**20.6%**
3	Public sector entities	**356**	**116**	**357**	**23**	**5**	**1.3%**
4	Multilateral development banks	**1,355**	**–**	**1,355**	**–**	**–**	**0.0%**
6	Institutions	**733**	**9**	**733**	**2**	**153**	**20.8%**
7	Corporates	**943**	**156**	**221**	**42**	**235**	**89.4%**
8	Retail	**5,632**	**10,504**	**5,632**	**21**	**4,240**	**75.0%**
9	Secured by mortgages on immovable property	**161**	**352**	**161**	**176**	**114**	**33.8%**
10	Exposures in default	**90**	**2**	**66**	**–**	**73**	**110.6%**
12	Covered bonds	**1,356**	**–**	**1,356**	**–**	**136**	**10.0%**
15	Equity exposures	**19**	**–**	**19**	**–**	**19**	**100.0%**
16	Other items	**765**	**–**	**765**	**–**	**856**	**111.9%**
17	**Total**	**22,541**	**11,391**	**23,031**	**314**	**5,844**	**25.03%**

		2020					
		A	B	C	D	E	F
		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
Exposure classes		On-balance sheet amount £m	Off-balance sheet amount £m	On-balance sheet amount £m	Off-balance sheet amount £m	RWA £m	RWA density[1] %
1	Central governments or central banks	11,167	1	12,264	–	–	0.0%
2	Regional government or local authority	14	249	14	50	13	20.3%
3	Public sector entities	385	116	385	23	5	1.2%
4	Multilateral development banks	1,268	–	1,268	–	–	0.0%
6	Institutions	894	10	894	3	186	20.7%
7	Corporates	382	114	212	21	210	90.1%
8	Retail	5,431	9,667	5,431	22	4,090	75.0%
9	Secured by mortgages on immovable property	247	373	247	186	144	33.3%
10	Exposures in default	58	2	58	–	62	106.9%
12	Covered bonds	1,442	–	1,442	–	144	10.0%
15	Equity exposures	13	–	13	–	14	107.7%
16	Other items	746	–	746	–	774	103.8%
17	**Total**	22,047	10,532	22,974	305	5,642	24.24%

(1) RWA density calculation has been performed on unrounded figures.

The below table shows a breakdown of exposures post-CCF and post-CRM. Risk-weight categories do not reflect where the SME supporting factor has been applied. Explanations on key movements in exposure classes during the year are shown in section 6.1.

Table 30: EU CR5 – Standardised approach – exposures by asset classes and risk weights (post-CCF and post-CRM)

		2021																	
	Exposure classes	0% £m	2% £m	4% £m	10% £m	20% £m	35% £m	50% £m	70% £m	75% £m	100% £m	150% £m	250% £m	370% £m	1250% £m	Others £m	Deducted £m	Total £m	Of which unrated £m
1	Central governments or central banks	**12,353**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**12,353**	**–**
2	Regional government or local authorities	**–**	**–**	**–**	**–**	**63**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**63**	**63**
3	Public sector entities	**356**	**–**	**–**	**–**	**24**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**380**	**380**
4	Multilateral development banks	**1,355**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,355**	**1,355**
6	Institutions	**–**	**–**	**–**	**–**	**716**	**–**	**19**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**735**	**62**
7	Corporates	**–**	**–**	**–**	**–**	**–**	**–**	**5**	**–**	**–**	**258**	**–**	**–**	**–**	**–**	**–**	**–**	**263**	**258**
8	Retail	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**5,653**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**5,653**	**5,653**
9	Secured by mortgages on immovable property	**–**	**–**	**–**	**–**	**–**	**318**	**–**	**–**	**–**	**19**	**–**	**–**	**–**	**–**	**–**	**–**	**337**	**337**
10	Exposures in default	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**52**	**14**	**–**	**–**	**–**	**–**	**–**	**66**	**66**
12	Covered bonds	**–**	**–**	**–**	**1,356**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,356**	**–**
15	Equity	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**19**	**–**	**–**	**–**	**–**	**–**	**–**	**19**	**19**
16	Other items	**86**	**–**	**–**	**–**	**8**	**–**	**–**	**–**	**–**	**548**	**–**	**123**	**–**	**–**	**–**	**–**	**765**	**765**
17	**Total**	**14,150**	**–**	**–**	**1,356**	**811**	**318**	**24**	**–**	**5,653**	**896**	**14**	**123**	**–**	**–**	**–**	**–**	**23,345**	**8,958**

Table 30: EU CR5 – Standardised approach – exposures by asset classes and risk weights (post-CCF and post-CRM) continued

		2020																	
Exposure classes		0% £m	2% £m	4% £m	10% £m	20% £m	35% £m	50% £m	70% £m	75% £m	100% £m	150% £m	250% £m	370% £m	1250% £m	Others £m	Deducted £m	Total £m	Of which unrated £m
1	Central governments or central banks	12,264	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12,264	–
2	Regional government or local authorities		–	–	–	64	–	–	–	–	–	–	–	–	–	–	–	64	64
3	Public sector entities	385	–	–	–	23	–	–	–	–	–	–	–	–	–	–	–	408	408
4	Multilateral development banks	1,268	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1,268	1,268
6	Institutions	–	–	–	–	878	–	19	–	–	–	–	–	–	–	–	–	897	75
7	Corporates	–	–	–	–	–	–	1	–	–	232	–	–	–	–	–	–	233	232
8	Retail	–	–	–	–	–	–	–	–	5,453	–	–	–	–	–	–	–	5,453	5,453
9	Secured by mortgages on immovable property	–	–	–	–	–	414	–	–	–	19	–	–	–	–	–	–	433	433
10	Exposures in default	–	–	–	–	–	–	–	–	–	49	9	–	–	–	–	–	58	58
12	Covered bonds	–	–	–	1,442	–	–	–	–	–	–	–	–	–	–	–	–	1,442	–
15	Equity	–	–	–	–	–	–	–	–	–	13	–	–	–	–	–	–	13	13
16	Other items	149	–	–	–	9	–	–	–	–	465	–	123	–	–	–	–	746	250
17	**Total**	14,066	–	–	1,442	974	414	20	–	5,453	778	9	123	–	–	–	–	23,279	8,254

Risk-weight categories do not reflect where the SME supporting factor has been applied.

Exposures are classed as ‘rated’ only where an ECAI rating has been used to derive the risk weight. Where a rating is unavailable, or where the risk weight has been determined by application of specific CRR provisions, exposures have been classed as unrated.

6.11 IRB approach

6.11.1 IRB permissions

Capital requirements for retail mortgages are calculated using an AIRB approach, the majority of the business portfolios uses a FIRB approach and the Group's Income Producing Real Estate portfolio uses the IRB Slotting Approach.

All other requirements are calculated using the standardised approach.

The PRA has provided a policy statement outlining its approach to implementing definition of default in line with EBA regulations by 1 January 2022. This change, combined with the PRA Hybrid model requirements for Mortgages, has led to changes being required to IRB models. The implementation of the definition of default changes for the Mortgage and Business IRB portfolios will be aligned to the PRA approval of the revised IRB models.

6.11.2 Internal ratings scales

The rating scale for business customers is included in the table below.

Table 31: Internal rating scale for business customers

Grade	Lower PD bound	Upper PD bound	Credit risk engine
1	0.000%	0.020%	0.030%
2	0.021%	0.030%	0.030%
3	0.031%	0.050%	0.043%
4	0.051%	0.080%	0.068%
5	0.081%	0.110%	0.096%
6	0.111%	0.140%	0.125%
7	0.141%	0.180%	0.161%
8	0.181%	0.240%	0.212%
9	0.241%	0.330%	0.283%
10	0.331%	0.440%	0.378%
11	0.441%	0.550%	0.490%
12	0.551%	0.690%	0.617%
13	0.691%	0.870%	0.777%
14	0.871%	1.170%	1.008%
15	1.171%	1.560%	1.346%
16	1.561%	2.020%	1.771%
17	2.021%	2.610%	2.295%
18	2.611%	3.720%	3.160%
19	3.721%	5.010%	4.380%
20	5.011%	6.890%	5.720%
21	6.891%	10.550%	8.300%
22	10.551%	15.910%	13.400%
23	15.911%	99.999%	23.426%
98	100.000%	100.000%	100.000%
99	100.000%	100.000%	100.000%

Table 32: Internal rating scale for retail customers
For Retail customers, the eCRS (rating system for Non-Retail customers) Grade 23 is further split into three grades as per the below table.

eCRS grade	Lower PD bound	Upper PD bound	Assigned PDs for the credit risk engine
23	15.911%	34.220%	23.426%
24	34.221%	61.240%	50.000%
25	61.241%	100.000%	75.000%

Note: Tables 31 and 32 relate to Clydesdale Bank PLC risk grades only. Information on Virgin Money Holdings (UK) plc risk grades can be found in Table 39.

Other uses of internal ratings
The outputs of the IRB models are used to calculate regulatory capital and are also used with appropriate adjustments internally for the following:

- as quantification of likelihood of default within portfolio and segment level Management Information including the setting of risk appetite and capital management;
- a key component in the calculation of product pricing and return on equity;
- an input into IFRS 9 ECL calculations;
- as input into Stress Testing for both internal and regulatory calculations; and
- COREP (Common Reporting regulatory) templates.

6.11.3 Rating system controls

Governance
IRB model governance is overseen by the relevant designated Committee Model Governance Committee (MGC) and supported by the technical Credit Models Technical Forum. These governance committees include participation from model developers, model users, product functions, credit risk and the independent review teams. Model materiality is assessed in line with agreed thresholds and determines the level of oversight required.

A detailed model risk framework includes minimum standards for development, data preparation, model structure, development methodologies, model approval, implementation of the models and model monitoring including performance thresholds. The framework assesses the models against internal policies and regulatory standards to ensure appropriate risk management standards.

The IRB models are subject to regular monitoring and mandatory annual validations. Statistical tests are performed to assess ongoing performance of the models including assessment of efficiency and stability and comparison of expected performance against observed model outputs to determine model accuracy. Reviews are conducted and material issues highlighted are presented to local management, governance committees and the Executive Leadership Team. IRB monitoring and validation outcomes are included within Tier 1 Model Risk RAS metrics, which are presented to MGC, Executive Risk Committee, Board Risk Committee and Board.

Independent validation
A team of independent specialists within Model Risk Oversight (MRO) conduct an independent review of new models and a periodic review of existing models, with a frequency determined by model materiality (annually for IRB models). This team is actively involved in the ongoing independent challenge of information presented to Committees as part of the governance process.

Annual review of existing IRB models includes assessment of model performance, data, methodology, conservatism, regulatory compliance and ongoing appropriateness to the portfolio.

Independent review of new IRB models includes provides an end-to-end assessment of the development, including:

- reviewing data extraction, integrity, and sampling (including third-party data) and definition of default;
- reviewing model methodology and statistical models developed;
- testing model assumptions and highlighting any risks observed;
- conducting independent verification of the outputs and model performance (may include assessment of alternative techniques);
- completing assessment of alternative techniques; and
- reviewing appropriateness of model conservatism.

MRO will document any material issues and the required actions. This will include an assessment of the magnitude of the actions and an appropriate timescale for completion. Any conflicts between the MRO and the modelling functions will be escalated as per the governance process highlighted above.

Issue/action management
Model issues identified during the validation of new models, periodic validation, or ongoing governance processes will result in detailed action plans that may include actions such as model enhancements, recalibration, reweights, full redeployment or interim mitigation (e.g. Post Model Adjustments).

Internal Audit
The Internal Audit team is independent of risk management including the modelling teams and the MRO. Internal Audit is responsible for the assurance over the controls, assumptions and regulatory compliance of the models with any material gaps escalated to the relevant Board committees and actions plans agreed with the modelling functions or MRO.

6.11.4 Description of ratings processes

Corporate IRB PD modelling approach

There are six IRB models used to calculate the capital requirements for the Corporate portfolio. These models are segmented based on one or more of exposure, turnover, and sector. The models take the form of scorecards utilising qualitative questions and, where available, quantitative metrics, to determine an overall score which is converted into a PD estimate.

Assignment to Retail or Non-Retail asset classes is determined in accordance with CRR Article 147 for exposure classification. Assignment to individual models is performed based on the product and collateral type or for Non-Retail exposures on industry or exposure size.

Assignment rules for Non-Retail exposures ensure that exposures/transactions are assigned to the following key Non-Retail model segments:

a) *Corporate* – The Group has developed PD models for this exposure class. Within corporate, large exposures with available financial accounts are further assigned to Mid-Market and SME models primarily based on turnover. Large exposure without financial accounts and smaller exposures that are non-trading are assigned to the Limited Financial Input Non-Trade model. The remaining small exposures are assigned to the small business model.

b) *Real Estate* – The Group has developed PD models for this exposure class for the purposes of internal credit approval, pricing and provisioning. Within Commercial Real Estate (CRE) PD models, exposures are further assigned to developer, large-investor and small-investor categories based on type of transaction and exposure size. These models are not used for capital calculations as the CRE exposure use the IRB Slotting approach for capital calculations.

c) *Agriculture* – The Group has developed two IRB PD models for this exposure class. Within agriculture, exposures are assigned to large-agriculture or small-agriculture based on exposure size.

d) *Non-Bank Financial Institution/Sovereign/Banks/Universities/Housing Associations/Project Finance* – These exposures are planned to remain on Permanent Partial Use under Article 150 of the CRR.

Obligor financial characteristics are input into a system-based spreading tool for business customers and into a spreadsheet-based spreading tool for agricultural customers (except for the Q&A models which use manual inputs) which automates the process of loading data into eCRS based on pre-defined rules.

The eCRS then generates a rating for the obligor which is reviewed and assessed by a separate case officer. The rating criteria (obligor characteristics) are clearly defined as inputs into the eCRS and the key definitions are embedded within the rating system. The definitions of rating grades are also available to all rating system users and these are mapped to PD values. This documentation enables users to have a consistent understanding of rating grades and risk profiles and allows them to consistently assign obligors to appropriate grades or pools through the rating system.

The Group uses the same rating framework across businesses, departments and geographic locations for Non-Retail exposures, with appropriate underlying models for specific exposure types.

All rating assignments for the Non-Retail models are reviewed and refreshed at an annual basis, or more frequently, where there is a change in the obligor's risk profile. This ensures that an appropriate review of rating assignments is undertaken on a periodic basis.

All data inputs/outputs into Non-Retail models are subject to three layers of vetting:

1. Financial data is input by a centralised independent team and subject to validation checks such as inputs balancing. The data is then subjected to 'objective' checks that are run automatically, including checks that identify incompleteness and/or invalid values. Standard checks such as 'valid input type' (e.g. non-negative values, non-numeric values, date to be past etc.) are automatically applied. Data is also checked for reasonableness if within the expected ranges. The values cannot be processed further if this check identifies any issues that need to be remediated before moving forward.

2. A staff member (senior Relationship Manager or credit officer) with appropriate experience and knowledge of the customer, checks the financial inputs and undertakes plausibility checks of a more subjective nature, which take account of the characteristics of the obligor and the transaction. Any issues identified are discussed and remediated with the relevant person who made the entry into the system.

3. Separate independent sample checks are carried out to ensure accuracy, completeness and appropriateness of the data and periodic monitoring to ensure the models remain relevant to the portfolios. Data inputs are both manually reviewed on input and reviewed during development and monitoring. Max financial ratios/inputs do have established and expected rates and they are incorporated within eCRS for user review. The variable transformation for model development includes a formal review of the distribution of these variables.

On a monthly basis, the Group's modelling team conducts a systematic analysis of model performance and stability. The Group also regularly performs model 'backtesting', reviewing and updating model specification as appropriate. Model outputs are compared with model outcomes as part of the monthly monitoring processes. Model performance reports are submitted to the relevant governance committees for discussion and/or escalation.

Key metrics such as predictive power, accuracy and robustness are assessed and documented as part of the model build; and assessed on an ongoing basis.

The IRB PD models were recalibrated in 2018 and independently validated by the MRO. All relevant models have been through a full annual revalidation to account for the enhancements to the definition of default.

These validations involve the MRO independently replicating calculations, data extraction methods and data exclusions, assessing key performance metrics and assessing regulatory compliance. For the Targeted Positive Assurance level reviews, the MRO produce performance metrics from first principles.

Retail mortgages IRB PD modelling approach
The Group uses bespoke models to calculate IRB capital requirements in relation to its mortgage portfolios. The models are used to estimate PDs for residential, Buy-to-Let (BTL) and Current Account Mortgage (CAM) products. In line with existing approved permissions, two distinct sets of credit models are used for heritage Virgin Money Holdings (UK) plc and heritage Clydesdale Bank PLC, and two distinct definitions of default are in place. The heritage Virgin Money Holdings (UK) plc permission uses a 180 days past due definition while the heritage Clydesdale Bank PLC permission is on a 90 days past due basis. The models follow a consistent methodology for LGD and EAD estimation. However, there is a distinction between the rating systems used to estimate PD for heritage Virgin Money Holdings (UK) plc portfolios (Through the Cycle) and Clydesdale Bank PLC portfolios (Point in Time). The Point in Time approach includes an additional conservative buffer.

The PDs for both heritages are derived from scorecards that use a variety of internal customer behaviour and external bureau information. For newly-originated accounts, PDs are assigned with respect to the customer's application score. Subsequently, behavioural scores are used.

The PDs are then adjusted, depending on the heritage, using the following approaches:

Through the Cycle – The models determine long run average PD for each segment in order to calculate expected losses and risk-weighted assets. In addition, the models are used to inform risk appetite, influence lending strategy and support determination of the level of impairment provisions.

The rating models group customers into segments differentiated by a number of factors, which include product type, Loan-to-Value and measures of affordability. For each segment, a long run average PD, downturn LGD and EAD are estimated from a combination of recent and historic data. Data covering the period back to the early 1990s is utilised in the derivation of the PD. All models incorporate an appropriate level of conservatism to account for uncertainty around model estimates over an economic cycle or in downturn conditions. The adequacy of this conservatism is robustly challenged through the Group's internal governance process.

Point in Time – A Point in Time ratings approach is used as a base for risk estimation, with a conservative PD adjustment adopted for regulatory long run average. This approach has been selected to mitigate against the historical data constraints across a representative mix of good and bad years (as required by PRA Supervisory Statement SS11/13), inclusive of the UK mortgage downturn of the early 1990s. This conservative adjustment has then been further considered to understand if it is likely to be sufficient across the whole cycle through a range of back casting and estimation processes, including future stressed scenarios.

A mandatory quarterly realignment framework has been established to maintain the alignment of modelled estimates with observed performance, with implications on both capital and IFRS 9 ECL understood. Approval is sought at MGC level with PRA notification as required depending on the materiality of impacts.

All mortgage models are subject to monthly model monitoring by the credit risk team as the first line, with presentation to the relevant committees, as set out in the Risk report available on page 157 of the Group's 2021 Annual Report & Accounts.

The discriminative power and accuracy of the models is measured over time and any breaches against defined triggers are investigated and actioned. The second-line MRO reviews and challenges the first-line's assessment within model governance and through its annual review process, as set out in the model validation standards.

Model performance is validated in terms of (a) model discriminatory power and (b) model accuracy (by testing alignment of model outputs against outcomes. Further stability of the models is validated by assessing the stability of the model variables over time using metrics such as Population Stability Index.

The data used in the rating systems covers a long history of account and customer level information along with bureau information from credit reference agencies. The model developments have used a long history of internal information which are subject to well established controls from a data capture and data quality perspective.

Specialised lending
CRE exposures are rated using the IRB Slotting approach.

Corporate LGD and EAD modelling approach
Corporate exposures are rated using the FIRB approach, and therefore use the LGDs and CCFs specified in the CRR. There is a small element of Corporate exposures which continue to be captured under the Standardised Approach under PPU per CRR Article 150(1) (c).

Retail mortgage IRB EAD modelling approach
Fixed Term Mortgages (Residential and BTL) have a fixed amortising repayment schedule whereas the CAM portfolio (which is specific to heritage Clydesdale Bank PLC) consists of revolving overdrafts, secured by residential property.

1. Fixed Term Mortgages are modelled directly based on balance adjusted for payment approach, including interest, charges accrued and payments made.
2. The CAM portfolio is modelled using a Conversion Factor approach to convert any undrawn exposure into predicted drawn exposure.

The regulatory EAD converts the underlying EAD using conservative assumptions to adjust for a downturn estimation, for example, no/reduced payments or increased use of headroom.

Retail mortgages IRB LGD modelling approach
The Group has developed bespoke LGD models which follow a structured approach in line with industry practice.

The methodology reflects the operational process to recover debt based on three key modelled components:

- time to repossession and sale;
- probability of possession; and
- shortfall after the property sale.

The regulatory LGD converts the underlying LGD using conservative assumptions to adjust for a downturn estimation. The primary factors in this include a reduction in house prices, increased discount rates and shortfall resulting in increased time to sale, increased possession rate and shortfall or forced sale discount.

Drivers of losses
Data is as of 30 September 2021, so default periods cover September to September (e.g. 2020–2021 is the period 30 September 2020 to 30 September 2021). Customer numbers are taken from the start of the period and defaults include any customers that default over the 12-month period. Customers in default at the start of the period are excluded from both the customer count and the default count.

Table 33: Customer default rate

	2020–2021			2019–2020			2018–2019		
	Customers	Defaults	Rate	Customers	Defaults	Rate	Customers	Defaults	Rate
Large Corporate	**500**	**15**	**3.0%**	521	17	3.3%	508	13	2.6%
SME	**10,689**	**163**	**1.5%**	10,832	215	2.0%	11,187	223	2.0%
Specialised Lending	**536**	**13**	**2.4%**	711	17	2.4%	949	20	2.1%
Total	**11,725**	**191**	**1.6%**	12,064	249	2.1%	12,644	256	2.0%

There has been a decrease in the customer level default rates for the overall business portfolio over the past few years, primarily driven by the SME portfolio, which is related to the COVID-19 economic support products introduced by the Government have supressed the natural default rates of the portfolio. There has also been change in the default rate of the Large Corporate portfolio, but this is due to low volumes of both customers and defaults, with the most recent change (3.3% to 3.0%) being the result of two fewer defaults. There has been little change in the default rate of the Specialised Lending portfolio.

EU CR6 – IRB approach – Credit risk exposures by class and PD range

The Group operates with two sets of IRB models for Retail Mortgages reflecting the portfolios that have been brought together as a result of the merger of Clydesdale Bank PLC and Virgin Money PLC. The models have different modelling methodologies and the associated portfolios have different risk profiles. Combining these into a single table does not provide a valid representation of risk, therefore the position of each heritage portfolio as at 30 September 2021 is presented separately below. The exposure amounts shown are disclosed after, where applicable, on- or off-balance sheet netting.

Table 34: Clydesdale Bank PLC Retail Mortgages[1] – (AIRB) Retail Secured by Immovable Property non-SME

	2021											
	A	B	C	D	E	F	G	H	I	J	K	L
PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligators	Average LGD	Average maturity	RWA	RWA density[2]	EL	Value adjustments and provisions
Retail mortgages												
0.00 to <0.15	**1,490**	**540**	**102.0%**	**2,075**	**0.10%**	**10,401**	**13.62%**	**–**	**84**	**4.0%**	**–**	
0.15 to <0.25	**1,729**	**160**	**102.1%**	**1,934**	**0.20%**	**8,740**	**12.47%**	**–**	**121**	**6.2%**	**1**	
0.25 to <0.50	**5,401**	**426**	**102.2%**	**5,966**	**0.39%**	**47,580**	**12.53%**	**–**	**567**	**9.5%**	**3**	
0.50 to <0.75	**3,111**	**102**	**102.2%**	**3,290**	**0.62%**	**16,376**	**14.07%**	**–**	**490**	**14.9%**	**3**	
0.75 to <2.50	**9,407**	**129**	**102.1%**	**9,757**	**1.18%**	**42,813**	**15.83%**	**–**	**2,386**	**24.5%**	**21**	
2.50 to <10.00	**790**	**13**	**102.4%**	**822**	**4.52%**	**5,595**	**14.85%**	**–**	**394**	**48.0%**	**6**	
10.00 to <100.00	**146**	**3**	**102.4%**	**152**	**34.21%**	**1,144**	**15.44%**	**–**	**123**	**81.1%**	**8**	
100.00 (Default)	**466**	**7**	**100.0%**	**474**	**100.00%**	**3,092**	**17.43%**	**–**	**970**	**204.8%**	**7**	
Subtotal	**22,540**	**1,380**	**102.0%**	**24,470**	**2.97%**	**135,741**	**14.33%**	**–**	**5,135**	**21.0%**	**49**	**53**

	2020											
	A	B	C	D	E	F	G	H	I	J	K	L
PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligators	Average LGD	Average maturity	RWA	RWA density[2]	EL	Value adjustments and provisions
Retail mortgages												
0.00 to <0.15	1,054	481	102.2%	1,570	0.12%	13,927	13.74%	–	57	3.6%	–	
0.15 to <0.25	3,677	293	102.1%	4,065	0.19%	34,564	12.48%	–	210	5.2%	1	
0.25 to <0.50	10,639	441	102.1%	11,342	0.36%	55,851	15.72%	–	1,188	10.5%	6	
0.50 to <0.75	2,130	56	102.1%	2,238	0.62%	9,936	18.48%	–	397	17.7%	2	
0.75 to <2.50	4,596	106	102.3%	4,805	1.32%	23,159	17.60%	–	1,294	26.9%	11	
2.50 to <10.00	841	14	102.2%	875	4.67%	5,755	17.24%	–	501	57.3%	7	
10.00 to <100.00	159	4	100.0%	166	34.99%	1,175	16.56%	–	145	87.2%	10	
100.00 (Default)	319	7	0.0%	326	100.00%	2,528	19.40%	–	728	223.6%	8	
Subtotal	23,415	1,402	102.1%	25,387	2.18%	146,895	15.78%	–	4,520	17.8%	45	74

(1) Clydesdale Bank PLC retail mortgages excluding the portfolio of heritage Virgin Money mortgages transferred on completion of the Financial Services and Markets Act 2000 (FSMA) Part VII transfer in October 2019.

(2) RWA density calculation has been performed on unrounded figures.

Table 35: Virgin Money Retail Mortgages(1) – (AIRB) Retail Secured by Immovable Property non-SME

	2021											
	A	B	C	D	E	F	G	H	I	J	K	L
PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligators	Average LGD	Average maturity	RWA	RWA density(2)	EL	Value adjustments and provisions
Retail mortgages												
0.00 to <0.15	**2,407**	**163**	**100.0%**	**2,597**	**0.12%**	**17,128**	**8.92%**	**–**	**67**	**2.6%**	**–**	
0.15 to <0.25	**8,534**	**222**	**100.0%**	**8,850**	**0.20%**	**59,967**	**9.57%**	**–**	**349**	**3.9%**	**2**	
0.25 to <0.50	**10,261**	**515**	**100.0%**	**10,887**	**0.36%**	**57,902**	**10.54%**	**–**	**761**	**7.0%**	**4**	
0.50 to <0.75	**6,361**	**231**	**100.0%**	**6,670**	**0.59%**	**45,708**	**17.08%**	**–**	**1,056**	**15.8%**	**7**	
0.75 to <2.50	**6,226**	**300**	**100.0%**	**6,607**	**1.00%**	**43,681**	**17.97%**	**–**	**1,546**	**23.4%**	**12**	
2.50 to <10.00	**1,353**	**36**	**100.0%**	**1,406**	**3.84%**	**10,500**	**14.70%**	**–**	**610**	**43.4%**	**8**	
10.00 to <100.00	**612**	**10**	**100.0%**	**630**	**33.43%**	**4,992**	**12.51%**	**–**	**406**	**64.5%**	**23**	
100.00 (Default)	**81**	**1**	**100.0%**	**82**	**100.00%**	**653**	**9.90%**	**–**	**80**	**97.8%**	**5**	
Subtotal	**35,835**	**1,478**	**100.0%**	**37,729**	**1.36%**	**240,531**	**12.83%**	**–**	**4,875**	**12.9%**	**61**	**33**

	2020											
	A	B	C	D	E	F	G	H	I	J	K	L
PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligators	Average LGD	Average maturity	RWA	RWA density(2)	EL	Value adjustments and provisions
Retail mortgages												
0.00 to <0.15	2,800	571	100.0%	3,419	0.11%	22,324	10.25%	–	96	2.8%	–	
0.15 to <0.25	5,650	329	100.0%	6,051	0.19%	40,279	13.55%	–	341	5.6%	1	
0.25 to <0.50	14,332	366	100.0%	14,859	0.36%	92,867	10.69%	–	1,052	7.1%	6	
0.50 to <0.75	3,531	90	100.0%	3,662	0.66%	22,637	12.72%	–	471	12.9%	3	
0.75 to <2.50	7,061	314	100.0%	7,467	1.11%	49,107	18.52%	–	1,891	25.3%	15	
2.50 to <10.00	1,078	22	100.0%	1,114	4.48%	8,609	16.73%	–	571	51.3%	8	
10.00 to <100.00	638	13	100.0%	659	31.14%	5,283	13.73%	–	474	72.0%	25	
100.00 (Default)	65	1	100.0%	66	100.00%	550	10.04%	–	68	102.5%	4	
Subtotal	35,155	1,706	100.0%	37,297	1.53%	241,656	13.12%	–	4,964	13.3%	62	55

(1) Retail mortgages written under the Virgin Money brand which were previously held in Virgin Money PLC prior to completion of the FSMA Part VII transfer in October 2019.

(2) RWA density calculation has been performed on unrounded figures.

Table 36: Clydesdale Bank PLC Business Lending – (FIRB) Corporates: Business

	2021											
	A	B	C	D	E	F	G	H	I	J	K	L
PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligators	Average LGD	Average maturity	RWA	RWA density[1]	EL	Value adjustments and provisions
Corporates: Business												
0.00 to <0.15	**64**	**46**	**69.2%**	**91**	**0.11%**	**115**	**40.80%**	**629**	**14**	**15.8%**	**–**	
0.15 to <0.25	**235**	**254**	**70.3%**	**398**	**0.19%**	**655**	**40.97%**	**849**	**101**	**25.3%**	**–**	
0.25 to <0.50	**941**	**441**	**66.3%**	**1,198**	**0.39%**	**1,590**	**39.37%**	**823**	**422**	**35.2%**	**2**	
0.50 to <0.75	**297**	**137**	**67.2%**	**368**	**0.62%**	**547**	**39.27%**	**736**	**151**	**41.0%**	**1**	
0.75 to <2.50	**2,882**	**937**	**66.9%**	**3,313**	**1.49%**	**4,852**	**39.91%**	**821**	**2,019**	**60.9%**	**20**	
2.50 to <10.00	**967**	**246**	**63.4%**	**1,005**	**4.49%**	**1,908**	**40.88%**	**664**	**807**	**80.3%**	**18**	
10.00 to <100.00	**115**	**18**	**67.8%**	**116**	**19.03%**	**229**	**38.94%**	**602**	**147**	**126.6%**	**8**	
100.00 (Default)	**140**	**10**	**70.9%**	**138**	**100.00%**	**160**	**41.45%**	**681**	**–**	**0.0%**	**57**	
Subtotal	**5,641**	**2,089**	**66.9%**	**6,627**	**3.96%**	**10,056**	**39.68%**	**786**	**3,661**	**55.2%**	**106**	**150**

	2020											
	A	B	C	D	E	F	G	H	I	J	K	L
PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligators	Average LGD	Average maturity	RWA	RWA density[1]	EL	Value adjustments and provisions
Corporates: Business												
0.00 to <0.15	79	64	69.6%	114	0.11%	170	40.80%	850	20	17.7%	–	
0.15 to <0.25	195	174	67.0%	297	0.20%	671	39.56%	868	70	23.5%	–	
0.25 to <0.50	798	433	68.0%	1,055	0.38%	1,707	39.32%	923	369	35.0%	1	
0.50 to <0.75	386	142	64.2%	465	0.62%	655	38.26%	875	197	42.4%	1	
0.75 to <2.50	3,333	1,023	67.9%	3,771	1.50%	6,414	40.01%	1,016	2,426	64.4%	23	
2.50 to <10.00	902	297	65.3%	1,009	4.62%	2,069	40.37%	878	839	83.1%	19	
10.00 to <100.00	107	23	72.8%	115	18.76%	203	40.49%	715	151	131.3%	9	
100.00 (Default)	105	9	62.7%	108	100.00%	168	41.04%	895	–	0.0%	44	
Subtotal	5,905	2,165	67.3%	6,934	3.40%	12,057	39.52%	916	4,072	58.7%	97	185

(1) RWA density calculation has been performed on unrounded figures.

Table 37: Clydesdale Bank PLC Corporates – Other – (FIRB) Corporates: Other

	2021											
	A	B	C	D	E	F	G	H	I	J	K	L
PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligators	Average LGD	Average maturity	RWA	RWA density[1]	EL	Value adjustments and provisions
Corporates: Other												
0.00 to <0.15	**7**	**49**	**73.5%**	**48**	**0.10%**	**21**	**39.84%**	**538**	**10**	**20.4%**	**–**	
0.15 to <0.25	**14**	**52**	**73.3%**	**56**	**0.17%**	**20**	**41.72%**	**428**	**16**	**28.0%**	**–**	
0.25 to <0.50	**153**	**187**	**60.9%**	**269**	**0.37%**	**45**	**43.41%**	**736**	**152**	**56.5%**	**–**	
0.50 to <0.75	**50**	**46**	**58.9%**	**77**	**0.62%**	**16**	**44.85%**	**745**	**57**	**74.9%**	**–**	
0.75 to <2.50	**659**	**271**	**66.1%**	**840**	**1.70%**	**248**	**43.45%**	**889**	**923**	**109.9%**	**6**	
2.50 to <10.00	**198**	**104**	**72.2%**	**251**	**4.04%**	**111**	**43.58%**	**754**	**345**	**137.5%**	**4**	
10.00 to <100.00	**32**	**19**	**72.8%**	**43**	**23.29%**	**125**	**43.74%**	**653**	**106**	**243.8%**	**5**	
100.00 (Default)	**31**	**2**	**62.2%**	**32**	**100.00%**	**53**	**43.16%**	**769**	**–**	**0.0%**	**14**	
Subtotal	**1,144**	**730**	**66.4%**	**1,616**	**4.23%**	**639**	**43.34%**	**802**	**1,609**	**99.5%**	**29**	**55**

	2020											
	A	B	C	D	E	F	G	H	I	J	K	L
PD scale	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post-CRM and post-CCF	Average PD	Number of obligators	Average LGD	Average maturity	RWA	RWA density[1]	EL	Value adjustments and provisions
Corporates: Other												
0.00 to <0.15	3	76	70.0%	69	0.10%	30	36.20%	799	17	24.3%	–	
0.15 to <0.25	60	66	730%	115	0.20%	18	41.94%	871	49	42.7%	–	
0.25 to <0.50	224	174	56.2%	321	0.42%	47	43.80%	976	217	67.6%	1	
0.50 to <0.75	96	64	56.5%	132	0.62%	26	44.18%	994	108	82.0%	–	
0.75 to <2.50	976	426	58.9%	847	1.82%	8,775	43.54%	1,311	964	113.9%	6	
2.50 to <10.00	164	101	69.8%	236	4.19%	147	43.13%	889	337	142.6%	4	
10.00 to <100.00	102	30	69.4%	63	23.33%	1,492	44.24%	1,350	158	249.8%	6	
100.00 (Default)	122	23	37.6%	130	100.00%	123	42.66%	839	–	0.0%	55	
Subtotal	1,747	960	61.1%	1,913	7.86%	10,658	42.85%	992	1,850	96.7%	72	69

(1) RWA density calculation has been performed on unrounded figures.

The number of obligors has decreased year on year as a direct result of a change in Credit Policy. In May 2021 Credit Policy was updated to exclude all BBLS from the aggregated £25k rating threshold calculation. As a result, we saw approximately 10.5k obligors moving from FIRB into Standardised Corporate Exposure classes.

Table 38: EU CR9 – Backtesting of PD per exposure class – CB Mortgages

	2021						
	B	C	D	E	F	G	H
			Number of obligors				
Retail mortgages	Weighted average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
PD range							
0.030% ≤ PD ≤ 0.050%	**0.03%**	**0.03%**	**1,903**	**3,814**	**2**	**–**	**0.059%**
0.050% < PD ≤ 0.080%	**0.07%**	**0.07%**	**2,104**	**875**	**2**	**–**	**0.219%**
0.080% < PD ≤ 0.110%	**0.10%**	**0.10%**	**1,466**	**678**	**3**	**–**	**0.108%**
0.110% < PD ≤ 0.140%	**0.13%**	**0.13%**	**8,452**	**5,034**	**38**	**1**	**0.230%**
0.140% < PD ≤ 0.180%	**0.16%**	**0.16%**	**14,787**	**2,066**	**52**	**–**	**0.221%**
0.180% < PD ≤ 0.240%	**0.21%**	**0.21%**	**19,777**	**6,674**	**80**	**1**	**0.280%**
0.240% < PD ≤ 0.330%	**0.28%**	**0.28%**	**25,716**	**12,581**	**147**	**1**	**0.355%**
0.330% < PD ≤ 0.440%	**0.38%**	**0.38%**	**17,498**	**21,000**	**128**	**2**	**0.419%**
0.440% < PD ≤ 0.550%	**0.49%**	**0.49%**	**12,637**	**13,999**	**82**	**–**	**0.389%**
0.550% < PD ≤ 0.690%	**0.62%**	**0.62%**	**9,936**	**16,376**	**129**	**2**	**0.588%**
0.690% < PD ≤ 0.870%	**0.78%**	**0.78%**	**5,794**	**14,545**	**58**	**–**	**0.643%**
0.870% < PD ≤ 1.170%	**1.01%**	**1.01%**	**5,972**	**12,330**	**86**	**–**	**0.801%**
1.170% < PD ≤ 1.560%	**1.35%**	**1.35%**	**4,251**	**6,854**	**68**	**–**	**0.920%**
1.560% < PD ≤ 2.020%	**1.77%**	**1.77%**	**3,238**	**4,883**	**70**	**–**	**1.373%**
2.020% < PD ≤ 2.610%	**2.23%**	**2.24%**	**3,904**	**4,201**	**176**	**–**	**1.924%**
2.610% < PD ≤ 3.720%	**3.16%**	**3.16%**	**2,118**	**2,235**	**88**	**1**	**2.676%**
3.720% < PD ≤ 5.010%	**4.38%**	**4.38%**	**1,744**	**1,324**	**117**	**1**	**4.036%**
5.010% < PD ≤ 6.890%	**5.72%**	**5.72%**	**1,259**	**1,425**	**93**	**–**	**5.718%**
6.890% < PD ≤ 10.550%	**8.30%**	**8.30%**	**638**	**611**	**57**	**1**	**7.347%**
10.550% < PD ≤ 15.910%	**13.40%**	**13.40%**	**254**	**282**	**26**	**–**	**11.310%**
15.910% < PD ≤ 34.220%	**23.43%**	**23.43%**	**429**	**448**	**55**	**–**	**23.003%**
34.220% < PD ≤ 61.240%	**50.00%**	**50.00%**	**352**	**330**	**107**	**–**	**36.376%**
61.240% < PD ≤ 99.999%	**75.00%**	**75.00%**	**140**	**84**	**66**	**–**	**53.789%**
Defaulted (PD = 100%)	**100.00%**	**100.00%**	**2,530**	**3,092**	**–**	**–**	**–**
Subtotal	**1.06%**	**1.10%**	**146,899**	**135,741**	**1,730**	**10**	**0.836%**

Retail mortgages	Weighted average PD	Arithmetic average PD by obligors	Number of obligors: End of previous year	Number of obligors: End of the year	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
	2020						
	B	C	D	E	F	G	H
PD range							
0.030% ≤ PD ≤ 0.050%	0.04%	0.04%	4,943	1,903	3	–	0.041%
0.050% < PD ≤ 0.080%	0.07%	0.07%	2,227	2,104	3	–	0.209%
0.080% < PD ≤ 0.110%	0.10%	0.10%	7,630	1,466	10	–	0.074%
0.110% < PD ≤ 0.140%	0.13%	0.13%	11,532	8,452	18	2	0.159%
0.140% < PD ≤ 0.180%	0.16%	0.16%	11,269	14,787	18	–	0.178%
0.180% < PD ≤ 0.240%	0.21%	0.21%	24,842	19,777	51	1	0.230%
0.240% < PD ≤ 0.330%	0.28%	0.28%	19,965	25,716	60	–	0.279%
0.330% < PD ≤ 0.440%	0.38%	0.38%	18,217	17,498	56	1	0.305%
0.440% < PD ≤ 0.550%	0.49%	0.49%	13,634	12,637	37	–	0.302%
0.550% < PD ≤ 0.690%	0.62%	0.62%	7,575	9,936	33	–	0.377%
0.690% < PD ≤ 0.870%	0.78%	0.78%	6,513	5,794	37	1	0.519%
0.870% < PD ≤ 1.170%	1.01%	1.01%	5,821	5,972	47	–	0.558%
1.170% < PD ≤ 1.560%	1.35%	1.35%	4,681	4,251	29	–	0.750%
1.560% < PD ≤ 2.020%	1.77%	1.77%	4,223	3,238	45	–	1.026%
2.020% < PD ≤ 2.610%	2.21%	2.22%	3,813	3,904	51	3	1.180%
2.610% < PD ≤ 3.720%	3.16%	3.16%	2,309	2,118	68	1	2.088%
3.720% < PD ≤ 5.010%	4.38%	4.38%	1,878	1,743	43	–	3.136%
5.010% < PD ≤ 6.890%	5.72%	5.72%	1,493	1,258	55	–	4.748%
6.890% < PD ≤ 10.550%	8.30%	8.30%	864	636	57	–	6.937%
10.550% < PD ≤ 15.910%	13.40%	13.40%	343	254	27	–	10.998%
15.910% < PD ≤ 34.220%	23.43%	23.43%	667	429	116	–	26.082%
34.220% < PD ≤ 61.240%	50.00%	50.00%	503	352	168	–	38.881%
61.240% < PD ≤ 99.999%	75.00%	75.00%	213	140	137	–	56.027%
Defaulted (PD = 100%)	100.00%	100.00%	2,516	2,530	–	–	–
Subtotal	0.91%	0.92%	157,671	146,895	1,169	9	0.693%

Table 39: EU CR9 – Backtesting of PD per exposure class – VM Mortgages

	2021						
	B	C	D	E	F	G	H
			Number of obligors				
Retail mortgages	Weighted average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
PD range							
0.000% ≤ PD ≤ 0.170%	**0.14%**	**0.14%**	**25,951**	**30,884**	**9**	**1**	**0.044%**
0.170% < PD ≤ 0.190%	**0.18%**	**0.18%**	**25,754**	**18,495**	**1**	**–**	**0.004%**
0.190% < PD ≤ 0.460%	**0.32%**	**0.32%**	**89,127**	**85,618**	**15**	**–**	**0.058%**
0.460% < PD ≤ 0.510%	**0.51%**	**0.51%**	**14,638**	**3,859**	**3**	**–**	**0.046%**
0.510% < PD ≤ 0.570%	**0.53%**	**0.52%**	**3,550**	**20,257**	**4**	**–**	**0.131%**
0.570% < PD ≤ 0.960%	**0.71%**	**0.71%**	**45,734**	**41,882**	**23**	**–**	**0.077%**
0.960% < PD ≤ 1.020%	**0.97%**	**0.97%**	**6,001**	**6,224**	**4**	**–**	**0.076%**
1.020% < PD ≤ 3.250%	**1.69%**	**1.62%**	**20,295**	**21,214**	**28**	**–**	**0.173%**
3.250% < PD ≤ 3.940%	**3.41%**	**3.41%**	**1,945**	**2,690**	**7**	**–**	**0.325%**
3.940% < PD ≤ 7.780%	**5.44%**	**5.23%**	**1,415**	**3,346**	**7**	**–**	**0.610%**
7.780% < PD ≤ 16.200%	**12.75%**	**12.61%**	**3,141**	**2,337**	**39**	**–**	**1.301%**
16.200% < PD ≤ 20.830%	**20.63%**	**20.63%**	**1,225**	**614**	**25**	**–**	**1.765%**
20.830% < PD ≤ 40.880%	**29.26%**	**29.39%**	**893**	**1,027**	**31**	**–**	**3.041%**
40.880% < PD ≤ 66.880%	**50.42%**	**50.05%**	**653**	**648**	**45**	**–**	**7.910%**
66.880% < PD ≤ 88.940%	**78.70%**	**79.10%**	**595**	**397**	**192**	**–**	**21.127%**
88.940% < PD ≤ 99.999%	**93.74%**	**93.76%**	**189**	**386**	**86**	**–**	**32.745%**
Default	**100.00%**	**100.00%**	**550**	**653**	**–**	**–**	**–**
Subtotal	**1.36%**	**1.59%**	**241,656**	**240,531**	**519**	**1**	**0.214%**

	2020						
	B	C	D	E	F	G	H
			Number of obligors				
Retail mortgages	Weighted average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
PD range							
0.000% ≤ PD ≤ 0.170%	0.12%	0.12%	19,480	25,951	10	–	0.031%
0.170% < PD ≤ 0.190%	0.19%	0.19%	36,653	25,754	4	1	0.006%
0.190% < PD ≤ 0.460%	0.31%	0.31%	77,130	89,127	9	–	0.058%
0.460% < PD ≤ 0.510%	0.47%	0.47%	5,700	14,638	1	–	0.043%
0.510% < PD ≤ 0.570%	0.52%	0.52%	30,342	3,550	6	–	0.103%
0.570% < PD ≤ 0.960%	0.81%	0.81%	34,805	45,734	11	–	0.070%
0.960% < PD ≤ 1.020%	0.98%	0.98%	5,338	6,001	6	–	0.072%
1.020% < PD ≤ 3.250%	1.83%	1.82%	23,024	20,295	24	–	0.155%
3.250% < PD ≤ 3.940%	3.70%	3.69%	1,695	1,945	8	–	0.310%
3.940% < PD ≤ 7.780%	5.42%	5.40%	1,186	1,415	4	–	0.566%
7.780% < PD ≤ 16.200%	11.12%	11.06%	2,921	3,141	38	–	1.117%
16.200% < PD ≤ 20.830%	18.81%	18.84%	833	1,225	16	–	1.497%
20.830% < PD ≤ 40.880%	29.23%	28.99%	1,255	893	44	–	2.888%
40.880% < PD ≤ 66.880%	50.00%	49.37%	386	653	38	–	7.711%
66.880% < PD ≤ 88.940%	79.25%	78.84%	602	595	189	–	17.465%
88.940% < PD ≤ 99.999%	92.93%	93.00%	276	189	115	–	29.870%
Default	100.00%	100.00%	492	550	–	–	–
Subtotal	1.33%	1.55%	242,118	241,656	523	1	0.189%

Table 40: EU CR9 – Backtesting of PD per exposure class – (FIRB) Corporates: Other

	2021						
	B	C	D	E	F	G	H
			Number of obligors				
(FIRB) Corporates: Other	Weighted average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
PD range							
0.030% ≤ PD ≤ 0.050%	**0.00%**	**0.00%**	**1**	**–**	**–**	**–**	**0.000%**
0.050% < PD ≤ 0.080%	**0.07%**	**0.07%**	**–**	**2**	**–**	**–**	**0.000%**
0.080% < PD ≤ 0.110%	**0.10%**	**0.10%**	**25**	**16**	**2**	**–**	**1.600%**
0.110% < PD ≤ 0.140%	**0.13%**	**0.13%**	**4**	**3**	**–**	**–**	**0.000%**
0.140% < PD ≤ 0.180%	**0.16%**	**0.16%**	**9**	**8**	**–**	**–**	**0.000%**
0.180% < PD ≤ 0.240%	**0.21%**	**0.21%**	**9**	**12**	**–**	**–**	**0.000%**
0.240% < PD ≤ 0.330%	**0.28%**	**0.28%**	**5**	**22**	**1**	**–**	**4.000%**
0.330% < PD ≤ 0.440%	**0.38%**	**0.38%**	**15**	**14**	**–**	**–**	**0.000%**
0.440% < PD ≤ 0.550%	**0.49%**	**0.49%**	**26**	**9**	**–**	**–**	**0.000%**
0.550% < PD ≤ 0.690%	**0.62%**	**0.62%**	**25**	**16**	**1**	**–**	**0.800%**
0.690% < PD ≤ 0.870%	**0.78%**	**0.78%**	**27**	**25**	**2**	**–**	**1.481%**
0.870% < PD ≤ 1.170%	**1.01%**	**1.01%**	**57**	**24**	**2**	**–**	**0.702%**
1.170% < PD ≤ 1.560%	**1.35%**	**1.35%**	**42**	**40**	**2**	**–**	**3.410%**
1.560% < PD ≤ 2.020%	**1.77%**	**1.77%**	**56**	**54**	**–**	**–**	**3.053%**
2.020% < PD ≤ 2.610%	**2.30%**	**2.30%**	**159**	**104**	**1**	**–**	**0.601%**
2.610% < PD ≤ 3.720%	**3.16%**	**3.16%**	**46**	**59**	**1**	**–**	**3.204%**
3.720% < PD ≤ 5.010%	**4.38%**	**4.38%**	**35**	**32**	**–**	**–**	**0.392%**
5.010% < PD ≤ 6.890%	**5.72%**	**5.72%**	**14**	**11**	**2**	**–**	**13.905%**
6.890% < PD ≤ 10.550%	**8.30%**	**8.30%**	**3**	**7**	**–**	**–**	**7.333%**
10.550% < PD ≤ 15.910%	**13.40%**	**13.40%**	**3**	**3**	**1**	**–**	**6.667%**
15.910% < PD ≤ 99.999%	**23.43%**	**23.43%**	**168**	**102**	**5**	**–**	**16.204%**
Defaulted (PD = 100%)	**100.00%**	**100.00%**	**106**	**52**	**–**	**–**	**-**
Subtotal	**2.26%**	**5.93%**	**835**	**615**	**20**	**–**	**2.166%**

Table 40: EU CR9 – Backtesting of PD per exposure class – (FIRB) Corporates: Other continued

	2020						
	B	C	D	E	F	G	H
			Number of obligors				
(FIRB) Corporates: Other	Weighted average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
PD range							
0.030% ≤ PD ≤ 0.050%	0.04%	0.04%	1	1	–	–	0.000%
0.050% < PD ≤ 0.080%	0.00%	0.00%	2	–	–	–	0.000%
0.080% < PD ≤ 0.110%	0.10%	0.10%	17	25	–	–	0.000%
0.110% < PD ≤ 0.140%	0.13%	0.13%	9	4	–	–	0.000%
0.140% < PD ≤ 0.180%	0.16%	0.16%	10	9	–	–	0.000%
0.180% < PD ≤ 0.240%	0.21%	0.21%	7	9	–	–	0.000%
0.240% < PD ≤ 0.330%	0.28%	0.28%	12	5	–	–	0.000%
0.330% < PD ≤ 0.440%	0.38%	0.38%	18	15	–	–	0.000%
0.440% < PD ≤ 0.550%	0.49%	0.49%	42	26	–	–	0.000%
0.550% < PD ≤ 0.690%	0.62%	0.62%	28	25	–	–	0.000%
0.690% < PD ≤ 0.870%	0.78%	0.78%	22	27	–	–	0.000%
0.870% < PD ≤ 1.170%	1.01%	1.01%	48	57	–	–	0.000%
1.170% < PD ≤ 1.560%	1.35%	1.35%	68	42	1	–	2.457%
1.560% < PD ≤ 2.020%	1.77%	1.77%	56	56	3	–	3.053%
2.020% < PD ≤ 2.610%	2.30%	2.30%	158	159	3	–	0.476%
2.610% < PD ≤ 3.720%	3.16%	3.16%	32	46	–	–	3.404%
3.720% < PD ≤ 5.010%	4.38%	4.38%	29	35	–	–	0.392%
5.010% < PD ≤ 6.890%	5.72%	5.72%	21	14	4	–	12.787%
6.890% < PD ≤ 10.550%	8.30%	8.30%	3	3	–	–	10.667%
10.550% < PD ≤ 15.910%	13.40%	13.40%	–	3	–	–	0.000%
15.910% < PD ≤ 99.999%	23.43%	23.43%	40	168	2	–	25.608%
Defaulted (PD = 100%)	–	–	87	106	–	–	–
Subtotal	2.23%	6.89%	710	835	13	–	2.215%

Lending under government-backed schemes has been excluded from the above tables as this lending does not currently go through FIRB models.

Table 41: EU CR9 – Backtesting of PD per exposure class – (FIRB) Corporates: SME

	2021						
	B	C	D	E	F	G	H
			Number of obligors				
(FIRB) Corporates: SME	Weighted average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
PD range							
0.030% ≤ PD ≤ 0.050%	**0.00%**	**0.00%**	**–**	**–**	**–**	**–**	**0.000%**
0.050% < PD ≤ 0.080%	**0.07%**	**0.07%**	**6**	**2**	**–**	**–**	**0.000%**
0.080% < PD ≤ 0.110%	**0.10%**	**0.10%**	**35**	**26**	**–**	**–**	**0.571%**
0.110% < PD ≤ 0.140%	**0.13%**	**0.13%**	**118**	**86**	**–**	**–**	**0.148%**
0.140% < PD ≤ 0.180%	**0.16%**	**0.16%**	**216**	**195**	**–**	**–**	**0.191%**
0.180% < PD ≤ 0.240%	**0.21%**	**0.21%**	**433**	**453**	**2**	**–**	**0.140%**
0.240% < PD ≤ 0.330%	**0.28%**	**0.28%**	**560**	**512**	**2**	**–**	**0.187%**
0.330% < PD ≤ 0.440%	**0.38%**	**0.38%**	**552**	**583**	**2**	**–**	**0.363%**
0.440% < PD ≤ 0.550%	**0.49%**	**0.49%**	**525**	**470**	**3**	**–**	**0.393%**
0.550% < PD ≤ 0.690%	**0.62%**	**0.62%**	**610**	**539**	**3**	**–**	**0.443%**
0.690% < PD ≤ 0.870%	**0.78%**	**0.78%**	**912**	**622**	**4**	**–**	**0.450%**
0.870% < PD ≤ 1.170%	**1.01%**	**1.01%**	**1,175**	**875**	**11**	**–**	**0.744%**
1.170% < PD ≤ 1.560%	**1.35%**	**1.35%**	**1,434**	**952**	**13**	**–**	**0.943%**
1.560% < PD ≤ 2.020%	**1.77%**	**1.77%**	**1,085**	**1,230**	**19**	**–**	**1.469%**
2.020% < PD ≤ 2.610%	**2.30%**	**2.30%**	**959**	**976**	**19**	**–**	**1.663%**
2.610% < PD ≤ 3.720%	**3.16%**	**3.16%**	**721**	**733**	**18**	**–**	**3.130%**
3.720% < PD ≤ 5.010%	**4.38%**	**4.38%**	**407**	**530**	**7**	**–**	**4.211%**
5.010% < PD ≤ 6.890%	**5.72%**	**5.72%**	**342**	**319**	**17**	**–**	**6.046%**
6.890% < PD ≤ 10.550%	**8.30%**	**8.30%**	**235**	**246**	**12**	**–**	**12.072%**
10.550% < PD ≤ 15.910%	**13.40%**	**13.40%**	**66**	**114**	**6**	**–**	**17.230%**
15.910% < PD ≤ 99.999%	**23.43%**	**23.43%**	**95**	**103**	**16**	**–**	**25.986%**
Defaulted (PD = 100%)	**100.00%**	**100.00%**	**163**	**148**	**–**	**–**	**–**
Subtotal	**1.90%**	**2.15%**	**10,649**	**9,714**	**154**	**–**	**1.732%**

Table 41: EU CR9 – Backtesting of PD per exposure class – (FIRB) Corporates: SME continued

	2020						
	B	C	D	E	F	G	H
			Number of obligors				
(FIRB) Corporates: SME	Weighted average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	Of which new obligors	Average historical annual default rate
PD range							
0.030% ≤ PD ≤ 0.050%	0.00%	0.00%	–	–	–	–	0.000%
0.050% < PD ≤ 0.080%	0.07%	0.07%	13	6	–	–	0.000%
0.080% < PD ≤ 0.110%	0.10%	0.10%	31	35	1	–	0.571%
0.110% < PD ≤ 0.140%	0.13%	0.13%	132	118	1	–	0.148%
0.140% < PD ≤ 0.180%	0.16%	0.16%	262	216	1	–	0.191%
0.180% < PD ≤ 0.240%	0.21%	0.21%	424	433	1	–	0.048%
0.240% < PD ≤ 0.330%	0.28%	0.28%	532	560	–	–	0.186%
0.330% < PD ≤ 0.440%	0.38%	0.38%	544	552	2	–	0.326%
0.440% < PD ≤ 0.550%	0.49%	0.49%	535	525	3	–	0.279%
0.550% < PD ≤ 0.690%	0.62%	0.62%	665	610	5	–	0.431%
0.690% < PD ≤ 0.870%	0.78%	0.78%	958	912	6	–	0.421%
0.870% < PD ≤ 1.170%	1.01%	1.01%	1,266	1,175	11	–	0.629%
1.170% < PD ≤ 1.560%	1.35%	1.35%	1,431	1,434	13	–	0.839%
1.560% < PD ≤ 2.020%	1.77%	1.77%	1,180	1,085	19	–	1.368%
2.020% < PD ≤ 2.610%	2.30%	2.30%	959	959	15	–	1.571%
2.610% < PD ≤ 3.720%	3.16%	3.16%	801	721	19	–	3.036%
3.720% < PD ≤ 5.010%	4.38%	4.38%	441	407	13	–	4.779%
5.010% < PD ≤ 6.890%	5.72%	5.72%	356	342	16	–	6.119%
6.890% < PD ≤ 10.550%	8.30%	8.30%	210	235	19	–	13.404%
10.550% < PD ≤ 15.910%	13.40%	13.40%	86	66	16	–	18.711%
15.910% < PD ≤ 99.999%	23.43%	23.43%	78	95	26	–	26.038%
Defaulted (PD = 100%)	–	–	179	163	–	–	–
Subtotal	1.94%	1.92%	11,083	10,649	187	–	1.740%

Lending under government-backed schemes has been excluded from the above tables as this lending does not currently go through FIRB models.

Table 42: EU CR10 – IRB specialised lending and equity exposures under the simple risk-weighted approach
Specialised lending: Income Producing Real Estate (Slotting approach)

		2021					
		On-balance sheet exposure	Off-balance sheet exposure	Risk weight	Exposure value	Risk-weighted exposure amount	Expected loss amount
Regulatory categories	Remaining maturity	A	B	C	D	E	F
Strong	< 2.5 years	**1**	**–**	**50%**	**1**	**–**	**–**
	≥ 2.5 years	**3**	**–**	**70%**	**3**	**2**	**–**
Good	< 2.5 years	**210**	**21**	**70%**	**226**	**131**	**1**
	≥ 2.5 years	**168**	**1**	**90%**	**167**	**128**	**1**
Satisfactory	< 2.5 years	**100**	**2**	**115%**	**104**	**98**	**3**
	≥ 2.5 years	**27**	**–**	**115%**	**27**	**24**	**1**
Weak	< 2.5 years	**10**	**–**	**250%**	**11**	**22**	**1**
	≥ 2.5 years	**7**	**–**	**250%**	**7**	**13**	**–**
Default	< 2.5 years	**9**	**–**	**0%**	**12**	**–**	**6**
	≥ 2.5 years	**2**	**–**	**0%**	**1**	**–**	**1**
Total	< 2.5 years	**330**	**23**		**354**	**251**	**11**
	≥ 2.5 years	**207**	**1**		**205**	**167**	**3**

		2020[1]					
		On-balance sheet exposure	Off-balance sheet exposure	Risk weight	Exposure value	Risk-weighted exposure amount	Expected loss amount
Regulatory categories	Remaining maturity	A	B	C	D	E	F
Strong	< 2.5 years	–	–	50%	–	–	–
	≥ 2.5 years	1	–	70%	1	–	–
Good	< 2.5 years	220	15	70%	243	142	1
	≥ 2.5 years	217	18	90%	239	183	2
Satisfactory	< 2.5 years	42	2	115%	47	43	1
	≥ 2.5 years	46	–	115%	46	41	1
Weak	< 2.5 years	7	–	250%	9	18	1
	≥ 2.5 years	6	–	250%	6	12	1
Default	< 2.5 years	11	–	0%	21	–	11
	≥ 2.5 years	6	–	0%	8	–	4
Total	< 2.5 years	280	17		320	203	14
	≥ 2.5 years	276	18		300	236	8

(1) The Group received approval in March 2020 to move the specialised lending portfolio from the standardised approach to the IRB slotting approach.

Operational risk

7.1 Approach to monitoring and mitigating exposures

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. It is a core component of the RMF and is embedded in day-to-day business activities focused on enabling operational efficiencies. Requirements and responsibilities are set out in the operational risk policy statement and supporting operational risk policy standard that seeks to identify, assess, mitigate, monitor, and report the operational risks, events and issues that could impact the achievement of business objectives or impact core business processes.

Business units are responsible for the day-to-day management of operational risk, with oversight from the risk management function, and independent assurance activities undertaken by Internal Audit.

Change risk

The risks associated with a failure to execute and deliver change that could result in an inability to meet our strategic objectives, including failing to meet our customer, regulator, colleague, or shareholder expectations, at a Group and local management level.

How this risk is managed – The Group uses a single integrated change governance framework which covers all levels of change management to ensure appropriate oversight and decision making across the change portfolio. As part of this, a centralised view of change is maintained to ensure that the risks of individual changes are managed effectively and that change is prioritised to minimise the overall risks to the organisation in line with risk appetite.

Third-party risk

The risks associated with ensuring the Group's outsourced and offshoring arrangements are controlled effectively, including the risk of failure to service existing and new customers; the potential cessation of specific activities; the risk of personally identifiable information or Group sensitive data being exposed or exploited; and the risk of financial, reputational and regulatory censure if the third party enters into any illegal or unethical activities.

How this risk is managed – The Group is enhancing its third-party risk management framework and oversight approach, to ensure that the procurement of service providers adheres to our minimum requirements. Ongoing performance management and assurance is undertaken to ensure that supplier relationships are controlled effectively.

Stress testing

The Group develops and maintains a suite of operational risk scenarios using internal and external data. These scenarios provide insights into the stresses the business could be subject to given extreme circumstances. Scenario's cover all material operational risks including execution of change, failures in core processes or contagion risk from a third party. Scenarios are owned by senior management custodians with review and challenge provided by the Risk function, Executive Risk Committee and Board Risk Committee, as part of the Internal Capital Adequacy Assessment Process (ICAAP) process. Management actions are agreed and monitored and linked with business resilience and continuity testing where appropriate.

7.2 Measurement

Material operational risk events are identified, reviewed and escalated in line with criteria set out in the RMF. Root cause analysis is undertaken and action plans are implemented.

Losses may result from both internal and external events, and are categorised using risk categories aligned to Basel II. The Basel II categories are used to ensure that data can be reported externally and compared with other industry data. Due to the nature of risk events, losses and recoveries can take time to crystallise and therefore may be restated for prior or subsequent financial years.

7.3 Operational risk RWA and capital requirement

The majority of losses are recorded under two Basel categories: 'External fraud' and 'Execution, delivery and process management'. The volume of external fraud losses accounted for over 86% of the total. This category's higher volume of low-value events is in line with the industry and relates mainly to card and online fraud. 'Execution, delivery and process management' volumes are as expected and reflect the daily volume of transactions and customer interactions.

Table 43: Operational risk RWA

Operational risk RWA	£m
As at 1 October 2020	2,557
Movement	(76)
As at 30 September 2021	**2,481**

The Group recognises the limitations of the standardised approach and applies a more granular, firm specific assessment as part of Pillar 2.

The reduction in RWA for operational risk is due to the decrease in revenue generated by the Group over the past three years, compared to the three years prior to 30 September 2020.

7.4 Further reading

For further information on how the Group manages operational risks, refer to pages 210 to 211 of the Group's 2021 Annual Report & Accounts.

Counterparty credit risk

8.1 Definition
The Group provides products to its customers in order to manage their interest rate, currency and commodity risk, and the Group in turn hedges this risk with other financial counterparties. In addition, the Group enters into sale and repurchase agreements with other financial counterparties for the purpose of liquidity risk management and funding.

Derivative and repurchase agreement (repo) transactions give rise to credit exposures to counterparties. Counterparty credit risk is the risk that a counterparty to a transaction may default before the final settlement of the transaction's cash flows. This section describes the Group's approach to managing CCR concerning financial instruments, including derivatives and repurchase agreements.

8.2 Internal capital limits
Counterparty credit limits for derivatives are approved and assigned by an appropriately authorised Delegated Commitment Authority (DCA). Limits are based on the credit quality of the counterparty and the appetite for the projected maximum potential future exposure of anticipated derivative transactions.

They also reflect the nature of the relevant documentation, including whether the transaction is subject to regular exchange of margin. Credit exposures for each transaction are measured as the current mark-to-market value and the potential credit exposure which is an estimate of possible future changes in mark-to-market value. Limit excesses, whether they are active or passive, are subject to formal approval by a DCA holder.

8.3 Securing collateral and reserves
The risk that counterparties could default is mitigated by offsetting the amounts due to the same counterparties (i.e. netting) and by cash collateral deposited by counterparties (i.e. collateralisation).

Collateralisation reduces the credit exposure recorded against market transactions. Counterparty credit exposures may be collateralised by an approved list of eligible collateral via market standard master agreements (such as CSAs to ISDA Master Agreements and Global Master Repurchase Agreements). CCR policy governs types of acceptable collateral and that collateral which may be subject to haircuts depending on asset type. Systems support daily marking-to-market of net exposures and margin requirements, marking-to-market of collateral value and reconciliation of collateral receipt and holdings against collateral due.

8.4 Wrong-way risk
Wrong-way risk occurs when exposure to a counterparty increases when the credit quality of that counterparty deteriorates. This could happen, for example, where CCR is mitigated through the use of collateral issued by the counterparty. Our high-quality collateral requirements mitigate this risk to a material extent. This is not considered to be a material risk to the Group due to the types of credit mitigation that are in place.

8.5 Downgrade impact
The Group calculates, as part of its regular liquidity reporting, the amount of any additional collateral that would have to be posted in the event of a downgrade in its external rating. For transactions that would be affected by a downgrade clause, planning for, and the impact of, the event for the Group is managed by the Group's Treasury division.

8.6 Exposures
Counterparty credit risk exposures are first measured using the mark-to-market method and subsequently risk-weighted under the standardised approach. The Group calculates a CVA on external derivative transactions with financial counterparties. The Group has no exposures to credit derivatives as at 30 September 2021 (2020: £Nil).

Table 44: EU CCR1 – Analysis of CCR exposure by approach

		2021						
		A	B	C	D	E	F	G
		Notional £m	Replacement cost/current market value £m	Potential future credit exposure £m	EEPE £m	Multiplier £m	EAD Post-CRM £m	RWA £m
1	Mark to market		**128**	**396**			**308**	**82**
9	Financial collateral comprehensive method (for SFTs)						**3,676**	**23**
11	**Total**							**105**

		2020						
		A	B	C	D	E	F	G
		Notional £m	Replacement cost/current market value £m	Potential future credit exposure £m	EEPE £m	Multiplier £m	EAD Post-CRM £m	RWA £m
1	Mark to market		288	503			492	142
9	Financial collateral comprehensive method (for SFTs)						3,398	37
11	**Total**							179

CRD IV introduced a regulatory capital charge to cover credit valuation adjustment risk, the risk of adverse moves in the credit valuation adjustments taken for ECL on derivative transactions. Certain counterparty exposures are exempt from CVA, such as non-financial counterparties and sovereigns. Details of the CVA capital charge are set out below:

Table 45: EU CCR2 – CVA capital charge

		2021		2020	
		A	B	A	B
		EAD post-CRM £m	RWA £m	EAD post-CRM £m	RWA £m
4	All portfolios subject to the standard method	**174**	**103**	319	175
5	**Total subject to the CVA capital charge**	**174**	**103**	319	175

Table 46: EU CCR8 – Exposures to central counterparties

		2021		2020	
		A	B	A	B
		EAD post-CRM £m	RWA £m	EAD post-CRM £m	RWA £m
1	Exposures to Qualifying Central Counterparties (QCCPs) (total)	**95**	**2**	102	2
2	Exposures for trades at QCCPs (excluding initial margin and default); of which	**95**	**2**	102	2
3	(i) OTC derivatives	**95**	**2**	102	2

The table below presents a breakdown of counterparty credit risk exposures by exposure class and by risk weight.

Table 47: EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk weights

		2021												
	Exposure classes	0% £m	2% £m	4% £m	10% £m	20% £m	50% £m	70% £m	75% £m	100% £m	150% £m	Others £m	Total £m	Of which unrated £m
1	Central governments or central banks	**3,630**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**3,630**	**–**
6	Institutions	**–**	**95**	**–**	**–**	**199**	**22**	**–**	**–**	**–**	**–**	**–**	**316**	**–**
7	Corporates	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**38**	**–**	**–**	**38**	**38**
11	**Total**	**3,630**	**95**	**–**	**–**	**199**	**22**	**–**	**–**	**38**	**–**	**–**	**3,984**	**38**

		2020												
	Exposure classes	0% £m	2% £m	4% £m	10% £m	20% £m	50% £m	70% £m	75% £m	100% £m	150% £m	Others £m	Total £m	Of which unrated £m
1	Central governments or central banks	3,323	–	–	–	–	–	–	–	–	–	–	3,323	–
6	Institutions	–	102	–	–	303	91	–	–	–	–	–	496	–
7	Corporates	–	–	–	–	–	–	–	–	71	–	–	71	71
11	**Total**	3,323	102	–	–	303	91	–	–	71	–	–	3,890	71

The table below shows the impact of netting and collateral held on counterparty credit risk exposures.

Table 48: EU CCR5-A – Impact of netting and collateral held on exposure values

		2021				
		A	B	C	D	E
		Gross positive fair value or net carrying amount £m	Netting benefits £m	Netted current credit exposure £m	Collateral held £m	Net credit exposure £m
1	Derivatives	**524**	**182**	**342**	**34**	**308**
2	SFTs	**9,857**	**–**	**9,857**	**6,181**	**3,676**
4	**Total**	**10,381**	**182**	**10,199**	**6,215**	**3,984**

		2020				
		A	B	C	D	E
		Gross positive fair value or net carrying amount £m	Netting benefits £m	Netted current credit exposure £m	Collateral held £m	Net credit exposure £m
1	Derivatives	791	190	601	109	492
2	SFTs	9,102	–	9,102	5,704	3,398
4	**Total**	9,893	190	9,703	5,813	3,890

Market risk

9.1 Definition
Market risk is the risk of loss associated with adverse changes in the value of assets and liabilities held by the Group as a result of movements in market factors such as foreign exchange risk, interest rates (duration risk), customer behaviour (optionality risk), and the movement in rate spreads across types of assets or liabilities (basis risk and credit spread risk). The Group's balance sheet is predominantly UK based and is denominated in GBP, therefore foreign exchange risk is not a material risk for the Group.

9.2 Exposure
The Group's principal exposure comes from structural interest rate risk. It comprises the sensitivity of the Group's current and future Net interest income (NII) and economic value to movements in market interest rates. The major contributors to interest rate risk are:

- the mismatch, or duration, between repricing dates of interest-bearing assets and liabilities;
- basis risk or assets and liabilities repricing to different reference rates, for example, customer asset and liability products repricing against BoE base rate and Sterling Over Night Indexed Average (SONIA); and
- customer optionality, e.g. the right to repay borrowing in advance of contractual maturity dates.

The focus of the Group's activity is to provide high-quality banking services to its customers. These services include the provision of foreign exchange products and derivative products to enable customers to manage risks within their businesses. As a result of these activities, the Group may be exposed to forms of market risk that would arise from movements in the price on these products, however, these risks are not a material component of the Group's risk profile. Controls include the hedging of these products as and when they arise.

9.3 Measurement
Interest Rate Risk in the Banking Book (IRRBB) is measured, monitored, and managed from both an internal management and regulatory perspective. The RMF incorporates both market valuation and earnings-based approaches. In accordance with the Group IRRBB policy standard, risk measurement techniques include: basis point sensitivity, NII sensitivity, value at risk (VaR), economic value of equity, interest rate risk stress testing, and scenario analysis.

The key features of the internal interest rate risk management model are:

- basis point sensitivity analysis is performed daily and compares the potential impact of a one basis point (0.01%) change on the present value of all future cash flows;
- NII sensitivity assesses changes to earnings over a 12-month time horizon as a result of interest rate movements and changes to customer behaviour;
- VaR is measured on a statistical basis using a 99% confidence level based on daily rate movements over a two-year history set with a one-day holding period;
- economic value of equity is measured in line with EBA guidance with all eight of the proposed EBA rate shocks assessed on a quarterly basis, including customer optionality stresses. Reporting is performed both including and excluding equity;
- static balance sheet (i.e. any new business is assumed to be matched, hedged or subject to immediate repricing);
- investment term for capital is modelled with a benchmark term agreed by ALCO;
- investment term for core non-interest bearing assets and liabilities is modelled on a behavioural basis with a benchmark term agreed by ALCO;
- assumptions covering the behavioural life of products and customer behaviour for optionality are reviewed and approved by ALCO; and
- Credit Spread Risk in the Banking Book (CSRBB) is assessed through VaR applied to the Group's liquid asset buffer portfolio.
- CSRBB is measured at a 99% confidence level based on daily spread movements over a 10-year history set with a three-month holding period.

Foreign exchange risk is assessed based on the absolute exposure to each currency.

9.4 Mitigation

Market risks are overseen by ALCO and delegated to Treasury for day-to-day management, who uses a number of techniques and products to manage market risks including interest rate swaps, cash flow netting and foreign exchange. Basis risk may be managed through a combination of wholesale market basis risk management products, pricing strategies and product innovation.

The Group uses derivative financial instruments to manage interest rate and foreign currency risk within approved limits. The Group elects to apply hedge accounting for the majority of its risk management activity that uses derivatives. Certain derivatives are designated as either fair value hedge or cash flow hedge:

Fair value hedges – the Group hedges part of its existing interest rate risk, resulting from potential movements in the fair value of fixed rate assets and liabilities. The fair value of these swaps is disclosed within note 3.6 to the Group's consolidated financial statements. There were no transactions for which fair value hedge accounting had to be discontinued in the year.

Cash flow hedges – the Group hedges a portion of the variability in future cash flows attributable to interest rate and foreign currency risk. The interest and foreign currency risks arise from variable interest rate assets and liabilities which are hedged using cross currency and interest rate swaps, and material non-GBP denominated assets which are hedged using foreign exchange forward contracts. There were no transactions for which cash flow hedge accounting had to be discontinued in the year as a result of the highly probable cash flows no longer being expected to occur. However, for cash flow hedges that were previously designated in respect of London Interbank Offered Rate (LIBOR) linked hedged items, the Group had to apply available reliefs such that the Group can now view the variable cash flows as being SONIA linked rather than LIBOR (as LIBOR is being replaced, the original expectations of LIBOR cash flows are no longer expected to occur). The fair value of derivatives is disclosed within note 3.6 to the Group's consolidated financial statements.

Table 49: Value at risk

	Duration risk		Credit spread[(1)]	
12 months to 30 September	2021 £m	2020 £m	2021 £m	2020 £m
As at 30 September	**2**	2	**45**	49
Average value during the year	**2**	2	**48**	36
Minimum value during the year	**1**	1	**45**	23
Maximum value during the year	**3**	2	**52**	49

(1) The history set for credit spread VaR was increased from two years to ten years from 1 March 2020, under internal methodology driving the year-on-year increase. The average figures for 2020 include five months over a two-year history and seven months over a 10-year history.

Table 50: Net Interest Income (NII)

Earnings sensitivity measures calculate the change in NII over a 12-month period resulting from an instantaneous and parallel change in interest rates. +/- 25 basis point shocks represents the primary NII sensitivity assessed internally, though a range of scenarios are assessed on a monthly basis.

12 months NII sensitivity as at 30 September	2021 £m	2020 £m
+ 25 basis point parallel shift	**30**	76
- 25 basis point parallel shift	**(23)**	(67)

The significant reduction in reported sensitivity year on year reflects the impact of reinstating the structural hedge during the year.

The sensitivities disclosed reflect the expected mechanical response to a movement in rates and represent a prudent outcome. The sensitivities are indicative only and should not be viewed as a forecast.

The key assumptions and limitations are outlined below:

- The sensitivities are calculated based on a static balance sheet and it is assumed there is no change to margins on reinvestment of maturing fixed rate products.
- There are no changes to basis spreads with the rate change passed on in full to all interest rate bases.
- Administered rate products receive a full rate pass on in the rate fall scenario, subject to internal product floor assumptions; In the rate rise scenario administered products receive a rate pass on in line with internal scenario specific pass on assumptions;
- Additional commercial pricing responses and management actions are not included.
- While in practice hedging strategy would be reviewed in light of changing market conditions the sensitivities assume no changes over the 12-month period.

9.5 Further reading

For further information on how the group manages market risks, refer to pages 199 to 204 of the Group's 2021 Annual Report & Accounts.

Funding and liquidity risk

10.1 Definition

Funding risk occurs where the Group is unable to raise or maintain funds of sufficient quantity and quality to support the delivery of the business plan or sustain lending commitments. Prudent funding risk management reduces the likelihood of liquidity risks occurring, increases the stability of funding sources, minimises concentration risks and ensures future balance sheet growth is sustainable.

Liquidity risk occurs when the Group is unable to meet its current and future financial obligations as they fall due or at acceptable cost, or when the Group reduces liquidity resources below internal or regulatory stress requirements.

10.2 Measurement

Funding and liquidity risks are subject to a range of measures contained within the Group's RAS which reflect both regulatory requirements as a minimum and the Group's own view on risk sensitivities. The Group RAS is supported by a series of limits agreed by ALCO. These measures provide a short and long-term view of risks under both normal and stressed conditions. The measures focus on: cash outflows and inflows under stress; concentration risks; refinancing risks; asset encumbrance; and the quantum, diversity and operational capability of mitigating actions.

The Group's funding plan establishes an acceptable level of funding risk which is approved by the Board and is consistent with risk appetite and the Group's strategic objectives. The development of the Group's funding plan is informed by the requirements of the Group's financial risk policy standards. A series of metrics is used across the Group to measure risk exposures, including funding ratios, limits to concentration risk and maximum levels of encumbrance.

Liquidity is managed in accordance with the Internal Adequacy Assessment Process, which is approved by the Board. Liquidity risk exposures are subject to assessment under both regulatory and internal requirements. The volume and quality of the Group's liquid asset portfolio is defined through a series of stress tests across a range of time horizons and stress conditions. The High-Quality Liquid Asset (HQLA) requirement is quantified as the outflow of funds under a series of stress scenarios less the impact of inflows from assets. Stress cash outflow assumptions have been established for individual liquidity risk drivers across idiosyncratic and market-wide stresses.

The Treasury function is responsible for the development and execution of strategy subject to oversight from the Risk function and monthly review at ALCO. The Group continues to maintain its strong funding and liquidity position and seeks to achieve an appropriate balance between profitability, liquidity risk and capital optimisation.

10.3 Monitoring

Liquidity is monitored and measured daily by the Group, with reporting conducted through ALCO and the Executive Risk Committee. In a stress situation or in adverse conditions, the level of monitoring and reporting is increased commensurate with the nature of the stress event, as demonstrated in the Group's response to COVID-19.

Monitoring and control processes are in place against internal and regulatory liquidity requirements. The Group monitors a range of market and internal early warning indicators on a routine basis for early signs of liquidity risk in the market or specific to the Group. These indicators cover a mixture of quantitative and qualitative measures including daily variation of customer balances, measurement against stress requirements and monitoring of the macroeconomic environment.

10.4 Mitigation

The Group holds a portfolio of HQLA that can be utilised to raise funding in times of stress. The size of the HQLA portfolio is calibrated based on a view of potential outflows under both systemic and idiosyncratic stress events. In addition, the Group can use the repo market and bilateral relationships to generate funds and can also participate in BoE operations through the Sterling Monetary Framework (SMF). The Group has several sources of funding which are well-diversified in terms of the type of instrument and product, counterparty, term structure and market. In addition to customer funding, wholesale funding is used to support balance sheet growth, lengthen the contractual tenor of funding and diversify funding sources. These funding programmes are a source of strength for the Group and leverage the Group's high-quality mortgage book as collateral for secured funding.

As a participant in the BoE SMF, the Group had access to funding via the Term Funding Scheme (TFS). Following its launch in April 2020, the Group has also been able to access additional funding from the Term Funding Scheme with additional incentives for SME's (TFSME), which was established to provide cost-effective funds to banks to support additional lending to the real economy and incentivise lending to SMEs during a period of economic disruption caused by COVID-19. Throughout 2021, the Group repaid a significant proportion of outstanding TFS amounts and has a strategy in place to repay the full amount comfortably in advance of the maturity date, funded by a combination of customer deposits, public market issuance and TFSME drawings.

The funding plan includes an assessment of the Group's capacity for raising funds across a wide range of primary funding sources, thereby mitigating funding risk. Refinancing risks are carefully managed and are subject to controls overseen by ALCO. The Group's funding plan includes TFSME repayment profiles designed to manage refinancing risk within a suitably prudent timeframe.

The Group recovery plan has been established for management of an escalated liquidity requirement, if the Group experiences either restricted access to wholesale funding or a significant increase in the withdrawal of funds. The plan identifies triggers for escalation, assesses capacity, details the action required, allocates the key tasks to individuals, provides a timeframe and defines a management committee to manage the action plan and return the balance sheet structure within appetite.

The Group operates a Funds Transfer Pricing system, a key purpose of which is to ensure that liquidity risk is a factor in the pricing of loans and deposits.

The quantity and quality of the Group's liquid assets are calibrated to the Board's view of liquidity risk appetite and remain at a prudent level above regulatory requirements.

Table 51: EU LIQ1 – Liquidity coverage ratio

		2021 £m	2020 £m
21	Liquidity buffer	**10,996**	10,675
22	Net Liquidity outflow	**7,289**	7,609
23	Liquidity coverage ratio (%)	**151%**	140%

The LCR increased from 140% to 151% during the year and remains comfortably above regulatory and internal risk appetite.

10.5 Further reading

For further information on how the Group manages funding and liquidity risks, refer to pages 192 to 199 of the Group's 2021 Annual Report & Accounts.

Securitisation

11.1 Objectives and roles in relation to securitisation activity

The Group has established three Residential Mortgage-Backed Security (RMBS) securitisation programmes (Lanark, Lannraig and Gosforth) which provide the Group with term funding via public debt capital markets and contingent liquidity. The structures facilitate the issuance of a multiple series of notes which can have differently rated tranches, tenors and repayment features tailored specifically to investor preferences. The master trust structures (Lanark and Lannraig) each have a series of notes supported by the same pool of mortgage assets that can be replenished, subject to eligibility criteria, as the trust reduces in size due to prepayments. The Gosforth structure has several special purpose vehicles (SPVs) each consisting of a separate pool of securitised mortgage loans, which can be replenished, subject to eligibility criteria. The Group's securitisation vehicles are SPVs which legally isolate the mortgage assets beyond the reach of the Group and its creditors in a bankruptcy, winding-up or receivership event.

Each master trust structure comprises three SPVs:

- *Mortgages Trustee:* the purpose of which is to acquire mortgage assets and their related security from Clydesdale Bank PLC and Yorkshire Bank Home Loans Limited and hold such mortgage assets and their related security on trust;
- *Funding:* the purpose of which is to purchase a beneficiary share in the trust property, using the proceeds of an inter-company loan from the Master Issuer; and
- *Master Issuer:* the purpose is to issue RMBS notes representing the mortgage-backed obligations, and to lend the note proceeds to Funding under the inter-company loan arrangements.

Each Gosforth structure comprises two SPVs:

- *Mortgages Trustee:* the purpose of which is to acquire mortgage assets and their related security from Clydesdale Bank PLC and hold such mortgage assets and their related security on trust. Some of the mortgages were originated by Landmark Mortgages Limited (formerly NRAM plc and Northern Rock Asset Management plc) and Virgin Money plc pre the Part VII transfer; and
- *Funding:* the purpose of which is to purchase a beneficial share in the trust property, using the proceeds from the issuance of RMBS notes.

11.2 Roles

The Group's roles in the securitisation programmes are sponsor, originator, servicer, cash manager, bank account provider, interest rate swap provider and transaction account provider. The obligations in these roles are outlined in the transaction documents in accordance with market practice and regulatory requirements. The securitisation structures are supported by fully-funded reserve accounts that are sized according to rating agency requirements. The reserve accounts are initially funded from subordinated loans from CB Group, which also provides a start-up loan for each issuance. This loan provides for fees charged in relation to new issuances. Both loans are repaid from revenue receipts generated by the asset pools.

The Group is under no obligation to support any losses incurred by the securitisation programmes or noteholders. The principal and interest received from the mortgage assets are used to repay note principal and meet interest payments.

11.3 Associated risks

The Group has not sought to obtain regulatory capital relief from securitisation as significant risk transfer is not achieved. Capital is therefore calculated in accordance with the underlying risk weighting on the balance sheet. Both the notes in issue and the underlying asset pool are exposed to market risk in the form of interest rate risk. The principal risks within the securitised transformation are:

- credit risk: the risk that borrowers fail to meet their obligations as and when they fall due. This risk is assessed by credit rating agencies both at note issuances and on an ongoing basis.

All Class A notes have at least two Aaa credit ratings from Moody's, AAA from Fitch and AAA from Standard & Poor's (S&P). The Group monitors the performance of its mortgage book and the securitisation portfolio by assessing key metrics such as arrears, loan-to-value and geographic distributions;

- prepayment risk: the risk that customers could prepay all or part of their outstanding debt before the maturity of outstanding bonds. This risk is factored into credit rating agencies' cash flow models and is mitigated through mortgage substitution or pool replenishment;
- basis risk: there is a fixed-floating interest rate mismatch between the fixed rate interest received from mortgage pool assets and the daily compounded SONIA linked interest due in respect of the SPV's liabilities. To mitigate this risk, the Funding SPVs have entered into interest rate swap agreements;
- foreign exchange rate risk: there is a mismatch between the GBP denominated income from interest rate swap agreements and the amounts payable to non-GBP denominated noteholders. This risk is mitigated by balance guaranteed cross currency swaps;
- call risk: there is a risk that any notes are not called on their respective call dates; and
- liquidity risk: there is a mismatch between the capital and interest payments on the underlying mortgage assets and the capital and interest payments through securitisation structures to investors.

The Group retains the credit risk associated with the mortgage assets as these remain on-balance sheet. The risk to the noteholders is mitigated by credit enhancement provided by subordination from junior classes of note and reserve funds.

11.4 Issuer and retained positions

In August 2007, the Group launched the inaugural issuance from Lanark Master Trust (Lanark). The asset pool originally comprised of owner-occupied residential mortgage loans and a small amount of BTL loans. In June 2011, BTL loans were removed from the Lanark mortgage pool and replaced with owner-occupied residential mortgage loans.

To date, there have been 14 issuances from Lanark. An external credit rating assessment is provided and monitored by S&P, Fitch and Moody's.

Credit enhancement for the securitisation structures is provided by subordinated Class Z Variable Funding Notes (VFN), specific reserves and excess spread. The Group retains the Class Z VFN in the form of amortising notes. The Group last utilised the Lanark programme in January 2020 with the issuance of 250m USD-denominated and 800m GBP-denominated floating rate notes as part of Lanark 2020-1. All currency notes were swapped back to GBP.

In September 2011, the Group established Lannraig Master Trust (Lannraig). The asset pool is made up exclusively of BTL mortgage loans. To date, there have been two issuances from Lannraig. External credit rating assessments are provided by Fitch and Moody's. All outstanding Class A notes are rated AAA and have been sold or retained by the Group. Credit enhancement for the securitisation structures is provided by subordinated Class Z VFN's specific reserves and excess spread. The Group retains the Class Z VFN Notes in the form of amortising Z VFN notes.

In January 2010, the Group issued the first of ten Gosforth transactions. The assets incorporated in these structures consist only of owner-occupied residential mortgages. External credit assessment is provided by Fitch and Moody's who rate the securitisation transactions.

Table 52: Outstanding notes

At 30 September 2021, the outstanding notes are:

	2021			
Issuer	Class A notes £m	Class M notes £m	Class Z notes £m	Total retained position £m
Lanark Master Issuer	**2,544**	**–**	**852**	**1,693**
Lannraig Master Issuer	**537**	**–**	**156**	**694**
Gosforth 2015-1[(1)]	**–**	**–**	**–**	**–**
Gosforth 2016-1[(1)]	**–**	**–**	**–**	**–**
Gosforth 2016-2[(1)]	**–**	**–**	**–**	**–**
Gosforth 2017-1	**447**	**46**	**98**	**171**
Gosforth 2018-1	**737**	**50**	**100**	**623**

	2020			
Issuer	Class A notes £m	Class M notes £m	Class Z notes £m	Total retained position £m
Lanark Master Issuer	3,905	–	852	2,009
Lannraig Master Issuer	609	–	156	766
Gosforth 2014-1	–	–	–	–
Gosforth 2015-1	–	–	–	–
Gosforth 2016-1	792	62	93	660
Gosforth 2016-2	–	–	–	–
Gosforth 2017-1	565	46	98	177
Gosforth 2018-1	910	50	100	624

(1) As at 30 September 2021, transactions have matured.

Securitisation continued

Table 53: On-balance sheet securitised exposures
As at 30 September 2021, on-balance sheet securitised exposures are:

	2021	
Issuer	Mortgage asset pool £m	Impaired and 90 days past due £m
Lanark Master Issuer	**4,383**	**5.4**
Lannraig Master Issuer	**921**	**4.1**
Gosforth 2014-1[(1)]	**–**	**–**
Gosforth 2015-1[(1)]	**–**	**–**
Gosforth 2016-1	**–**	**–**
Gosforth 2016-2[(1)]	**–**	**–**
Gosforth 2017-1	**712**	**–**
Gosforth 2018-1	**1,107**	**0.1**

	2020	
Issuer	Mortgage asset pool £m	Impaired and 90 days past due £m
Lanark Master Issuer	5,686	6.8
Lannraig Master Issuer	860	2.5
Gosforth 2014-1	–	–
Gosforth 2015-1	–	–
Gosforth 2016-1	1,141	1.0
Gosforth 2016-2	–	–
Gosforth 2017-1	910	0.6
Gosforth 2018-1	1,227	0.9

(1) As at 30 September 2021, transactions have matured.

The SPVs are fully consolidated on page 264 of the Group's 2021 Annual Report & Accounts.

The Group does not have any synthetic securitisations outstanding or any re-securitisations.

11.5 Securitisation accounting policies

The CB Group has sold mortgages to the securitisation vehicles. However, these mortgages continue to be recognised on the Group's balance sheet. The mortgages do not qualify for derecognition because the Group remains exposed to the risks and rewards of ownership on an ongoing basis. It is exposed primarily to the credit risk, liquidity risk and interest rate risk of the mortgages. The Group is also exposed to the residual rewards of the mortgages as a result of its ability to benefit from the future performances of the mortgages through the receipt of deferred consideration.

The externally held Class A Notes are disclosed in note 3.3 of the Group's 2021 Annual Report & Accounts. The notes are initially recognised at fair value, being the issue proceeds net of transaction costs incurred, and are subsequently measured at amortised cost using the effective interest method. To avoid grossing up the balance sheet, the retained Class A, Z and M (Gosforth) notes, and the equivalent deemed loan, together with the related income, expenditure and cash flows, are not recognised in the Group's 2021 Annual Report & Accounts.

Asset encumbrance

12.1 Overview

The term encumbrance is used to denote those assets on a bank's balance sheet which have been pledged as security, collateral or legally ring-fenced in some other way which prevents the firm from being able to transfer, pledge, sell or otherwise use/dispose of these assets. These disclosures are based on the EBA Regulatory Technical Standards (RTS) on disclosure of encumbered and unencumbered assets (EBA/RTS/2017/03).

12.2 Cash and debt securities

Repo transactions

Sale and repo transactions are used, in the ordinary course of business, to manage short-term cash flow requirements and mismatches. A repo transaction involves the pledge of marketable securities as security in exchange for receiving a consideration. During the term of the repo, the securities pledged are encumbered. The Group has entered into a number of repo agreements with a range of market counterparties.

Note cover

Under Part 6 of the Banking Act 2009, banks in Scotland and Northern Ireland which issue bank notes are required at all times to hold backing assets equivalent to 100% of their bank notes in circulation. Banks may use a combination of BoE notes, UK coin and funds held in specific bank accounts at the BoE. As a result, note cover backing assets held with the BoE are considered to be encumbered assets. If note issuance increases, then additional cash balances are required to be placed with the BoE. However, as this process creates equal and offsetting liabilities for the encumbered assets there is no material risk to depositors or the Group.

Cash ratio deposit

Non-interest bearing deposits lodged with the BoE by eligible institutions (i.e. banks and building societies), who have reported average eligible liabilities of over £600m over a calculation period. The level of each institution's Cash Ratio Deposit is calculated twice-yearly in May and November. A ratio is calculated by the BoE based on Gilt yield data.

This is then applied to the institution's average eligible liabilities over the previous six end-of-calendar months, in excess of £600m, to calculate the required Cash Ratio Deposit. Due to the permanent nature of the Cash Ratio Deposit, the requirement is considered to be an encumbered asset.

Margin

As noted above, a repo transaction involves the pledge of marketable securities in exchange for receiving a deposit. During the period of the repo, the market value of the securities pledged fluctuates while the value of the underlying cash deposit remains fixed.

To account for the fluctuations in the market value of the securities, additional cash ('margin') is passed between the parties. Cash margin paid out by the Group in respect of repo transactions is treated as encumbered.

Likewise, where the Group has entered into a derivative transaction with another market counterparty, the market value of the derivative fluctuates with changes in market rates.

In addition, Initial Margin may be required by market counterparties in respect of executing centrally cleared derivatives. In both examples, margin is passed between the parties, either in the form of cash or other securities. Margin paid out by the Group in respect of derivative transactions is treated as encumbered.

Payment system collateral

The Group is a direct participant in a number of UK payment and clearing systems, all of which require collateral to be posted to support the Group's obligations. Collateral posted up to the minima required to pre-fund deferred net settlement payment systems is treated as encumbered. Balances in collateralisation accounts in excess of the minima required are not treated as encumbered.

Operational Continuity in Resolution (OCIR)

The Group is required to calculate and segregate sufficient funds to meet the costs of critical services in the event that the Group enters resolution. As such, a volume of securities are held in a segregated HSBC custody account and are treated as encumbered to the level required to meet OCIR requirements.

12.3 Loans and advances

The Group has five structured funding programmes: three securitisation structures as outlined in section 11 and two regulated covered bond programmes, also backed by residential mortgages. Term funding issuance from these platforms results in a portion of the Group's mortgage assets becoming encumbered.

Over-collateralisation levels are embedded in each programme to meet the minimum levels as specified by the programme documentation and as agreed with the ratings agencies and regulators to mitigate certain legal risks, such as set-off rights.

The SPVs/LLPs also hold cash balances in segregated bank accounts with external counterparties. The use of these balances is restricted to specific entities and these balances are therefore considered by the Group to be encumbered.

The Group has also pledged whole mortgage pools to the BoE to support collateral requirements of central bank operations and for secured funding as part of the BoE's Term Funding Scheme. Assets utilised through these facilities are treated as encumbered. Additional information is provided in the Risk report on page 195 of the Group's 2021 Annual Report & Accounts.

12.4 Encumbered assets

The amounts disclosed in Tables 54, 55 and 56 below are median values for the financial year 2021 calculated using quarterly data.

Tables 54-56 are populated in line with EBA RTS and as such differ from the disclosures contained in the Group's Annual Report & Accounts as at 30 September 2021. Volatility in the level of encumbered assets is not significant and the use of monthly data is not expected to result in materially different information relative to the data below.

Table 54 shows encumbered and unencumbered assets in carrying amount and fair value by broad category of asset type.

Table 55 shows collateral received by the Group.

Table 56 shows the carrying amount of encumbered assets/collateral received and associated liabilities.

Table 54: Fair value of encumbered assets (Template A)

		2021							
		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			Of which notionally eligible EHQLA and HQLA		Of which notionally eligible EHQLA and HQLA		Of which EHQLA and HQLA		Of which EHQLA and HQLA
		010	030	040	050	060	080	090	100
	Template A	£m	£m	£m	£m	£m	£m	£m	£m
010	Assets of the reporting institutions	**20,316**	**3,305**			**69,327**	**10,980**		
030	Equity instruments	**–**	**–**			**13**	**–**		
040	Debt securities	**723**	**723**	**723**	**723**	**3,737**	**3,712**	**3,737**	**3,712**
050	*Of which: covered bonds*	**–**	**–**	**–**	**–**	**1,441**	**1,425**	**1,441**	**1,425**
060	*Of which: asset-backed securities*	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
070	*Of which: issued by general governments*	**723**	**723**	**723**	**723**	**408**	**403**	**408**	**403**
080	*Of which: issued by financial corporations*	**–**	**–**	**–**	**–**	**3,331**	**1,897**	**3,331**	**1,897**
120	Other assets(1)	**19,611**	**2,582**			**65,574**	**7,231**		

		2020							
		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
			Of which notionally eligible EHQLA and HQLA		Of which notionally eligible EHQLA and HQLA		Of which EHQLA and HQLA		Of which EHQLA and HQLA
		010	030	040	050	060	080	090	100
	Template A	£m	£m	£m	£m	£m	£m	£m	£m
010	Assets of the reporting institutions	24,110	3,628			66,122	10,336		
030	Equity instruments	–	–			8	–		
040	Debt securities	717	717	717	717	4,229	4,180	4,229	4,180
050	*Of which: covered bonds*	–	–	–	–	1,461	1,442	1,461	1,442
060	*Of which: asset-backed securities*	–	–	–	–	–	–	–	–
070	*Of which: issued by general governments*	717	717	717	717	949	916	949	916
080	*Of which: issued by financial corporations*	–		–	–	3,238	1,764	3,238	1,764
120	Other assets(1)	23,416	2,893			61,872	6,156		

(1) In line with the EBA's RTS on asset encumbrance disclosures. Other assets is now presented including cash on hand, loans on demand and loans and advances. Other assets also include assets which are deemed unavailable for encumbrance, such as intangible assets and goodwill.

Table 55: Received collateral (Template B)

		2021			
		Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance	
			Of which: notionally eligible EHQLA and HQLA		Of which: EHQLA and HQLA
		010	030	040	060
Template B		£m	£m	£m	£m
130	Collateral received by the reporting institution	**–**	**–**	**27**	**27**
160	Debt securities	**–**	**–**	**–**	**–**
190	*Of which: issued by general governments*	**–**	**–**	**–**	**–**
230	Other collateral received	**–**	**–**	**27**	**27**
241	Own covered bonds and asset-backed securities issued and not yet pledged			**2,666**	**–**
250	Total assets, collateral received and own debt securities issued	**20,316**	**3,305**		

		2020			
		Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance	
			Of which: notionally eligible EHQLA and HQLA		Of which: EHQLA and HQLA
		010	030	040	060
Template B		£m	£m	£m	£m
130	Collateral received by the reporting institution	–	–	64	64
160	Debt securities	–	–	–	–
190	*Of which: issued by general governments*	–	–	–	–
230	Other collateral received	–	–	52	52
241	Own covered bonds and asset-backed securities issued and not yet pledged			3,744	–
250	Total assets, collateral received and own debt securities issued	24,110	3,628		

Table 56: Encumbered assets/collateral received and associated liabilities (Template C)

		2021		2020	
		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered	Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
		010	030	010	030
		£m	£m	£m	£m
010	Carrying amount of selected financial liabilities	**10,567**	**17,695**	12,983	21,157

Appendices

Contents

Appendix 1: Disclosures for CB Group consolidated

The following tables present the disclosures required for CB Consol. Due to the fact that the structures of the Group and CB Consol are very closely aligned, RWA and total capital are also closely aligned.

Table 57: Capital composition

As at 30 September		2021 £m	2020 £m
COMMON EQUITY TIER 1 CAPITAL: INSTRUMENTS AND RESERVES			
1	Capital instruments and the related share premium accounts	**2,792**	2,792
1a	*Of which: ordinary shares*	**1,243**	1,243
1b	*Of which: share premium*	**1,549**	1,549
2	Retained earnings	**1,621**	1,865
3	Accumulated other comprehensive income (and other reserves)	**44**	(69)
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	**185**	(21)
6	**Common Equity Tier 1 capital before regulatory adjustments**	**4,642**	4,567
COMMON EQUITY TIER 1 CAPITAL: REGULATORY ADJUSTMENTS			
7	Additional value adjustments	**(5)**	(6)
8	Intangible assets	**(219)**	(488)
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences	**(388)**	(215)
11	Fair value reserves related to gains or losses on cash flow hedges	**(10)**	80
15	Defined benefit pension fund assets	**(551)**	(470)
25a	Losses for the current financial year	**–**	(270)
	Adjustment under IFRS 9 transitional arrangements	**134**	310
28	**Total regulatory adjustments to Common Equity Tier 1**	**(1,039)**	(1,059)
29	**Common Equity Tier 1 capital**	**3,603**	3,508
ADDITIONAL TIER 1 CAPITAL: INSTRUMENTS			
30	Capital instruments and the related share premium accounts	**672**	672
31	*Of which: classified as equity under applicable accounting standards*	**672**	672
36	Additional Tier 1 capital before regulatory adjustments	**672**	672
44	Additional Tier 1 capital	**672**	672
45	**Tier 1 capital**	**4,275**	4,180
TIER 2 CAPITAL: INSTRUMENTS AND PROVISIONS			
46	Capital instruments and the related share premium accounts	**1,019**	749
50	Credit risk adjustments	**1,019**	749
51	**Tier 2 capital before regulatory adjustment**	**1,019**	749
58	**Tier 2 capital**	**1,019**	749
59	**Total capital**	**5,294**	4,929
60	**Total risk-weighted assets**	**24,194**	24,384
CAPITAL RATIOS AND BUFFERS			
61	Common Equity Tier 1	**14.9%**	14.4%
62	Tier 1	**17.7%**	17.1%
63	Total capital	**21.9%**	20.2%
64	Institution-specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements plus a systemic risk buffer, plus systemically important institution buffer expressed as a percentage of total risk exposure amount)	**7.0%**	7.0%
65	*Of which: capital conservation buffer requirement*	**2.5%**	2.5%
66	*Of which: countercyclical buffer requirement*	**0.0%**	0.0%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	**10.4%**	9.9%
APPLICABLE CAPS ON THE INCLUSION OF PROVISIONS IN TIER 2			
77	Cap on inclusion of credit risk adjustments in Tier 2 under standardised approach	**73**	72
79	Cap for inclusion of credit risk adjustments in Tier 2 under internal ratings-based approach	**94**	95

CB Consol CET1 ratio at 30 September 2021 is 14.9%, with the movement driven by similar factors as those driving the movement in the Group ratio. The table below shows the movements in CB Consol's capital during 2021.

Table 58: Capital flow statement

	2021 £m	2020 £m
COMMON EQUITY TIER 1 CAPITAL		
Common Equity Tier 1 capital at 1 October	**3,508**	3,462
Retained earnings and other reserves	**502**	(97)
Prudent valuation adjustment	**1**	(1)
Intangible assets	**269**	24
IRB shortfall of credit risk adjustments to expected losses	**–**	88
Deferred tax assets relying on future profitability	**(173)**	35
Defined benefit pension fund assets	**(81)**	(213)
AT1 foreseeable distribution	**7**	–
Foreseeable dividend on ordinary shares	**(254)**	–
IFRS 9 transitional relief	**(176)**	210
Total Common Equity Tier 1 capital	**3,603**	3,508
Additional Tier 1 capital		
AT1 capital at 1 October	**672**	672
Total AT1 capital at 30 September	**672**	672
Total Tier 1 capital	**4,275**	4,180
Tier 2 capital		
Tier 2 capital at 1 October	**749**	723
Capital instruments repurchased: Subordinated debt redemption	**(30)**	(446)
Capital instruments issued: subordinated debt	**298**	472
Other movements	**2**	–
Total Tier 2 capital	**1,019**	749
Total capital at 30 September	**5,294**	4,929

(1) The table shows the capital position on a CRD IV 'fully loaded' basis and transitional IFRS 9 basis.

Tier 1 Capital
Tier 1 capital comprises:

- ordinary shares;
- retained earnings;
- accumulated other comprehensive income (and other reserves);
- AT1 instruments; and
- adjustments as set out by the regulatory requirements governing capital resources.

Regulatory adjustments are made where appropriate. These are made on a consistent basis as the Group, described in section 4.

Tier 2 Capital
Tier 2 capital comprises:

- subordinated loan debt; and
- adjustments as set out by the regulatory requirements governing capital resources.

Table 59: IFRS 9-FL Comparison of institutions' own funds and capital and leverage ratios

		2021 quantitative		2020
		A	C	E
		30 September 2021	31 March 2021	30 September 2020
AVAILABLE CAPITAL (AMOUNTS)				
1	Common Equity Tier 1 (CET1) capital	**3,603**	3,706	3,508
2	Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**3,469**	3,394	3,198
3	Tier 1 capital	**4,275**	4,378	4,180
4	Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**4,141**	4,066	3,870
5	Total capital	**5,294**	5,098	4,929
6	Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**5,197**	4,880	4,714
RISK-WEIGHTED ASSETS (AMOUNTS)				
7	Total risk-weighted assets	**24,194**	24,138	24,384
8	Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**24,118**	24,004	24,231
CAPITAL RATIOS				
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	**14.9%**	15.4%	14.4%
10	Common Equity Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**14.4%**	14.1%	13.2%
11	Tier 1 (as a percentage of risk exposure amount)	**17.7%**	18.1%	17.1%
12	Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**17.2%**	16.9%	16.0%
13	Total capital (as a percentage of risk exposure amount)	**21.9%**	21.1%	20.2%
14	Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**21.5%**	20.3%	19.5%
LEVERAGE RATIO				
15	Leverage ratio total exposure measure	**84,293**	84,638	86,475
16	Leverage ratio	**5.1%**	5.2%	4.8%
17	Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	**4.9%**	4.8%	4.5%

The table below shows the reconciliation of statutory equity to regulatory capital for CB Consol. Movements in the capital position are driven by similar factors which impact the Group position, as shown in section 4.2.

Table 60: Reconciliation of statutory equity to regulatory capital

	2021 £m	2020 £m
Statutory total equity	**5,582**	4,990
Less pension regulatory adjustments	**(551)**	(470)
Less additional value adjustment	**(5)**	(6)
Less intangible assets	**(219)**	(488)
Less deferred tax asset relying on future profitability	**(388)**	(215)
Less cash flow hedge	**(10)**	80
IFRS 9 transitional adjustment	**134**	310
Foreseeable dividend on ordinary shares	**(254)**	–
AT1 foreseeable distribution	**(14)**	(21)
Regulatory Tier 1 capital	**4,275**	4,180
Statutory Tier 2 subordinated debt	**1,019**	749
Regulatory Tier 2 subordinated debt	**1,019**	749

Table 61: LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

		2021 £m	2020 £m
1	Total assets as per published financial statements	**89,216**	90,307
4	Adjustments for derivative financial instruments	**91**	81
5	Adjustments for securities financing transactions	**2,235**	2,072
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	**2,884**	2,892
EU-6b	Adjustment for exposures excluded from the leverage ratio exposure measure(1)	**(9,094)**	(8,088)
7	Other adjustments	**(1,039)**	(789)
8	**Total leverage ratio exposure**	**84,293**	86,475

(1) In accordance with Article 429 (14) of Regulation (EU) No 575/2013.

The leverage ratio for CB Consol is calculated on a basis consistent with that of the Group. See section 4.4 Leverage ratio for further details on processes used to manage the risk of excessive leverage and a description of factors which have impacted the leverage ratio during the period.

Table 62: LRCom: Leverage ratio common disclosure

		2021 £m	2020 £m
	On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	**89,076**	89,989
2	(Asset amounts deducted in determining Tier 1 capital)	**(1,039)**	(789)
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)**	**88,037**	89,200
	Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	**94**	179
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	**213**	313
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	**(76)**	(93)
11	**Total derivative exposures**	**231**	399
	Securities financing transaction exposures		
14	Counterparty credit risk exposure for SFT assets	**2,235**	2,072
16	**Total securities financing transaction exposures**	**2,235**	2,072
	Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	**16,829**	16,781
18	(Adjustments for conversion to credit equivalent amounts)	**(13,945)**	(13,889)
19	**Other off-balance sheet exposures**	**2,884**	2,892
	Capital and total exposures		
EU-19b	(Exposures exempted in accordance with Article 429(14) of Regulation (EU) No 575/2013 (on and off-balance sheet))	**(9,094)**	(8,088)
20	Tier 1 capital	**4,275**	4,180
21	**Total leverage ratio exposures**	**84,293**	86,475
	Leverage ratio		
22	Leverage ratio	**5.1%**	4.8%
	Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	**Transitional**	Transitional

Table 63: LRSpl: Split-up of on-balance sheet exposures

		2021 £m	2020 £m
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	**80,122**	81,901
EU-3	Banking book exposures, of which:	**80,122**	81,901
EU-4	Covered bonds	**1,356**	1,442
EU-5	Exposures treated as sovereigns	**3,817**	3,858
EU-6	Exposures to regional governments, multilateral development banks, international organisations and public sector entities NOT treated as sovereigns	**151**	169
EU-7	Institutions	**733**	895
EU-8	Secured by mortgages of immovable properties	**60,564**	61,269
EU-9	Retail exposures	**5,632**	5,318
EU-10	Corporate	**5,379**	5,316
EU-11	Exposures in default	**778**	593
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	**1,712**	3,041

Table 64: CRB-B – Total and average net amount of exposures

		2021			
		A	B		
		Net value of exposures at the end of the period £m	Average net exposures over the period £m	Risk-weighted assets £m	Minimum capital requirements £m
3	Corporates	**10,029**	**10,655**	**5,688**	**455**
4	*Of which: Specialised lending*	**559**	**568**	**417**	**33**
5	*Of which: SMEs*	**7,626**	**7,800**	**3,661**	**293**
6	Retail	**61,146**	**61,745**	**10,010**	**801**
7	*Secured by real estate property*	**61,146**	**61,745**	**10,010**	**801**
9	*Non-SMEs*	**61,146**	**61,745**	**10,010**	**801**
15	**Total IRB approach**	**71,175**	**72,400**	**15,698**	**1,256**
16	Central governments or central banks	**11,116**	**11,489**	**–**	**–**
17	Regional governments or local authorities	**402**	**369**	**13**	**1**
18	Public sector entities	**473**	**482**	**5**	**–**
19	Multilateral development banks	**1,355**	**1,331**	**–**	**–**
21	Institutions	**742**	**793**	**153**	**12**
22	Corporates	**1,102**	**831**	**237**	**19**
23	*Of which: SMEs*	**159**	**111**	**99**	**8**
24	Retail	**16,135**	**15,694**	**4,240**	**339**
26	Secured by mortgages on immovable property	**513**	**567**	**114**	**9**
27	*Of which: SMEs*	**228**	**191**	**50**	**4**
28	Exposures in default	**92**	**74**	**73**	**6**
28a	*Of which: SMEs*	**–**	**–**	**1**	**–**
29	Items associated with particularly high risk	**–**	**–**	**–**	**–**
29a	*Of which: SMEs*	**–**	**–**	**–**	**–**
30	Covered bonds	**1,356**	**1,417**	**136**	**11**
33	Equity exposures	**16**	**5**	**16**	**1**
34	Other exposures	**756**	**774**	**835**	**67**
35	**Total standardised approach**	**34,058**	**33,826**	**5,822**	**465**
36	**Total**	**105,233**	**106,226**	**21,520**	**1,721**

Appendix 1: Disclosures for CB Group consolidated continued

		2020			
		A	B		
		Net value of exposures at the end of the period £m	Average net exposures over the period £m	Risk-weighted assets £m	Minimum capital requirements £m
3	Corporates	11,188	10,393	6,361	509
4	*Of which: Specialised lending*	590	299	438	35
5	*Of which: SMEs*	7,923	7,745	4,072	326
6	Retail	61,548	62,037	9,484	759
7	*Secured by real estate property*	61,548	62,037	9,484	759
9	*Non-SMEs*	61,548	62,037	9,484	759
15	**Total IRB approach**	72,736	72,430	15,845	1,268
16	Central governments or central banks	11,163	11,080	–	–
17	Regional governments or local authorities	418	384	13	1
18	Public sector entities	502	465	5	–
19	Multilateral development banks	1,268	1,180	–	–
21	Institutions	905	801	186	15
22	Corporates	499	506	213	17
23	*Of which: SMEs*	122	173	81	6
24	Retail	15,098	15,053	4,090	327
26	Secured by mortgages on immovable property	620	842	144	12
27	*Of which: SMEs*	279	504	64	5
28	Exposures in default	60	72	62	5
28a	*Of which: SMEs*	1	5	1	–
29	Items associated with particularly high risk	–	10	–	–
29a	*Of which: SMEs*	–	9	–	–
30	Covered bonds	1,442	1,473	144	12
33	Equity exposures	2	2	3	–
34	Other exposures	740	897	758	61
35	**Total standardised approach**	32,717	32,765	5,618	450
36	**Total**	105,453	105,195	21,463	1,718

The exposure amounts disclosed above are post-credit conversion factors and pre-credit mitigation.

Appendix 2: Group remuneration disclosures

Approach to remuneration

The Group's approach to remuneration is designed to support the delivery of the long-term corporate strategy in a manner that is compliant with the Prudential Regulation Authority's Remuneration Code (the Code). The Group's remuneration philosophy is based on principles which are applicable to all employees within the Group; in particular that the remuneration framework should support the delivery of the Group's wider strategic goals by motivating colleagues to contribute towards the long-term success of the business. The Group ensures its approach to remuneration, and in particular variable pay, is aligned with clear risk principles which aim to drive sustainable growth, with absolutely no reward for inappropriate risk taking.

Material Risk Takers

The Remuneration Code and European Regulatory Technical Standards require the Group to identify 'Material Risk Takers'. Material Risk Takers are deemed to have, or potentially have, a material impact on the risk profile of the Group or a significant entity within the Group. On an annual basis all Group colleagues, including Material Risk Takers, are required to complete mandatory training on risk management.

The Group has an established process for assessing how the criteria for Material Risk Takers applies to individuals across the Group.

The following groups have been identified as meeting the criteria:

- Senior Management, Executive Directors, members of the Executive Leadership Team Committee;
- Non-Executive Directors; and
- other colleagues whose activities could have an impact on the Group's risk profile, including those that are highly remunerated

The Material Risk Taker population in 2021 totalled 175. The remuneration for these colleagues is governed under the Remuneration Policy for all-colleagues and overseen by the Group Remuneration Committee, following a review by Risk Management.

The remuneration committee

The Group has a clear governance structure with the Group Remuneration Committee (the Committee) responsible for:

- determining and recommending to the Board a Group Remuneration Policy that is aligned to the Group's strategy risk appetite, culture, values and long-term interests and that provides a structured and balanced remuneration package for all colleagues, including all Executive Directors; and
- implementing the remuneration arrangements for Material Risk Takers (while having oversight of remuneration issues, and regard for remuneration scales and structure, across the Group).

The Committee undertakes periodic reviews of the Remuneration Policy (at least annually) to ensure continued compliance and alignment with the Remuneration Code.

The Committee Chair and Committee members are appointed by the Board on the recommendation of the Board's governance and nomination committee. The Committee comprises of at least three members all of whom are to be independent non-executive directors of the Company. Committee members shall collectively have appropriate remuneration, regulatory and industry knowledge, expertise and professional experience, to ensure that the remuneration structure is aligned with the risk and capital profile of the Group.

The Committee members during the year were:

- Darren Pope (Chair)
- David Bennett
- Geeta Gopalan
- Tim Wade
- Paul Coby
- Elena Novokreshchenova (from 1 August 2021)

The Committee meets at least four times a year and at such other times as the Committee Chair or any member of the Committee may request. During the financial year the Committee held seven meetings and three additional meetings.

The Committee's Charter, last updated in October 2021, is on the Group website.

During 2021, the Remuneration Committee took external advice from PwC, the Committee's independent remuneration consultants. PwC are members of the Remuneration Consultants Group and comply with the professional body's code of conduct. This supports the Remuneration Committee's view that the advice received was objective and independent.

Design characteristics of the remuneration system

The Group regularly reviews its approach to senior remuneration to ensure the overall package is fair, competitive and supportive of the Group's strategy. The Group ensures it remains competitive in the financial services market through regular market reviews.

Remuneration is delivered in a proportion of fixed and variable components.

The variable elements are subject to appropriate limits (capped at 2:1 variable to fixed ratio) as approved by shareholders. Variable pay awards for senior colleagues and Material Risk Takers are subject to deferral in line with the Code to promote longer term risk awareness.

Appendix 2: Group remuneration disclosures continued

Base salary
All Material Risk Takers receive salaries (except for Non-Executive Directors who receive fees), determined to reflect the role of the individual, taking account of responsibilities and experience. Base salaries are reviewed annually, taking into account and market information.

Annual bonus and deferred bonus awards
All Material Risk Takers (excluding Non-Executive Directors and third-party consultants) are eligible to be considered for an annual bonus. Annual bonuses are discretionary and are based on Group performance within the year. A personal performance element is also incorporated for senior colleagues including Executive Directors and the Leadership Team. The determination of measures and their weighting are set annually and aligned to delivery of the Group's strategy. Awards are determined by the Remuneration Committee at the end of the financial year.

In line with regulatory requirements a proportion of any bonus may be deferred (as per the 'deferral' section below). The mechanism for making the bonus deferral is the Virgin Money UK Deferred Equity Plan. Deferral levels are set at the time of award and in line with regulatory requirements (see below) taking account of total variable remuneration awarded for the financial year.

Long-term incentives
The Group's Long Term Incentive Plan (LTIP), awarded to certain senior colleagues, is designed to align colleagues with the long-term interests of the Group and reward delivery of the Group's strategy and growth.

Performance conditions are normally tested over a period of three financial years and, subject to the achievement of any performance conditions, awards will vest according to timetables designed to comply with regulatory requirements. The performance conditions will be aligned to the Group's long-term strategy.

Deferral
Variable pay deferral levels are set at the time of award and in line with regulatory requirements. For 2021, this means that for Material Risk Takers receiving a variable pay award that exceeds 33% of total pay or total remuneration that exceeds £500,000:

- at least 40% of total variable pay is deferred;
- at least 50% of variable pay is paid in shares; and
- vested shares are subject to retention periods.

Vesting and risk adjustment
The release of deferred amounts is governed by a robust risk assessment framework and governance pathway. Both clawback and malus provisions can be applied by the Committee both during and after any relevant performance period to adjust (including to nil) any variable pay awarded, paid or deferred. A performance adjustment may include, but is not limited to:

- reducing an employee's bonus outcome for the current year;
- reducing the amount of any unvested deferred variable remuneration (including LTIP awards) to which an employee is entitled;
- requiring the repayment on demand of any cash and share awards received at any time during the seven-year period after the date of the awards (or ten years in the case of individuals holding a PRA Senior Manager Function role and where an investigation has commenced); and
- requiring a bonus which has been awarded but not yet paid to be forfeited.

In the case of firm-wide adjustment, measures may also include:

- reducing the overall annual bonus pool; and/or
- reducing overall unvested/unpaid awards.

Malus may be applied where:

- there is evidence of colleague misbehaviour, misconduct, material error;
- where a colleague participated in conduct which resulted in losses for the Group or they failed to meet appropriate standards;
- any material failure of risk management at a Group, business area, division or business unit level;
- if the financial results at a Group, division or business unit level are restated;
- if the financial results for a given year do not support the level of variable remuneration awarded;
- or any other circumstances where the Committee consider adjustments should be made. The Committee is supported in this by the Board Risk Committees and the Group's Risk function.

Clawback may be applicable where there is reasonable evidence of colleague misbehaviour or material error, or there is material failure of risk management at a Group, business area, division or business unit level.

The above principles apply to all variable pay for all Group Material Risk Takers.

Link between pay and performance and the performance criteria used

The Group's approach to reward is to ensure that all elements of pay are aligned with the long-term interests of the Group and a prudent approach to risk management while being sufficiently competitive to attract, retain and motivate high-calibre colleagues.

Variable pay is based on the principle that when the Group performs well all colleagues will share in this success. This team-based approach to variable pay ensures that everyone is rewarded for the contribution they make to the business. Colleagues are motivated to work together to deliver on the Group's strategic goals in a way that is underpinned by the Group's Purpose, values and behaviours.

The following criteria were used by the Committee to determine the size of the overall variable remuneration pool:

- the Committee considered the key financial performance measures, including profit before tax, and other non-financial measures, including net promoter scores for customers and engagement scores for colleagues;
- the Chief Risk Officer provided the Committee (via the Board Risk Committee) with an independent risk assessment report to consider whether and to what extent the variable remuneration pool should be subject to risk adjustment; and
- the Chief Financial Officer and the HR Director also provided the Committee with an assessment of financial and individual performance to identify any significant instances when the operation of the malus provisions might be appropriate.

In addition to the Committee's review of ex-ante and ex-post risks that impact on the level of the bonus pool and the application of malus and clawback as outlined above, individual bonus awards are also subject to meeting all compliance requirements and awards can be reduced to nil where these are not met, or where colleagues are subject to disciplinary action.

Remuneration for Material Risk Takers for 2021

The following tables set out remuneration disclosures for individuals identified as MRTs. Disclosures are presented at Group level only as there are no differences between the Material Risk Taker population of the Group and CB Group consolidated. Numbers within the tables have been rounded to the nearest £0.1m.

Table 65: Aggregate remuneration by business area

Aggregate remuneration by business area

	2021			
	Banking	Independent control functions	Corporate functions	Total
Number of MRTs	62	78	35	175
Total fixed remuneration (£m)	8.8	13.8	6.5	29.1
Total variable (£m)	2.5	8.5	2.4	13.4
Total remuneration (£m)(1)	11.3	22.3	8.9	42.5

(1) Remuneration numbers within this table have been rounded to the nearest £0.1m.

Table 66: Fixed and variable remuneration of Material Risk Takers

	2021		
	Senior management	Material Risk Takers	Total
Number of Material Risk Takers	24	151	175
Total fixed remuneration(1)	8.0	21.1	29.1
Variable remuneration (cash)	0.6	2.8	3.4
Variable remuneration (shares)	0.3	0.7	1.0
Deferred remuneration (cash)	–	–	–
Deferred remuneration (shares)	–	0.0	0.0
Long-term incentive (shares)	6.5	2.5	9.0
Total variable remuneration(2)	7.4	6.0	13.4
Total remuneration	15.4	27.1	42.5

(1) Remuneration numbers within this table have been rounded to the nearest £0.1m.

(2) Values for 2021 LTIP awards are based on the face value of awards.

Appendix 2: Group remuneration disclosures continued

Table 67: Special payments to staff whose professional activities have a material impact on institutions' risk profile (identified staff)

	2021		
	A	B	C
	Senior management	Other MRTs	Total
Commencement awards	–	0.0	0.0
No. of beneficiaries	–	1	1
Termination awards(1)	0.3	1.4	1.7
No. of beneficiaries	1	13	14
Highest award to single beneficiary(1)	–	0.3	–

(1) Remuneration numbers within this table have been rounded to the nearest £0.1m.

Table 68: Deferred remuneration
Deferred and retained remuneration(1)

		2021		
		A	B	C
		Senior management £m	Other MRTs £m	Total £m
1	**Deferred remuneration at 1 October 2019**	24.0	7.4	31.4
2	Awarded in the year	10.2	4.2	14.4
3	Performance adjustment in the year	–	–	–
4	Forfeited in the year	(6.2)	(1.9)	(8.1)
5	Paid in the year	(0.6)	(0.3)	(0.9)
6	Deferred Remuneration at 30 September 2020	27.4	9.4	36.8
7	*Of which: vested*	1.2	0.3	1.5
8	*Of which: unvested*	26.2	9.1	35.3

(1) Remuneration numbers within this table have been rounded to the nearest £0.1m.

Table 69: Remuneration of 1 million EUR or more per year

		2021		
		A	B	C
	EUR	Senior management	Other MRTs	Total
1	More than €4,000,000	–	–	–
2	€3,500,000 – €4,000,000	1	–	1
3	€3,000,000 – €3,500,000	–	–	–
4	€2,500,000 – €3,000,000	–	–	–
5	€2,000,000 – €2,500,000	–	–	–
6	€1,500,000 – €2,000,000	2	–	2
7	€1,000,000 – €1,500,000	4	–	4

Appendix 3: Main features of regulatory capital instruments – Virgin Money UK PLC

Main features of regulatory capital instruments for Virgin Money UK PLC.

1	Issuer	Virgin Money UK PLC	Virgin Money UK PLC	Virgin Money UK PLC	Virgin Money UK PLC	Virgin Money UK PLC	Virgin Money UK PLC
2	ISIN	GB00BD6GN030	XS1346644799	XS1959441640	XS1921970668	XS2227898421	XS2343851510
2a	Public/Private Placement	Public	Public	Public	Private	Public	Public
3	Governing law	English	English	English	English	English	English
3a	Contractual recognition of write down and conversion powers of resolution authorities	n/a	No	No	No	No	No
	Regulatory treatment						
4	Transitional CRR rules	Common Equity Tier 1	Additional Tier 1	Additional Tier 1	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Common Equity Tier 1	Additional Tier 1	Additional Tier 1	Tier 2	Tier 2	Tier 2
6	Eligible at Group or Bank	Virgin Money UK PLC Group	Virgin Money UK PLC Group	Virgin Money UK PLC Group	Virgin Money UK PLC Group	Virgin Money UK PLC Group	Virgin Money UK PLC Group
7	Instrument type (type to be specified by each jurisdiction)	Ordinary Shares	Other Equity Instruments	Other Equity Instruments	Dated Subordinated Debt	Dated Subordinated Debt	Dated Subordinated Debt
8	Regulatory capital value	GBP 143,999,351	GBP 449,555,148	GBP 247,138,469	GBP 248,119,680	GBP 472,302,871	GBP 297,795,434
9	Nominal value (£)	GBP 143,999,351	GBP 450,000,000	GBP 250,000,000	GBP 250,000,000	GBP 475,000,000	GBP 300,000,000
9a	Issue Price (£)	100%	99.924%	100%	99.493%	99.840%	99.807%
9b	Redemption Price (£)	100%	100%	100%	100%	100%	100%
10	Accounting classification	Shareholder's Equity	Shareholder's Equity	Shareholder's Equity	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original date of issue	Various	8 February 2016	13 March 2019	14 December 2018	11 September 2020	19 May 2021
12	Perpetual or dated	Perpetual	Perpetual	Perpetual	Dated	Dated	Dated
13	Original maturity date	n/a	n/a	n/a	14 December 2028	11 December 2030	19 August 2031
14	Issuer call subject prior to supervisory approval	n/a	Yes	Yes	Yes	Yes	Yes
15	Optional call date, contingent call dates and redemption amount	n/a	Optional Call Date = 8 December 2022 Reg Call = Yes Tax Call = Yes Redemption Price = 100%	Optional Call Date = 8 June 2024 Reg Call = Yes Tax Call = Yes Redemption Price = 100%	Optional Call Date = 14 December 2023 Reg Call = Yes Tax Call = Yes Redemption Price = 100%	Optional Call Date = Any date from (and including) 11 September 2025 to (and including) 11 December 2025 Reg Call = Yes Tax Call = Yes Redemption Price = 100%	Optional Call Date = Any date from (and including) 19 May 2026 to (and including) 19 August 2026 Reg Call = Yes Tax Call = Yes Redemption Price = 100%
16	Subsequent call dates	n/a	Any interest payment date thereafter	Each fifth anniversary thereafter	n/a	n/a	n/a

Appendix 3: Main features of regulatory capital instruments – Virgin Money UK PLC continued

	Coupons/Dividends						
17	Fixed or floating dividend/coupon	n/a	Fixed	Fixed	Fixed	Fixed	Fixed
18	Coupon rate and any related index	n/a	8.00% per annum until 8 December 2022. Resets to a fixed rate equal to the 5-year SONIA Mid-Swap Rate + 652.7bps, if not called	9.25% per annum until 8 June 2024. Resets to a fixed rate equal to the 5-year Benchmark Gilt Rate + 830.7bps, if not called	7.875% per annum until 14 December 2023. Resets to a fixed rate equal to the 5-year Benchmark Gilt Rate + 712.8bps, if not called	5.125% per annum until 11 December 2025. Resets to a fixed rate equal to the 5-year Benchmark Gilt Rate + 525bps, if not called	2.625% per annum until 19 August 2026. Resets to a fixed rate equal to the 5-year Benchmark Gilt Rate + 225bps, if not called
19	Existence of a dividend stopper	n/a	No	No	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory
21	Existence of step-up or other incentive to redeem	n/a	No	No	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	n/a	n/a	n/a
23	Convertible or non-convertible	Non-convertible	Convertible	Convertible	Convertible (Statutory/ bail in only)	Convertible (Statutory/ bail in only)	Convertible (Statutory/ bail in only)
24	If convertible, conversion triggers	n/a	Contractual, if Virgin Money UK PLC Group's CET1 ratio falls below 7% Statutory conversion or bail-in by the UK Resolution Authority, at point of non-viability/ when resolution conditions met	Contractual, if Virgin Money UK PLC Group's CET1 ratio falls below 7% Statutory conversion or bail-in by the UK Resolution Authority, at point of non-viability/ when resolution conditions met	Statutory conversion or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory conversion or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory conversion or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met
25	If convertible, fully or partially	n/a	Fully	Fully	n/a	n/a	n/a
26	If convertible, conversion rate	n/a	119p	119p	n/a	n/a	n/a
27	If convertible, mandatory or optional conversion	n/a	Mandatory	Mandatory	n/a	n/a	n/a
28	If convertible, specify instrument type convertible into	n/a	Common Equity Tier 1	Common Equity Tier 1	n/a	n/a	n/a
29	If convertible, specify issuer of instrument it converts into	n/a	Virgin Money UK PLC	Virgin Money UK PLC	n/a	n/a	n/a
30	Write-down feature	No	Yes (Statutory/ bail in only)	Yes (Statutory/ bail in only)	Yes (Statutory/ bail in only)	Yes (Statutory/ bail in only)	Yes (Statutory/ bail in only)
31	If write-down, trigger(s)	n/a	Statutory write-down or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory write-down or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory write-down or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory write-down or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory write-down or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met

32	If write-down, full or partial	n/a	n/a	n/a	n/a	n/a	n/a
33	If write-down, permanent or temporary	n/a	n/a	n/a	n/a	n/a	n/a
34	If temporary write-down, description of write-up mechanism	n/a	n/a	n/a	n/a	n/a	n/a
34a	Type of subordination	Statutory	Contractual and Structural	Contractual and Structural	Contractual and Structural	Contractual and Structural	Contractual and Structural
34b	Ranking	Common Equity Tier 1	Additional Tier 1	Additional Tier 1	Tier 2	Tier 2	Tier 2
35	Instrument type immediately senior	Additional Tier 1	Tier 2	Tier 2	Senior Unsecured	Senior Unsecured	Senior Unsecured
36	Non-compliant transitioned features	No	No	No	No	No	No
37	If yes, specify non-compliant features	n/a	n/a	n/a	n/a	n/a	n/a
37a	Link to T&Cs	n/a	Link	Link	Link	Link	Link

Appendix 4: Main features of regulatory capital instruments – Clydesdale Bank PLC

Main features of regulatory capital instruments for Clydesdale Bank PLC

1	Issuer	Clydesdale Bank PLC	Clydesdale Bank PLC	Clydesdale Bank PLC	Clydesdale Bank PLC	Clydesdale Bank PLC	Clydesdale Bank PLC
2	ISIN	n/a	n/a	n/a	n/a	n/a	n/a
2a	Public/Private Placement	Private	Private	Private	Private	Private	Private
3	Governing law	English	English	English	English	English	English
3a	Contractual recognition of write down and conversion powers of resolution authorities	n/a	No	No	No	No	No
	Regulatory treatment						
4	Transitional CRR rules	Common Equity Tier 1	Additional Tier 1	Additional Tier 1	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Common Equity Tier 1	Additional Tier 1	Additional Tier 1	Tier 2	Tier 2	Tier 2
6	Eligible at Group or Bank	Clydesdale Bank PLC Solo and CB Group Consolidated	Clydesdale Bank PLC Solo and CB Group Consolidated	Clydesdale Bank PLC Solo and CB Group Consolidated	Clydesdale Bank PLC Solo and CB Group Consolidated	Clydesdale Bank PLC Solo and CB Group Consolidated	Clydesdale Bank PLC Solo and CB Group Consolidated
7	Instrument type (type to be specified by each jurisdiction)	Ordinary Shares	Other Equity Instruments	Other Equity Instruments	Dated Subordinated Debt	Dated Subordinated Debt	Dated Subordinated Debt
8	Regulatory capital value	GBP 1,243,153,827	GBP 425,431,130	GBP 247,138,469	GBP 248,119,680	GBP 472,300,999	GBP 297,797,626
9	Nominal value (£)	GBP 1,243,153,827	GBP 450,000,000	GBP 250,000,000	GBP 250,000,000	GBP 475,000,000	GBP 300,000,000
9a	Issue Price (£)	100%	94.540%	100%	99.493%	99.840%	99.807%
9b	Redemption Price (£)	100%	100%	100%	100%	100%	100%
10	Accounting classification	Equity	Equity	Equity	Liability – amortised cost	Liability – amortised cost	Liability – amortised cost
11	Original date of issue	Various	8 February 2016	13 March 2019	14 December 2018	11 September 2020	19 May 2021
12	Perpetual or dated	Perpetual	Perpetual	Perpetual	Dated	Dated	Dated
13	Original maturity date	n/a	n/a	n/a	14 December 2028	11 December 2030	19 August 2031
14	Issuer call subject prior to supervisory approval	n/a	Yes	Yes	Yes	Yes	Yes
15	Optional call date, contingent call dates and redemption amount		Optional Call Date = 8 December 2022 Reg Call = Yes Tax Call = Yes Redemption Price = 100%	Optional Call Date = 8 June 2024 Reg Call = Yes Tax Call = Yes Redemption Price = 100%	Optional Call Date = 14 December 2023 Reg Call = Yes Tax Call = Yes Redemption Price = 100%	Optional Call Date = Any date from (and including) 11 September 2025 to (and including) 11 December 2025 Reg Call = Yes Tax Call = Yes Redemption Price = 100%	Optional Call Date = Any date from (and including) 19 May 2026 to (and including) 19 August 2026 Reg Call = Yes Tax Call = Yes Redemption Price = 100%
16	Subsequent call dates	n/a	Any interest payment date thereafter	Each fifth anniversary thereafter	n/a	n/a	n/a
	Coupons/dividends						
17	Fixed or floating dividend/coupon	n/a	Fixed	Fixed	Fixed	Fixed	Fixed
18	Coupon rate and any related index	n/a	8.00% per annum until 8 December 2022. Resets to a fixed rate equal to the 5-year SONIA Mid-Swap Rate + 652.7bps, if not called	9.25% per annum until 8 June 2024. Resets to a fixed rate equal to the 5-year Benchmark Gilt Rate + 830.7bps, if not called	7.875% per annum until 14 December 2023. Resets to a fixed rate equal to the 5-year Benchmark Gilt Rate + 712.8bps, if not called	5.125% per annum until 11 December 2025. Resets to a fixed rate equal to the 5-year Benchmark Gilt Rate + 525bps, if not called	2.625% per annum until 19 August 2026. Resets to a fixed rate equal to the 5-year Benchmark Gilt Rate + 225bps, if not called

19	Existence of a dividend stopper	n/a	No	No	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary	Fully discretionary	Mandatory	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	n/a	No	No	No	No	No
22	Non-cumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	n/a	n/a	n/a
23	Convertible or non-convertible	Non-convertible	Convertible (Statutory/ bail in only)	Convertible (Statutory/ bail in only)	Convertible (Statutory/ bail in only)	Convertible (Statutory/ bail in only)	Convertible (Statutory/ bail in only)
24	If convertible, conversion triggers	n/a	Statutory conversion or bail-in by the UK Resolution Authority, at point of non-viability/ when resolution conditions met	Statutory conversion or bail-in by the UK Resolution Authority, at point of non-viability/ when resolution conditions met	Statutory conversion or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory conversion or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory conversion or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met
25	If convertible, fully or partially	n/a	n/a	n/a	n/a	n/a	n/a
26	If convertible, conversion rate	n/a	n/a	n/a	n/a	n/a	n/a
27	If convertible, mandatory or optional conversion	n/a	n/a	n/a	n/a	n/a	n/a
28	If convertible, specify instrument type convertible into	n/a	n/a	n/a	n/a	n/a	n/a
29	If convertible, specify issuer of instrument it converts into	n/a	n/a	n/a	n/a	n/a	n/a
30	Write-down feature	No	Yes	Yes	Yes (Statutory/ bail in only)	Yes (Statutory/ bail in only)	Yes (Statutory/ bail in only)
31	If write-down, trigger(s)	n/a	Contractual, if Virgin Money UK PLC Group's CET1 ratio or CB Group's CET1 ratio falls below 7% Statutory write-down or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Contractual, if Virgin Money UK PLC Group's CET1 ratio CB Group's CET1 ratio or CB Solo CET1 falls below 7% Statutory write-down or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory write-down or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory write-down or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met	Statutory write-down or bail-in by the UK Resolution Authority at point of non-viability/ when resolution conditions met
32	If write-down, full or partial	n/a	Fully	Fully	n/a	n/a	n/a
33	If write-down, permanent or temporary	n/a	Permanent	Permanent	n/a	n/a	n/a

Appendix 4: Main features of regulatory capital instruments – Clydesdale Bank PLC continued

34	If temporary write-down, description of write-up mechanism	n/a	n/a	n/a	n/a	n/a	n/a
34a	Type of subordination	Statutory	Contractual	Contractual	Contractual	Contractual	Contractual
34b	Ranking	Common Equity Tier 1	Additional Tier 1	Additional Tier 1	Tier 2	Tier 2	Tier 2
35	Instrument type immediately senior	Additional Tier 1	Tier 2	Tier 2	Senior Unsecured	Senior Unsecured	Senior Unsecured
36	Non-compliant transitioned features	No	No	No	No	No	No
37	If yes, specify non-compliant features	n/a	n/a	n/a	n/a	n/a	n/a

Appendix 5: CRR mapping to reports

The following tables display the compliance by Virgin Money UK PLC to the disclosure requirements of Part Eight of the CRR for FY21 reporting.

CRR	Description	Compliance
SCOPE OF DISCLOSURE REQUIREMENTS		
431(1)	Requirement to publish Pillar 3 disclosures	Virgin Money UK PLC publishes Pillar 3 disclosures
431(2)	Firms with permission to use specific operational risk methodologies must disclose operational risk information	Pillar 3 – 7.0 Operational Risk Annual Report and Accounts 2021 – Risk report: Operational risk
431(3)	Institution must have a policy covering frequency of disclosures, their verification, comprehensiveness and appropriateness	The Virgin Money UK PLC Pillar 3 disclosure policy is included in the External Reporting Policy Standard
431(4)	Explanation of ratings decisions on request	Not applicable
NON-MATERIAL, PROPRIETARY AND CONFIDENTIAL INFORMATION		
432(1)	Institutions may omit information that is not material if certain conditions are respected	Pillar 3 – 2.1 Basis of preparation and frequency of disclosures
432(2)	Institutions may omit information that is proprietary or confidential if certain conditions are met	Virgin Money UK PLC does not omit any information on the grounds that it may be proprietary or confidential
432(3)	Where 432(2) applies this must be stated in the disclosures, and more general information must be disclosed	Not applicable
432(4)	Use of 431(1), (2) or (3) is without prejudice to scope of liability for failure to disclose material information	Not applicable
FREQUENCY OF DISCLOSURE		
433	Disclosures must be published once a year at a minimum and more frequently if necessary	Pillar 3 – Section 2.1 Basis of preparation and frequency of disclosures
MEANS OF DISCLOSURE		
434(1)	To include all disclosures in one appropriate medium, or provide clear cross-references	All required disclosures are published on the Virgin Money UK PLC website This table provides clear cross referencing to all disclosures
434(2)	Disclosures made under other requirements (e.g. accounting) can be used to satisfy Pillar 3 if appropriate	All cross references to the ARA are signposted within this table and throughout the Pillar 3 document
RISK MANAGEMENT OBJECTIVES AND POLICIES		
435(1)	*Disclose information on:*	
435(1)(a)	The strategies and processes to manage risks	Annual Report and Accounts 2021 – Strategic report: How we manage risk; and Risk report
435(1)(b)	Structure and organisation of the risk management function	Pillar 3 – 3.1 Risk management; 3.2 The Board and governance; and Annual Report and Accounts 2021 – Risk report
435(1)(c)	The scope and nature of risk reporting and measurement systems	Annual Report and Accounts 2021 – Risk report
435(1)(d)	Hedging and mitigating risk – policies and processes	Annual Report and Accounts 2021 – Strategic report: How we manage risk; and Risk report
435(1)(e)	A declaration of adequacy of risk management arrangements approved by the Board	Pillar 3 – 2.4 Review and challenge
435(1)(f)	Concise risk statement approved by the Board	Pillar 3 – 1.3 Summary of risk profile
435(2)	*Disclose information on:*	
435(2)(a)	Number of directorships held by Board members	Pillar 3 – 3.2 The Board and governance
435(2)(b)	Recruitment policy for selection of Board members, their actual knowledge, skills and expertise	Pillar 3 – 3.2 The Board and governance
435(2)(c)	Policy on diversity of Board membership and results against targets	Pillar 3 – 3.2 The Board and governance
435(2)(d)	Disclosure of whether a dedicated risk committee is in place and number of meetings in the year	Pillar 3 – 3.2 The Board and governance; and Annual Report and Accounts 2021 – Risk report
435(2)(e)	Description of information flow on risk to Board	Pillar 3 – 3.2 The Board and governance

Appendix 5: CRR mapping to reports continued

CRR	Description	Compliance
SCOPE OF APPLICATION		
436(a)	Name of institution	Pillar 3 – 1.1 Introduction, 2.1 Basis of preparation and frequency of disclosures
436(b)	Difference in basis of consolidation for accounting and prudential purposes, describing entities that are: fully consolidated; proportionally consolidated; deducted from own funds; or neither consolidated nor deducted	Pillar 3 – 2.2 Scope of disclosures
436(c)	Impediments to transfer of own funds between parent and subsidiaries	Pillar 3 – 2.2 Scope of disclosures
436(d)	Capital shortfalls in any subsidiaries outside the scope of consolidation	Not applicable
436(e)	Making use of articles on derogations from (a) prudential requirements or (b) liquidity requirements for individual subsidiaries or entities	Pillar 3 – 2.2 Scope of disclosure. Clydesdale Bank PLC holds permission to use the individual consolidation method from the PRA under CRR Article 9
OWN FUNDS		
437(1)	Disclose the following information regarding own funds:	
437(1)(a)	A full reconciliation of CET1 items, AT1 items, Tier 2 items and filters and deductions applied to own funds of the institution and the balance sheet in the audited financial statements of the institution	Virgin Money UK PLC – Pillar 3 – 4.1 Own funds, Table 3 Capital composition, Table 6 Reconciliation of statutory equity to regulatory capital CB Consol – Pillar 3 – Appendix 1, Table 57 Capital composition, Table 60 Reconciliation of statutory equity to regulatory capital
437(1)(b)	A description of the main features of the CET1, AT1 and Tier 2 instruments issued by the institution	Group, CB Consol – Pillar 3 – Appendix 4 Main Features of Regulatory Capital Instruments
437(1)(c)	The full terms and conditions of all CET1, AT1 and Tier 2 instruments	Virgin Money UK PLC – Pillar 3 – 4.1 Own funds Virgin Money UK PLC, CB Consol – separately disclosed on Group website: www.virginmoney.com
437(1)(d)	Disclosure of the nature and amounts of the prudential filters, deductions made against own funds and items not deducted	Virgin Money UK PLC – Pillar 3 – 4.1 Own funds, Table 3 Capital composition Virgin Money UK PLC – Pillar 3 – 4.2 Movements in capital, Table 4 Capital flow statement CB Consol – Pillar 3 – Appendix 1, Table 57 Capital composition, Table 58 Capital flow statement
437(1)(e)	A description of all restrictions applied to the own funds in accordance with this regulation and the instruments, prudential filters and deductions to which those restrictions apply	Pillar 3 – 4.1 Own funds, Table 3 Capital composition; CB Consol – Pillar 3 – Appendix 1, Table 57 Capital composition
437(1)(f)	An explanation where institutions disclose capital ratios calculated using elements of own funds determined on a different basis	Not applicable
CAPITAL REQUIREMENTS		
438(a)	Summary of institution's approach to assessing adequacy of capital levels	Pillar 3 – 5.1 Capital management
438(b)	Result of ICAAP on demand from authorities	Not applicable
438(c)	Capital requirements for each standardised approach credit risk exposure class	Pillar 3 – Table 11 EU OV1 – Overview of risk-weighted assets, Table 16 EU CRB-B – Total and average net amount of exposures CB Consol – Table 64 CRB-B – Total and average net amount of exposures
438(d)	Capital requirements for each IRB approach to credit risk exposure classes	Pillar 3 – Table 11 EU OV1 – Overview of risk-weighted assets, Table 16 EU CRB – B – Total and average net amount of exposures, Table 15 EU CR8 – RWA flow statements of credit risk exposures CB Consol Table 64 CRB-B – Total and average net amount of exposures
438(e)	Capital requirements for market risk or settlement risk	Not applicable
438(f)	Capital requirements for operational risk	Pillar 3 – Table 11 EU OV1 – Overview of risk-weighted assets; CB Consol – Table 64 CRB-B – Total and average net amount of exposures
438 (end note)	Requirement to disclose specialised lending exposures and equity exposures in the banking book falling under the simple risk-weight approach	Not applicable

CRR	Description	Compliance
EXPOSURES TO COUNTERPARTY CREDIT RISK		
439(a)	Discussion of process to assign internal capital and credit limits to CCR exposures	Pillar 3 – 8.2 Internal capital and credit limits
439(b)	Discussion of policies for securing collateral and establishing credit reserves	Pillar 3 – 8.3 Securing collateral and reserves
439(c)	Discussion of policies for Wrong-Way risk exposures	Pillar 3 – 8.4 Wrong-way risk
439(d)	Discussion of collateral to be provided (outflows) in the event of a ratings downgrade	Pillar 3 – 8.5 Downgrade impact
439(e)	Derivation of net derivative credit exposure	Pillar 3 – Table 44 EU CCR1 – Analysis of CCR exposure by approach, Table 45 EU CCR2 – CVA capital charge, Table 46 EU CCR8 – Exposures to central counterparties, Table 48 EU CCR5-A – Impact of netting and collateral held on exposure values
439(f)	Exposure values for mark-to-market, original exposure, standardised and internal model methods	Pillar 3 – Table 44 EU CCR1 – Analysis of CCR exposure by approach, Table 45 EU CCR2 – CVA capital charge
439(g)	Notional value of credit derivative hedges and current credit exposure by type of exposure	Pillar 3 – 8.6 Exposures
439(h)	Notional value of credit derivative transactions	Pillar 3 – 8.6 Exposures
439(i)	Estimate of alpha, if applicable	Not applicable
CAPITAL BUFFERS		
440(1)(a)	Geographical distribution of relevant credit exposures for calculation of countercyclical buffer	Pillar 3 – 5.2 Minimum capital requirement, Table 13 Geographical distribution of credit exposures
440(1)(b)	Amount of the institution-specific countercyclical capital buffer	Pillar 3 – 5.2 Minimum capital requirement, Table 14 Amount of institution-specific countercyclical capital buffer
INDICATORS OF GLOBAL SYSTEMIC IMPORTANCE		
441(1)	Disclosures of the indicators of global systemic importance	Not applicable
CREDIT RISK ADJUSTMENTS		
442(a)	Disclosure of institution's definitions of past due and impaired	
442(b)	Approaches for calculating specific and general credit risk adjustments	Pillar 3 – 6.5.1 Definition, 6.5.2 Managing impaired exposures and impairment provisions
442(c)	Disclosure of pre-CRM EAD by exposure class	Pillar 3 – Table 16 EU CRB-B – Total and average net amount of exposures
442(d)	Disclosure of pre-CRM EAD by geography and exposure class	Pillar 3 – Table 19 EU CRB-C – Geographical breakdown of exposures
442(e)	Disclosure of pre-CRM EAD by industry and exposure class	Pillar 3 – Table 17 EU CRB-D – Concentration of exposures by industry
442(f)	Disclosure of pre-CRM EAD by residual maturity and exposure class	Pillar 3 – Table 18 EU CRB-E – Maturity of exposures
442(g)	Breakdown of impaired, past due, specific and general credit risk adjustments and impairment charges for the period	Not applicable
442(h)	Impaired, past due exposures, by geographical area and amounts of specific and general impairment for each geographical area	Pillar 3 – Table 21 EU CR1-B – Credit quality of exposures by industry or counterparty types
442(i)	Reconciliation of changes in specific and general credit risk adjustments for impaired exposures	Pillar 3 – 6.5.1 Definition, Table 23 EU CR1-E – Performing and non-performing exposures and related provisions; Table 25 EU CR2-A – Changes in the stock of general and specific credit risk adjustments
442 (end note)	Specific credit risk adjustments recorded to income statement are disclosed separately	Pillar 3 – Table 25 EU CR2-A – Changes in the stock of general and specific credit risk adjustments
UNENCUMBERED ASSETS		
443	Disclosures on unencumbered assets	Pillar 3 – Section 12.0 Asset Encumbrance

Appendix 5: CRR mapping to reports continued

CRR	Description	Compliance
USE OF ECAI		
444(a)	Names of the ECAI used in the calculation of standardised approach risk-weighted assets and reasons for any changes	Pillar 3 – 6.9 Use of External Credit Assessment Institutions (ECAI)
444(b)	Exposure classes associated with each ECAI	Pillar 3 – 6.9 Use of External Credit Assessment Institutions (ECAI)
444(c)	Description of the process used to transfer credit assessments to non-trading book items	Not applicable
444(d)	Mapping of external rating to Credit Quality Steps (CQS)	Not applicable The Group complies with the standard association published on the EBA website
444(e)	Exposure value pre and post-credit risk mitigation by CQS	Pillar 3 – Table 29 EU CR4 – Standardised approach – credit risk exposure and CRM effects; Table 30 EU CR5 – Standardised approach, Table 47 EU CCR3 – Standardised approach – CCR exposures by regulatory portfolio and risk

CRR	Description	Compliance
EXPOSURE TO MARKET RISK		
445	Disclosure of position risk, large exposures exceeding limits, FX settlement	Not applicable

CRR	Description	Compliance
OPERATIONAL RISK		
446	Scope of approaches used to calculate operational risk	Pillar 3 – Table 11 EU OV1 – Overview of risk-weighted assets and Section 7.0 Operational risk Annual Report and Accounts 2021 – Risk report: Operational risk

CRR	Description	Compliance
EXPOSURE IN EQUITIES NOT INCLUDED IN THE TRADING BOOK		
447(a)	Differentiation of exposures based on objectives and an overview of accounting techniques and valuation methodologies	Pillar 3 – 2.1 Basis of preparation and frequency of disclosures Omitted on grounds of materiality
447(b)	The balance sheet value, the fair value and, for those exchange-traded, a comparison to the market price where it is materially different from the market value	Pillar 3 – 2.1 Basis of preparation and frequency of disclosures Omitted on grounds of materiality
447(c)	The types, nature and amounts of exchange-traded exposures, private equity exposures in sufficiently diversified portfolios and other exposures	Pillar 3 – 2.1 Basis of preparation and frequency of disclosures Omitted on grounds of materiality
447(d)	Cumulative realised gains or losses arising from sales and liquidations in the period	Pillar 3 – 2.1 Basis of preparation and frequency of disclosures Omitted on grounds of materiality
447(e)	Total unrealised gains or losses, the total latent revaluation gains or losses and any of those amounts included in the original or additional own funds	Pillar 3 – 2.1 Basis of preparation and frequency of disclosures Omitted on grounds of materiality

CRR	Description	Compliance
EXPOSURE TO INTEREST RATE RISK ON POSITIONS NOT INCLUDED IN THE TRADING BOOK		
448(a)	Nature of the interest rate risk and the key assumptions and frequency of measurement of the interest rate risk	Pillar 3 – Section 9.0 Market Risk
449(b)	Variation in earnings, or economic value or other measures used by the institution from upward and downward rate shocks, by currency	Annual Reports and Accounts 2021 – Risk report: Financial risk

CRR	Description	Compliance
EXPOSURE TO SECURITISATION POSITIONS		
449(a)	Objectives in relation to securitisation activity	Pillar 3 – 11.1 Objectives and roles in relation to securitisation activity
449(b)	Nature of other risks in securitised assets, including liquidity	Pillar 3 – 11.3 Associated risks
449(c)	Risks in re-securitisation activity stemming from seniority of underlying securitisations and ultimate underlying assets	Not applicable
449(d)	The roles played by the institution in the securitisation process	Pillar 3 – 11.2 Roles
449(e)	Indication of the extent of involvement in roles	Pillar 3 – 11.2 Roles
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	Pillar 3 – 11.3 Associated risks and 11.4 Issuer and retained positions
449(g)	Description of the institution's policies on hedging and unfunded protection and identification of material hedge counterparties	Not applicable
449(h)	Approaches to the calculation of risk-weighted assets for securitisations mapped to types of exposures	Pillar 3 – 11.3 Associated risks
449(i)	Types of securitisation special purchase entities used to securitise third-party exposures as a sponsor	Pillar 3 – 11.1 Objectives and roles in relation to securitisation activity
449(j)	Summary of accounting policies for securitisations, including:	Pillar 3 – Table 25 EU CR2-A – Changes in the stock of general and specific credit risk adjustments
449(j)(i)	Whether the transactions are treated as sales or financings	Pillar 3 – 11.1 Objectives and roles in relation to securitisation activity
449(j)(ii)	The recognition of gains on sales	Not applicable
449(j)(iii)	Methods, key assumptions, inputs and changes from the previous period in valuing securitisation positions	Pillar 3 – 11.5 Securitisation accounting policies
449(j)(iv)	The treatment of synthetic securitisations	Pillar 3 – 11.4 Issuer and retained positions
449(j)(v)	How assets awaiting securitisation are valued, and whether they are recorded as trading or non-trading	Not applicable
449(j)(vi)	Policies for recognising liabilities on the balance sheet for arrangements that could require the institution to provide financial support	Pillar 3 – 11.2 Roles
449(k)	Names of ECAI used for securitisation and type	Pillar 3 – 11.3 Associated risks and 11.4 Issuer and retained positions
449(l)	Full description of Internal Assessment Approach	Not applicable
449(m)	Explanation of significant changes in quantitative disclosure	Pillar 3 – 11.4 Issuer and retained positions
449(n)	As appropriate, separately for the banking and trading book securitisation exposures:	
449(n)(i)	Amount of outstanding exposures securitised	Pillar 3 – Table 52 Outstanding notes
449(n)(ii)	On-balance sheet securitisation retained or purchased, and off-balance sheet exposures	Pillar 3 – Table 53 On-balance sheet exposures
449(n)(iii)	Amount of assets awaiting securitisation	Not applicable
449(n)(iv)	Early amortisation treatment, aggregate drawn exposures, capital requirements	Not applicable
449(n)(v)	Deducted or 1,250%-weighted securitisation positions	Not applicable
449(n)(vi)	Securitisation activity including the amount of exposures securitised and recognised gains or losses on sales	Pillar 3 – 11.4 Issuer and retained positions, Table 52 Outstanding notes
449(o)	Banking and trading book securitisations	
449(o)(i)	Retained and purchased positions and associated capital requirements, broken down by risk-weight bands	Not applicable
449(o)(ii)	Retained and purchased re-securitisation positions before and after hedging and insurance, exposure to financial guarantors broken down by guarantor creditworthiness	Not applicable
449(p)	Impaired assets and recognised losses related to banking book securitisations by exposure type	Pillar 3 – 11.4 Issuer and retained positions, Table 53 On-balance sheet exposures
449(q)	Exposure and capital requirements for trading book securitisations:	Not applicable
449(r)	Whether the institution has provided non-contractual financial support to securitisation vehicles	Not applicable

Appendix 5: CRR mapping to reports continued

CRR	Description	Compliance
REMUNERATION DISCLOSURES		
450	Remuneration	Appendix 3
LEVERAGE		
451(1) (a), (b), (c)	Leverage ratio and breakdown of total exposure measure including reconciliation to financial statements and derecognised fiduciary items	Pillar 3 – Virgin Money UK PLC – Table 7 LRSum: Summary reconciliation of accounting assets and leverage ratio exposures, Table 8 LRCom: Leverage ratio common disclosure, Table 9 LRSpl: Split-up of on-balance sheet exposures CB Consol – Table 61 LRSum: Summary reconciliation of accounting assets and leverage ratio exposures, Table 62 LRCom: Leverage ratio common disclosure, Table 63 LRSpl: Split-up of on-balance sheet exposures
451(1) (d), (e)	Description of the processes used to manage the risk of excessive leverage and factors that impacted the leverage ratio during the year	Pillar 3 – 4.4 Leverage ratio
USE OF THE IRB APPROACH TO CREDIT RISK		
452(a)	Permission for use of the IRB approach from the competent authority	Pillar 3 – 6.11 IRB approach
452(b)	Explanation of:	
452(b)(i)	The structure of internal ratings scales	Pillar 3 – 6.11 IRB approach
452(b)(ii)	Use of internal ratings for purposes other than capital requirement calculations	Pillar 3 – 6.11 IRB approach
452(b)(iii)	Management and recognition of credit risk mitigation	Pillar 3 – 6.11 IRB approach
452(b)(iv)	Controls around rating systems	Pillar 3 – 6.11 IRB approach
452(c)	Description of ratings processes for each IRB asset class provided separately	Pillar 3 – 6.11 IRB approach
452(d)	Exposure values by IRB exposure class, separately for Advanced and Foundation IRB	Pillar 3 – Table 16 EU CRB-B – Total and average net amount of exposures
452(e-f)	Total exposure, separating loans and undrawn exposures where applicable and exposure-weighted average risk weight	Pillar 3 – Table 34 EU CR6 – IRB approach – Credit risk exposures by class and PD range (CB Mortgages); Table 35 EU CR6 – IRB approach – Credit risk exposures by class and PD range (VM Mortgages); Table 36 Credit risk exposures by class and PD range – Corporates: Business; Table 37 EU CR6 – IRB approach – Credit risk exposures by class and PD range – Corporates: Other
452(g)	Actual specific risk adjustments for the period and explanation of changes	Pillar 3 – Table 34 EU CR6 – IRB approach – Credit risk exposures by class and PD range (CB Mortgages); Table 35 EU CR6 – IRB approach – Credit risk exposures by class and PD range (VM Mortgages); Table 36 Credit risk exposures by class and PD range – Corporates: Business; Table 37 EU CR6 – IRB approach – Credit risk exposures by class and PD range – Corporates: Other
452(h)	Commentary of drivers of losses in preceding period	Pillar 3 – 6.11 IRB approach
452(i)	Estimates against actual losses for sufficient period, and historical analysis to help assess the performance of the rating system over a sufficient period	Pillar 3 – Table 38 EU CR9 – Backtesting of PD per exposure class (CB Mortgages), Table 39 EU CR9 – Backtesting of PD per exposure class (VM Mortgages), Table 40 EU CR9 – Backtesting of PD per exposure class – (FIRB) Corporates: Other and Table 41 EU CR9 – Backtesting of PD per exposure class – (FIRB) Corporates: SME
452(j)	Where applicable, PD and LGD by each country where the institution operates	Not applicable

CRR	Description	Compliance
USE OF CREDIT RISK MITIGATION TECHNIQUES		
453(a)	Use of on and off-balance sheet netting	Pillar 3 – 6.10 Credit risk mitigation.
453(b)	How collateral valuation is managed	Pillar 3 – 6.10.1 Collateral held as security and other credit enhancements
453(c)	Description of types of collateral used	Pillar 3 – 6.10.1 Collateral held as security and other credit enhancements
453(d)	Types of guarantor and credit derivative counterparty and their creditworthiness	Not applicable
453(e)	Disclosure of market or credit risk concentrations within risk mitigation exposures	Pillar 3 – 6.10.1 Collateral held as security and other credit enhancements
453(f)	For exposures under either the standardised or IRB approach, disclose the exposure value covered by eligible collateral	Pillar 3 – Table 28 EU CR3 – CRM techniques – overview; Table 29 EU CR4 – Standardised approach – credit risk exposure and CRM effects
453(g)	Exposures covered by guarantees or credit derivatives	Pillar 3 – Table 28 EU CR3 – CRM techniques – overview; Table 29 EU CR4 – Standardised approach – credit risk exposure and CRM effects
USE OF THE ADVANCED MEASUREMENT APPROACHES TO OPERATIONAL RISK		
454	Description of the use of insurance or other risk transfer mechanisms to mitigate operational risk	Not applicable
USE OF INTERNAL MARKET RISK MODELS		
455	Disclosures relating to the use of Internal Market Risk Models	Not applicable

Appendix 6: Tables

Appendix 7: Glossary

Term	Definition
Advanced Internal-Ratings Based **(AIRB)** approach	CRD IV approach for measuring exposure to retail credit risks. The method of calculating credit risk capital requirements uses internal PD, LGD and EAD models. AIRB approaches may only be used with PRA permission.
Additional Tier 1 capital **(AT1)**	AT1 capital instruments are non-cumulative perpetual securities that contain a specific provision to write down the security or convert it to equity, should the CET1 ratio fall below a specified trigger limit.
Arrears	A customer is in arrears when they fail to adhere to their contractual payment obligations resulting in an outstanding loan that is unpaid or overdue.
Backing assets	Backing assets relate to obligations to place collateral with the BoE as part of the regulations that allow certain firms, including Clydesdale Bank PLC, to issue Scottish bank notes.
Bank	Clydesdale Bank PLC.
Basel II	The capital adequacy framework issued by the BCBS in June 2004.
Basel III	Reforms issued by the BCBS in December 2017 with subsequent revisions.
Bounce back loan scheme **(BBLS)**	A scheme implemented by the UK Government to provide financial support to businesses across the UK that are losing revenue, and seeing their cashflow disrupted as a result of COVID-19, and that can benefit from £50,000 or less in finance.
Capital buffers	Capital conservation buffer – A buffer set for all banks that can be used to absorb losses while avoiding breaching minimum requirements. It is designed to ensure that banks build up capital outside periods of stress which can be drawn down as losses are incurred. Systemic risk buffer – A buffer set for ring-fenced banks and large building societies to reduce their probability of failure or distress. It is commensurate with the greater cost that their failure or distress would have for the UK economy. Firms with total assets less than £175bn are subject to a 0% SRB. Countercyclical capital buffer – A capital buffer to ensure eligible firms have a sufficient capital base to absorb losses in stressed periods. The CCyB aims to ensure that banking sector capital requirements take account of the macroeconomic financial environment in which banks operate. It enables the Bank of England's Financial Policy Committee to adjust the resilience of the banking system to the changing scale of risk the system faces over time. PRA buffer – A buffer set using supervisory judgement informed by the impact of stress scenarios on a firm's capital requirements and resources and taking account, where appropriate, of other factors including leverage, systemic importance and weaknesses in firms' risk management and governance. This is set on a firm-specific basis. Firms are not permitted to disclose if a PRA buffer has been applied.
Capital conservation buffer **(CCB)**	Refer to 'Capital buffers.'
Capital Requirements Directive IV **(CRD IV)**	European legislation to implement Basel III. It replaces earlier European capital requirements directives with a revised package consisting of a new Capital Requirements Directive and a new Capital Requirements Regulation. CRD IV sets out capital and liquidity requirements for European banks and harmonises the European framework for bank supervision. See also 'Basel III.'
Carrying value/carrying amount	The value of an asset or a liability in the balance sheet based on either amortised cost or fair value principals.
Cash ratio deposit	Non-interest bearing deposits lodged with the BoE by eligible institutions.
CB Group Consolidated **(CB Consol)**	Prudential sub-consolidation group of Clydesdale Bank PLC.
Collateral	The assets of a borrower that are used as security against a loan facility.
Collective investment undertakings **(CIU)**	Collective investment scheme allowed to operate freely throughout the EU on the basis of a single authorisation from one member state.
Common Equity Tier 1 **(CET1)** capital	The highest quality form of regulatory capital that comprises total shareholders' equity and related non-controlling interests, less goodwill and intangible assets and certain other regulatory adjustments.
Common Equity Tier 1 **(CET1)** ratio	CET1 capital divided by RWA at a given date.
Company	CYBG PLC up until 31 October 2019 and thereafter Virgin Money UK PLC.
Coronavirus business interruption loan scheme **(CBILS)**	A scheme implemented by the UK Government to provide financial support to smaller businesses across the UK that are losing revenue, and seeing their cashflow disrupted, as a result of COVID-19.
Coronavirus large business interruption loan scheme **(CLBILS)**	A scheme implemented by the UK Government to provide financial support to mid-sized and larger businesses across the UK that are suffering disruption to their cashflow due to lost or deferred revenues as a result of COVID-19.
Countercyclical capital buffer **(CCyB)**	Refer to 'Capital buffers.'
Counterparty	The other party that participates in a financial transaction, with every transaction requiring a counterparty in order for the transaction to complete.
Counterparty credit risk **(CCR)**	Counterparty credit risk is the risk that a counterparty to a transaction may default before the final settlement of the transaction's cash flows. This risk concerns financial instruments, including derivatives and repurchase agreements.
Coverage ratio	Impairment allowance as at the period end, shown as a percentage of gross loans and advances.
Covered bonds	A corporate bond with primary recourse to the institution and secondary recourse to a pool of assets that act as security for the bonds on issuer default. Covered bonds remain on the issuer's balance sheet and are a source of term funding for the Group.

Term	Definition
Credit conversion factor **(CCF)**	Credit conversion factors are used in determining the exposure at default in relation to a credit risk exposure. The CCF is an estimate of the proportion of undrawn and off-balance sheet commitments expected to be drawn down at the point of default.
Credit quality steps	A credit quality assessment scale as set out in CRD IV.
Credit risk adjustment/credit valuation adjustment	An adjustment to the valuation of financial instruments held at fair value to reflect the creditworthiness of the counterparty.
Credit risk mitigation **(CRM)**	Techniques to reduce the potential loss in the event that a customer (borrower or counterparty) becomes unable to meet its obligations. This may include the taking of financial or physical security, the assignment of receivables or the use of credit derivatives, guarantees, credit insurance, set-off or netting.
Default	A customer is in default when either they are more than 90 DPD on a credit obligation to the Group or are considered unlikely to pay their credit obligations in full without recourse to actions such as realisation of security (if held).
Derivative	A financial instrument that is a contract or agreement whose value is related to the value of an underlying instrument, reference rate or index.
EBA Implementing Technical Standard on Disclosure for Own Funds	Commission Implementing Regulation (EU) No 1423/2013 of 20 December 2013 laying down implementing technical standards with regard to disclosure of own funds requirements for institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council.
Encumbered assets	Assets that have been pledged as security, collateral or legally ring-fenced in some other way which prevents those assets being transferred, pledged, sold or otherwise disposed.
Expected Loss **(EL)**	Regulatory expected loss represents the anticipated loss, in the event of default, on a credit risk exposure modelled under the AIRB approach. Expected loss is determined by multiplying the associated PD, LGD and EAD.
Exposure	A claim, contingent claim or position which carries a risk of financial loss.
Exposure at Default **(EAD)**	An estimate of the amount expected to be owed on a credit risk exposure at the time of default.
External Credit Assessment Institutions **(ECAI)**	ECAI include external credit rating agencies such as Moody's, Fitch, and S&P.
Fair value	The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions.
Financial Conduct Authority **(FCA)**	Conduct regulator for all financial services firms and financial markets in the UK and the prudential regulator for a minority of those firms.
Forbearance	The term generally applied to the facilities provided or changes to facilities provided to assist borrowers, who are experiencing, or are about to experience, a period of financial stress.
Group	Virgin Money UK PLC and its controlled entities.
IFRS 9	The new financial instrument accounting standard which was adopted by the Group with effect from 1 October 2018.
IFRS 9 Stage 1	A loan that is not credit-impaired on initial recognition and has not experienced a significant increase in credit risk.
IFRS 9 Stage 2	If a significant increase in credit risk has occurred since initial recognition, the loan is moved to stage 2, but is not yet deemed to be credit-impaired.
IFRS 9 Stage 3	If the loan is credit-impaired it is moved to stage 3. All expired term, material fraud and operational risk loans are classified as credit-impaired.
Internal Capital Adequacy Assessment Process **(ICAAP)**	The Group's assessment of the levels of capital that it needs to hold through an examination of its risk profile from regulatory and economic capital viewpoints.
Internal ratings-based approach **(IRB)**	A method of calculating credit risk capital requirements using internal, rather than supervisory, estimates of risk parameters.
Leverage ratio	This is a regulatory standard ratio proposed by Basel III as a supplementary measure to the risk-based capital requirements. It is intended to constrain the build-up of excess leverage in the banking sector and is calculated by dividing Tier 1 capital resources by a defined measure of on and off-balance sheet items plus derivatives.
Liquidity risk	Liquidity risk is the risk that the Group is unable to meet its current and future financial obligations as they fall due at acceptable cost.
Long-run average Probability of Default **(PD)**	An estimate of the likelihood of a borrower defaulting on their credit obligations over a forward-looking 12-month period, with the estimates based on default experience across a full economic cycle rather than current economic conditions.
Loss given default **(LGD)**	The estimate of the loss that the Group will suffer if the customer defaults (incorporating the effect of any collateral held).
Minimum requirement for own funds and eligible liabilities **(MREL)**	MREL is a minimum requirement for institutions to maintain equity and eligible debt liabilities, to help ensure that when an institution fails, the resolution authority can use these financial resources to absorb losses and recapitalise the continuing business. The BoE set out its approach to setting banks' MREL in November 2016.
Net interest income **(NII)**	The amount of interest received or receivable on assets, net of interest paid or payable on liabilities.
Personal lending	Lending to individuals rather than institutions and excludes mortgage lending which is reported separately.
Pillar 1	The quantitative elements of the Basel III framework including the minimum regulatory capital requirements for credit, operational and market risks.

Appendix 7: Glossary continued

Term	Definition
Pillar 2	The qualitative expectations of the Basel III framework to be met through the supervisory review process. This includes the ICAAP, governance process and the supervisory review and evaluation process.
Pillar 3	The final pillar of the Basel III framework which aims to encourage market discipline by improving the information made available to the market. This pillar sets out disclosure requirements for banks on their capital, risk exposures and risk assessment processes.
Probability of default **(PD)**	The probability that a customer will default over either the next 12 months or lifetime of the account.
Prudential Regulation Authority **(PRA)**	Entity of the BoE responsible for the prudential regulation and supervision of banks, building societies, credit unions, insurers and major investment firms.
PRA buffer	Refer to 'Capital buffers.'
Regulatory capital	The capital which banks hold, determined in accordance with rules established by the relevant regulatory bodies.
Repurchase (repo) agreement	A short-term funding agreement that allows a borrower to create a collateralised loan by selling a financial asset to a lender. As part of the agreement, the borrower commits to repurchase the security at a date in the future repaying the proceeds of the loan. For the counterparty (buying the security and agreeing to sell in the future) it is a reverse repurchase agreement or a reverse repo.
Residential mortgage-backed securities **(RMBS)**	Securities that represent interests in groups or pools of underlying mortgages. Investors in these securities have the right to cash received from future mortgage payments (interest and principal).
Risk appetite	The level and types of risk the Group is willing to assume within the boundaries of its risk capacity to achieve its strategic objectives.
Risk-weighted assets **(RWA)**	On and off-balance sheet assets of the Group are allocated a risk-weighting based on the amount of capital required to support the asset.
Risk management framework **(RMF)**	The Group identifies and manages risk using the RMF which is the totality of systems, structures, policies, processes and people that identify, measure, evaluate, control, mitigate, monitor and report all internal and external sources of material risk.
Sale and repurchase agreement **('repo')**	Refer to 'Repurchase (repo) agreement'.
Securities financing transaction **(SFT)**	Repurchase transactions, securities or commodities lending or borrowing transactions or other capital market-driven transactions.
Securitisation	The practice of pooling similar types of contractual debt and packaging the cash flows from the financial asset into securities that can be sold to institutional investors in debt capital markets. It provides the Group with a source of secured funding that can achieve a reduction in funding costs by offering typically 'AAA' rated securities secured by the underlying financial asset.
Standardised approach **(SA)**	In relation to credit risk, a method for calculating credit risk capital requirements using ECAI ratings and supervisory risk weights. In relation to operational risk, a method of calculating the operational capital requirement by the application of a supervisory defined percentage charge to the gross income of eight specified business lines.
Stress testing	The term used to describe techniques where plausible events are considered as vulnerabilities to ascertain how this will impact the own funds or liquidity which a bank holds.
Systemic risk buffer **(SRB)**	Refer to 'Capital buffers.'
Tier 1 capital	A measure of a bank's financial strength defined by CRD IV. It captures Common Equity Tier 1 capital plus other Tier 1 securities in issue, subject to deductions.
Tier 1 capital ratio	Tier 1 capital as a percentage of risk-weighted assets.
Tier 2 capital	A component of regulatory capital, including qualifying subordinated debt, eligible collective impairment provisions and other Tier 2 securities as defined by CRD IV.
Value at Risk **(VaR)**	A measure of the loss that could occur on risk positions as a result of adverse movements in market risk factors (e.g. rates, prices, volatilities) over a specified time horizon and to a given level of confidence.
Write-off	Where the outstanding balance or shortfall from sale of property is deemed irrecoverable. Assets written off will be deducted from the balance sheet.

Appendix 8: Abbreviations

AIRB	Advanced Internal-Ratings Based
ALCO	Asset and Liability Committee
AT1	Additional Tier 1
BBLS	Bounce Back Loan Scheme
BCBS	Basel Committee on Banking Supervision
BoE	Bank of England
BTL	Buy-to-Let
CAM	Current account mortgage
CCF	Credit Conversion Factor
CCR	Counterparty Credit Risk
CCyB	Countercyclical Capital Buffer
CET1	Common Equity Tier 1 capital
CRD	Capital Requirements Directive
CRM	Credit risk mitigation
CRR	Capital Requirements Regulation
CVA	Credit Valuation Adjustment
DCA	Delegated Commitment Authority
EaD	Exposures at Default
EBA	European Banking Authority
ECAI	External Credit Assessment Institutions
ECL	Expected Credit Losses
EHQLA	Extremely High Quality Liquid Assets
EL	Expected Loss
FIRB	Foundation Internal-Ratings Based
FINREP	Financial Reporting
FPC	Financial Policy Committee
G-SII	Global Systemically Important Institutions
HQLA	High-Quality Liquid Assets
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standards
IRB	Internal ratings-based approach
ISDA	International Swaps and Derivatives Association
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
LIBOR	London Inter-Bank Offered Rate
LTIP	Long Term Incentive Plan
MREL	Minimum Requirements for own funds and Eligible Liabilities
MRO	Model Risk Oversight
NII	Net interest income
OCIR	Operational continuity in resolution
O-SII	Other Systemically Important Institutions
PD	Probability of Default
PFE	Potential future exposure
PMA	Post-model adjustment
PRA	Prudential Regulation Authority
QCCPs	Qualifying Central Counterparties
RAS	Risk Appetite Statement
Repo	Repurchase agreement
RMBS	Residential Mortgage-Backed Securities
RMF	Risk Management Framework
RTS	Regulatory Technical Standards
RWA	Risk-Weighted Assets
SA	Standardised Approach
SFT	Securities Financing Transaction
SME	Small and Medium-Sized Enterprise
SONIA	Sterling Overnight Index Average
SPV	Special Purpose Vehicle
SRB	Systemic Risk Buffer
SYSC	Systems and Controls
TFS	Term Funding Scheme
TFSME	Term Funding Scheme with additional incentives for SME's
VaR	Value at Risk
VFN	Variable Funding Note

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