Barclays Bank Ireland PLC

Pillar 3 Report

Amendment

31 December 2021

EXPLANATORY NOTE

Barclays Bank Ireland PLC is publishing this amendment on 7 October 2022 to amend its Pillar 3 Report for the fiscal year ended 31 December 2021 (Original Publication) that was published on 13 July 2022 (Original Publication Date). The purpose of this amendment is to reflect:

- *the amendment of CET1 and associated ratios to include €189.5m of certain reserves eligible as core equity under CRR2.*
- *inclusion of the average liquidity measure within Table 5: KM1 – Key Metrics.*
- *inclusion of Table 23: CR2 – Changes in the stock of non-performing loans and advances.*
- *amendment of certain measures from a fully loaded to a transitional basis (Tier 1 capital within Table 17: LR2 and Leverage ratio total exposure measure within Table 10: IFRS9-FL).*

Other disclosure in this amendment is included for the convenience of the reader only and has not been updated from the Original Publication. Therefore, except for the changes expressly described above, this amendment continues to present information as at the Original Publication Date and does not amend, supplement or update any information contained in the Original Publication to give effect to any subsequent events.

Table of Contents

Foreword

Section 10.1 of the Basel Committee on Banking Supervision's Basel Framework introduces disclosure requirements for banks as follows:

The provision of meaningful information about common key risk metrics to market participants is a fundamental tenet of a sound banking system. It reduces information asymmetry and helps promote comparability of banks' risk profiles within and across jurisdictions.

Pillar 3 of the Basel Framework aims to promote market discipline through regulatory disclosure requirements. These requirements enable market participants to access key information relating to a bank's regulatory capital and risk exposures in order to increase transparency and confidence about a bank's exposure to risk and the overall adequacy of its regulatory capital.

Expansion of Barclays Bank Ireland PLC

Barclays has been operating in Ireland since 1978. Based in Dublin, we have historically provided corporate banking services to corporate clients, including top-tier Irish corporations, multi-nationals and financial institutions.

Barclays is a British universal bank, diversified by different types of business. The European operations of the Barclays Group (the Group) are integral to the strategic ambitions of Barclays International, which comprises the Group's top tier Corporate and Investment Bank, Global Barclaycard business and Private Bank.

Following the UK's decision to withdraw from the European Union (EU), the Group has taken the necessary steps to preserve market access for our clients in the EU 27 countries.

- The Group delivers a broad range of products and services to clients across Europe. We value these relationships and our priority has been to minimise disruption and preserve our clients' ability to continue to transact with Barclays.
- Due to the loss of passporting from the UK, new transactions performed for EU clients under the existing UK passports are being carried out by Barclays Bank Ireland PLC (the "Bank" or "BBI"), as an EEA regulated entity. Loss of passporting also impacts the ability of entities domiciled in any of the EU 27 countries to access the UK.
- Barclays' strategy is to continue to offer its core products and services to its EU clients through BBI which encompasses the activities that the Barclays' Group undertakes today across our EU footprint.

Further client migration activity

Client and business migrations resulting from the expansion of the Bank were substantially completed at the end of 2020 in advance of the end of the Brexit transition period. Migrations during the course of 2021 were considerably lower than 2020 and included derivative financial assets of €6.9bn (2020: €10.8bn), derivative financial liabilities of €5.3bn (2020: €13.8bn) and customer loan facilities of €1.5bn (2020: €5.3bn), of which €0.1bn (2020: €0.4bn) were drawn. Some further migrations are expected during 2022.

Brexit

The EU-UK Trade and Cooperation Agreement (TCA), which provides a new economic and social partnership between the EU and UK, came into force provisionally on 1 January 2021. The TCA does not cover the provision of financial services from the EU into the UK and there is no agreement on passporting, equivalence or regulatory cooperation.

The EU and UK have agreed to establish structured regulatory cooperation on financial services, with the aim of establishing a durable and stable relationship, based on a shared commitment to preserve financial stability, market integrity, and the protection of investors and consumers.

Capital position and risk management in 2021

Our annual disclosures contain extensive information on risk as well as capital management.

The Pillar 3 report provides a detailed breakdown of BBI's regulatory capital adequacy and how this relates to the Bank's risk management.

The CET1 Ratio decreased to 16.1% (December 2020: 16.6%) due to the increase in the amount of risk weighted assets in the year. The impact of these increases was partially offset by capital issuances in the reporting period

The leverage ratio increased to 6.7% (December 2020: 6.3%) due to an increase in the leverage exposure in the year. The impact of this increase was partially offset by capital issuances in the reporting period

This section presents a high-level summary of BBI's risk profile.

The Board makes use of the Risk Appetite Framework to set appetite, and continuously monitors existing and emerging risks.

BBI sets its risk appetite in terms of performance metrics as well as a set of mandate and scale limits to monitor risks. The following risk metrics reflect the risk profile of BBI:

Common Equity Tier 1 ratio

16.1%

2020: 16.6%

(see page 15)

CRR leverage ratio

6.7%

2020: 6.3%[1]

(see page 15)

Common Equity Tier 1 capital

€5.2bn

2020: €3.9bn

(see page 15)

Management Value at Risk

€1.7m

2020: €0.7m

(see page 74)

Liquidity pool

€25.4bn

2020: €21.0bn

(see page 32)

Liquidity coverage ratio

171%

2020: 218%

(see page 32)

Risk weighted assets

€32.1bn

2020: €23.7bn

(see page 23)

[1] 2020 leverage ratio disclosed on a fully phased in basis, 2021 is disclosed on a transitional basis.

Pillar 3 report regulatory framework

The Pillar 3 report is prepared in accordance with the Capital Requirements Regulation and Capital Requirements Directive ('CRR' and 'CRD V', also known as the 'CRD V legislative package'). In particular articles 431 to 455 of CRR specify the requirements of the Pillar 3 framework. The CRD V legislative package came into force on 27 June 2021.

The Pillar 3 disclosures have also been prepared in accordance with the EBA 'Implementing Technical Standards on institutions' public disclosures of the information referred to in Titles II and III of Part Eight of Regulation (EU) No 575/2013', as amended by Regulation (EU) 2019/876, in effect at the reporting date. The disclosures included in this report reflect the Bank's interpretation of the current rules and guidance.

See 'Application of the Basel framework' on page 9 for a more detailed description.

Basis of preparation

Under Article 13 of the CRR a "large subsidiary" of an EU parent institution is required to make certain disclosures from Part Eight of the CRR. As at 31 December 2021, the reference date of this report, BBI met the criteria of a large subsidiary; total assets in excess of €30 billion.

The European Central Bank ('ECB') has designated the Bank (i) as a "Significant Institution" and (ii) as an "Other-Systemically Important Institution ("O-SII) by the Central Bank of Ireland ('CBI'). Therefore, it has decided, in the interests of transparency, to make disclosures over and above those required by Article 13 of the CRR.

Disclosure of exposures subject to measures applied in response to the COVID-19 crisis

In response to the COVID-19 pandemic, the EBA introduced three new tables (40, 41 and 42) per the EBA guidelines (EBA/GL/2020/07) published in June 2020, which introduced additional disclosure requirements in relation to the application of payment moratoria to existing loans as well as new lending subject to public guarantees schemes.

Recovery and resolution

The CBI and the ECB require the Bank to submit a standalone Bank Recovery and Resolution Directive[2] ('BRRD')-compliant recovery plan on an annual basis.

The Bank, as a significant institution under the Single Resolution Mechanism Regulations ('SRMR'), is subject to the powers of the Single Resolution Board (SRB') as the Eurozone resolution authority. The SRB has the power to require data submissions specific to the Bank under powers conferred upon it by the BRRD and the SRMR.

The SRB will exercise these powers to determine the optimal resolution strategy for the Bank in the context of the Bank of England's preferred resolution strategy (as home regulator of the Barclays Group) of single point of entry with bail-in at B PLC. The SRB also has the power under the BRRD and the SRMR to develop a resolution plan for the Bank.

Disclosure of Non-performing exposure (NPEs) and forborne exposure

This report includes five tables (35-39) introduced to improve the uniform disclosure format for information on NPEs, forborne exposures and foreclosed assets.

Key changes in the 2021 Pillar 3 Report

Regulatory updates

Following the application of CRR amending regulation (EU) 2019/876 ('CRR II') the following reporting changes were implemented from June 2021:

- The introduction of a minimum leverage ratio of 3%
- Net Stable Funding ratio (NSFR), long term liquidity ratio
- A new Standardised Approach for Counterparty Credit Risk (SA-CCR) for computing the exposure value of derivative exposures
- Reporting under the standardised approach for market risk
- New limits for large exposures (equal to or exceeds 10% of Tier 1 capital)
- The IFRS 9 transitional arrangements have been extended by two years and a new modified calculation has been introduced allowing 100% relief throughout 2020 and 2021 on increases in stage 1 and stage 2 provisions from 1 January 2020 throughout 2020 and 2021; 75% in 2022; 50% in 2023; 25% in 2024 with no relief applied from 2025.

The phasing out of transitional relief on the "day 1" impact of IFRS 9 as well as increases in stage 1 and stage 2 provisions between 1 January 2018 and 31 December 2019 under the modified calculation remain unchanged and continue to be subject to 70% transitional relief throughout 2020; 50% for 2021; 25% for 2022 and with no relief applied from 2023. Also impacting own funds from 30 June 2020 until 31 December 2020 inclusive are amendments to the regulatory technical standards on prudential valuation which include an increase to diversification factors applied to certain additional valuation adjustments.

Minimum requirements for own funds and eligible liabilities (MREL)

CRR II requirements relating to own funds and eligible liabilities came into force from 27 June 2019, which amended CRR. The Bank is required to meet at all times a Minimum requirement for own funds and eligible liabilities ("MREL") which ensures that it has sufficient loss absorbing capacity in resolution to avoid recourse to taxpayers' money.

Instruments which qualify for MREL are own funds (Common Equity Tier 1, Additional Tier 1 and Tier 2) and certain eligible liabilities, mainly plain-vanilla unsecured bonds.

On 22 February 2021 the SRB notified the Bank that individual MREL requirements had been set on an interim basis, effective 1 January 2022, with end state requirements to be met from 1 January 2024.

The Bank also became subject to Total Loss Absorption Capacity (TLAC) requirements from 1 January 2021 as a result of becoming a material EU subsidiary of a non EU Global Systemically Important Bank (G-SIB) following withdrawal of the UK from the EU.

TLAC requirements are subject to a scalar and are set at 90% of the G-SIB's' TLAC requirements. Both MREL and TLAC requirements include both risk based and leverage exposure based requirements.

[2] The European Union (Bank Recovery and Resolution) Regulations 2015 (S.I. No 289 of 2015) transposed Directive 2014/59/EU into Irish law and came into effect on 15 July 2015 (with the exception of the bail-in tool which came into effect on 1 January 2016).

Presentation of risk data in the Pillar 3 disclosures versus the Annual Report and Accounts

This document discloses BBI's assets in terms of exposures and capital requirements. For the purposes of this document:

Credit losses

Impairment or losses disclosed within this document have followed the IFRS definitions used in the Annual Report.

Scope of application

Where this document discloses credit exposures or capital requirements, BBI has followed the scope and application of its Pillar 1 capital adequacy calculations (unless noted otherwise).

Definition of credit exposures

Credit exposure, or 'Exposure at Default' (EAD) is defined as the estimate of the amount at risk in the event of a default (before any recoveries) or through the decline in value of an asset. This estimate takes account of contractual commitments related to undrawn amounts.

In contrast, an asset in BBI's balance sheet is reported as a drawn balance only. This is one of the reasons why exposure values in the Pillar 3 report will differ from asset values as reported in the Annual Report.

Validation and sign-off

For the year ended 31 December 2021, the Bank has operated a framework of disclosure controls and procedures in place to support the approval of the Bank's Pillar 3 disclosure.

See 'Appendix D for a reference to BBI compliance with the CRD V.

The Bank is committed to operating within a strong system of internal controls. A framework of disclosure controls and procedures are in place to support the approval of the entity's external financial disclosures. A governance committee is responsible for reviewing the Bank's regulatory reports and disclosures such as this Pillar 3 report to ensure that they have been prepared in line with their relevant internal control frameworks.

This governance process is in place to provide both management and the Board with sufficient opportunity to debate and challenge the Bank's disclosures before they are made public.

" We confirm that BBI's Pillar 3 disclosures, to the best of our knowledge, comply with Part Eight of the CRR and have been prepared in compliance with the Bank's internal control framework."

Rhys Kiff

Chief Risk Officer

Jasper Hanebuth

Chief Financial Officer

Scope of Application of Basel Rules

Tables 1 and 2 show the scope of permissions and calculation approaches that summarises the various approaches to calculate RWAs, and BBI's permission to use them.

Table 3 and 4 show the mapping of financial statement categories to regulatory risk types and a reconciliation of financial statement carrying values against regulatory exposures.

Table 10 shows how IFRS balances contribute to the regulatory scope of consolidation on a line-by-line basis.

This section explains the scope of application of Basel rules in relation to capital adequacy.

Application of the Basel framework

Overview of Pillar 3

The Pillar 3 requirements as defined by the Basel Committee have been implemented by the EU as part of the Capital Requirement Regulation and Capital Requirement Directive, ('CRR' and 'CRD V')

The framework is made up of three pillars:

Pillar 1:

covers the calculation of risk weighted assets for credit risk, counterparty credit risk, market risk and operational risk

Pillar 2:

covers the consideration of whether additional capital is required over and above the Pillar 1 risk calculations. A firm's own internal models and assessments support this process

Pillar 3:

covers external communication of risk and capital information by banks as specified in the Basel rules to promote transparency and good risk management

Pillar 3 requires the disclosure of exposures and associated risk weighted assets for each risk type and approach to calculating capital requirements for Pillar 1.

Distinct regulatory capital approaches are followed for each of the following risk and exposure types:

- credit risk (including certain non-traded equity exposures)
- counterparty credit risk ('CCR')
- credit valuation adjustment ('CVA')
- market risk
- securitisations
- operational risk.

Approaches to calculating capital requirements under CRD V and the Capital Requirements Regulations (CRR)

Calculation of capital for credit risk

The credit risk weighted assets calculation is based on an estimate of the Exposure at Default (EAD). In addition, where the Bank has the necessary regulatory permissions, it estimates Probabilities of Default (PD) and Loss Given Default (LGD):

- Standardised approach: assesses capital requirements using standard industry-wide risk weightings based on a detailed classification of asset types, ratings and maturity
- Internal Ratings-Based approach (IRB): assesses capital requirements using the Bank's specific data and internal models to calculate risk weightings. As such, internal calculations of PD, LGD and credit conversion factors are used to model risk exposures.

See page 36 for more details on capital requirements for credit risk.

Calculation of capital for counterparty credit risk

CCR differs from credit risk, above, in how the EAD is calculated and applies to derivative and securities financing transaction (SFT) exposures. It arises where a counterparty default may lead to losses of an uncertain nature as the values of any resulting claims are market driven. This uncertainty is factored into the valuation of the Bank's credit exposure arising from such transactions. BBI uses three methods under the regulatory framework to calculate CCR exposure:

- the new Standardised Approach for Counterparty Credit Risk (SA-CCR) for computing the exposure value of derivative exposures, using a more risk sensitive approach than previous standardised approaches
- the Internal Model Method ('IMM'), subject to regulatory approval, allows the use of internal models to calculate an effective expected positive exposure (EEPE), multiplied by a factor stipulated by the regulator called alpha. For the Bank this is set at 1.4. BBI uses this approach for certain derivatives and SFT exposures
- the Financial Collateral Comprehensive Method (FCCM), which is the net position of SFT exposures after the application of volatility adjustments prescribed by CRR.

See page 59 for more details on capital requirements for counterparty credit risk exposures.

Calculation of credit valuation adjustment capital charge

The CVA is the capital charge accounting for potential MTM losses due to credit quality deterioration of a counterparty (that does not necessarily default). Two approaches can be used to calculate the adjustment:

- Standardised approach: takes account of the external credit rating of each counterparty, EAD from the CCR calculation (outlined above) and the effective maturity
- Advanced approach: this approach requires the calculation of the charge as; a) a 10-day 99% value at risk (VaR) measure for the current one-year period; and b) the same measure for a stressed period. The sum of the two VaR measures is multiplied with the relevant multiplication factor, based on the number of market risk back-testing exceptions for the most recent 250 business days, to yield the capital charge.

See page 67 for more details on CVA

Calculation of capital for market risk

Risk weighted assets calculations for market risk assess the losses from extreme movements in the prices of financial assets and liabilities:

- Standardised approach: a calculation is prescribed that depends on the type of contract, the net position at portfolio level, and other inputs that are relevant to the position. For instance, for equity positions a general market risk component captures changes in the market (systematic risk), while specific market risk is calculated based on features of the specific security (idiosyncratic risk)
- Model-based approach: with their regulator's permission, firms can use proprietary value at risk (VaR) models to calculate capital requirements. Under the Basel framework, stressed VaR, incremental risk charge and all-price risk models must also be used to ensure that sufficient levels of capital are maintained.

See page 73 for more details on capital requirements for market risk.

Calculation of capital for operational risk

Capital set aside for operational risk is deemed to cover the losses or costs resulting from human factors, inadequate or failed internal processes and systems or external events.

To assess capital requirements for operational risk, the Standardised approach (TSA) is applied by the Bank, where the capital requirement is calculated as a percentage of the income. Typically a credit institution will use an average of three years of historical income. However, as the Bank is going through a transition phase, BBI's historical income would not be representative. Therefore the Bank has received permission from the ECB under Article 317, paragraph 4 to use:

- an average of three years of historical income for those business lines where that historical income can be clearly identified, for example the Barclaycard Germany business which was previously booked in BBPLC; or
- for those business lines where historical income is not clearly identifiable, for example from the Bank's Markets business, a combination of historical and forecast income as outlined within the BBI addendum to the Operational Risk TSA Regulatory Capital Requirement.

Application of the Basel framework

For 2021, projected income was used which were based off projections from the 2020 Medium Term Plan (MTP).

See page 80 for more details on capital requirements for operational risk.

Calculation of capital for large exposures

BBI has not exceeded the large exposure limit set in CRR and, as such, no capital charge applies.

Regulatory minimum capital and leverage requirements

Capital & Leverage

BBI is required to maintain a CET1 ratio comprising:

- a Pillar 1 requirement of 4.5%;
- a Pillar 2 requirement (P2R) of 3% of Risk Weighted Assets (RWAs) plus an 'execution risk' add-on, related to the transfer of activities from the Bank's parent to BBI, of the higher of €100 million or 0.3% of RWAs; and
- a combined buffer requirement.

The combined buffer requirement as at 31 December 2021 includes a capital conservation buffer (CCB) of 2.5%, a countercyclical buffer (CCyB) requirement of 0.0% and an O-SII capital buffer of 0.75%. National authorities determine the appropriate countercyclical buffer that should be applied to exposures in their jurisdiction. As at 31 December 2021, the CBI had set a countercyclical buffers of 0% for Irish exposures.

BBI's P2R and O-SII buffer requirements are subject to annual review by the Single Supervisory Mechanism (SSM) and CBI respectively. The current P2R requirement as per the Joint Risk Assessment and Decision (JRAD) Process between the Central Bank of Ireland and Prudential Regulation Authority is based on a point in time assessment.

The European Commission introduced a binding leverage requirement of 3% effecting from 28 June 2021.

Future reporting BCBS Standards

In December 2017, the BCBS finalised 'Basel III' (the BCBS international regulatory framework for banks), with the majority of the December 2017 changes expected to be implemented by 1 January 2023. In 2020, the Basel Committee's oversight body, the Group of Central Bank Governors and Heads of Supervision, endorsed a proposal to defer the final implementation until this date in 2023 to provide additional operational capacity for banks and supervisors to respond to the financial stability priorities resulting from the impact of the coronavirus disease (COVID-19) on the global banking system.

The BCBS's finalisation of Basel III, noted above, among other things, eliminates model-based approach for categories of risk-weighted assets (RWAs), for example:

- operational risk RWAs,
- CVA volatility and
- credit risk RWAs for equity exposures.

The framework revises risk weights under the standardised approach for a variety of exposure categories, replaces the four current approaches for operational risk (including the advanced measurement approach) with a single standardised measurement approach and establishes 72.5% of standardised approach RWAs for exposure categories as a floor for RWAs calculated under advanced approaches (referred to as the "output floor"), with a five-year phase-in period. The end of the five year phase in period has also been extended by one year.

In January 2019, the BCBS issued an update to the new market risk framework, including rules made as a result of its "fundamental review of the trading book" (FRTB). In November 2016 the European Commission adopted a proposal (commonly referred to as CRD V) to begin the legislative process for introducing these standards within the EU.

The implementation of the FRTB framework in the EU will take place over two phases. The first phase introduced a binding reporting requirement by banks to their supervisor for the standardised approach (FRTB-SA). This was introduced from Q3 2021 and is mandatory for all banks with trading activity above a certain level. In terms of the second phase, the CRR has since now been amended to reflect the revised FRTB standards from 2019, with a proposal to move to binding capital requirements for market risk and CVA, which would come into force on 1 January 2025. This timeline diverges with the BCBS proposal of 1 January 2024. Additionally, the amendments include a provision that allows the European Commission to amend the market risk capital calculation approaches if there are any major discrepancies with other major jurisdictions, by 31 March 2024.

CRD V also proposes to require that where:

(i) two or more credit institutions or investment firms established in the EU have a common parent undertaking established outside the EU, and

(ii) the group has been identified as a G-SIB or has entities in the EU (whether subsidiaries or branches) with total assets of at least €30 billion:

the group must establish an intermediate parent undertaking ('IPU'), authorised and established in, and subject to the supervision of, an EU member state. Political agreement permitting two IPUs, where structural reform within the head office jurisdiction would not enable a single IPU to operate, was agreed in December 2018.

The Bank has reviewed these requirements and considers itself to be out of scope for the creation of an IPU.

Scope of permission for calculation approaches

BBI seeks permission from its regulators to use modelled approaches where possible, to enable risk differentiation.

The Bank has permission to use the Internal Model Method (IMM) to calculate its counterparty credit risk exposures. The permission is comprehensive and applies to the majority of its trades and portfolios.

Scope of permission for calculation approaches

Table 1: The scope of the Standardised and IRB approaches for credit and counterparty credit risk excluding CVA

	Credit risk(see Table 22)			Counterparty credit risk excl. CVA (see Table 43)			Advanced Internal Ratings Based (IRB) approaches	Standardised approach
As at 31 December 2021	RWA	Average risk weight	EAD post-CRM	RWA	Average risk weight	EAD post-CRM		
	€m	€m	€m	€m	€m	€m		
	16,329	32 %	50,895	5,632	49 %	11,582	• Counterparty credit risk exposures • Germany retail credit cards • Italy home loans	• Most investment bank portfolios • High quality liquidity pool assets • European corporate portfolio • Germany retail consumer loans

The Bank has permission to use the Internal Model Method (IMM) to calculate its counterparty credit risk exposures. The permission is comprehensive and applies to the majority of its trades and portfolios.

Table 2: Summary of the scope of application of regulatory methodologies for CVA, market and operational risk

As at 31 December 2021

Risk Type	RWAs €m	Scope
Credit value adjustment	2,125	BBI calculates Credit Valuation Adjustment (CVA) risk for all contracts in scope as defined by article 382 of the Capital Requirements Regulation. BBI has permission to use an internal model for the specific risk of debt instruments and therefore is allowed to use the Advanced method for CVA for such instruments where applicable. The Standardised method for CVA is used otherwise.
Market risk	5,532	As explained on page 114 and following pages, the risk of loss from changes in the prices of assets in the trading book are captured by a combined RWA calculation for general and specific market risks. The regulatory permission for BBI to use models mirrors that of Barclays Group via agreed temporary tolerance; see Table 11 on page 23 for capital requirements related to each approach and risk category. BBI has regulatory approval for VaR modelling for general market risk, which is designed to capture the risk of loss arising from changes in market interest rates, along with the risk of losses arising from changes in foreign exchange rates, and equity prices. The capital charge for specific market risk is designed to protect against losses from adverse movements in the price of an individual security owing to factors related to the individual issuer. BBI has permission to model specific market risk, including credit spread, migration, and default risks and product types. Where BBI does not have permission to use a model, the Standardised Approach is applied.
Operational risk	2,165	BBI applies the Standardised Approach (TSA) for operational risk regulatory capital purposes.

Linkage between financial statements and regulatory risk

Table 3: LI1 – Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories

This table shows an outline of the differences in the basis of consolidation for accounting and regulatory purposes. It provides an allocation of the balance sheet line items reported under the scope of regulatory consolidation between the different regulatory risk frameworks. Information regarding the market risk valuation methodologies, independent price verifications process and procedures for valuation adjustments or reserves can be found in the Management of Market risk section from page 114.

As at 31 December 2021	Carrying values as reported in published financial statements €m	Carrying values under scope of regulatory consolidation[a] €m	Subject to the credit risk framework €m	Subject to the CCR framework €m	Subject to the securitisation framework €m	Subject to the market risk framework €m	Not subject to capital requirements or subject to deduction from capital[b] €m
Assets							
Cash and balances at central banks	24,125	24,125	24,125	—	—	—	—
Cash collateral and settlement balances	17,651	17,651	26	13,707	—	—	3,918
Loans and advances at amortised cost	13,986	13,986	13,794	—	192	—	—
Reverse repurchase agreements and other similar secured lending	3,228	3,228	—	3,228	—	—	—
Trading portfolio assets	8,204	8,204	226	—	—	7,978	—
Financial assets at fair value through the income statement	15,352	15,352	352	14,648	—	15,001	—
Derivative financial instruments	33,875	33,875	—	33,875	—	33,808	—
Financial assets at fair value through other comprehensive income	—	—	—	—	—	—	—
Investments in associates and joint ventures	—	—	—	—	—	—	—
Goodwill and intangible assets	59	59	—	—	—	—	59
Property, plant and equipment	90	90	90	—	—	—	—
Current tax assets	27	27	27	—	—	—	—
Deferred tax assets	178	178	178	—	—	—	—
Retirement benefit assets	—	—	—	—	—	—	—
Other assets	337	337	337	—	—	—	—
Total assets	117,112	117,112	39,155	65,458	192	56,787	3,977
Liabilities							
Deposits at amortised cost	25,634	25,634	—	—	—	—	25,634
Cash collateral and settlement balances	17,125	17,125	—	14,895	—	—	2,229
Repurchase agreements and other similar secured borrowing	3,596	3,596	—	646	—	—	2,950
Debt securities in issue	3,397	3,397	—	—	—	—	3,397
Subordinated liabilities	3,171	3,171	—	—	—	—	3,171
Trading portfolio liabilities	10,286	10,286	—	—	—	10,286	—
Financial liabilities designated at fair value	13,843	13,843	—	9,803	—	13,688	155
Derivative financial instruments	33,517	33,517	—	33,517	—	33,268	—
Current tax liabilities	32	32	—	—	—	—	32
Deferred tax liabilities	—	—	—	—	—	—	—
Retirement benefit liabilities	21	21	—	—	—	—	21
Other liabilities	512	512	—	—	—	—	512
Provisions	79	79	—	—	—	—	79
Total liabilities	111,213	111,213	—	58,861	—	57,242	38,180

Notes:

The following points should be considered in conjunction with table LI1:

a The balances shown in column "Carrying values under the scope of regulatory consolidation" do not equal the sum of those in the columns relating to the regulatory framework, as certain assets can be in scope for more than one regulatory framework. As such, assets included in line items for "Reverse repurchase agreements and other similar secured lending", "Financial assets at fair value through the income statement", and "Derivative financial instruments", can be subject to credit risk, counterparty credit risk and market risk

b For liabilities, balances shown in column "Not subject to capital requirements or subject deduction from capital" are balancing amounts so that the "Carrying values under scope of regulatory consolidation" at least equals the sum of those in the columns relating to the regulatory framework.

Linkage between financial statements and regulatory risk

Table 4: LI2 – Main sources of differences between regulatory exposure amounts and carrying values in financial statements

This table provides a reconciliation between assets carrying values under the regulatory scope of consolidation as per Table 3 and the exposures used for regulatory purposes, split as per regulatory risk framework.

Off-balance-sheet amounts: Under the credit risk framework, these balances principally consist of undrawn credit facilities after the application of Credit Conversion Factors (CCF). Under the counterparty credit risk framework, the off-balance-sheet items consist of the exposure due to collateral given in SFTs.

Difference in netting rules: This reflects the effects of master netting agreements in addition to the netting permitted under International Accounting Standards (IAS) framework.

Differences due to consideration of provisions: The carrying value of assets is net of impairment. The regulatory exposure calculated under AIRB approach adds back the impairments.

Differences between input balance and modelled regulatory output: The assets carrying values as defined per IFRS differ from the values used for regulatory reporting purposes, this reflects the modelling of exposures such as use of IMM.

As at 31 December 2021	Total €m[a]	Subject to the credit risk framework €m	Subject to the CCR framework €m	Subject to the securitisation framework €m
Assets carrying value amount under the scope of regulatory consolidation (as per template LI1)	104,805	39,155	65,458	192
Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	(58,863)	—	(58,863)	—
Total net amount under the regulatory scope of consolidation	45,942	39,155	6,595	192
Off-balance-sheet amounts[b]	83,190	19,656	49,625	—
Differences due to different netting rules	(50,298)	—	(50,298)	—
Differences due to consideration of provisions	213	213	—	—
Differences between input balance and modelled regulatory output	7,457	1,569	5,888	—
Regulatory exclusion –CCP trades for a client where Barclays acts as clearing member on behalf of a counterparty	(236)	—	(236)	—
Other	585	585	—	—
Exposure amounts considered for regulatory purposes	86,853	61,178	11,574	192

Notes:
The following points should be considered in conjunction with table LI2:

a The total column cannot be directly reconciled back to the carrying values under scope of consolidation shown in Table 3 - LI1, as it excludes balances "subject to the market risk framework" and items "not subject to capital requirements or subject to deduction from capital".

b In line item "Off-balance sheet amounts", the amounts shown in the Total column, which relates to exposures pre-CCF, do not equal the sum of the amounts shown in the remaining columns, as these are post-CCF

Analysis of treasury and capital risk

This section details BBI's capital position providing information on capital resources and requirements, own funds and eligible liabilities, leverage and liquidity.

Key Metrics

2021 Common Equity Tier 1 ratio

16.1%

2020: 16.6%

2021 CRR leverage ratio

6.7%

2020: 6.3%[1]

2021 Liquidity coverage ratio

171%

2020: 218%

1 2020 leverage ratio disclosed on fully phased in basis, 2021 is disclosed on transitional basis.

Analysis of treasury and capital risk

Table 5: KM1 - Key metrics

This table shows key metrics and their components on a transitional basis as at 31 December 2021.

	Key metrics	As at 31 December 2021	As at 30 September 2021	As at 30 June 2021
		€m	€m	€m
Available own funds (amounts)				
1	Common Equity Tier 1 (CET1)	5,182	4,718	4,218
2	Tier 1	5,987	5,523	4,883
3	Total capital	6,867	6,404	5,763
Risk-weighted exposure amounts (RWEA)				
4	Total risk-weighted assets (RWEA)	32,120	30,679	28,038
Capital ratios (as a percentage of RWEA)				
5	Common Equity Tier 1 ratio (%)	16.1 %	15.4 %	15.0 %
6	Tier 1 ratio (%)	18.6 %	18.0 %	17.4 %
7	Total capital ratio (%)	21.4 %	20.9 %	20.6 %
Additional own funds requirements to address risks other than the risk of excessive leverage (as a percentage of risk-weighted exposure amount)				
EU 7a	Additional own funds requirements to address risks other than the risk of excessive leverage (%)	3.3 %	3.3 %	3.4 %
EU 7b	of which: to be made up of CET1 capital (%)	1.9 %	1.9 %	1.9 %
EU 7c	of which: to be made up of Tier 1 capital (%)	2.5 %	2.5 %	2.5 %
EU 7d	Total SREP own funds requirements (%)	11.3 %	11.3 %	11.4 %
Combined buffer requirement (as a percentage of RWEA)				
8	Capital conservation buffer (%)	2.5 %	2.5 %	2.5 %
EU 10a	Other Systemically Important Institution buffer	0.8 %	0.8 %	0.5 %
11	Combined buffer requirement (%)	3.3 %	3.3 %	3.1 %
EU 11a	Overall capital requirements (%)	14.6 %	14.6 %	14.4 %
12	CET1 available after meeting the total SREP own funds requirements	3,138	3,292	3,053
Leverage ratio				
13	Leverage ratio total exposure measure	89,998	98,117	93,036
13a	Fully loaded leverage ratio total exposure measure	89,957	98,071	92,982
14	Leverage ratio	6.7 %	5.6 %	5.4 %
14a	Fully loaded leverage ratio	6.6 %	5.6 %	5.3 %
Additional own funds requirements to address the risk of excessive leverage (as a percentage of total exposure measure)				
EU 14c	Total SREP leverage ratio requirements (%)	3.3 %	3.4 %	3.3 %
Leverage ratio buffer and overall leverage ratio requirement (as a percentage of total exposure measure)				
EU 14e	Overall leverage ratio requirements (%)	3.3 %	3.4 %	3.3 %
Liquidity Coverage Ratio				
15	Total high-quality liquid assets (HQLA) (Weighted value - average)	23,603	22,744	22,065
EU 16a	Cash outflows - Total weighted value	21,846	20,209	18,568
EU 16b	Cash inflows - Total weighted value	7,986	7,459	6,729
16	Total net cash outflows (adjusted value)	13,860	12,750	11,839
17	Liquidity coverage ratio (%)(average)[a]	170 %	180 %	188 %
17a	Liquidity coverage ratio (%) (spot)	171 %	175 %	168 %
Net Stable Funding Ratio				
18	Total available stable funding	30,356	28,550	26,068
19	Total required stable funding	20,545	18,903	17,774
20	NSFR ratio (%)	148 %	151 %	154 %

Notes:
a Liquidity Coverage Ratio (%) (average) was calculated as a simple average of month-end LCR observations over the previous twelve months.

Analysis of treasury and capital risk

Table 5: KM1 - Key metrics continued

	Key Metrics	As at 31 December 2020[e]
		€m
Available capital (amounts)		
1	Common Equity Tier 1 (CET1) [a]	3,927
1a	Fully loaded Expected Credit Loss (ECL) accounting model [b]	3,808
2	Tier 1	4,492
2a	Fully loaded ECL accounting model Tier 1	4,373
3	Total capital	5,208
3a	Fully loaded ECL accounting model total capital	5,108
Risk-weighted assets (amounts)		
4	Total risk-weighted assets (RWA) [a]	23,717
4a	Fully loaded ECL accounting model total risk-weighted assets (RWA) [b]	23,611
Risk-based capital ratios as a percentage of RWA		
5	Common Equity Tier 1 ratio (%)	16.6 %
5a	Fully loaded ECL accounting model Common Equity Tier 1 (%)	16.1 %
6	Tier 1 ratio (%)	18.9 %
6a	Fully loaded ECL accounting model Tier 1 ratio (%)	18.5 %
7	Total capital ratio (%)	22.0 %
7a	Fully loaded ECL accounting model total capital ratio (%)	21.6 %
Additional CET1 buffer requirements as a percentage of RWA		
8	Capital conservation buffer requirement (%)	2.5%
9	Countercyclical buffer requirement (%)	0.2%
10	Bank O-SII buffer requirements (%) [c]	0.5%
11	Total of bank CET1 specific buffer requirements (%) (row 8 + 9 + 10)	3.2%
12	CET1 available after meeting the bank's minimum capital requirements (%)	7.2%
CRR leverage ratio		
13	Total CRR leverage ratio exposure measure	69,562
14	Fully loaded CRR leverage ratio (%) [d]	6.3 %
Liquidity Coverage Ratio		
15	Total HQLA	21,007
16	Total net cash outflows	9,631
17	LCR ratio (%)	218%

Notes:

a CET1 capital and RWAs for 31 December 2020 are calculated applying the IFRS9 transitional arrangements of the CRR as amended by the CRR II applicable as at the reporting date.

b Fully loaded CET1 capital and RWAs for 31 December 2020 are calculated without applying the transitional arrangements of the CRR as amended by the CRR II applicable as at the reporting date.

c The Bank was categorised as an O-SII or "Other Systemically Important Institution" on 2 December 2019 and is a subject to an O-SII Buffer of 0.5% from 1 July 2020, rising to 0.75% on 1 July 2021 and to 1.0% from 1 July 2022.

d Fully loaded CRR Leverage Ratio for 31 December 2020 is calculated without applying the transitional arrangements of the CRR as amended by the CRR II applicable as at the reporting date.

e Transitional Capital Amounts (rows 1, 2 and 3) and Transitional Capital Ratios (rows 5, 6 and 7) for 31 December 2020 have been restated to reflect a correction (a reduction of €28 million) to the dynamic element of the IFRS9 transitional relief at that date.

Analysis of treasury and capital risk

Table 6: iLAC - Internal loss absorbing capacity: internal MREL and, where applicable, requirement for own funds and eligible liabilities for non-EU G-SIIs

The Bank is a material subsidiary of a Non-EU Globally Systemic International Institution, i.e. the Barclays Group, therefore it is subject to Article 92b of the Capital Requirements Regulation to satisfy at all times 90% of the own funds and eligible liabilities requirement in Article 92a. This requirement is applicable on an individual basis.

iLAC		Minimum requirement for own funds and eligible liabilities (internal MREL)	Non-EU G-SII requirement for own funds and eligible liabilities (internal TLAC)
As at 31 December 2021		€m	€m
Own funds and eligible liabilities			
EU-3	Common Equity Tier 1 capital (CET1)	5,182	5,182
EU-4	Eligible Additional Tier 1 instruments	805	805
EU-5	Eligible Tier 2 instruments	881	881
EU-6	Eligible own funds	6,867	6,867
EU-7	Eligible liabilities	2,275	2,275
EU-8	Of which permitted guarantees	—	
EU-9a	(Adjustments)	—	
EU-9b	Own funds and eligible liabilities items after adjustments	9,142	9,142
Total risk exposure amount and total exposure measure			
EU-10	Total risk exposure amount (TREA)	32,120	32,120
EU-11	Total exposure measure	89,998	89,998
Ratio of own funds and eligible liabilities			
EU-12	Own funds and eligible liabilities (as a percentage of TREA)	28.46 %	28.46 %
EU-13	of which permitted guarantees	—	
EU-14	Own funds and eligible liabilities (as a percentage of leverage exposure)	10.16 %	10.16 %
EU-15	of which permitted guarantees	—	
EU-16	CET1 (as a percentage of TREA) available after meeting the entity's requirements	3.51 %	3.51 %
EU-17	Institution-specific combined buffer requirement		3.29 %
Requirements			
EU-18	Requirement expressed as a percentage of the total risk exposure amount	20.45 %	16.20 %
EU-19	of which may be met with guarantees	—	
EU-20	Internal MREL expressed as percentage of the total exposure measure	5.93 %	6.08 %
EU-21	of which may be met with guarantees	—	
Memorandum items			
EU-22	Total amount of excluded liabilities referred to in Article 72a(2) CRR		**42,497**

Analysis of treasury and capital risk

Table 7: TLAC2 - Creditor ranking - Entity that is not a resolution entity

This table shows the nominal values of Barclays Bank Ireland PLC's capital and liabilities and the position in creditor hierarchy..

		Insolvency ranking								
		1 (most junior)	2	3	3	5	6	11 (most senior)	11 (most senior)	Total
		resolution entity	resolution entity	resolution entity	other	other	other	resolution entity	other	
As at 31 December 2021		€m	€m	€m	€m	€m	€m	€m	€m	€m
2	Description of insolvency rank	Equity	Subordinated Claims	Unsecured claims	Unsecured claims	Certain deposit claims	Certain claims owing by preferential creditors	Certain claims owing by preferential creditors	Claims secured by fixed security, financial collateral arrangements or where a right or set-off / netting arises	
3	Liabilities and own funds including derivative liabilities	5,182	3,961	4,387	40,173	2,404	996	12,644	47,410	117,156
4	o/w excluded liabilities	—	—	4,314	21,786	—	32	8,000	18,537	52,669
5	Liabilities and own funds less excluded liabilities	5,182	3,961	73	18,387	2,404	964	4,644	28,873	64,486
6	Subset of liabilities and own funds less excluded liabilities that are own funds and eligible liabilities for the purpose of internal MREL	5,182	3,961	—	—	—	—	—	—	9,142
7	o/w residual maturity ≥ 1 year < 2 years	—	—	—	—	—	—	—	—	—
8	o/w residual maturity ≥ 2 year < 5 years	—	125	—	—	—	—	—	—	125
9	o/w residual maturity ≥ 5 years < 10 years	—	2,345	—	—	—	—	—	—	2,345
10	o/w residual maturity ≥ 10 years, but excluding perpetual securities	—	700	—	—	—	—	—	—	700
11	o/w perpetual securities	5,182	805	—	—	—	—	—	—	5,987

Analysis of treasury and capital risk

Table 8: CC1 – Composition of regulatory own funds

This table shows the components of regulatory capital presented on both a transitional and fully loaded basis as at 31 December 2021.

CC1			Transitional approach	Fully loaded approach
As at 31 December 2021		Ref†	€m	€m
Common Equity Tier 1 (CET1) capital: instruments and reserves				
1	Capital instruments and the related share premium accounts	*a*	3,247	3,247
2	Retained earnings	*d*	(85)	(85)
3	Accumulated other comprehensive income (and other reserves)	*c, d*	1,702	1,702
EU-5a	Independently reviewed interim profits net of any foreseeable charge or dividend		235	235
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**		5,099	5,099
Common Equity Tier 1 (CET1) capital: regulatory adjustments				
7	Additional value adjustments (negative amount)		(33)	(33)
8	Intangible assets (net of related tax liability) (negative amount)	*e*	(43)	(43)
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	*c*	14	14
12	Negative amounts resulting from the calculation of expected loss amounts		(44)	(44)
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	*c*	138	138
27a	Other regulatory adjustments [h]	*g*	51	—
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**		83	32
29	**Common Equity Tier 1 (CET1) capital**		5,182	5,130
Additional Tier 1 (AT1) capital: instruments				
30	Capital instruments and the related share premium accounts	*b*	805	805
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**		805	805
Additional Tier 1 (AT1) capital: regulatory adjustments				
44	**Additional Tier 1 (AT1) capital**		805	805
45	**Tier 1 capital (T1 = CET1 + AT1)**		5,987	5,935
Tier 2 (T2) capital: instruments				
46	Capital instruments and the related share premium accounts	*f*	895	895
51	**Tier 2 (T2) capital before regulatory adjustments**		895	895
Tier 2 (T2) capital: regulatory adjustments				
56b	Other regulatory adjustments to T2 capital (including IFRS 9 transitional adjustments when relevant)		(14)	—
57	**Total regulatory adjustments to Tier 2 (T2) capital**		(14)	—
58	**Tier 2 (T2) capital**		881	895
59	**Total capital (TC = T1 + T2)**		6,867	6,830
60	**Total risk exposure amount**		32,120	32,078
Capital ratios and requirements including buffers				
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)		16.1 %	16.0 %
62	Tier 1 (as a percentage of total risk exposure amount)		18.6 %	18.5 %
63	Total capital (as a percentage of total risk exposure amount)		21.4 %	21.3 %
64	Institution CET1 overall capital requirement (CET1 requirement in accordance with Article 92 (1) CRR, plus additional CET1 requirement which the institution is required to hold in accordance with point (a) of Article 104(1) CRD, plus combined buffer requirement in accordance with Article 128(6) CRD) expressed as a percentage of risk exposure amount)		9.7 %	9.7 %
65	of which: capital conservation buffer requirement		2.5 %	2.5 %
EU-67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer		0.8 %	0.8 %
EU-67b	of which: additional own funds requirements to address the risks other than the risk of excessive leverage		1.9 %	1.9 %
68	**Common Equity Tier 1 available to meet buffer (as a percentage of risk exposure amount)**		9.8 %	9.8 %
Amounts below the thresholds for deduction (before risk weighting)				
72	Direct and indirect holdings of own funds and eligible liabilities of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)		56	56
75	Deferred tax assets arising from temporary differences (amount below 17.65% threshold, net of related tax liability where the conditions in Article 38 (3) are met)		80	80
Applicable caps on the inclusion of provisions in Tier 2				
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach		215	215
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach		28	28

Notes:
† The references (a) - (g) identify balance sheet components in Table 9: CC2 – Reconciliation of regulatory capital to balance sheet on page 20 which are used in the calculation of regulatory capital.
h. Other regulatory adjustments represent IFRS9 transitional relief.

Analysis of treasury and capital risk

Table 9: CC2 – Reconciliation of regulatory capital to balance sheet

This table shows that the accounting balance sheet and balance sheet per regulatory scope of consolidation are the same. The amounts shown are not a risk weighted asset measure; they are based on an accounting measure and cannot be directly reconciled to other tables in this report.

	Ref†	Accounting balance sheet per published financial statements and per regulatory scope of consolidation	
		As at 31 December 2021	As at 31 December 2020
		€m	€m
Assets			
Cash and balances at central banks		24,125	20,066
Cash collateral and settlement balances		17,651	19,061
Loans and advances at amortised cost		13,986	13,049
Reverse repurchase agreements and other similar secured lending		3,228	3,174
Trading portfolio assets		8,204	7,379
Financial assets at fair value through the income statement		15,352	14,749
Derivative financial instruments		33,875	56,842
Financial assets at fair value through other comprehensive income		—	—
Investments in associates and joint ventures		—	—
Goodwill and intangible assets		59	50
Of which: goodwill		—	—
Of which: other intangibles (excluding MSRs)	*e*	59	50
Property, plant and equipment		90	106
Current tax assets		27	6
Deferred tax assets	*g*	178	188
Retirement benefit assets		—	—
Other assets		337	267
Total assets		**117,112**	**134,937**
Liabilities			
Deposits at amortised cost		25,634	23,108
Cash collateral and settlement balances		17,125	19,432
Repurchase agreements and other similar secured borrowing		3,596	3,583
Debt securities in issue		3,397	2,297
Subordinated liabilities	*f*	3,171	1,061
Trading portfolio liabilities		10,286	7,771
Financial liabilities designated at FV		13,843	14,871
Derivative financial instruments		33,517	57,733
Current tax liabilities		32	7
Deferred tax liabilities		—	—
Retirement benefit liabilities		21	28
Other liabilities		512	416
Provisions		79	72
Total liabilities		**111,213**	**130,379**
Total Equity			
Called up share capital and share premium		3,247	2,282
Of which: amount eligible for CET1	*a*	3,247	2,282
Other equity instruments	*b*	805	565
Other reserves	*c*	(196)	(132)
Retained earnings	*d*	2,043	1,843
Total equity excluding non-controlling interest		5,899	4,558
Non-controlling interest		—	—
Total equity		**5,899**	**4,558**
Total liability and equity		**117,112**	**134,937**

Notes:
† The references (a) – (g) identify balance sheet components that are used in the calculation of regulatory capital in Table 8: CC1 – Composition of regulatory own funds on page 19.

Analysis of treasury and capital risk

IFRS 9 – Transitional capital arrangements

On 1 January 2018, IFRS 9 transitional capital arrangements were implemented by Regulation (EU) 2017/2395. The Bank elected to apply the transitional arrangements and will disclose both transitional and fully loaded CET1 ratios until the end of the transitional period. On 27 June 2020, CRR was further amended to extend the transitional period by two years and to introduce a new modified calculation.

The transitional arrangements, implemented under a modified static approach, allow for (i) transitional relief on the "day 1" impact on adoption of IFRS 9 (static element) and for (ii) transitional relief on the increase between "day 1" and the reporting date (modified element), subject to eligibility.

The transitional relief applied to the static element is phased out over a 5-year period with 95% applicable for 2018; 85% for 2019; 70% for 2020; 50% for 2021; 25% for 2022 and with no transitional relief from 2023.

The transitional relief applied to the modified element for increases between "day 1" and 31 December 2019 is phased out in line with the static element. From 27 June 2020, under new legislation, the transitional relief applied to the modified element for increases between 1 January 2020 and the reporting date is phased out over a 5 year period with 100% applicable for 2020 and 2021; 75% for 2022; 50% for 2023; 25% for 2024 and with no transitional relief from 2025.

For the static element, stage 1, stage 2 and stage 3 provisions are eligible for transition, whereas for the modified element, stage 3 provisions are excluded.

Total increases in impairment allowances as a result of IFRS 9, net of tax, decreases shareholders' equity through retained earnings and decreases standardised RWAs due to the increase in impairment being offset against the standardised Credit Risk exposures. This is somewhat reversed by the transitional relief applied on eligible impairment.

Separate calculations are performed for standardised and advanced IRB portfolios, reflecting the different ways these frameworks take account of provisions.

Under the standardised approach, increases in provisions for both the static and modified elements are eligible for transition. Under the advanced approach, for both the static and modified elements, provisions are only eligible for transitional relief to the extent that they exceed regulatory expected loss.

For advanced Internal Ratings Based (IRB) exposures, the calculation of capital takes account of the expected loss via a comparison with the impairment allowances. Where regulatory expected losses exceed impairment allowances, the shortfall is deducted from CET1 capital. Where the impairment allowance is higher than expected loss, the excess is added back to tier 2 capital and capped at an amount of 0.6% of IRB RWAs. For both the static and modified elements, provisions are only eligible for transitional relief to the extent that they exceed regulatory expected loss.

The DTAs created from the increase of impairment are also accounted for in the CET1 ratio. When DTAs arising from temporary differences are above the 10% CET1 capital threshold, any excess above the threshold is deducted and those below the threshold are risk weighted at 250% up to the point they reach the 10% CET1 capital threshold. DTAs that rely on future profitability excluding temporary differences are deducted from CET1 capital. To the extent that DTAs have arisen as a result of increases in eligible impairment, the impacts may also be reversed by the transitional relief applied.

Analysis of treasury and capital risk

Table 10: IFRS 9-FL – Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs

		As at 31 December 2021	As at 31 December 2020[e]
		€m	€m
	Available capital (amounts)		
1	Common Equity Tier 1 (CET1) capital[a]	5,182	3,927
2	Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	5,130	3,808
3	Tier 1 capital[b]	5,987	4,492
4	Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	5,935	4,373
5	Total capital[b]	6,867	5,208
6	Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	6,830	5,108
	Risk-weighted assets (amounts)		
7	Total risk-weighted assets[a]	32,120	23,717
8	Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	32,078	23,611
	Capital ratios		
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	16.1 %	16.6%
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	16.0 %	16.1%
11	Tier 1 (as a percentage of risk exposure amount)	18.6 %	18.9%
12	Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	18.5 %	18.5%
13	Total capital (as a percentage of risk exposure amount)	21.4 %	22.0%
14	Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	21.3 %	21.6%
	Leverage ratio		
15	Leverage ratio total exposure measure[c]	89,998	69,562
16	Leverage ratio[d]	6.7 %	6.3%
17	Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	6.6 %	6.3%

Notes:

a Transitional CET1 capital and RWAs are calculated applying the transitional arrangements of the CRR. This includes IFRS 9 transitional arrangements.
b Transitional T1 and Total capital are calculated applying the transitional arrangements of the CRR. This includes IFRS 9 transitional arrangements.
c Leverage ratio total exposure measure is calculated applying the transitional arrangements of the CRR for 2021, where previously it was calculated on a fully loaded basis for 2020.
d Leverage ratio is calculated applying the transitional treatment of the CRR.
e Transitional Capital Amounts (rows 1, 3 and 5), Transitional Capital Ratios (rows 9, 11 and 13) and Transitional Leverage Ratio (row 16) for 31 December 2020 have been restated to reflect a correction (a reduction of €28 million) to the dynamic element of the IFRS9 transitional relief at that date.

Analysis of treasury and capital risk

Table 11: Risk weighted assets by risk type and business

This table shows risk weighted assets by risk type.

	Credit risk		Counterparty credit risk					Securitisation risk			Market risk		Operational risk	Total RWAs
	Std	A-IRB	Std	A-IRB	CCP[a]	Settlement risk	CVA	Std	Deduction	A-IRB	Std	IMA	TSA	
	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
As at 31 December 2021	**11,988**	**4,312**	**5,544**	**369**	**38**	**13**	**2,125**	**29**	**5**	**—**	**38**	**5,494**	**2,165**	**32,120**
As at 31 December 2020	10,941	4,468	3,402	315	128	21	342	—	—	—	6	1,859	2,235	23,717

Note:

a Risk exposure amount for contributions to the default fund of a CCP.

Table 12: OV1 - Overview of risk weighted assets by risk type and capital requirements

The table shows RWAs, split by risk type and approach. For credit risk, RWAs are shown by credit exposure class.

		RWA	Capital requirements
	As at 31 December 2021	€m	€m
1	**Credit risk (excluding CCR)**	**16,300**	**1,304**
2	Of which the standardised approach	**11,988**	**959**
3	Of which the foundation IRB (FIRB) approach	**—**	**—**
4	Of which: slotting approach	**153**	**12**
EU 4a	Of which: equities under the simple riskweighted approach	**—**	**—**
5	Of which the advanced IRB (AIRB) approach	**4,159**	**333**
6	**Counterparty credit risk - CCR**	**8,076**	**646**
7	Of which the standardised approach	**307**	**25**
8	Of which internal model method (IMM)	**4,940**	**395**
EU 8a	Of which exposures to a CCP	**55**	**4**
EU 8b	Of which credit valuation adjustment - CVA	**2,125**	**170**
9	Of which other CCR[3]	**649**	**52**
15	**Settlement risk**	**13**	**1**
16	**Securitisation exposures in the non-trading book (after the cap)**	**34**	**3**
17	Of which SEC-IRBA approach	**—**	**—**
18	Of which SEC-ERBA (including IAA)	**—**	**—**
19	Of which SEC-SA approach	**29**	**2**
EU 19a	Of which 1250%/ deduction	**5**	**1**
20	**Position, foreign exchange and commodities risks (Market risk)**	**5,532**	**443**
21	Of which the standardised approach	**38**	**3**
22	Of which IMA	**5,494**	**440**
EU 22a	**Large exposures**	**—**	**—**
23	**Operational risk**	**2,165**	**173**
EU 23a	Of which basic indicator approach	**—**	**—**
EU 23b	Of which standardised approach	**2,165**	**173**
EU 23c	Of which advanced measurement approach	**—**	**—**
24	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**200**	**16**
29	**Total**	**32,120**	**2,570**

For further detail on movements in RWAs for each risk type please see Analysis of credit risk on page 35, Analysis of counterparty credit risk on page 59 and Analysis of market risk on page 73.

[3] Other counterparty credit risk RWAs includes IMM post model adjustments.

Analysis of treasury and capital risk

Table 12: OV1 - Overview of risk weighted assets by risk type and capital requirements - continued

		RWA	Capital requirements
	As at 31 December 2020	€m	€m
1	**Credit risk (excluding counterparty credit risk) (CCR)**	**15,409**	**1,232**
2	Of which standardised approach	10,941	875
3	Of which the foundation IRB (FIRB) approach	—	—
4	Of which the advanced IRB (AIRB) approach	4,468	357
5	Of which Equity IRB under the Simple risk-weight or the internal models approach	—	—
6	**CCR**	**4,187**	**335**
7	Of which mark to market	374	30
8	Of which original exposure	—	—
9	Of which standardised approach	—	—
9a	Of which financial collateral comprehensive method	56	5
10	Of which internal model method	3,287	263
11	Of which risk exposure amount for contributions to the default fund of a CCP	128	10
12	Of which CVA	342	27
13	**Settlement risk**	**21**	**2**
14	**Securitisation exposures in banking book (after cap)**	**—**	**—**
14a	Of which capital deduction approach (CAPD)	—	—
14b	Of which look through approach (KIRB)	—	—
15	Of which IRB approach	—	—
16	Of which IRB supervisory formula approach (SFA)	—	—
17	Of which internal assessment approach (IAA)	—	—
18	Of which standardised approach	—	—
19	**Market risk**	**1,865**	**149**
20	Of which the standardised approach	6	—
21	Of which IMA	1,859	149
22	**Large exposures**	**—**	**—**
23	**Operational risk**	**2,235**	**179**
24	Of which basic indicator approach	—	—
25	Of which standardised approach	2,235	179
26	Of which advanced measurement approach	—	—
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	255	20
29	Total	**23,717**	**1,897**

Analysis of treasury and capital risk

Table 13: CR8 - RWA flow statement of credit risk exposures under the IRB approach

		RWA amount[a]	Capital requirements
		€m	€m
1	**As at 1 January 2021**	**4,003**	**320**
2	Asset size	(29)	(2)
3	Asset quality	(74)	(6)
4	Model updates	—	—
5	Methodology and policy	(62)	(5)
6	Acquisitions and disposals	—	—
7	Foreign exchange movements	(4)	—
8	Other	—	—
9	**As at 31 December 2021**	**3,834**	**307**
1	**As at 30 September 2021**	**4,114**	**329**
2	Asset size	(281)	(22)
3	Asset quality	(5)	—
4	Model updates	—	—
5	Methodology and policy	—	—
6	Acquisitions and disposals	—	—
7	Foreign exchange movements	6	—
8	Other	—	—
9	**As at 31 December 2021**	**3,834**	**307**

a RWA amount excludes non-credit obligation assets and deferred tax assets.

AIRB credit risk RWAs decreased by €0.2bn to €3.8bn (September 2021: €4.1bn) primarily within asset size due to decrease in residential Mortgages.

Table 14: CCR7 - RWA flow statement of counterparty credit risk exposures under the IMM

The total in this table shows the contribution of IMM exposures to CCR RWAs (under both standardised and AIRB).

		RWA amount	Capital requirements
		€m	€m
1	**As at 1 January 2021**	**3,287**	**263**
2	Asset size	1,768	142
3	Credit quality of counterparties	(8)	(1)
4	Model updates (IMM only)	—	—
5	Methodology and policy (IMM only)	(89)	(7)
6	Acquisitions and disposals	—	—
7	Foreign exchange movements	—	—
8	Other	—	—
9	**As at 31 December 2021**	**4,958**	**397**
1	**As at 30 September 2021**	**4,500**	**360**
2	Asset size	738	60
3	Credit quality of counterparties	(9)	(1)
4	Model updates (IMM only)	—	—
5	Methodology and policy (IMM only)	(271)	(22)
6	Acquisitions and disposals	—	—
7	Foreign exchange movements	—	—
8	Other	—	—
9	**As at 31 December 2021[4]**	**4,958**	**397**

CCR IMM RWAs increased by €0.5 bn to €5.0bn (September 2021: €4.5bn) primarily due to client trading activity in the period along with the migration of client trades from various Barclays Group entities.
Methodology and policy RWA movement are as a result of the loss of equivalence in the treatment of third country institutions, following the end of Brexit transitional arrangements on 31 December 2020. In this regard UK institutions are now risk weighted as corporate entities. The Bank's most material counterparty credit risk exposures to UK institutions are with its parent, Barclays Bank PLC and other UK institutions that are part of the Barclays Group.

[4] OTC Back testing buffer is not included in this table and disclosed under 'Other CCR' risk category in Table OV1 .

Analysis of treasury and capital risk

Table 15: MR2-B - RWA flow statement of market risk exposures under the IMA

		VaR	SVaR	IRC	CRM	Other	Total RWA	Total Capital requirements
		€m	€m	€m	€m	€m	€m	€m
1	**As at 1 January 2021**	341	600	505	—	413	1,859	149
1a	*Regulatory adjustment*	(195)	(355)	—	—	—	(550)	(44)
1b	*RWAs at the previous quarter-end (end of the day)*	146	245	505	—	413	1,309	105
2	Movement in risk levels	248	(271)	23	—	353	354	28
3	Model updates/changes	—	—	—	—	1,143	1,143	91
4	Methodology and policy	(255)	244	—	—	(51)	(63)	(5)
5	Acquisitions and disposals	—	—	—	—	—	—	—
6	Foreign exchange movements	—	—	—	—	—	—	—
7	Other	—	—	—	—	—	—	—
8a	*RWAs at the end of the reporting period (end of the day)*	139	218	528	—	1,858	2,743	219
8b	*Regulatory adjustment*	474	1,801	476	—	—	2,751	221
8	**As at 31 December 2021**	**613**	**2,019**	**1,004**	**—**	**1,858**	**5,494**	**440**
1	**As at 30 September 2021**	**304**	**1,753**	**1,070**	**—**	**651**	**3,778**	**302**
1a	*Regulatory adjustment*	(137)	(726)	(126)	—	—	(989)	(79)
1b	*RWAs at the previous quarter-end (end of the day)*	167	1,027	944	—	651	2,789	223
2	Movement in risk levels	(28)	(809)	(416)	—	64	(1,189)	(95)
3	Model updates/changes	—	—	—	—	1,143	1,143	91
4	Methodology and policy	—	—	—	—	—	—	—
5	Acquisitions and disposals	—	—	—	—	—	—	—
6	Foreign exchange movements	—	—	—	—	—	—	—
7	Other	—	—	—	—	—	—	—
8a	*RWAs at the end of the reporting period (end of the day)*	139	218	528	—	1,858	2,743	219
8b	*Regulatory adjustment*	474	1,801	476	—	—	2,751	221
8	**As at 31 December 2021**	**613**	**2,019**	**1,004**	**—**	**1,858**	**5,494**	**440**

Model Market Risk RWAs increase by €1.2bn (September 2021: €0.7bn) primarily due to increases in SVaR RWAs. This increase arose from the recalibration of the SVaR window to the COVID-19 stress period and the resulting requirement to include a PMA that accounts for any shortfall obtained by scaling the 1-day SVaR RWAs by the square root of 10 against the regulatory requirement of the 10-day SVaR.

Analysis of treasury and capital risk

Basis of preparation for movements in risk weighted assets

This analysis presents a flow statement which explains variations in the RWAs for credit, counterparty credit, market and operational risk. Seven categories of drivers have been identified and are described below. Not all the drivers are applicable to all risk types, however all categories have been listed below for the purpose of completeness.

Book size

Credit risk and counterparty risk (including CVA)

- new business and maturing loans
- changes in product mix and exposure growth for existing portfolios
- book size reductions owing to risk mitigation and write-offs.

Market risk

This represents RWA movements owing to the changes in trading positions and volumes driven by business activity.

Book quality

Credit risk and counterparty risk (including CVA)

This represents RWA movements driven by changes in the underlying credit quality and recoverability of portfolios and reflected through model calibrations or realignments where applicable. This includes, but is not exclusive to:

- PD migration and LGD changes driven by economic conditions
- ratings migration for standardised exposures.

Market risk

This is the movement in RWAs owing to changing risk levels in the trading book, caused by fluctuations in market conditions.

Model updates

Credit risk and counterparty risk (including CVA)

This is the movement in RWAs as a result of both internal and external model updates. This includes, but is not exclusive to:

- updates to existing model inputs driven by both internal and external review
- model enhancements to improve models performance.

Market risk

This is the movement in RWAs reflecting change in model scope, changes to market data levels, volatilities, correlations, liquidity and ratings used as input for the internal modelled RWA calculations.

Methodology and policy

Credit risk and counterparty risk (including CVA)

This is the movement in RWAs as a result of both internal and external methodology, policy and regulatory changes. This includes, but is not exclusive to:

- updates to RWA calculation methodology, communicated by the regulator
- the implementation of credit risk mitigation to a wider scope of portfolios.

Market risk

This is the movement in RWAs as a result of both internal and external methodology, policy and regulatory changes for market risk.

Acquisitions and disposals

This is the movement in RWAs as a result of the disposal or acquisition of business operations impacting the size of banking and trading portfolios.

Foreign exchange movements

This is the movement in RWAs as a result of changes arising from foreign currency translation movements. It should be noted that foreign exchange movements do not include the impact of foreign exchange for the counterparty credit risk or market risk RWAs.

Other

This is the movement in RWAs driven by items that cannot be reasonably assigned to the other driver categories. In relation to market risk RWAs, this includes changes in measurement that are not driven by methodology, policy or model updates.

Analysis of treasury and capital risk

Leverage ratio and exposures

BBI is required to disclose a Capital Requirements Regulation (CRR) leverage ratio, which is based on the end point CRR definition of tier 1 capital and the CRR definition of leverage exposure.

The following leverage tables show the components of the leverage ratio using the CRR definition for the leverage exposure and Tier 1 capital, on a fully loaded basis as at 31 December 2021.

This disclosure has been prepared using the format set out in Annex I and Annex II of the final 'Implementing technical standards with regard to disclosure of the leverage ratio for institutions (Commission implementing regulation-EU 2016/200)'.

Table 16: LR1 - Summary of reconciliation of accounting assets and leverage ratio exposures

This table is a summary of the total leverage exposure and comprises of total IFRS assets used for statutory purposes, regulatory consolidation and other leverage adjustments.

		As at 31 December 2021
		€m
1	Total assets as per published financial statements	117,112
4	(Adjustment for temporary exemption of exposures to central banks (if applicable))	(11,278)
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	(3,809)
8	Adjustments for derivative financial instruments	(14,672)
9	Adjustment for securities financing transactions (SFTs)	1,100
10	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	14,289
12	Other adjustments	(12,744)
13	**Total exposure measure**	**89,998**

		As at 31 December 2020
		€m
1	Total assets as per published financial statements	134,937
4	Adjustments for derivative financial instruments	(57,778)
5	Adjustments for securities financing transactions (SFTs)	767
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	11,785
7	Other adjustments	(72)
EU-7a	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	(3,738)
EU-7b	Adjustment for the impact of any applicable temporary exemption of central bank exposures	(16,339)
8	**Total leverage ratio exposure**	**69,562**

Analysis of treasury and capital risk

Table 17: LR2 - Leverage ratio common disclosure

This table shows the leverage ratio calculation and includes additional breakdowns for the leverage exposure measure.

		As at 31 December 2021
		€m
On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs, but including collateral)	48,234
3	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(10,578)
6	(Asset amounts deducted in determining Tier 1 capital)	(79)
7	**Total on-balance sheet exposures (excluding derivatives and SFTs)**	37,577
Derivative exposures		
8	Replacement cost associated with SA-CCR derivatives transactions (ie net of eligible cash variation margin)	6,320
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	14,400
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	(2,160)
11	Adjusted effective notional amount of written credit derivatives	33,211
12	Adjusted effective notional offsets and add-on deductions for written credit derivatives	(32,568)
13	**Total derivative exposures**	19,203
Securities financing transaction (SFT) exposures		
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	46,448
15	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(28,619)
16	Counterparty credit risk exposure for SFT assets	1,100
18	**Total securities financing transaction exposures**	18,929
Other off-balance sheet exposures		
19	Off-balance sheet exposures at gross notional amount	33,059
20	(Adjustments for conversion to credit equivalent amounts)	(18,770)
22	**Off-balance sheet exposures**	14,289
Capital and total exposure measure		
23	Tier 1 capital	5,987
24	**Total exposure measure**	89,998
Leverage ratio		
25	**Leverage ratio**	6.7 %
EU-25	Leverage ratio excluding the impact of the exemption of public sector investments and promotional loans) (%)	6.7 %
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves)	5.9 %
26	Regulatory minimum leverage ratio requirement (%)	3.3 %
EU-27a	Overall leverage ratio requirement (%)	3.3 %
Choice on transitional arrangements and relevant exposures		
EU-27b	Choice on transitional arrangements for the definition of the capital measure	Transitional
Disclosure of mean values		
28	Mean value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	21,275
29	Quarter-end value of gross SFT assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	17,829
30	Total exposure measure (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	93,444
30a	Total exposure measure (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	104,722
31	Leverage ratio (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	6.4 %
31a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	5.7 %

Analysis of treasury and capital risk

Table 17: LR2 - Leverage ratio common disclosure - continued

		As at 31 December 2020
		€m
On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	60,925
EU-1a	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting	(3,738)
2	Asset amounts deducted in determining tier 1 capital	(81)
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)**	**57,106**
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	3,708
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	12,747
7	Deductions of receivables assets for cash variation margin provided in derivatives transactions	(14,158)
8	Exempted CCP leg of client-cleared trade exposures	(3,282)
9	Adjusted effective notional amount of written credit derivatives	14,891
10	Adjusted effective notional offsets and add-on deductions for written credit derivatives	(14,842)
11	**Total derivative exposures**	**(936)**
Securities financing transaction (SFT) exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	36,026
13	Netted amounts of cash payables and cash receivables of gross SFT assets	(18,847)
14	Counterparty credit risk exposure for SFT assets	767
16	**Total securities financing transaction exposures**	**17,946**
Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	28,387
18	Adjustments for conversion to credit equivalent amounts	(16,602)
19	**Other off-balance sheet exposures**	**11,785**
EU-19b	Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet)	(16,339)
Capital and total exposure measure		
20	Tier 1 capital	4,373
21	**Total leverage ratio exposures**	**69,562**
EU-21a	Leverage ratio exposures (excluding the impact of any applicable temporary exemption of central bank exposures)	85,892
Leverage ratio		
22	**Leverage ratio**	**6.5%**
EU-22a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank exposures)	5.1%
Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Fully phased in

The decrease in the CRR leverage ratio was driven by a €20bn increase in the leverage exposure partially offset by a €1.4bn increase in tier 1 capital.
The CRR leverage exposure increased by €20bn during 2021, attributable for the most part to a reduction in the amount of balances held at central banks that are eligible for exemption as well as an increase in the derivative exposure value due to a change in methodology and lower deduction and exemption opportunities.
The CRRII amendment to CRR, effective from 27 June 2021, applies a new methodology called the Standardised Approach - Counterparty Credit Risk to derivatives. Along with the growth in the business in the period, this resulted in a €4bn increase in leverage exposure. Over the period the amount of central bank balances that are eligible for a temporary exemption decreased by €8bn.

Analysis of treasury and capital risk

Table 18: LR3 - Split-up of on balance sheet exposures (excluding derivatives, SFTs, and exempted exposures)

The table shows a breakdown of the on-balance sheet exposures excluding derivatives, SFTs and exempted exposures, by asset class.

		As at 31 December 2021	As at 31 December 2020
		€m	€m
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	37,075	25,573
EU-2	Trading book exposures	8,332	7,593
EU-3	Banking book exposures, of which:	28,743	17,980
EU-4	Covered bonds	—	—
EU-5	Exposures treated as sovereigns	12,997	3,875
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	73	77
EU-7	Institutions	946	962
EU-8	Secured by mortgages of immovable properties	5,721	5,904
EU-9	Retail exposures	4,194	3,501
EU-10	Corporates	3,903	2,824
EU-11	Exposures in default	315	334
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	594	503

Analysis of treasury and capital risk

Table 19: LIQ1 - Liquidity Coverage ratio

This table shows the level and components of the Liquidity Coverage Ratio. This disclosure has been prepared in accordance with the requirements set out in the 'Guidelines on LCR disclosure to complement the disclosure of liquidity risk management under Article 435 of Regulation (EU) No 575/2013' as specified in Annex II which complements Article 435(1)(f) of Regulation (EU) No 575/2013.

Liquidity coverage ratio (period end)	Total period end value			
	31.12.21	30.09.21	30.06.21	31.03.21
	€m	€m	€m	€m
Liquidity buffer	25,445	23,458	20,858	22,027
Total net cash outflows	14,853	13,391	12,449	12,631
Liquidity coverage ratio (%) (period end)	171%	175%	168%	174%

LIQ1 - Liquidity coverage ratio (average)		Total unweighted value (average)				Total weighted value (average)			
		31.12.21	30.09.21	30.06.21	31.03.21	31.12.21	30.09.21	30.06.21	31.03.21
Number of data points used in calculation of averages		12	12	12	12	12	12	12	12
High-quality liquid assets		€m	€m	€m	€m	€m	€m	€m	€m
1	Total high-quality liquid assets (HQLA)					23,603	22,744	22,065	21,080
Cash outflows									
2	**Retail deposits and deposits from small business customers, of which:**	1,781	1,723	1,661	1,626	185	170	164	161
3	*Stable deposits*	41	42	44	44	2	2	2	2
4	*Less stable deposits*	1,740	1,681	1,617	1,582	183	168	162	158
5	**Unsecured wholesale funding, of which:**	17,256	16,454	16,007	15,588	9,366	8,704	8,318	7,990
6	*Operational deposits (all counterparties) and deposits in networks of cooperative banks*	4,458	4,182	3,830	3,406	1,110	1,041	953	849
7	*Non-operational deposits (all counterparties)*	12,648	12,116	12,014	12,009	8,106	7,508	7,203	6,968
8	*Unsecured debt*	150	156	163	173	150	156	163	173
9	**Secured wholesale funding**					3,607	2,840	1,826	1,176
10	**Additional requirements, of which:**	25,383	24,002	21,852	19,817	8,142	7,949	7,748	7,608
11	*Outflows related to derivative exposures and other collateral requirements*	5,186	5,198	5,167	5,291	5,186	5,198	5,167	5,291
12	*Outflows related to loss of funding on debt products*	143	265	399	441	143	265	399	441
13	*Credit and liquidity facilities*	20,054	18,538	16,286	14,084	2,813	2,486	2,182	1,876
14	**Other contractual funding obligations**	—	—	—	—	—	—	—	—
15	**Other contingent funding obligations**	9,566	9,294	8,859	8,503	545	545	512	485
16	**Total cash outflows**					**21,846**	**20,209**	**18,568**	**17,420**
Cash inflows		—	—	—	—	—	—	—	—
17	**Secured lending (e.g. reverse repos)**	33,391	30,451	24,059	18,524	2,840	2,142	1,294	765
18	**Inflows from fully performing exposures**	1,722	1,786	1,857	1,870	1,345	1,394	1,487	1,519
19	Other cash inflows	3,858	3,924	3,947	4,255	3,801	3,924	3,947	4,255
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)					—	—	—	—
EU-19b	(Excess inflows from a related specialised credit institution)					—	—	—	—
20	**Total cash inflows**	**38,971**	**36,160**	**29,863**	**24,648**	**7,986**	**7,459**	**6,729**	**6,539**
EU-20a	*Fully exempt inflows*	—	—	—	—	—	—	—	—
EU-20b	*Inflows subject to 90% cap*	—	—	—	—	—	—	—	—
EU-20c	*Inflows subject to 75% cap*	38,971	36,160	29,863	24,648	7,986	7,459	6,729	6,539
21	**Liquidity buffer**					23,603	22,744	22,065	21,080
22	**Total net cash outflows**					**13,860**	**12,750**	**11,839**	**10,881**
23	**Liquidity coverage ratio (%) (average)**					170%	180%	188%	195%

As at 31 December 2021, BBI's LCR was 171%, equivalent to a surplus of €9.1bn to 110% regulatory requirement. The Net Stable Funding Ratio ('NSFR') at 31 December 2021 was 148%, which was above the regulatory minimum (100%), details are include on Table 20. The strong liquidity position reflects BBI's prudent approach given the continued macroeconomic uncertainty. The Bank also continued to maintain surpluses to its internal liquidity requirements.

Analysis of treasury and capital risk

The composition of the liquidity pool is subject to caps set by the Risk team designed to monitor and control concentration risk by issuer, currency and asset type.

As at 31 December 2021, the liquidity pool consisted of a mix of EUR cash (€23.5bn) and HQLA Securities (€2.0bn).

The strong deposit franchise in BBI is a primary funding source for the Bank. The BBI Structured and Medium Term Notes programmes, along with the portfolio of Schuldschein notes, European commercial paper and unsecured intragroup funding facilities compliment the well diversified and stable sources of funding for BBI. BBI also has access to ECB monetary policy operations such as Main Refinancing Operations ('MRO') and Targeted Long Term Refinancing Operations ('TLTRO').

The Bank maintains access to a variety of sources of wholesale funding in major currencies, including those available from term investors across a range of distribution channels and geographies, short-term funding markets and repo markets. In addition, BBI has access to US, European and Asian capital markets directly or through Barclays group. As a result, wholesale funding is well diversified by product, maturity, geography and currency.

Analysis of treasury and capital risk

Table 20: LIQ2 - Net Stable Funding Ratio

		Unweighted value by residual maturity				
		No maturity[a]	< 6 months	6 months to < 1yr	≥ 1yr	Weighted value
As at 31 December 2021		€m	€m	€m	€m	€m
Available stable funding (ASF) Items						
1	Capital items and instruments	5,893	—	—	3,140	9,033
2	*Own funds*	5,893	—	—	620	6,513
3	*Other capital instruments*		—	—	2,520	2,520
4	Retail deposits		1,830	—	—	1,653
5	*Stable deposits*		128	—	—	121
6	*Less stable deposits*		1,702	—	—	1,532
7	Wholesale funding:		29,322	4,102	11,101	19,670
8	*Operational deposits*		5,481	—	—	2,741
9	*Other wholesale funding*		23,841	4,102	11,101	16,929
10	Interdependent liabilities		—	—	—	—
11	Other liabilities:	—	10,869	—	—	—
12	*NSFR derivative liabilities*	—				
13	*All other liabilities and capital instruments not included in the above categories*		10,869	—	—	—
14	**Total available stable funding (ASF)**					**30,356**
Required stable funding (RSF) Items						
15	Total high-quality liquid assets (HQLA)					321
EU-15a	Assets encumbered for more than 12m in cover pool		—	—	—	—
16	Deposits held at other financial institutions for operational purposes		—	—	—	—
17	Performing loans and securities:		12,887	2,896	14,370	15,390
18	*Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut*		2,555	925	2,806	3,268
19	*Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions*		7,490	1,069	1,257	2,228
20	*Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which:*		1,147	542	6,263	5,201
21	*With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk*		828	247	3,663	2,918
22	*Performing residential mortgages, of which:*		868	354	4,045	4,290
23	*With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk*		831	338	3,856	3,090
24	*Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products*		826	7	—	402
25	Interdependent assets		—	—	—	—
26	Other assets:	—	14,800	—	1,332	3,631
27	*Physical traded commodities*				—	—
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*		1,576	—	—	1,339
29	*NSFR derivative assets*		314			314
30	*NSFR derivative liabilities before deduction of variation margin posted*		12,910			646
31	*All other assets not included in the above categories*		—	—	1,332	1,332
32	Off-balance sheet items		24,075	—	—	1,204
33	**Total RSF**					**20,545**
Net Stable Funding Ratio (NSFR)						
34	**Net Stable Funding Ratio (%)**					148 %

Note:

a Items disclosed in the "no maturity" time bucket do not have a stated maturity or are perpetual including CET1 and AT1 items. In the case of AT1 items that have a call option, the maturity bucket of an instrument is determined by the date of the next call option.

Analysis of treasury and capital risk

Table 21: PV1 - Prudent valuation adjustments (PVA)

This table below provides a granular breakdown of the Prudent Valuation Adjustment (PVA). PVA is a Common Equity Tier 1 capital deduction. CRR, Articles 34 and105 define regulatory principles that are applied to all fair valued assets and liabilities in order to determine a prudent valuation. The PVA is the difference between the financial statement fair valuation and the prudent valuation.

		Risk category					Category level AVA - Valuation uncertainty				
	Category level AVA	Equity	Interest rates	Foreign exchange	Credit	Commodities	Unearned credit spreads AVA	Investment and funding costs AVA	Total category level post-diversification	Of which: Total core approach in the trading book	Of which: Total core approach in the banking book
		€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
As at 31 December 2021											
1	Market price uncertainty	—	13	—	29	—	4	2	24	15	9
3	Close-out cost	—	4	—	—	—	1	—	3	3	—
4	Concentrated positions	—	—	—	—	—	—	—	—	—	—
5	Early termination	—	—	—	—	—	—	—	—	—	—
6	Model risk	—	1	—	—	—	1	—	1	1	—
7	Operational risk	—	1	—	1	—	—	—	3	2	1
10	Future administrative costs	—	2	—	—	—	—	—	2	2	—
12	**Total Additional Valuation Adjustments (AVAs)**								**33**	**23**	**10**
As at 31 December 2020											
1	Market price uncertainty	—	4	—	31		1	4	14	7	7
3	Close-out cost	—	2	—	—		1	—	1	1	—
4	Concentrated positions	—	—	—	—				—	—	—
5	Early termination	—	—	—	—				—	—	—
6	Model risk	—	1	—	—		1	—	1	1	—
7	Operational risk	—	—	—	1				2	1	1
10	Future administrative costs	—	—	—	—				—	—	—
12	**Total Additional Valuation Adjustments (AVAs)**								**18**	**10**	**8**

Note:

A diversification reduction factor of 50% is applied to uncertainty after all regulatory exclusions and offsets, where permitted by CRR and Commission Delegated Regulation (EU) 2016/101.

Prudent Valuation Adjustment (PVA) increased to €33m (December 2020: €18m) driven by (i) use of a 50% CRR diversification reduction factor in 2021 (December 2020: 66%) and (ii) higher AVAs from increases in trading positions on the Bank's fair value balance sheet.

Analysis of credit risk

This section details BBI's credit risk profile, focusing on regulatory measures such as exposure at default and risk weighted assets. The risk profile is analysed by country and industry concentrations, residual maturities and probabilities of default.

Key Metrics

2021 Risk weighted assets for credit risk

€16.3bn

2020: €15.4bn

Analysis of credit risk

Table 22: Detailed view of credit risk EAD, RWAs and Capital Requirement

This table shows RWAs for credit risk by credit exposure class.

	As at 31 December 2021			As at 31 December 2020		
	EAD €m	RWA €m	Capital requirements €m	EAD €m	RWA €m	Capital requirements €m
Credit risk						
Standardised approach						
Central governments or central banks	24,315	21	2	20,255	12	1
Regional governments or local authorities	—	—	—	—	—	—
Public sector entities	197	89	7	381	197	16
Multilateral development banks	—	—	—	—	—	—
International organisations	—	—	—	—	—	—
Institutions	927	365	29	633	255	20
Corporates	10,474	8,945	715	9,835	8,644	692
Retail	2,210	1,657	133	1,803	1,352	108
Secured by mortgages	1,328	499	40	57	53	4
Exposures in default	250	315	25	217	248	20
Items associated with high risks	—	—	—	—	—	—
Covered bonds	—	—	—	—	—	—
Securitisation positions	188	29	2	—	—	—
Collective investment undertakings	—	—	—	—	—	—
Equity positions	—	—	—	—	—	—
Other items	128	97	8	210	180	14
Total standardised approach credit risk exposure	**40,017**	**12,017**	**961**	**33,391**	**10,941**	**875**
Advanced IRB approach						
Central governments or central banks	—	—	—	—	—	—
Institutions	—	—	—	—	—	—
Corporates	218	153	12	157	97	8
Retail	10,318	3,681	295	10,483	3,906	313
- Small and medium-sized enterprises (SMEs)	—	—	—	—	—	—
- Secured by real estate collateral	5,442	2,005	161	6,096	2,299	184
- Qualifying revolving retail	4,876	1,676	134	4,387	1,607	129
- Other retail	—	—	—	—	—	—
Equity	—	—	—	—	—	—
Securitisation positions	—	—	—	—	—	—
Non-credit obligation assets	342	478	38	299	465	37
Total advanced IRB credit risk exposure	**10,878**	**4,312**	**345**	**10,939**	**4,468**	**358**
Total credit risk weighted assets	**50,895**	**16,329**	**1,306**	**44,330**	**15,409**	**1,233**

Risk weighted assets increased by €0.9bn to €16.3bn primarily driven by an increase in secured by mortgages and corporates asset classes under standardised approach of €0.3bn to €8.9bn due to increase in business activity.

Exposure At Default (EAD) increased by €6.6bn to €50.9bn due to movements in central bank balances and an increase in corporates and amounts secured by mortgages on immovable property due to business activity.

Analysis of credit risk

Table 23: CR2 - Changes in the stock of non-performing loans and advances

This table shows information on the changes in the institutions stock of on-balance sheet non-performing loans and advances. The amounts shown are based on IFRS accounting values according to the regulatory scope of consolidation.

		Gross carrying amount
		As at 31 December 2021
		€m
1	**Initial stock of non-performing loans and advances**	736
2	Inflows to non-performing portfolios	203
3	Outflows from non-performing portfolios	(59)
4	Outflows due to write-offs	(39)
5	Outflow due to other situations[1]	(164)
6	**Final stock of non-performing loans and advances**	678

1 Other situations include repayments, disposals, net movements in the exposure in default on existing loans and debt securities and other adjustments.

Table 24: CR3 – CRM techniques overview: Disclosure of the use of credit risk mitigation techniques

This table shows the use of CRM techniques broken down by loans and debt securities. This table includes unsecured and secured exposures including collateral, financial guarantees and credit derivatives for both Standardised and Internal rating based approach.

		Exposures unsecured – Carrying amount	Exposures to be secured			
				Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
As at 31 December 2021		€m	€m	€m	€m	€m
1	Total loans and advances	49,959	24,701	23,569	1,132	—
2	Total debt securities	79	24	24	—	—
3	**Total exposures**	**50,038**	**24,725**	**23,593**	**1,132**	**—**
4	Of which non-performing exposures	421	257	256	1	—
5	Of which defaulted	402	249	—	—	—
As at 31 December 2020						
1	Total loans	47,303	23,388	23,345	43	—
2	Total debt securities	—	—	—	—	—
3	**Total exposures**	**47,303**	**23,388**	**23,345**	**43**	**—**
4	Of which defaulted	240	94	94	—	—

The total unsecured and secured exposure increased by €4.1bn to €74.7bn primarily due to an increase in liquidity pool.

Analysis of credit risk

Table 25: CR4 - Standardised – Credit Risk exposure and CRM effect

This table shows the impact of CRM and credit conversion factors (CCF) on exposure values, broken down by credit exposure class. This table includes exposures subject to the Standardised approach only, nor does it include securitisation exposures.

The term 'before CCF and CRM' means the original gross exposures before the application of credit conversion factor and before the application of risk mitigation techniques.

		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density
		€m	€m	€m	€m	€m	%
As at 31 December 2021							
1	Central governments or central banks	24,276	12	24,315	—	21	— %
2	Regional governments or local authorities	—	—	—	—	—	— %
3	Public sector entities	73	604	65	132	89	45 %
4	Multilateral development banks	—	—	—	—	—	— %
5	International Organisations	—	—	—	—	—	— %
6	Institutions	946	2,621	469	458	365	39 %
7	Corporates	3,719	23,937	2,371	8,103	8,945	85 %
8	Retail	2,168	309	2,093	117	1,657	75 %
9	Secured by mortgages on immovable property	67	1,285	67	1,261	499	38 %
10	Exposures in default	150	133	147	103	315	126 %
11	Items associated with particularly high risk	—	—	—	—	—	— %
12	Covered Bonds	—	—	—	—	—	— %
13	Claims on institutions and corporate with a short-term credit assessment	—	—	—	—	—	— %
14	Claims in the form of collective investment undertakings	—	—	—	—	—	— %
15	Equity exposures	—	—	—	—	—	— %
16	Other items	128	—	128	—	97	75 %
17	Total	31,527	28,901	29,655	10,174	11,988	30 %
As at 31 December 2020							
1	Central governments or central banks	20,214	47	20,255	—	12	— %
2	Regional governments or local authorities	—	—	—	—	—	— %
3	Public sector entities	77	855	67	314	197	52 %
4	Multilateral development banks	—	—	—	—	—	— %
5	International Organisations	—	—	—	—	—	— %
6	Institutions	962	2,488	393	241	255	40 %
7	Corporates	2,687	19,964	1,806	8,028	8,644	88 %
8	Retail	1,808	196	1,803	—	1,352	75 %
9	Secured by mortgages on immovable property	54	5	54	2	53	94 %
10	Exposures in default	152	121	152	65	248	114 %
11	Items associated with particularly high risk	—	—	—	—	—	— %
12	Covered Bonds	—	—	—	—	—	— %
13	Claims on institutions and corporate with a short-term credit assessment	—	—	—	—	—	— %
14	Claims in the form of collective investment undertakings	—	—	—	—	—	— %
15	Equity exposures	—	—	—	—	—	— %
16	Other items	210	—	210	—	180	86 %
17	**Total**	**26,164**	**23,676**	**24,740**	**8,650**	**10,941**	**33 %**

On-Balance sheet exposure increased by €5.4bn to €31.5bn primarily driven by liquidity pool and increased lending in the corporates asset class.
Off-Balance sheet exposure increased by €5.2bn primarily driven by increased lending in the corporate and secured by mortgages on immovable property asset classes.

Further information about the key drivers for RWA are provided in Table 22.

Analysis of credit risk

Table 26: CR7 - Effect on RWA of credit derivatives used as CRM techniques (IRB)

This table shows the effect of credit derivatives on the AIRB credit risk approach.

		Pre-credit derivatives RWAs		Actual RWAs	
		As at 31 December 2021 €m	As at 31 December 2020 €m	As at 31 December 2021 €m	As at 31 December 2020 €m
1	**Exposures under Foundation IRB**	—	—	—	—
2	Central governments and central banks	—	—	—	—
3	Institutions	—	—	—	—
4	Corporates	—	—	—	—
4.1	of which Corporates - SMEs	—	—	—	—
4.2	of which Corporates - Specialised lending	—	—	—	—
5	**Exposures under Advanced IRB**	3,681	4,003	3,681	4,003
6	Central governments and central banks	—	—	—	—
7	Institutions	—	—	—	—
8	Corporates	—	97	—	97
8.1	of which Corporates - SMEs	—	—	—	—
8.2	of which - Specialised lending[a]	—	97	—	97
9	Retail	3,681	3,906	3,681	3,906
9.1	of which Retail – SMEs - Secured by immovable property collateral	—	—	—	—
9.2	of which Retail – non-SMEs - Secured by immovable property collateral	2,005	2,299	2,005	2,299
9.3	of which Retail – Qualifying revolving	1,676	1,607	1,676	1,607
9.4	of which Retail – SMEs - Other	—	—	—	—
9.5	of which Retail – Non-SMEs- Other	—	—	—	—
10	**Total**[b]	**3,681**	**4,003**	**3,681**	**4,003**

Note:

a In previous CR7 disclosures, the Bank included exposures under the slotting approach in Specialised Lending. Commission Implementing Regulation (EU) 2021/637 has set out that such exposures should no longer be included in this template. Details of specialised lending under the slotting approach are disclosed in Table 30.

b 'Other non credit-obligation assets' were excluded from the total RWA under Chapter 6 of Title II of Part Three CRR.

Numbers are aligned to the 'Detailed view of credit risk EAD, RWAs and Capital Requirement' table. Please see Table 22 for further information on key movements.

Analysis of credit risk

Table 27: CR7-A – Disclosure of the extent of the use of CRM techniques (IRB)

		Total exposures	Credit risk Mitigation techniques											Credit risk Mitigation methods in the calculation of RWEAs	
			Funded credit Protection (FCP)									Unfunded credit Protection (UFCP)			
				Other eligible collaterals				Other funded credit protection							
			Financial Collaterals	Total	Immovable property Collaterals	Receivables	Other physical collateral	Total	Cash on deposit	Life insurance policies	Instruments held by a third party	Guarantees	Credit Derivatives	RWEA without substitution effects (reduction effects only)	RWEA with substitution effects (both reduction and substitution effects)
As at 31 December 2021		€m	%	%	%	%	%	%	%	%	%	%	%	€m	€m
	A-IRB														
1	Central governments and central banks	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
2	Institutions	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
3	Corporates	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
3.1	*Of which Corporates – SMEs*	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
3.2	*Of which Corporates – Specialised lending*[a]	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
3.3	*Of which Corporates – Other*	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
4	Retail	10,318	— %	133 %	133 %	— %	— %	— %	— %	— %	— %	28 %	— %	3,681	3,681
4.1	*Of which Retail – Immovable property SMEs*	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
4.2	*Of which Retail – Immovable property non-SMEs*	5,442	— %	252 %	252 %	— %	— %	— %	— %	— %	— %	53 %	— %	2,005	2,005
4.3	*Of which Retail – Qualifying revolving*	4,876	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	1,676	1,676
4.4	*Of which Retail – Other SMEs*	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
4.5	*Of which Retail – Other non-SMEs*	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
5	Total	10,318	— %	133 %	133 %	— %	— %	— %	— %	— %	— %	28 %	— %	3,681	3,681
	F-IRB														
1	Central governments and central banks	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
2	Institutions	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
3	Corporates	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
3.1	*Of which Corporates – SMEs*	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
3.2	*Of which Corporates – Specialised lending*	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
3.3	*Of which Corporates – Other*	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—
4	Total	—	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	— %	—	—

Note:

a The Bank has all exposures to corporates of which specialised lending under the slotting approach. These were not included under Article 147(8) CRR as at 31 December 2021.

Analysis of credit risk

Credit quality analysis of standardised exposures

Credit rating agencies

Under the standardised approach, ratings assigned by External Credit Assessment Institutions (ECAIs) are used in the calculation of RWAs. Ratings from an ECAI may be used where the ECAI is a rating agency that:

- Has been recognised as an ECAI per the list published by the European Banking Authority (EBA); and
- Has been nominated for use by Barclays.

Barclays uses ratings assigned by the following agencies for credit risk calculations:

- Standard & Poor's
- Moody's
- Fitch

These ratings are used in the calculation of risk weights for the central governments and central banks, institutions, corporate and securitisation exposure classes.

Rated and unrated counterparties

The following section summarises the rules governing standardised calculations for non-securitised exposures.

Each exposure must be assigned to one of six credit quality steps if a rating is available, as defined in the table below[a]. After being assigned to a specific quality step, exposure class and maturity are then used to determine the risk weight percentage.

The assignment of weights according to credit ratings complies with the regulatory requirements, aligning the alphanumeric scale of each agency used with the credit quality steps set down in Chapter II, Section II of the CRR, as follows:

Credit Quality Step			
	Standard and Poor's	Moody's	Fitch
Credit Quality Step 1	AAA+ to AA-	Aaa1 to Aa3	AAA+ to AA-
Credit Quality Step 2	A+ to A-	A1 to A3	A+ to A-
Credit Quality Step 3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-
Credit Quality Step 4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-
Credit Quality Step 5	B+ to B-	B1 to B3	B+ to B-
Credit Quality Step 6	CCC+ and below	Caa1 and below	CCC+ and below

The following table shows the prescribed risk weights associated with credit quality steps.

Credit Quality Step					
		Institutions (includes banks)			
		Sovereign method	Credit assessment method		
	Corporates	Sovereign method	Maturity > 3 months	Maturity 3 months or less	Central governments or central banks
Credit Quality Step 1	20%	20%	20%	20%	0%
Credit Quality Step 2	50%	50%	50%	20%	20%
Credit Quality Step 3	100%	100%	50%	20%	50%
Credit Quality Step 4	100%	100%	100%	50%	100%
Credit Quality Step 5	150%	100%	100%	50%	100%
Credit Quality Step 6	150%	150%	150%	150%	150%

Notes:
a The mapping of external ratings to credit quality steps applicable as at year-end 2021 are found in Commission Implementing Regulation (EU) 2016/1799 as amended (for non-securitisation exposures).

Exposures to international organisations are assigned a 0% risk weight.

Exposures fully and completely secured by residential property (which considers, amongst other criteria, the size of the loan relative to the value of the property) are generally assigned a risk weight of 35%. Other retail exposures are assigned a risk weight of 75%.

The unsecured portion of a past due exposure is assigned a risk weight of either 150% or 100%, depending on the specific credit risk adjustments recognised.

High risk items are assigned a risk weight of 150%.

Other items are generally assigned a risk weight of 100%, unless they relate to cash in hand (0%) or items in the course of collection (20%).

Analysis of credit risk

Table 28: CR5 - Analysis of exposures by asset classes and risk weight under the standardised approach

This table shows exposure at default post-CRM, broken down by Credit Exposure Class and risk weight. This table includes exposures subject to the Standardised approach only.

		0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Total	of which: Unrated
		€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
As at 31 December 2021																		
1	Central governments or central banks	24,294	—	—	—	—	—	—	—	—	21	—	—	—	—	—	24,315	84
2	Regional governments or local authorities	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	Public sector entities	—	—	—	—	30	—	167	—	—	—	—	—	—	—	—	197	—
4	Multilateral development banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	International Organisations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Institutions	—	—	—	—	368	—	535	—	—	24	—	—	—	—	—	927	227
7	Corporates	—	—	—	—	357	—	2,738	—	—	7,118	261	—	—	—	—	10,474	4,815
8	Retail	—	—	—	—	—	—	—	—	2,210	—	—	—	—	—	—	2,210	2,210
9	Secured by mortgages on immovable property	—	—	—	—	—	1,275	—	—	—	53	—	—	—	—	—	1,328	1,328
10	Exposures in default	—	—	—	—	—	—	—	—	—	119	131	—	—	—	—	250	250
11	Exposures associated with particularly high risk	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	Covered Bonds	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	Institutions and corporate with a short-term credit assessment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	Unit or shares in collective investment undertakings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	Equity exposures	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	Other items	30	—	—	—	3	—	—	—	—	95	—	—	—	—	—	128	128
17	**Total**	**24,324**	**—**	**—**	**—**	**758**	**1,275**	**3,440**	**—**	**2,210**	**7,430**	**392**	**—**	**—**	**—**	**—**	**39,829**	**9,042**

Analysis of credit risk

Table 28: CR5 - Analysis of exposures by asset classes and risk weight under the standardised approach continued

		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	Total €m	which: Unrated €m
As at 31 December 2020																		
1	Central governments or central banks	20,243	—	—	—	—	—	—	—	—	12	—	—	—	—	—	20,255	337
2	Regional governments or local authorities	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	Public sector entities	41	—	—	—	28	—	241	—	—	71	—	—	—	—	—	381	99
4	Multilateral development banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	International Organisations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Institutions	—	—	—	—	275	—	316	—	—	42	—	—	—	—	—	633	155
7	Corporates	—	—	—	—	259	—	2,028	—	—	7,483	65	—	—	—	—	9,835	4,613
8	Retail	—	—	—	—	—	—	—	—	1,803	—	—	—	—	—	—	1,803	1,804
9	Secured by mortgages on immovable property	—	—	—	—	—	5	—	—	—	52	—	—	—	—	—	57	57
10	Exposures in default	—	—	—	—	—	—	—	—	—	155	62	—	—	—	—	217	215
11	Exposures associated with particularly high risk	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	Covered Bonds	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	Institutions and corporate with a short-term credit assessment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	Unit or shares in collective investment undertakings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	Equity exposures	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	Other items	1	—	—	—	36	—	—	—	—	173	—	—	—	—	—	210	210
17	**Total**	**20,285**	**—**	**—**	**—**	**598**	**5**	**2,585**	**—**	**1,803**	**7,988**	**127**	**—**	**—**	**—**	**—**	**33,391**	**7,490**

Standardised Credit Risk Exposure Post-CCF and CRM increased by €6.4bn to €39.8bn primarily driven by an increase in central banks due to increase in cash balances and deposits. The increase in secured by mortgages on immovable property exposures is due to increased business activity.

Analysis of credit risk

Credit quality analysis of IRB exposures

The following section provides breakdowns of inputs into risk weighted asset calculations. Please note that risk weights and risk factors may be volatile in granular breakdowns of wholesale exposures, especially in categories that are more sparsely populated. This is often due to the addition or removal of a relatively large exposure to or from narrow categories when its risk factors are different to the category average. This happens in the normal course of business, for instance, following new lending, repayments, or syndications. See page 92 for a discussion of IRB models.

Table 29: Internal default grade probabilities and mapping to external ratings

The table below illustrates the approximate relationship between external rating agency grades and the PD bands for wholesale exposures as at 31 December 2021. The EBA and internal Default Grade (DG) bands are based on Through-the-cycle Probability of Default (TTC PD). Note that this relationship is dynamic, and therefore, varies over time, region and industry.

	Internal	Default Probability				
EBA PD Range	DG Band	>Min	Mid	<=Max	Moody's	Standard and Poor's
0.00 to < 0.15	1	0.00%	0.01%	0.02%	Aaa, Aa1, Aa2	AAA, AA+, AA
	2	0.02%	0.03%	0.03%	Aa3	AA-
	3	0.03%	0.04%	0.05%	A1	A+
	4	0.05%	0.08%	0.10%	A2, A3	A, A-
	5	0.10%	0.13%	0.15%	Baa1	BBB+
0.15 to < 0.25	6	0.15%	0.18%	0.20%	Baa2	BBB
	7	0.20%	0.23%	0.25%	Baa2	BBB
0.25 to < 0.50	8	0.25%	0.28%	0.30%	Baa3	BBB-
	9	0.30%	0.35%	0.40%	Baa3	BBB-
	10	0.40%	0.45%	0.50%	Ba1	BB+
0.50 to < 0.75	11	0.50%	0.55%	0.60%	Ba1	BB+
	12	0.60%	—	—	Ba2	BB
0.75 to < 2.50	12	—	0.90%	1.20%	Ba2	BB
	13	1.20%	1.38%	1.55%	Ba3	BB-
	14	1.55%	1.85%	2.15%	Ba3	B+
	15	2.15%	—	—	B1	B+
2.50 to < 10.00	15	—	2.60%	3.05%	B1	B+
	16	3.05%	3.75%	4.45%	B2	B+
	17	4.45%	5.40%	6.35%	B3,Caa1	B
	18	6.35%	7.50%	8.65%	B3,Caa1	B-
	19	8.65%	10.00%	—	B3,Caa1	CCC+
10.00 to < 100.00	19	—	—	11.35%	Caa2	CCC+
	20	11.35%	15.00%	18.65%	Caa2	CCC
	21	18.65%	30.00%	99.99%	Caa3, Ca, C	CCC-, CC+ ,CC, C
100.00 (Default)					D	D

IRB obligor grade disclosure

The following tables show credit risk exposure at default post-CRM for the advanced IRB approach and foundation IRB approach for portfolios within both the trading and banking books. Separate tables are provided for the following credit exposure classes: secured retail (Table 31) and revolving retail (Table 32).

BBI's Model Risk Management group reviews and approves the application of post model adjustments to models that do not fully reflect the risk of the underlying exposures.

Analysis of credit risk

Table 30: CR10 – Specialised lending and equity exposures under the simple riskweighted approach

Specialised lending approach is an approach that is applied to financing of individual projects where the repayment is highly dependent on the performance of the underlying pool or collateral. It uses a standard set of rules for the calculation of RWAs, based upon an assessment of factors such as the financial strength of the counterparty. The requirements for the application of the slotting approach are detailed in CRR article 153.

Regulatory categories		Remaining maturity	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA	Expected losses
As at 31 December 2021			€m	€m	%	€m	€m	€m
Category 1	Strong	Less than 2.5 years	18	5	50 %	23	10	—
		Equal to or more than 2.5 years	105	59	70 %	150	105	1
Category 2	Good	Less than 2.5 years	14	—	70 %	14	10	—
		Equal to or more than 2.5 years	31	—	90 %	31	28	—
Category 3	Satisfactory	Less than 2.5 years	—	—	115 %	—	—	—
		Equal to or more than 2.5 years	—	—	115 %	—	—	—
Category 4	Weak	Less than 2.5 years	—	—	250 %	—	—	—
		Equal to or more than 2.5 years	—	—	250 %	—	—	—
Category 5	Default	Less than 2.5 years	—	—	—	—	—	—
		Equal to or more than 2.5 years	—	—	—	—	—	—
Total		Less than 2.5 years	32	5	—	37	20	—
		Equal to or more than 2.5 years	136	59	—	181	133	1
As at 31 December 2020								
Category 1	Strong	Less than 2.5 years	37	36	50 %	79	38	—
		Equal to or more than 2.5 years	68	47	70 %	56	39	—
Category 2	Good	Less than 2.5 years	—	—	70 %	—	—	—
		Equal to or more than 2.5 years	32	—	90 %	22	20	—
Category 3	Satisfactory	Less than 2.5 years	—	—	115 %	—	—	—
		Equal to or more than 2.5 years	—	—	115 %	—	—	—
Category 4	Weak	Less than 2.5 years	—	—	250 %	—	—	—
		Equal to or more than 2.5 years	—	—	250 %	—	—	—
Category 5	Default	Less than 2.5 years	—	—	—	—	—	—
		Equal to or more than 2.5 years	—	—	—	—	—	—
Total		Less than 2.5 years	37	36	—	79	38	—
		Equal to or more than 2.5 years	100	47	—	78	59	—

Analysis of credit risk

Table 31: CR6-B – IRB approach – Credit risk exposures by exposure class and PD range for secured retail

	Original on-balance sheet gross exposure €m	Off-balance sheet exposures pre CCF €m	Average CCF %	EAD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average Maturity Years	RWA €m	RWA Density %	EL €m	Value Adjustment and Provisions €m
As at 31 December 2021												
0.00 to < 0.15	3,521	—	— %	3,557	0.1 %	43,504	21.4 %	—	1,272	35.8 %	10	
0.00 to <0.10	874	—	— %	883	0.1 %	11,016	19.8 %	—	307	34.8 %	2	
0.10 to <0.15	2,647	—	— %	2,674	0.1 %	32,488	22.0 %	—	965	36.1 %	8	
0.15 to < 0.25	1,078	—	— %	1,088	0.2 %	14,486	21.5 %	—	397	36.5 %	5	
0.25 to < 0.50	253	—	— %	255	0.3 %	3,265	22.4 %	—	93	36.3 %	2	
0.50 to < 0.75	101	—	— %	102	0.6 %	1,246	26.0 %	—	34	33.8 %	1	
0.75 to < 2.50	174	—	— %	176	1.1 %	2,110	27.3 %	—	61	34.4 %	3	
0.75 to <1.75	165	—	— %	166	1.0 %	1,957	27.5 %	—	58	34.7 %	3	
1.75 to <2.5	9	—	— %	10	2.1 %	153	24.6 %	—	3	30.1 %	—	
2.50 to < 10.00	33	—	— %	33	5.2 %	453	24.6 %	—	10	29.4 %	4	
2.5 to <5	17	—	— %	17	3.5 %	259	24.0 %	—	5	29.9 %	1	
5 to <10	16	—	— %	16	7.1 %	194	25.2 %	—	5	28.9 %	3	
10.00 to < 100.00	40	—	— %	41	33.4 %	515	24.6 %	—	12	28.4 %	31	
10 to <20	9	—	— %	9	14.5 %	127	24.4 %	—	3	29.0 %	3	
20 to <30	9	—	— %	9	26.2 %	129	21.9 %	—	3	28.4 %	6	
30.00 to	22	—	— %	23	44.6 %	259	25.9 %	—	6	28.1 %	22	
100.00 (Default)	188	—	— %	190	100.0 %	2,508	27.4 %	—	126	66.3 %	62	
Total	**5,388**	**—**	**— %**	**5,442**	**4.0 %**	**68,087**	**22.0 %**	**—**	**2,005**	**36.8 %**	**118**	**(85)**
As at 31 December 2020												
0.00 to < 0.15	3,865	—	— %	3,904	0.1 %	46,375	21.7 %	16	1,416	36.3 %	7	
0.15 to < 0.25	1,214	—	— %	1,226	0.2 %	15,594	21.8 %	16	453	37.0 %	4	
0.25 to < 0.50	329	—	— %	332	0.3 %	4,001	22.8 %	16	124	37.4 %	2	
0.50 to < 0.75	130	—	— %	131	0.6 %	1,549	26.0 %	17	43	32.0 %	1	
0.75 to < 2.50	214	—	— %	216	1.1 %	2,612	26.8 %	17	87	40.2 %	3	
2.50 to < 10.00	52	—	— %	53	5.3 %	758	24.1 %	17	28	53.6 %	4	
10.00 to < 100.00	90	—	— %	91	39.1 %	1,136	24.2 %	17	55	60.4 %	56	
100.00 (Default)	142	—	— %	143	100.0 %	1,734	28.6 %	9	93	64.8 %	46	
Total	**6,036**	**—**	**— %**	**6,097**	**3.2 %**	**73,759**	**22.3 %**	**16**	**2,299**	**37.7 %**	**123**	**(98)**

The RWA density associated with IRB exposures to secured retail remained broadly stable at 36.8% (December 2020: 37.7%).

Analysis of credit risk

Table 32: CR6-B – IRB approach – Credit risk exposures by exposure class and PD range for revolving retail

	Original on-balance sheet gross exposure €m	Off-balance sheet exposures pre CCF €m	Average CCF[a] %	EAD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average Maturity Years	RWA €m	RWA Density %	EL €m	Value Adjustment and Provisions €m
As at 31 December 2021												
0.00 to < 0.15	395	4,555	32.6 %	2,794	0.0 %	1,030,765	75.8 %	—	142	5.1 %	4	
0.00 to <0.10	370	4,496	33.0 %	2,750	0.0 %	1,017,241	75.8 %	—	137	5.0 %	4	
0.10 to <0.15	25	59	3.6 %	44	0.1 %	13,524	75.8 %	—	5	11.2 %	—	
0.15 to < 0.25	93	208	9.2 %	174	0.2 %	54,518	75.9 %	—	34	19.7 %	1	
0.25 to < 0.50	414	385	5.7 %	567	0.4 %	121,359	78.8 %	—	185	32.7 %	8	
0.50 to < 0.75	153	45	2.6 %	175	0.5 %	24,930	81.5 %	—	79	45.4 %	4	
0.75 to < 2.50	717	162	16.7 %	867	1.1 %	147,107	82.4 %	—	712	82.1 %	38	
0.75 to <1.75	627	145	18.1 %	762	1.0 %	126,087	82.5 %	—	588	77.1 %	30	
1.75 to <2.5	90	17	4.7 %	105	2.1 %	21,020	81.5 %	—	124	118.8 %	8	
2.50 to < 10.00	151	22	5.2 %	174	4.7 %	46,487	78.2 %	—	358	205.9 %	29	
2.5 to <5	100	18	4.8 %	117	3.6 %	30,825	78.7 %	—	225	192.9 %	17	
5 to <10	51	4	6.9 %	57	7.0 %	15,662	77.2 %	—	133	232.3 %	12	
10.00 to < 100.00	30	3	4.7 %	32	25.2 %	10,797	76.2 %	—	134	414.3 %	27	
10 to <20	16	1	6.6 %	18	13.6 %	6,302	75.7 %	—	60	334.3 %	7	
20 to <30	5	1	1.6 %	5	23.8 %	1,681	76.7 %	—	22	412.1 %	3	
30.00 to <100.00	9	1	1.0 %	9	48.4 %	2,814	76.8 %	—	52	569.5 %	17	
100.00 (Default)	93	47	— %	93	100.0 %	20,669	48.4 %	—	32	34.1 %	80	
Total	**2,046**	**5,427**	**24.1 %**	**4,876**	**2.5 %**	**1,456,632**	**77.1 %**	**—**	**1,676**	**34.4 %**	**191**	**(182)**
As at 31 December 2020												
0.00 to < 0.15	307	3,989	— %	2,449	0.0 %	908,360	75.8 %	—	124	5.0 %	5	
0.15 to < 0.25	74	167	— %	130	0.2 %	34,425	75.8 %	—	26	19.8 %	1	
0.25 to < 0.50	356	323	— %	466	0.4 %	82,952	78.9 %	—	154	33.0 %	10	
0.50 to < 0.75	163	42	— %	181	0.5 %	21,055	81.8 %	—	83	45.7 %	6	
0.75 to < 2.50	734	124	— %	851	1.1 %	113,977	82.8 %	—	702	82.4 %	58	
2.50 to < 10.00	154	14	— %	168	4.7 %	34,042	78.8 %	—	350	208.4 %	43	
10.00 to < 100.00	30	2	— %	31	25.3 %	7,026	77.1 %	—	132	425.6 %	41	
100.00 (Default)	110	46	— %	110	100.0 %	20,559	47.4 %	—	37	33.4 %	73	
Total	**1,928**	**4,707**	**— %**	**4,387**	**3.2 %**	**1,222,396**	**77.1 %**	**—**	**1,607**	**36.6 %**	**237**	**(237)**

Note:

a The Bank used an Exposure Value Approach to model EAD as at 31 December 2020; hence Average CCF was 0% across all PD ranges. At 31 December 2021 Average CCF is calculated at an aggregate level and reflects where the modelled EAD is higher than the original on and off balance sheet exposures pre CCF.

The RWA density associated with IRB exposures to revolving retail remained broadly stable at 34.4% (December 2020: 36.6%).

Analysis of credit risk

Table 33: CR6-A – Scope of the use of IRB and SA approaches

		Exposure value as defined in Article 166 CRR for exposures subject to IRB approach	Total exposure value for exposures subject to the Standardised approach and to the IRB approach	Percentage of total exposure value subject to the permanent partial use of the SA (%)	Percentage of total exposure value subject to a roll-out plan (%)	Percentage of total exposure value subject to IRB Approach (%)
As at 31 December 2021		€m	€m	%	%	%
1	Central governments or central banks	—	24,963	—	—	—
1.1	Of which Regional governments or local authorities	—	—	—	—	—
1.2	Of which Public sector entities	—	677	—	—	—
2	Institutions	—	3,568	—	—	—
3	Corporates	231	29,533	—	—	0.78 %
3.1	Of which Corporates - Specialised lending, excluding slotting approach	—	—	—	—	—
3.2	Of which Corporates - Specialised lending under slotting approach	231	231	—	—	100.00 %
4	Retail	12,861	15,537	—	—	82.78 %
4.1	of which Retail – Secured by real estate SMEs	—	—	—	—	—
4.2	of which Retail – Secured by real estate non-SMEs	5,388	5,393	—	—	99.91 %
4.3	of which Retail – Qualifying revolving	7,473	7,473	—	—	100.00 %
4.4	of which Retail – Other SMEs	—	—	—	—	—
4.5	of which Retail – Other non-SMEs	—	—	—	—	—
5	Equity	—	—	—	—	—
6	Other non-credit obligation assets	358	491	—	—	72.97 %
7	**Total**	**13,451**	**74,091**	**—**	**—**	**18.15 %**

Analysis of credit risk

Table 34 represents a breakdown of loans and debt securities by residual maturity. For on-balance-sheet items, the net exposure value is the gross carrying value of exposure less allowances/impairments. For off-balance-sheet items, the net value is the gross carrying value of exposure less provisions.

Table 34: CR1-A – Maturity of exposures

		Net Exposure Values					
		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
As at 31 December 2021		€m	€m	€m	€m	€m	€m
1	Loans and advances	32,788	35,399	8,157	5,227	—	81,571
2	Debt securities	—	11	48	44	—	103
3	**Total**	**32,788**	**35,410**	**8,205**	**5,271**	**—**	**81,674**

Table 35: CQ1- Credit quality of forborne exposures

		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	
			Non Performing forborne						
		Performing forborne	Total	Of which defaulted	Of which impaired	On performing forborne exposures	On non-performing forborne exposures	Total	Of which collateral and financial guarantees received on non-performing exposures with forebearance measures
As at 31 December 2021		€m	€m	€m	€m	€m	€m	€m	€m
0	Cash balances at central banks and other demand deposits	—	—	—	—	—	—	—	—
1	**Loans and Advances**	5	279	242	272	(1)	(77)	88	88
2	Central banks	—	—	—	—	—	—	—	—
3	General governments	—	—	—	—	—	—	—	—
4	Credit institutions	—	—	—	—	—	—	—	—
5	Other financial corporations	—	—	—	—	—	—	—	—
6	Non-financial corporations	2	123	121	121	—	(30)	—	—
7	Households	3	156	121	151	—	(47)	88	88
8	**Debt securities**	—	—	—	—	—	—	—	—
9	**Loan commitments given**	25	12	—	—	—	—	—	—
10	**Total**	**30**	**291**	**242**	**272**	**(1)**	**(77)**	**88**	**88**
As at 31 December 2020									
0	Cash balances at central banks and other demand deposits	—	—	—	—	—	—	—	—
1	**Loans and Advances**	62	204	72	198	(6)	(77)	93	93
2	Central banks	—	—	—	—	—	—	—	—
3	General governments	—	—	—	—	—	—	—	—
4	Credit institutions	—	—	—	—	—	—	—	—
5	Other financial corporations	—	—	—	—	—	—	—	—
6	Non-financial corporations	60	28	28	28	(5)	(20)	—	—
7	Households	2	176	44	170	(1)	(57)	93	93
8	**Debt securities**	—	—	—	—	—	—	—	—
9	**Loan commitments given**	10	12	12	12	—	—	—	—
10	**Total**	**72**	**216**	**84**	**210**	**(6)**	**(77)**	**93**	**93**

Analysis of credit risk

Table 36: CQ3: Credit quality of performing and non-performing exposures by past due days

		Gross carrying amount / Nominal amount											
		Performing exposures			Non-performing exposures								
		Total performing exposures	Not past due or Past due < 30 days	Past due > 30 days < 90 days	Total non-performing exposures	Unlikely to pay that are not past-due or past-due	Past due > 90 days <= 180 days	Past due > 180 days < =1 year	Past due > 1 year <= 2 years	Past due > 2 year <= 5 years	Past due > 5 year <= 7 years	Past due > 7 years	Of which defaulted
As at 31 December 2021		€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
5	Cash balances at central banks and other demand deposits	24,096	24,096	—	—	—	—	—	—	—	—	—	—
10	Loans and advances	49,885	49,569	317	678	378	37	40	58	86	61	17	651
20	Central banks	992	992	—	—	—	—	—	—	—	—	—	—
30	General governments	1,473	1,473	—	—	—	—	—	—	—	—	—	—
40	Credit institutions	16,923	16,923	—	—	—	—	—	—	—	—	—	—
50	Other financial corporations	17,922	17,750	173	13	—	—	—	—	—	13	—	13
60	Non-financial corporations	3,127	3,006	121	151	133	—	1	—	—	14	3	151
70	Of which SMEs	—	—	—	4	—	—	1	—	—	2	1	4
80	Households	9,448	9,425	23	514	245	37	39	58	86	34	14	487
09	Debt Securities	103	103	—	—	—	—	—	—	—	—	—	—
100	Central banks	—	—	—	—	—	—	—	—	—	—	—	—
110	General governments	—	—	—	—	—	—	—	—	—	—	—	—
120	Credit institutions	—	—	—	—	—	—	—	—	—	—	—	—
130	Other financial corporations	103	103	—	—	—	—	—	—	—	—	—	—
140	Non-financial corporations	—	—	—	—	—	—	—	—	—	—	—	—
150	Off-balance sheet exposures	31,401			83								83
160	Central banks	—			—								—
170	General governments	—			—								—
180	Credit institutions	635			—								—
190	Other financial corporations	3,287			—								—
200	Non-financial corporations	21,817			71								71
210	Households	5,662			12								12
220	**Total**	105,485	73,768	317	761	378	37	40	58	86	61	17	734

Analysis of credit risk

Table 36: CQ3: Credit quality of performing and non-performing exposures by past due days continued

		Gross carrying amount/nominal amount											
		Performing exposures			Non-performing exposures								
		Total performing exposures	Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days	Total non-performing exposures	Unlikely to pay that are not past due or are past due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 2 years	Past due > 2 year ≤ 5 years	Past due > 5 year ≤ 7 years	Past due > 7 years	Of which defaulted
As at 31 December 2020		€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
5	Cash balances at central banks and other demand deposits	20,065	20,065	-	-	-	-	-	-	-	-	-	-
10	Loans and advances	49,890	49,832	58	736	286	187	72	45	104	27	15	707
20	Central banks	108	108	-	-	-	-	-	-	-	-	-	-
30	General governments	1,108	1,108	-	-	-	-	-	-	-	-	-	-
40	Credit institutions	15,485	15,485	-	-	-	-	-	-	-	-	-	-
50	Other financial corporations	20,643	20,643	-	13	-	-	-	-	13	-	-	13
60	Non-financial corporations	2,888	2,878	10	179	25	132	2	2	12	5	1	179
70	Of which SMEs	-	-	-	4	1	-	-	-	-	2	1	4
80	Households	9,658	9,610	48	544	261	55	69	43	80	22	14	515
90	**Debt securities**	-	-	-	-	-	-	-	-	-	-	-	-
100	Central banks	-	-	-	-	-	-	-	-	-	-	-	-
110	General governments	-	-	-	-	-	-	-	-	-	-	-	-
120	Credit institutions	-	-	-	-	-	-	-	-	-	-	-	-
130	Other financial corporations	-	-	-	-	-	-	-	-	-	-	-	-
140	Non-financial corporations	-	-	-	-	-	-	-	-	-	-	-	-
150	**Off-balance-sheet exposures**	26,569			117								109
160	Central banks	-			-								-
170	General governments	-			-								-
180	Credit institutions	976			-								-
190	Other financial corporations	1,710			-								-
200	Non-financial corporations	18,906			113								105
210	Households	4,977			4								4
220	**Total**	96,524	69,897	58	853	286	187	72	45	104	27	15	816

Total exposures increased by €8.9bn to €106.2bn due to increase in cash balances at central banks driven by the change in liquidity pool requirements and increase in off-balance sheet exposures driven by increase in non-financial corporations due to trading activity.

Analysis of credit risk

Table 37: CQ4 - Quality of non-performing exposures by geography

		Gross carrying/Nominal amount						
			of which: non-performing				Provisions on off-balance sheet commitments and financial guarantee given	Accumulated negative changes in fair value due to credit risk on non-performing exposures
	As at 31 December 2021	Total		of which: defaulted	of which: subject to impairment	Accumulated impairment		
		€m	€m	€m	€m	€m	€m	€m
1	***On balance sheet exposures***	50,666	678	652	35,316	(450)		—
2	*United Kingdom*	13,356	1	1	7,413	(2)		—
3	*Germany*	9,099	281	268	8,592	(286)		—
4	*France*	7,442	2	2	2,165	(3)		—
5	*Italy*	7,035	347	335	6,237	(139)		—
6	*Netherlands*	5,905	21	21	5,519	—		—
7	*Spain*	1,429	8	8	527	(4)		—
8	*Ireland*	1,297	1	1	1,273	(1)		—
9	*Sweden*	839	—	—	411	—		—
10	*Luxembourg*	728	6	6	669	(4)		—
11	*United States*	617	—	—	617	(2)		—
12	*Denmark*	523	—	—	79	—		—
13	*Portugal*	487	3	3	279	(3)		—
14	*Austria*	348	—	—	159	—		—
15	*Norway*	301	5	5	301	(3)		—
16	*Belgium*	272	—	—	272	(1)		—
21	*Other countries*	988	3	2	803	(2)		—
22	***Off Balance Sheet Exposures***	31,484	83	83			27	
23	*Germany*	9,901	60	60			3	
24	*France*	7,643	—	—			3	
25	*Italy*	2,454	8	8			2	
26	*Ireland*	1,939	—	—			4	
27	*Spain*	1,765	—	—			3	
28	*United States*	1,329	—	—			1	
29	*United Kingdom*	1,316	4	4			3	
30	*Netherlands*	1,279	10	10			1	
31	*Norway*	1,095	—	—			5	
32	*Luxembourg*	681	1	1			1	
33	*Sweden*	670	—	—			—	
34	*Austria*	422	—	—			—	
35	*Finland*	288	—	—			1	
36	*Portugal*	197	—	—			—	
37	*Other countries*	505	—	—			—	
38	***Total***	**82,150**	**761**	**735**	**35,316**	**(450)**	**27**	**—**

Analysis of credit risk

Table 38: CQ5 - Credit quality of loans and advances to non-financial corporations by industry

		Gross carrying amount					
			of which: non-performing				
	As at 31 December 2021	Total €m	€m	of which: defaulted €m	of which: loans and advances subject to impairment €m	Accumulated impairment €m	Accumulated negative changes in fair value due to credit risk on non-performing exposures €m
1	Agriculture, forestry and fishing	—	—	—	—	—	—
2	Mining and quarrying	701	25	25	701	(3)	—
3	Manufacturing	446	19	19	446	(16)	—
4	Electricity, gas, steam and air conditioning supply	465	—	—	465	—	—
5	Water supply	—	—	—	—	—	—
6	Construction	154	1	1	154	(1)	—
7	Wholesale and retail trade	368	5	5	368	(3)	—
8	Transport and storage	224	1	1	224	(4)	—
9	Accommodation and food service activities	202	1	1	202	(1)	—
10	Information and communication	288	2	2	288	(1)	—
11	Real estate activities	49	14	14	49	(13)	—
12	Financial and insurance activities	—	—	—	—	—	—
13	Professional, scientific and technical activities	133	—	—	133	—	—
14	Administrative and support service activities	149	83	83	149	(25)	—
15	Public administration and defense, compulsory social security	—	—	—	—	—	—
16	Education	—	—	—	—	—	—
17	Human health services and social work activities	82	—	—	82	—	—
18	Arts, entertainment and recreation	17	—	—	17	—	—
19	Other services	—	—	—	—	—	—
20	**Total**	**3,278**	**151**	**151**	**3,278**	**(67)**	**—**

Analysis of credit risk

Table 39: CR1 - Performing and non-performing exposures

		Gross carrying amount/nominal						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			Accumulated partial write-off	On performing exposures	On non-performing exposures
	As at 31 December 2021	Total	Of which stage 1	Of which stage 2	Total	Of which stage 2	Of which stage 3	Total	Of which stage 1	Of which stage 2	Total	Of which stage 2	Of which stage 3			
		€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
0	Cash balances at central banks and other demand deposits	24,096	24,096	—	—	—	—	—	—	—	—	—	—	—	—	—
1	**Loans and advances**	49,885	32,702	1,883	678	32	619	(196)	(33)	(164)	(254)	(8)	(246)	—	24,443	257
2	Central banks	992	96	—	—	—	—	—	—	—	—	—	—	—	896	—
3	General governments	1,473	822	—	—	—	—	—	—	—	—	—	—	—	299	—
4	Credit institutions	16,922	8,438	8	—	—	—	—	—	—	—	—	—	—	11,697	—
5	Other financial corporations	17,923	12,743	204	13	—	13	—	—	—	(4)	—	(4)	—	5,203	9
6	Non-financial corporations	3,127	2,644	483	151	—	151	(20)	(5)	(15)	(47)	—	(47)	—	1,158	10
7	Of which SMEs	—	—	—	4	—	4	—	—	—	(4)	—	(4)	—	—	—
8	Households	9,448	7,959	1,188	514	32	455	(176)	(28)	(149)	(203)	(8)	(195)	—	5,190	238
9	**Debt securities**	103	79	—	—	—	—	—	—	—	—	—	—	—	24	—
10	Central banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	General governments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	Credit institutions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	Other financial corporations	103	79	—	—	—	—	—	—	—	—	—	—	—	24	—
14	Non-financial corporations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	**Off-balance-sheet exposures**	31,437	26,965	2,912	84	—	84	27	18	9	—	—	—	—	8,640	11
16	Central banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17	General governments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18	Credit institutions	635	635	—	—	—	—	—	—	—	—	—	—	—	157	—
19	Other financial corporations	3,287	3,234	53	—	—	—	—	—	—	—	—	—	—	307	—
20	Non-financial corporations	21,817	17,704	2,568	70	—	70	27	17	9	—	—	—	—	8,089	9
21	Households	5,698	5,393	291	14	—	14	—	—	—	—	—	—	—	87	2
22	**Total**	**105,520**	**83,842**	**4,795**	**762**	**32**	**703**	**(169)**	**(15)**	**(155)**	**(254)**	**(8)**	**(246)**	**—**	**33,106**	**268**

Analysis of credit risk

Table 39: CR1 - Performing and non-performing exposures continued

		Gross carrying amount/nominal						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			Accumulated partial write-off	On performing exposures	On non-performing exposures
	As at 31 December 2020	Total €m	Of which stage 1 €m	Of which stage 2 €m	Total €m	Of which stage 2 €m	Of which stage 3 €m	Total €m	Of which stage 1 €m	Of which stage 2 €m	Total €m	Of which stage 2 €m	Of which stage 3 €m	€m	€m	€m
0	Cash balances at central banks and other demand deposits	20,065	20,065	—	—	—	—	—	—	—	—	—	—	—	—	—
1	**Loans and advances**	49,890	32,924	2,247	736	21	682	(328)	(48)	(281)	(265)	(10)	(255)	—	23,115	288
2	Central banks	108	49	—	—	—	—	—	—	—	—	—	—	—	58	—
3	General governments	1,108	1,108	—	—	—	—	—	—	—	—	—	—	—	—	—
4	Credit institutions	15,485	7,323	3	—	—	—	—	—	—	—	—	—	—	10,975	—
5	Other financial corporations	20,643	14,469	—	13	—	13	(1)	(1)	—	(4)	—	(4)	—	6,149	9
6	Non-financial corporations	2,888	2,375	514	179	—	179	(49)	(13)	(37)	(64)	—	(64)	—	185	7
7	Of which SMEs	—	—	—	4	—	4	—	—	—	(4)	—	(4)	—	—	—
8	Households	9,658	7,601	1,730	544	21	490	(278)	(34)	(244)	(197)	(10)	(187)	—	5,748	272
9	**Debt securities**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	Central banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	General governments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	Credit institutions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	Other financial corporations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	Non-financial corporations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	**Off-balance-sheet exposures**	26,568	22,562	4,007	118	—	117	(52)	(15)	(37)	—	—	—	—	176	—
16	Central banks	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17	General governments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18	Credit institutions	976	918	58	—	—	—	(1)	(1)	—	—	—	—	—	—	—
19	Other financial corporations	1,710	1,510	200	—	—	—	(1)	(1)	—	—	—	—	—	8	—
20	Non-financial corporations	18,906	15,417	3,489	114	—	113	(50)	(13)	(37)	—	—	—	—	130	—
21	Households	4,977	4,717	260	4	—	4	—	—	—	—	—	—	—	37	—
22	**Total**	**76,459**	**55,485**	**6,254**	**854**	**21**	**799**	**(380)**	**(63)**	**(318)**	**(265)**	**(10)**	**(255)**	**—**	**23,291**	**288**

Analysis of credit risk

Table 40: Loans and advances subject to legislative and non-legislative moratoria

This table provides an overview of the credit quality of loans and advances subject to moratoria on loan repayments applied in the light of the COVID-19 crisis.

		Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying amount
			Performing			Non performing				Performing			Non performing			
		Total	Total Performing	Of which: exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	Total Non performing	Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Total	Total Performing	Of which: exposures with forbearance measures	Of which: Instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	Total Non performing	Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Inflows to non-performing exposures
As at 31 December 2021		€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
1	Loans and advances subject to moratorium	33	31	—	23	2	1	2	(1)	(1)	—	(1)	—	—	—	—
2	of which: Households	33	31	—	23	2	1	2	(1)	(1)	—	(1)	—	—	—	—
3	*of which: Collateralised by residential immovable property*	33	31	—	23	2	1	2	(1)	(1)	—	(1)	—	—	—	—
4	of which: Non-financial corporations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	*of which: Small and Medium-sized Enterprises*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	*of which: Collateralised by commercial immovable property*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Analysis of credit risk

Table 41: Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria

This table provides an overview of the volume of loans and advances subject to legislative and non-legislative moratoria.

			Gross carrying amount						
					Residual maturity of moratoria				
	Number of obligors		Of which: legislative moratoria	Of which: expired	<= 3 months	> 3 months <= 6 months	> 6 months <= 9 months	> 9 months <= 12 months	> 1 year
As at 31 December 2021		€m	€m	€m	€m	€m	€m	€m	€m
1 Loans and advances for which moratorium was offered	23,491	799							
2 Loans and advances subject to moratorium (granted)	15,201	440	385	408	16	6	2	4	4
3 of which: Households		440	385	408	16	6	2	4	4
4 *of which: Collateralised by residential immovable property*		377	321	344	16	6	2	4	4
5 *of which: Non-financial corporations*		—	—	—	—	—	—	—	—
6 *of which: Small and Medium-sized Enterprises*		—	—	—	—	—	—	—	—
7 *of which: Collateralised by commercial immovable property*		—	—	—	—	—	—	—	—

Table 42: Newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis

This table provides an overview of the stock of newly originated loans and advances subject to public guarantee schemes introduced in response to COVID-19 crisis.

		Gross carrying amount		Maximum amount of the guarantee that can be considered	Gross carrying amount
			of which: forborne	Public guarantees received	Inflows to non-performing exposures
As at 31 December 2021		€m	€m	€m	€m
1	**Newly originated loans and advances subject to public guarantee schemes**	52	—	41	—
2	*of which: Households*	—			—
3	*of which: Collateralised by residential immovable property*	—			—
4	*of which: Non-financial corporations*	52	—	41	—
5	*of which: Small and Medium-sized Enterprises*	—			—
6	*of which: Collateralised by commercial immovable property*	—			—

Analysis of counterparty credit risk

This section details BBI's counterparty credit risk profile, focusing on regulatory measures such as exposure at default and risk weighted assets. The risk profile is analysed by financial contract type, approach and notional value.

Key Metrics

2021 Risk weighted assets for counterparty credit risk

€6.0bn

2020: €3.9bn

- Counterparty credit risk (CCR) RWAs are primarily generated by the following IFRS account classifications: financial assets designated at fair value; derivative financial instruments; reverse repurchase agreements and other similar secured lending.
- CVA has been included overleaf as part of the CCR RWAs disclosures.

Analysis of counterparty credit risk

Counterparty risk exposures

Counterparty credit risk (CCR) is the risk related to a counterparty defaulting before the final settlement of a transaction's cash flows. BBI calculates the exposures subject to CCR using three methods: Internal Model Method (IMM), Financial Collateral Comprehensive Method (FCCM), and Standardised Approach to counterparty credit risk (SA-CCR).

The following tables analyse CCR exposures and risk weighted assets split by regulatory exposure classes. Table 43 excludes CVA, which is shown on table 51 and post model adjustments disclosed in table 12 under other CCR items.

Table 43: Detailed view of counterparty credit risk EAD, RWAs and Capital Requirement

As at 31 December 2021	EAD €m	RWA €m	Capital Requirements €m
Counterparty credit risk exposure class			
Standardised approach			
Central governments or central banks	191	86	7
Regional governments or local authorities	364	—	—
Public sector entities	580	38	3
Multilateral development banks	8	—	—
International organisations	77	—	—
Institutions	3,674	1,427	114
Corporates	4,181	3,690	296
Retail	—	—	—
Secured by mortgages	—	—	—
Exposures in default	3	4	—
Items associated with high risk	—	—	—
Covered bonds	—	—	—
Securitisation positions	—	—	—
Collective investment undertakings	—	—	—
Equity positions	—	—	—
Other items	—	—	—
Total Standardised Approach Credit Risk Exposure	**9,078**	**5,245**	**420**
Advanced IRB approach			
Central governments or central banks	16	6	—
Institutions	—	—	—
Corporates	2,312	343	28
Retail	—	—	—
- Small and medium enterprises (SME)	—	—	—
- Secured by real estate collateral	—	—	—
- Qualifying revolving retail	—	—	—
- Other retail	—	—	—
Equity	—	—	—
Securitisation positions	—	—	—
Non-credit obligation assets	—	—	—
Other items	—	—	—
Total Advanced IRB Credit Risk Exposure	**2,328**	**349**	**28**
Default fund contributions	176	38	3
Total Counterparty Credit Risk	**11,582**	**5,632**	**451**

Analysis of counterparty credit risk

Table 43: Detailed view of counterparty credit risk EAD, RWAs and Capital Requirement continued

As at 31 December 2020	EAD €m	RWA €m	Capital Requirements €m
Counterparty credit risk exposure class	—	—	—
Standardised approach	—	—	—
Central governments or central banks	224	22	2
Regional governments or local authorities	541	—	—
Public sector entities	251	25	2
Multilateral development banks	—	—	—
International organisations	105	—	—
Institutions	2,512	799	64
Corporates	2,924	2,577	206
Retail	—	—	—
Secured by mortgages	—	—	—
Exposures in default	—	—	—
Items associated with high risk	—	—	—
Covered bonds	—	—	—
Securitisation positions	—	—	—
Collective investment undertakings	—	—	—
Equity positions	—	—	—
Other items	—	—	—
Total Standardised Approach Credit Risk Exposure	6,557	3,423	274
Advanced IRB approach	—	—	—
Central governments or central banks	7	3	—
Institutions	—	—	—
Corporates	1,921	312	25
Retail	—	—	—
- Small and medium enterprises (SME)	—	—	—
- Secured by real estate collateral	—	—	—
- Qualifying revolving retail	—	—	—
- Other retail	—	—	—
Equity	—	—	—
Securitisation positions	—	—	—
Non-credit obligation assets	—	—	—
Total Advanced IRB Credit Risk Exposure	**1,928**	**315**	**25**
Default fund contributions	179	128	10
Total Counterparty Credit Risk	**8,664**	**3,866**	**309**

CCR EADs and RWAs increased €2.9bn to €11.6bn and €1.7bn to €5.6bn respectively, primarily due to trading activity.

Analysis of counterparty credit risk

Table 44: CCR1 – Analysis of CCR exposure by approach

This table excludes default fund contribution, post model adjustments and CCPs as at 31 December 2021 and as such cannot be directly reconciled to Table 43.

	As at 31 December 2021	Replacement cost/current market value €m	Potential future credit exposure €m	EEPE €m	Multiplier	EAD pre CRM €m	EAD post CRM €m	EAD €m	RWAs €m
EU1	EU - Original Exposure Method (for derivatives)	—	—		1.4	—	—	—	—
EU2	EU - Simplified SA-CCR (for derivatives)	—	—		1.4	—	—	—	—
1	SA-CCR (for derivatives)	77	361		1.4	984	612	612	307
2	IMM (for derivatives and SFTs)			6,763	1.4	23,341	9,468	9,468	4,940
2a	Of which securities financing transactions netting sets			1,060		—	1,484	1,484	402
2b	Of which derivatives and long settlement transactions netting sets			5,703		23,341	7,984	7,984	4,538
2c	Of which from contractual cross-product netting sets			—		—	—	—	—
3	Financial collateral simple method (for SFTs)					—	—	—	—
4	Financial collateral comprehensive method (for SFTs)					—	462	462	317
5	VaR for SFTs					—	—	—	—
6	Total					24,325	10,542	10,542	5,564

	As at 31 December 2020	Notional €m	Replacement cost/current market value €m	Potential future credit exposure €m	EEPE	Multiplier €m	EAD post CRM €m	RWAs €m
1	Mark to market		1,187	399			820	395
2	Original exposure	—					—	—
3	Standardised approach		—				—	—
4	IMM (for derivatives and SFTs)				5,294	1.4	7,412	3,286
5	Of which securities financing transactions				1,210	1.4	1,695	229
6	Of which derivatives and long settlement transactions				4,084	1.4	5,717	3,057
7	Of which from contractual cross-product netting				—		—	—
8	Financial collateral simple method (for SFTs)						—	—
9	Financial collateral comprehensive method (for SFTs)						253	57
10	VaR for SFTs						—	—
11	**Total**							**3,738**

CCR RWAs increased €1.9bn to €5.6bn primarily due to trading activity.

Analysis of counterparty credit risk

Table 45: CCR3 - Counterparty credit risk exposures by regulatory exposure class and risk weight under standardised approach

This table shows exposure at default, broken down by exposure class and risk weight. This table includes exposures subject to the Standardised approach only.

	Exposures by regulatory portfolio and risk	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	Total exposure value
	As at 31 December 2021												
1	Central governments or central banks	105	—	—	—	—	1	—	—	85	—	—	191
2	Regional governments or local authorities	364	—	—	—	—	—	—	—	—	—	—	364
3	Public sector entities	458	—	—	—	75	47	—	—	—	—	—	580
4	Multilateral development banks	8	—	—	—	—	—	—	—	—	—	—	8
5	International Organisations	77	—	—	—	—	—	—	—	—	—	—	77
6	Institutions	—	856	—	—	581	1,905	—	—	323	7	—	3,672
7	Corporates	—	—	—	—	221	628	—	—	3,327	—	—	4,176
8	Retail	—	—	—	—	—	—	—	—	—	—	—	—
9	Institutions and corporate with a short-term credit assessment	—	—	—	—	—	—	—	—	—	—	—	—
10	Other items	—	—	—	—	—	—	—	—	—	3	—	3
11	Total	**1,012**	**856**	**—**	**—**	**877**	**2,581**	**—**	**—**	**3,735**	**10**	**—**	**9,071**
	As at 31 December 2020												
1	Central governments or central banks	201	—	—	—	—	3	—	—	20	—	—	224
2	Regional governments or local authorities	541	—	—	—	—	—	—	—	—	—	—	541
3	Public sector entities	158	—	—	—	71	22	—	—	—	—	—	251
4	Multilateral development banks	—	—	—	—	—	—	—	—	—	—	—	—
5	International Organisations	105	—	—	—	—	—	—	—	—	—	—	105
6	Institutions	—	530	—	—	613	1,263	—	—	11	6	—	2,423
7	Corporates	—	—	—	—	143	468	—	—	2,305	2	—	2,918
8	Retail	—	—	—	—	—	—	—	—	—	—	—	—
9	Institutions and corporate with a short-term credit assessment	—	—	—	—	—	—	—	—	—	—	—	—
10	Other items	—	—	—	—	—	—	—	—	—	—	—	—
11	**Total**	**1,005**	**530**	**—**	**—**	**827**	**1,756**	**—**	**—**	**2,336**	**8**	**—**	**6,462**

CCR EAD increased by €2.6bn to €9.1bn primarily due to trading activity.

Analysis of counterparty credit risk

IRB obligor grade disclosure

The following tables show counterparty credit risk exposure at default post-CRM for the advanced IRB approach for portfolios within both the trading and banking books. Separate tables are provided for the following exposure classes: central governments and central banks (Table 46) and corporates (Table 47).

Table 46: CCR4 - Counterparty credit risk exposures by portfolio and PD range for central governments and central banks

	EAD post CRM €m	Average PD %	Number of obligors	Average LGD %	Average Maturity	RWA €m	RWA Density %
As at 31 December 2021							
0.00 to < 0.15	—	— %	—	— %	—	—	— %
0.15 to < 0.25	16	0.2 %	1	55.4 %	1	6	35.1 %
0.25 to < 0.50	—	— %	—	— %	—	—	— %
0.50 to < 0.75	—	— %	—	— %	—	—	— %
0.75 to < 2.50	—	— %	—	— %	—	—	— %
2.50 to < 10.00	—	— %	—	— %	—	—	— %
10.00 to < 100.00	—	— %	—	— %	—	—	— %
100.00 (Default)	—	— %	—	— %	—	—	— %
Total	**16**	**0.2 %**	**1**	**55.4 %**	**1**	**6**	**35.1 %**
As at 31 December 2020							
0.00 to < 0.15	—	— %	—	— %	—	—	— %
0.15 to < 0.25	7	0.2 %	1	55.4 %	1	3	44.1 %
0.25 to < 0.50	—	— %	—	— %	—	—	— %
0.50 to < 0.75	—	— %	—	— %	—	—	— %
0.75 to < 2.50	—	— %	—	— %	—	—	— %
2.50 to < 10.00	—	— %	—	— %	—	—	— %
10.00 to < 100.00	—	— %	—	— %	—	—	— %
100.00 (Default)	—	— %	—	— %	—	—	— %
Total	**7**	**0.2 %**	**1**	**55.4 %**	**1**	**3**	**44.1 %**

The RWA density associated with central governments and central banks decreased 9% to 35.1% due to trading activity with counterparties with higher quality PD grades.

Table 47: CCR4 - Counterparty credit risk exposures by portfolio and PD range for corporates

	EAD post CRM €m	Average PD %	Number of obligors	Average LGD %	Average Maturity	RWA €m	RWA Density %
As at 31 December 2021							
0.00 to < 0.15	2,159	0.05 %	504	45.0 %	1	261	12.1 %
0.15 to < 0.25	87	0.20 %	55	45.0 %	1	30	34.9 %
0.25 to < 0.50	31	0.27 %	19	45.0 %	1	15	49.5 %
0.50 to < 0.75	11	0.55 %	4	45.0 %	1	10	88.3 %
0.75 to < 2.50	24	1.52 %	11	45.0 %	1	28	115.4 %
2.50 to < 10.00	—	— %	—	— %	—	—	— %
10.00 to < 100.00	—	— %	—	— %	—	—	— %
100.00 (Default)	—	— %	—	— %	—	—	— %
Total	**2,312**	**0.08 %**	**593**	**45.0 %**	**1**	**344**	**14.9 %**
As at 31 December 2020							
0.00 to < 0.15	1,716	0.10 %	477	45.0 %	1	207	12.1 %
0.15 to < 0.25	39	0.20 %	47	45.0 %	1	14	35.3 %
0.25 to < 0.50	89	0.30 %	37	45.0 %	1	35	39.2 %
0.50 to < 0.75	12	0.60 %	5	45.0 %	1	9	73.7 %
0.75 to < 2.50	65	1.70 %	6	45.0 %	—	47	73.0 %
2.50 to < 10.00	—	— %	—	— %	—	—	— %
10.00 to < 100.00	—	— %	—	— %	—	—	— %
100.00 (Default)	—	— %	—	— %	—	—	— %
Total	**1,921**	**0.10 %**	**572**	**45.0 %**	**1**	**312**	**16.3 %**

The RWA density associated corporates has decreased 1.4% to 14.9% this is primarily due to trading activity with counterparties with higher quality PD grades.

Analysis of counterparty credit risk

Table 48: CCR5 - Composition of collateral for exposures to CCR

This table shows the types of collateral posted or received, to support or reduce, CCR exposures relating to derivative transactions or SFTs, including transactions cleared through a CCP. Segregated collateral is collateral that is held in a bankruptcy-remote manner as defined in Article 300 (1) CRR. December 2020 comparative not included in this report as a result of the change in structure of Table 48.

	Collateral used in derivative transactions				Collateral used in SFTs[5]			
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received		Fair value of posted collateral	
	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated	Segregated	Unsegregated
As at 31 December 2021	€m	€m	€m	€m	€m	€m	€m	€m
1 Cash – domestic currency	—	12,837	—	15,161	—	—	—	—
2 Cash – other currencies	—	406	—	413	—	—	—	—
3 Domestic sovereign debt	1,883	721	—	872	—	40,596	—	33,692
4 Other sovereign debt	1	307	—	45	—	1,072	—	1,269
5 Government agency debt	643	—	—	—	—	—	—	—
6 Corporate bonds	199	2	—	—	—	9,187	—	7,943
7 Equity securities	553	—	—	—	—	5,756	—	6,045
8 Other collateral	598	38	505	—	—	20	—	21
9 Total	**3,877**	**14,311**	**505**	**16,491**	**—**	**56,631**	**—**	**48,970**

[5] Collateral used in SFT includes the initial margin and variation margin collateral as well as the collateral appearing in the security leg of the SFT.

Analysis of counterparty credit risk

Table 49: CCR6 - Credit derivatives exposures

This table provides a breakdown of the BBI's exposures to credit derivatives products. The structure of Table 49 has changed as a result of amendments to Article 439 of the CRR and all credit derivatives are now reported across the categories of Protection bought and Protection sold. As a result, December 2020 comparative table not included in this report.

	As at 31 December 2021	Protection bought €m	Protection sold €m
Notionals			
1	Single-name credit default swaps	13,800	13,034
2	Index credit default swaps	12,807	13,031
3	Total return swaps	445	445
4	Credit options	6,766	6,766
5	Other credit derivatives	—	—
6	**Total notionals**	**33,818**	**33,276**
Fair values			
7	**Positive fair value (asset)**	237	818
8	**Negative fair value (liability)**	(838)	(235)

Table 50: CCR8 - Exposures to CCPs

This table provides a breakdown of the BBI's exposures and RWAs to central counterparties (CCPs).

		As at 31 December 2021		As at 31 December 2020	
		EAD post CRM €m	RWAs €m	EAD post CRM €m	RWAs €m
1	**Exposures to QCCPs (total)**		55		138
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	87	2	31	1
3	(i) OTC derivatives	87	2	31	1
4	(ii) Exchange-traded derivatives	—	—	—	—
5	(iii) SFTs	—	—	—	—
6	(iv) Netting sets where cross-product netting has been approved	—	—	—	—
7	Segregated initial margin	—		—	
8	Non-segregated initial margin	770	15	498	10
9	Prefunded default fund contributions	176	38	179	127
10	Unfunded default fund contributions	300	—		—
11	**Exposures to non-QCCPs (total)**		—		—
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	—	—	—	—
13	(i) OTC derivatives	—	—	—	—
14	(ii) Exchange-traded derivatives	—	—	—	—
15	(iii) SFTs	—	—	—	—
16	(iv) Netting sets where cross-product netting has been approved	—	—	—	—
17	Segregated initial margin	—		—	
18	Non-segregated initial margin	—	—	—	—
19	Prefunded default fund contributions	—	—	—	—
20	Unfunded default fund contributions	—	—	—	—

EAD post CRM to CCP increased primarily due to trading activity in the derivative portfolio.

Analysis of counterparty credit risk

Credit value adjustments

The Credit value adjustment (CVA) measures the risk from MTM losses due to deterioration in the credit quality of a counterparty to over-the-counter derivative transactions with BBI. It is a complement to the counterparty credit risk charge that accounts for the risk of outright default of a counterparty.

Table 51: CCR2 - Transactions subject to own funds requirements for CVA risk

Two approaches can be used to calculate the adjustment:

- Standardised approach: this approach takes account of the external credit rating of each counterparty, and incorporates the effective maturity and EAD from the calculation of the CCR
- Advanced approach: this approach requires the calculation of the charge as a) a 10-day 99% Value at Risk (VaR) measure for the most recent one year period and b) the same measure for a stressed period. The sum of the two VaR measures is scaled by the relevant multiplication factor, based on the number of market risk back testing exceptions for the most recent 250 business days, to yield the capital charge.

Credit valuation adjustment (CVA) capital charge			
		Exposure value	RWA
		€m	€m
As at 31 December 2021			
1	Total transactions subject to the Advanced method	3,261	1,979
2	(i) VaR component (including the 3x multiplier)		501
3	(ii) Stressed VaR component (including 3x multiplier)		1,478
4	Transactions subject to the Standardised method	61	146
EU4	Transactions subject to the Alternative approach (Based on original exposure method)	—	—
5	**Total transactions subject to own funds requirements for CVA risk**	**3,322**	**2,125**
As at 31 December 2020			
1	Total transactions subject to the Advanced method	1,747	342
2	(i) VaR component (including the 3.4x multiplier)		70
3	(ii) Stressed VaR component (including 3.4x multiplier)		272
4	Transactions subject to the Standardised method	—	—
EU4	Transactions subject to the Alternative approach (Based on original exposure method)		
5	**Total transactions subject to own funds requirements for CVA risk**	1,747	342

CVA RWA increased €1.8bn to €2.1bn primarily driven by the loss of an exemption for intragroup exposures due to the loss of United Kingdom's equivalent prudential regulatory regime status following the conclusion of the transitional Brexit withdrawal period and trades that were previously measured under the Current Exposure Method are now being assessed under the Standardised Approach to Counterparty Credit Risk.

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Analysis of securitisation risk

Securitisation positions are subject to a distinct regulatory framework and are therefore disclosed separately.

This section shows BBI's credit, counterparty credit and market risk arising from securitisation positions. These are already included in previous related sections.

Key Metrics

2021 Banking book risk weighted assets

€34m

2020: nil

The increase in RWEA of € 34m is driven by investment in new securitisation positions. There were no exposures to securitisation in 2020.

There were no securitisation positions in the trading book for both 2020 and 2021 year ends.

Securitisation risk

Table 52: SEC1 - Securitisation exposures in the non-trading book

		Institution acts as originator							Institution acts as sponsor				Institution acts as investor			
		Traditional				Synthetic			Traditional				Traditional			
		STS		Non-STS												
			of which SRT		of which SRT		of which SRT	Sub-total	STS	Non-STS	Synthetic	Sub-total	STS	Non-STS	Synthetic	Sub-total
As at 31 December 2021		€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
1	**Total exposures**	—	—	1,332	3	—	—	1,332	—	—	—	—	—	188	—	188
2	Retail (total)	—	—	1,306	3	—	—	1,306	—	—	—	—	—	36	—	36
3	residential mortgage	—	—	116	3	—	—	116	—	—	—	—	—	—	—	—
4	credit card	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	other retail exposures	—	—	1,190	—	—	—	1,190	—	—	—	—	—	36	—	36
6	re-securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7	Wholesale (total)	—	—	26	—	—	—	26	—	—	—	—	—	153	—	153
8	loans to corporates	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	commercial mortgage	—	—	26	—	—	—	26	—	—	—	—	—	—	—	—
10	lease and receivables	—	—	—	—	—	—	—	—	—	—	—	—	153	—	153
11	other wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	re-securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

There were no exposures in the non-trading book as at 31 December 2020.

An increase in exposure of €1.2bn is driven by origination where new securitisations have not achieved significant risk transfer (SRT). The remaining increase is driven by origination of new securitisations that have achieved SRT.

An increase in exposure of €188m is driven by investment in new securitisation positions.

Securitisation risk

Table 53: SEC3 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor

		Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWEA (by regulatory approach)				Capital charge after cap			
		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions
As at 31 December 2021		€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
1	**Total exposures**	3	—	—	—	—	—	—	3	—	—	—	—	5	—	—	—	—
2	Traditional transactions	3	—	—	—	—	—	—	3	—	—	—	—	5	—	—	—	—
3	Securitisation	3	—	—	—	—	—	—	3	—	—	—	—	5	—	—	—	—
4	Retail underlying	3	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—
5	Of which STS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Wholesale	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—
7	Of which STS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	Re-securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	Synthetic transactions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	Retail underlying	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	Wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	Re-securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

There were no exposures in the non-trading book and associated regulatory capital requirements where the Bank was acting as an originator or as a sponsor as at 31 December 2020. The increase in exposure of €3m is primarily driven by origination of securitisations and retention of some of the horizontal tranches.

Securitisation risk

Table 54: SEC4 - Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor

		Exposure values (by RW bands/deductions)					Exposure values (by regulatory approach)				RWEA (by regulatory approach)				Capital charge after cap			
		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions	SEC-IRBA	SEC-ERBA (including IAA)	SEC-SA	1250%/ deductions
As at 31 December 2021		€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
1	**Total exposures**	188	—	—	—	—	—	—	188	—	—	—	29	—	—	—	2	—
2	Traditional securitisation	188	—	—	—	—	—	—	188	—	—	—	29	—	—	—	2	—
3	Securitisation	188	—	—	—	—	—	—	188	—	—	—	29	—	—	—	2	—
4	Retail underlying	36	—	—	—	—	—	—	36	—	—	—	5	—	—	—	—	—
5	Of which STS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	Wholesale	153	—	—	—	—	—	—	153	—	—	—	23	—	—	—	2	—
7	Of which STS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	Re-securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	Synthetic securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	Securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	Retail underlying	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	Wholesale	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	Re-securitisation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

There were no exposures in the non-trading book and associated regulatory capital requirements where the Bank was acting as an investor as at 31 December 2020. The increase in exposure of €188m is primarily driven by investment in new securitisations.

Securitisation risk

Table 55: SEC5 - Exposures securitised by the institution - Exposures in default and specific credit risk adjustments

		Exposures securitised by the institution - Institution acts as originator or as sponsor		
		Total outstanding nominal amount		Total amount of specific credit risk adjustments made during the period
			Of which exposures in default	
As at 31 December 2021		€m	€m	€m
1	**Total exposures**	3,962	8	—
2	Retail (total)	3,452	8	—
3	residential mortgage	2,262	8	—
4	credit card	—	—	—
5	other retail exposures	1,190	—	—
6	re-securitisation	—	—	—
7	Wholesale (total)	510	—	—
8	loans to corporates	—	—	—
9	commercial mortgage	510	—	—
10	lease and receivables	—	—	—
11	other wholesale	—	—	—
12	re-securitisation	—	—	—

There were no exposures securitised, no exposures in default and no specific credit risk adjustments made by the Bank as at 31 December 2020. The increase in exposure of €4.0bn is due to €2.8bn increase driven by origination of new securitisations which achieved SRT and €1.2bn increase driven by origination of new securitisations that did not achieve SRT.

Analysis of market risk

This section contains key disclosures describing BBI's market risk profile, highlighting regulatory as well as management measures.

Key Metrics

2021 *Risk weighted assets for market risk*

€5.5bn

2020: €1.9bn

Market risk RWAs are primarily generated by the following IFRS account classifications: Trading portfolio assets and liabilities; and derivative financial instruments.

BBI has regulatory approval for VaR modelling for general market risk, which is designed to capture the risk of loss arising from changes in market interest rates, along with the risk of losses arising from changes in foreign exchange rates, and equity prices.

The capital charge for specific market risk is designed to protect against losses from adverse movements in the price of an individual security owing to factors related to the individual issuer. BBI has permission to model specific market risk, including credit spread, migration, and default risks, for certain legal entities and product types. Where BBI does not have permission to use a model, the Standardised Approach is applied.

Analysis of market risk

Traded market risk overview:

This section contains key disclosures describing the market risk profile of the Bank. The market risk management section provides a description of management Value at Risk.

Measures of market risk

Traded market risk measures such as VaR and balance sheet exposure measures have fundamental differences:

a. Balance sheet measures show accruals-based balances or marked to market values as at the reporting date;
b. VaR measures also take account of current marked to market values, but in addition hedging effects between positions are considered;
c. Market risk measures are expressed in terms of changes in value or volatilities as opposed to static values.

For these reasons, it is not possible to present direct reconciliations of traded market risk and accounting measures.

Review of management measures

The table below shows the total Management VaR on a diversified basis by risk factor. Total management VaR includes all the trading and certain banking books (those where the accounting treatment is fair value through profit or loss). In addition, it captures risk add-ons in the form of risks not in model engine ('RNIME') where a small population of risk factors are not well captured in VaR.

Limits are applied against each risk factor VaR as well as total Management VaR, which are then cascaded further by risk managers to each business.

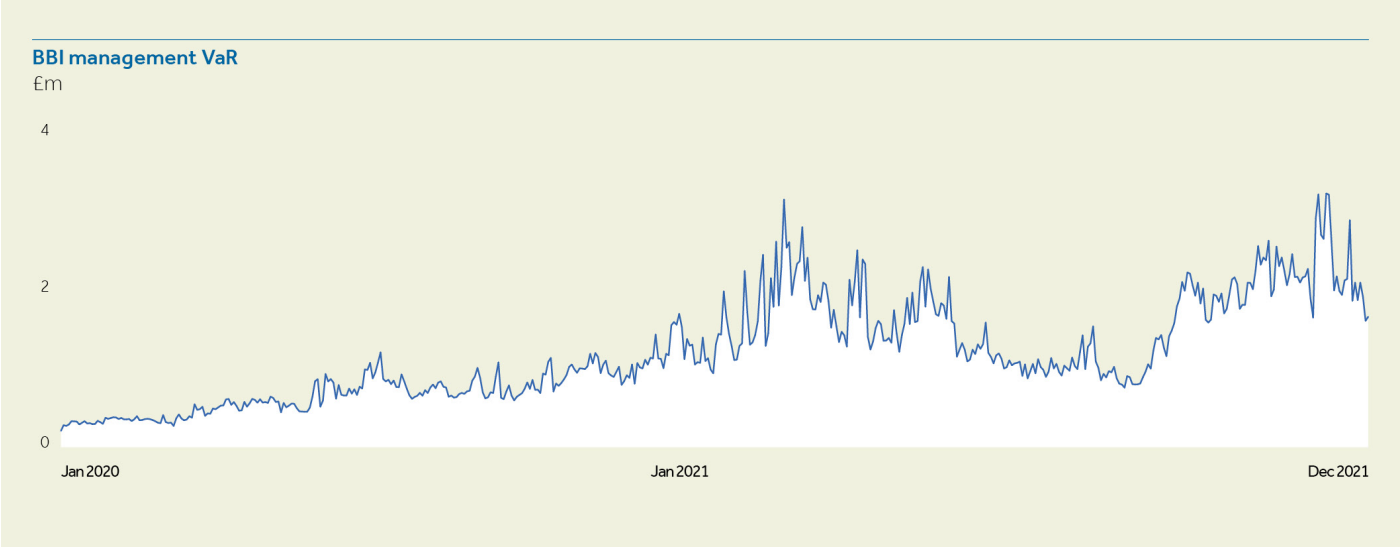
Table 56: The daily average, maximum and minimum values of management VaR

Management VaR (95%, one day) (audited)	2021			2020		
	Average	High	Low	Average	High	Low
	€m	€m	€m	€m	€m	€m
Credit risk	0.95	1.82	0.44	0.49	1.02	0.17
Interest rate risk	0.76	2.58	0.21	0.29	1.36	0.04
Equity risk	0.07	0.13	0.02	0.14	0.32	—
Basis risk	0.36	0.63	0.18	0.20	0.37	0.08
Spread risk	1.23	2.79	0.42	0.32	1.55	0.01
Foreign exchange risk	0.18	0.41	0.03	0.07	0.50	0.01
Commodity risk	—	—	—	—	—	—
Inflation risk	0.05	0.25	0.01	0.01	0.03	—
Diversification effect[a]	(1.93)	n/a	n/a	(0.79)	n/a	n/a
Total management VaR	1.67	3.25	0.77	0.72	1.71	0.22

Notes:

a Diversification effects recognise that forecast losses from different assets or businesses are unlikely to occur concurrently, hence the expected aggregate loss is lower than the sum of the expected losses from each area. Historical correlations between losses are taken into account in making these assessments. The high and low VaR figures reported for each category did not necessarily occur on the same day as the high and low VaR reported as a whole. Consequently, a diversification effect balance for the high and low VaR figures would not be meaningful and is therefore omitted from the above table.

Average Management VaR increased by 132% to €1.67m (2020: €0.72m) driven by increased risk taking in Rates and Credit business.



Analysis of market risk

Business scenario stresses

As part of the Bank's risk management framework, on a regular basis the performance of the trading business in hypothetical scenarios characterised by severe macroeconomic conditions is modelled. Up to seven global scenarios are modelled on a regular basis, for example, a sharp deterioration in liquidity, a slowdown in the global economy, global recession, and a sharp increase in economic growth.

In 2021, the scenario analyses showed that the largest market risk related impacts would be due to a severe deterioration in financial liquidity and an associated global recession.

Review of regulatory measures

The following disclosures provide details of regulatory measures of market risk.

BBI's market risk capital requirement comprises of two elements:

- the market risk of trading book positions booked to BBI is measured under temporary tolerance by the CBI approved internal models approach, including Regulatory VaR, Stressed Value at Risk (SVaR), Incremental Risk Charge (IRC) and Comprehensive Risk Measure (CRM) as required.
- the trading book positions that do not meet the conditions for inclusion within the approved internal models approach are calculated using standardised rules.

The table below summarises the regulatory market risk measures, under the internal models approach.

Table 57: MR3 - Analysis of Regulatory VaR, SVaR, IRC and Comprehensive Risk Measure

As at 31 December 2021	Year-end €m	Avg. €m	Max €m	Min €m
Regulatory VaR- 1 day	3.99	4.79	9.61	2.24
Regulatory VaR- 10 day[a]	12.63	15.15	30.38	7.08
SVaR - 1 day	6.37	11.07	21.62	6.02
SVaR - 10 day[a]	20.14	35.00	68.37	19.02
IRC	42.33	88.39	181.08	38.94
CRM	—	—	—	—
As at 31 December 2020				
Regulatory VaR- 1 day	3.58	2.29	5.50	0.66
Regulatory VaR- 10 day[a]	11.32	7.26	17.39	2.08
SVaR - 1 day	7.49	4.49	9.37	1.83
SVaR - 10 day[a]	23.69	14.19	29.63	5.78
IRC	53.29	27.80	53.29	19.67
CRM	—	—	—	—

Notes

a 10-day VaR results reported above are based on 1-day VaR multiplied by the square root of 10. For SVaR, following a recalibration of the SVaR period to the COVID-19 stress period, Barclays has taken a post-model adjustment for RWA reporting purposes to capture the incremental risk associated with 10-day SVaR over and above that obtained by scaling 1-day SVaR by the square root of 10. See Table 60: MR2-A for details.

Overall, average VaR, SVaR and IRC increased in 2021 primarily driven by a full year impact of business that migrated to BBI during 2020, which would have given rise to a relatively smaller impact on 2020 risk measures.

Analysis of market risk

Table 58: Breakdown of the major regulatory risk measures by portfolio

As at 31 December 2021	Macro €m	Equities €m	Credit €m	Banking €m	Treasury €m	Cross Markets €m	Fixed Income Financing €m
Regulatory VaR- 1 day	2.99	0.23	1.24	0.05	0.05	1.56	0.04
Regulatory VaR - 10 day	9.46	0.72	3.91	0.15	0.15	4.94	0.13
SVaR- 1 day	6.81	0.07	1.80	0.04	0.04	2.23	0.94
SVaR- 10 day	21.53	0.23	5.68	0.13	0.12	7.05	2.97
IRC	38.80	—	35.78	0.21	—	6.05	—
CRM	—	—	—	—	—	—	—
As at 31 December 2020							
Regulatory VaR- 1 day	1.21	0.02	1.27	0.03	0.01	2.70	0.03
Regulatory VaR - 10 day	3.82	0.08	4.00	0.10	0.02	8.53	0.09
SVaR- 1 day	3.86	0.05	1.44	0.04	—	4.83	0.11
SVaR- 10 day	12.22	0.15	4.55	0.12	0.01	15.27	0.36
IRC	13.59	—	43.80	0.25	—	7.99	—
CRM	—	—	—	—	—	—	—

The table above shows the primary portfolios which are driving the trading businesses' modelled capital requirement as at 2021 year-end. The standalone portfolio results diversify at the total level and are not additive.

Capital requirements for market risk

The table below shows the elements of capital requirements and risk weighted assets under the market risk framework as defined in the CRR. The Bank is required to hold capital for the market risk exposures arising from regulatory trading books. Inputs for the modelled components include the measures on Table 57, using the higher of the end of period value or an average over the past 60 days (times a multiplier in the case of VaR and SVaR).

Table 59: MR1 - Market risk under standardised approach

This table shows the RWAs and capital requirements for standardised market risk split between outright products, options and securitisation. This table includes exposures subject to the Standardised approach only.

		RWA	
		As at 31 December 2021 €m	As at 31 December 2020 €m
	Outright products		
1	Interest rate risk (general and specific)	33	—
2	Equity risk (general and specific)	5	6
3	Foreign exchange risk	—	—
4	Commodity risk	—	—
	Options	—	
5	Simplified approach	—	—
6	Delta-plus method	—	—
7	Scenario approach	—	—
8	**Securitisation (Specific Risk)**	—	—
9	**Total**	**38**	**6**

Overall market risk RWA under standardised approach increased due to trading a subset of loan products on a non back-to-back basis resulting in residual risk remaining within the bank.

Analysis of market risk

Table 60: MR2-A - Market risk under internal models approach

This table shows RWAs and capital requirements under the internal models approach. The table shows the calculation of capital requirements as a function of latest and average values for each component.

		RWA		Capital requirements	
		As at 31 December 2021	As at 31 December 2020	As at 31 December 2021	As at 31 December 2020
		€m	€m	€m	€m
1	VaR (higher of values a and b)	613	341	49	27
(a)	Previous day's VaR (Article 365(1) (VaRt-1))			11	12
(b)	Average of the daily VaR (Article 365(1)) on each of the preceding sixty business days (VaRavg) x multiplication factor ((mc) in accordance with Article 366)			49	27
2	SVaR (higher of values a and b)	2,019	600	162	48
(a)	Latest SVaR (Article 365(2) (sVaRt-1))	—	245	17	20
(b)	Average of the SVaR (Article 365(2) during the preceding sixty business days (sVaRavg) x multiplication factor (ms) (Article 366)			162	48
3	Incremental risk charge -IRC (higher of values a and b)	1,004	505	80	41
(a)	Most recent IRC value (incremental default and migration risks section 3 calculated in accordance with Section 3 articles 370/371)			42	40
(b)	Average of the IRC number over the preceding 12 weeks			80	30
4	Comprehensive Risk Measure – CRM (higher of values a, b and c)	—	—	—	—
(a)	Most recent risk number for the correlation trading portfolio (article 377)			—	—
(b)	Average of the risk number for the correlation trading portfolio over the preceding 12-weeks			—	—
(c)	8 % of the own funds requirement in SA on most recent risk number for the correlation trading portfolio (Article 338(4))			—	—
5	Other	1,858	413	149	33
6	**Total**	**5,494**	**1,859**	**440**	**149**

Overall modelled market risk RWA increased by €3.6bn to €5.5bn, primarily due to increases in SVaR RWAs. This increase arose from the recalibration of the SVaR window to the COVID-19 stress period and the resulting requirement to include a PMA that accounts for any shortfall obtained by scaling the 1-day SVaR RWAs by the square root of 10 against the regulatory requirement of the 10-day SVaR.

Analysis of the interest rate risk in the banking book

This section contains key disclosures describing BBI's exposure to interest rate risk in the banking book, highlighting the interest rate sensitivity to the supervisory shock scenarios as well as an overview of the management framework.

Key Metrics

- Interest rate risk in the banking book (IRRBB) is defined as the risk that the firm is exposed to capital or income volatility because of a mismatch between the interest rate exposures of its (non-traded) assets and liabilities.
- The maximum EVE loss under the six scenarios was -€396m under the parallel up scenario as of December 2021, compared to -€228m under the same scenario as of June 2021.
- The maximum one-year loss in NII was -€58m as of December 2021, compared to -€35m as of June 2021.

Interest rate risk in the banking book (IRRBB)

Table 61: Change in Economic Value of Equity and Net Interest Income under the supervisory shock scenarios

The following table shows the impact on the Bank's EVE and NII from the six standardised supervisory interest rate shock scenarios defined by the EBA, in their guidelines on the management of interest rate risk arising from non-trading book activities.

	Supervisory shock scenarios	Change in Economic Value of Equity		Change in Net Interest Income	
		As at 31 December 2021	As at 30 June 2021	As at 31 December 2021	As at 30 June 2021
		€m	€m	€m	€m
1	Parallel up	(395.6)	(228.1)	36.1	52.5
2	Parallel down	(16.2)	(20.4)	(58.2)	(35.0)
3	Steepener	(45.2)	(81.4)		
4	Flattener	(65.1)	(71.3)		
5	Short rates up	(169.7)	(94.7)		
6	Short rates down	(2.8)	(20.1)		

The maximum EVE loss under the six scenarios was -€396m under the parallel up scenario as of December 2021, compared to -€228m under the same scenario as of June 2021. The material driver of the parallel up scenario is the sensitivity of the Bank's receive fixed structural hedge to rates rising, with hedging of equity forming the material portion of this structural hedge. The primary driver of the EVE increase to December 2021 has been an increase in the Banks receive fixed position through a long-dated reverse repurchase agreement, which is assumed to be called in a down shock but not in an up shock.

The maximum one-year loss in NII was -€58m as of December 2021, compared to -€35m as of June 2021. The increase in the parallel down shock sensitivity arises predominantly due to an increase in the margin compression exposure on USD and GBP deposits, due to a combination of margin and balance increases. The primary driver of the parallel up scenario is margin widening on deposits, with the reduction since June 2021 derived from the impact of the receive fixed reverse repurchase agreement outlined above. The asymmetry noted between the up and down shocks is driven by product floors and the impact of the EBA prescribed post-shock interest rate floor, in the business segments where this has been applied.

Repricing maturity assumptions assigned to non-maturity deposits

Non-maturity deposits are behaviourally modelled, with the longest repricing maturity at 5 years and the overall weighted average life at 1.6 years.

Analysis of operational risk

This section contains details of capital requirements for operational risk, expressed as RWAs, and an analysis of the BBI's operational risk profile, including events which have had a significant impact in 2021

Key Metrics

46% of BBI's 2021 net reportable operational risk events by number had a loss value of €58,680 (£50,000) or less

85% of 2021 Operational Risk events by number are aligned to Execution, Delivery and Process Management

94% of 2021 losses are from events aligned to Execution, Delivery and Process Management

2021 Risk Weighted Assets for operational risk

€2.2bn

2020: €2.2bn

Summary of performance in the period

Total reportable Operational Risk losses during 2021 were €1.98m

Analysis of operational risk

Operational risk - risk weighted assets

The following table details BBI's operational risk RWAs. BBI calculates its operational risk capital requirement using the Standardised Approach.

Table 62: Risk Weighted assets for operational risk

	As at 31 December 2021	As at 31 December 2020
	€m	€m
Operational Risk		
Basic Indicator Approach	—	—
Standardised Approach	2,165	2,235
Advanced Measurement Approach	—	—
Total operational risk RWAs	**2,165**	**2,235**

Operational risk RWAs are assessed using the standardised approach (amended TSA). The Bank uses its Medium Term Plan (MTP) income projections where it does not have sufficient historical incomes to calculate some Business Indicators. For 2021, the value of the three-year average MTP incomes remained consistent with prior years, therefore there was no material movement in overall RWAs for Operational Risk.

Table 63: OR1 - Operational risk own funds requirements and risk-weighted exposure amounts

		Relevant indicator			Own funds requirements	Risk exposure amount
		Year-3	Year-2	Last year		
		€m	€m	€m	€m	€m
1	Banking activities subject to basic indicator approach (BIA)	—	—	—	—	—
2	Banking activities subject to standardised (TSA) / alternative standardised approaches (ASA)	872	1,253	1,222	173	2,165
3	Subject to TSA:	872	1,253	1,222		
4	Subject to ASA:	—	—	—		
5	Banking activities subject to advanced measurement approaches AMA	—	—	—	—	—

Operational risk profile

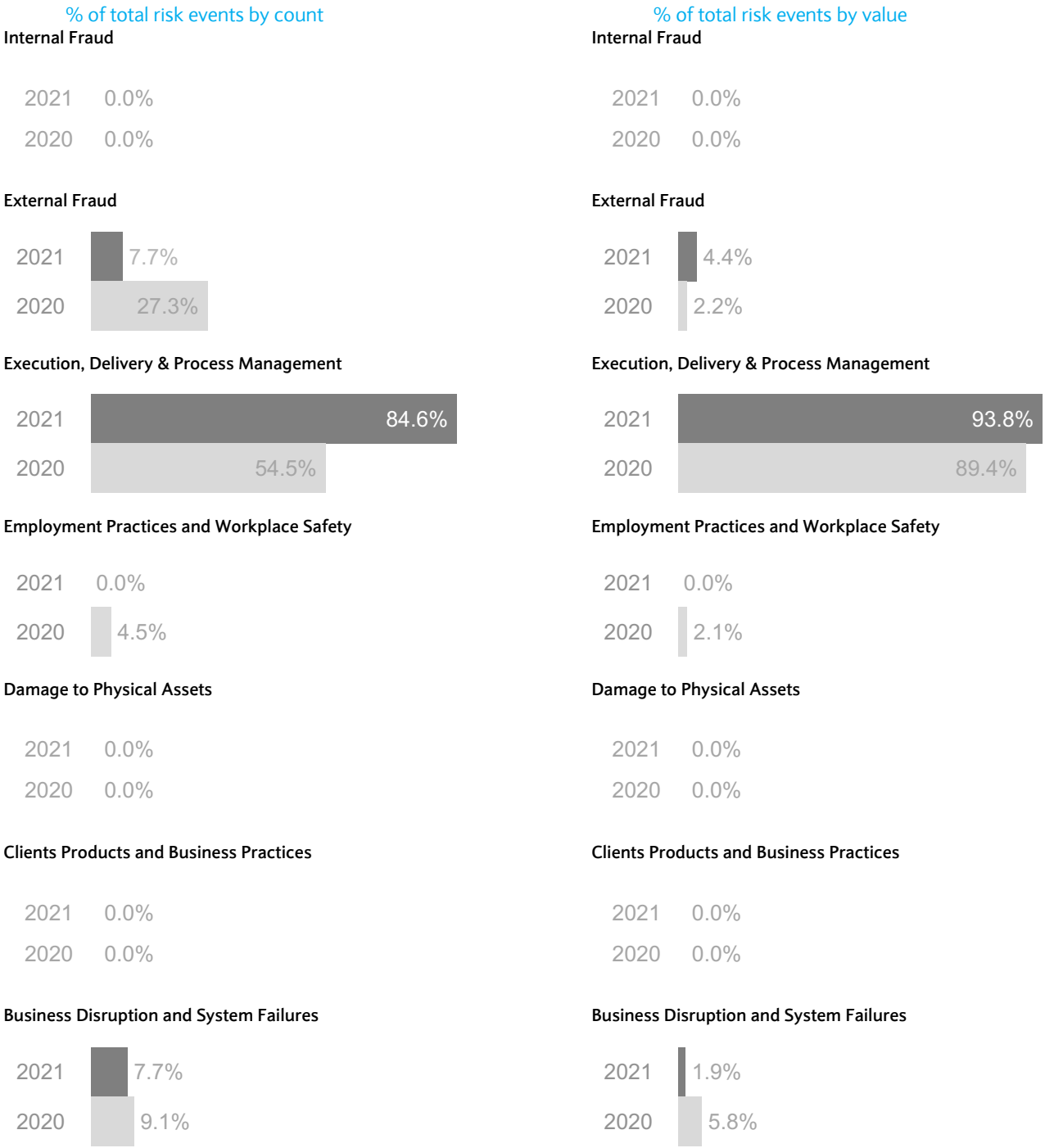
Reflective of the recent expansion of activities across a wider array of business lines, BBI's operational risk profile has many similarities with that of the broader Barclays Group.

Within operational risk, a high proportion of risk events have a low financial cost whilst a very small proportion of operational risk events will have a material impact on the financial results of the Bank. During 2021, 46% (2020: 59%) of the Bank's reportable operational risk events by volume had a value of less than €58,680 (£50,000), although this type of event accounted for only 12% (2020: 7%) of the Bank's total net operational risk losses.

Analysis of operational risk

The analysis below presents BBI's operational risk events by Basel event category:

Operational risk events by BASEL event category



Notes:

a The data disclosed includes operational risk losses for reportable events having net impact of > £10,000 and excludes events that are conduct or legal risk, aggregate and boundary events. A boundary event is an operational risk event that results in a credit risk impact.

b Losses are recorded in GBP and converted for reporting here in EUR at an FX rate 1.1736.

- Execution, Delivery and Process Management impacts for 2021 amounted to €1.86m (2020: €2.91m) and accounted for 94% (2020: 89%) of overall operational risk losses. Volume of events remained stable at 11 (2020: 12) accounting for 85% of total events (2020: 55%). The events in this category are typical of the banking industry as a whole where high volumes of transactions are processed on a daily basis.
- External Fraud events volume during 2021 fell to 1 (2020: 6) with impact of €0.09m (2020: €0.07m) accounting for 4% of overall losses (2020: 2%). In this category, high volume, low value events are driven by transactional fraud often related to debit and credit card usage.

Analysis of operational risk

Investment continues to be made in improving the control environment across BBI. Particular areas of focus include new and enhanced fraud prevention systems and tools to combat the increasing level of fraud attempts being made whilst minimising disruption to genuine transactions. Fraud remains an industry wide threat and BBI continues to work closely with external partners on various prevention initiatives.

Operational Resilience remains a key area of focus for BBI. The COVID-19 pandemic is the most severe global health emergency the World Health Organization (WHO) has ever declared and whilst overall, BBI has continued to prove resilient and actual losses have not materially increased due to the effects of the pandemic, the COVID-19 pandemic has continued to cause some minor disruption to BBI's customers, suppliers, and staff globally. The COVID-19 pandemic has reinforced our focus on resilience and BBI continues to monitor potential operational disruptions associated with both BBI's and its suppliers' transition to a Work-from-Home environment and in response to initially high market volatility. BBI continues to strengthen its resilience approach across its most important business services to improve recoverability and assurance thereof.

Operational risk associated with cybersecurity remains a top focus for BBI. The sophistication of threat actors continues to grow as noted by multiple external risk events observed throughout the year. Ransomware attacks across the global Barclays supplier base were observed and we worked closely with the affected suppliers to manage potential impacts to BBI and its clients and customers. BBI's cybersecurity events were managed within its risk tolerances and there were no material loss events associated with cybersecurity recorded within the event categories above.

For further information, refer to the operational risk management section.

Risk management strategy, governance and risk culture

In this section we describe the approaches and strategies for managing risks at Barclays Bank Ireland PLC. It contains information on how risk management functions are organised, how they maintain their independence and foster a sound risk culture.

- The Enterprise Risk Management Framework (ERMF) sets out the tools, techniques and organisational arrangements to enable all material risks to be identified and understood (see page 85)
- A governance structure, encompassing the organisation of the function as well as executive and Board committees, supports the continued application of the ERMF. This is discussed in pages 86 to 87
- A discussion of how our risk management strategy is designed to foster a strong risk culture is contained on pages 87 to 88
- Pages 88 to 91 describe Group-wide risk management tools that support risk management, the Barclays Group ExCo and the Board in discharging their responsibilities, and how they are applied in the strategic planning cycle.

Risk management strategy, governance and risk culture

The Bank's risk management strategy

This section introduces the Bank's approach to managing and identifying risks, and for fostering a strong risk culture.

Enterprise Risk Management Framework (ERMF)

The ERMF outlines the highest level principles for risk management by setting out standards, objectives and key responsibilities of different groups of employees of the Bank. The Bank's ERMF is adapted from and consistent with the Barclays Group ERMF as approved by the B PLC Board on the recommendation of the Group Board Risk Committee and the Barclays Group Chief Risk Officer. This is then reviewed and formally adopted by the Bank's Board at local legal entity level.

The ERMF sets out:

- Principal risks faced by the Bank which guides the organisation of the risk management function
- Risk appetite requirements: This helps define the level of risk we are willing to undertake in our business
- Risk Management and Segregation of duties: The ERMF defines a "Three Lines of Defence" model
- Roles and responsibilities for risk management and governance structure.

The ERMF is complemented by frameworks, policies and standards, which are mainly aligned to individual principal risks:

- Frameworks cover the management processes for a collection of related activities and define the associated policies used to govern them
- Policies set out principles, control objectives and other core requirements for the activities of the firm. Policies describe "what" must be done
- Standards set out the key control requirements that describe how the requirements set out in the policy are met.

Segregation of duties - the "Three Lines of Defence" model

The ERMF sets out a clear lines of defence model. All colleagues are responsible for understanding and managing risks within the context of their individual roles and responsibilities, as set out below.

First Line of Defence

The First line comprises all employees engaged in the revenue generating and client facing areas of the Bank and all associated support functions, including Finance, Operations, Treasury, and Human Resources etc. The first line is responsible for identifying and managing the risks in which they are engaged in, developing a control framework, and escalating risk events to Risk and Compliance.

Second Line of Defence

The Second line is comprised of the Risk and Compliance functions. The role of the second line is to establish the limits, rules and constraints, policies and standards under which first line activities shall be performed, consistent with the risk appetite of the Bank, and to monitor the performance of the first line against these limits and constraints. Controls for first line activities, especially those related to operational risk, will ordinarily be established by the control officers operating within the control framework of the firm. These will remain subject to supervision by the second line.

Third Line of Defence

The Third line of defence is Internal Audit, who are responsible for providing independent assurance over the effectiveness of governance, risk management and control over current, systemic and evolving risks.

The Legal function provides support to all areas of the Bank and is not formally part of any of the three lines, however is subject to second line oversight with respect to operational and conduct risks.

Principal risks

The ERMF identifies nine principal risks namely: credit risk, market risk, treasury and capital risk, climate risk, operational risk, model risk, conduct risk, reputation risk and legal risk. Note that climate risk was added in January 2022; see page 89 for more information.

Each of the principal risks is overseen by an accountable executive at the Group level who is responsible for the framework, policies and standards that set out associated responsibilities and expectations, and detail the related requirements around risk management.

In addition, certain risks span across more than one principal risk.

Risk appetite

Risk appetite is defined as the level of risk which the Bank is prepared to accept in the conduct of their activities. It provides a basis for ongoing dialogue between management and Board with respect to the Bank's current and evolving risk profile, allowing strategic and financial decisions to be made on an informed basis.

Risk appetite is approved by the Barclays PLC Board in aggregate and disseminated across legal entities and businesses, including the Bank. The Bank's Board cannot approve a higher Risk Appetite than that determined by the Group Board but may choose to operate at a lower level of risk appetite than that approved by the Barclays Group.

The Barclays Group's total risk appetite and its allocation to the Bank are supported by limits to enable and control specific exposures and activities that have material concentration risk implications.

Risk committees

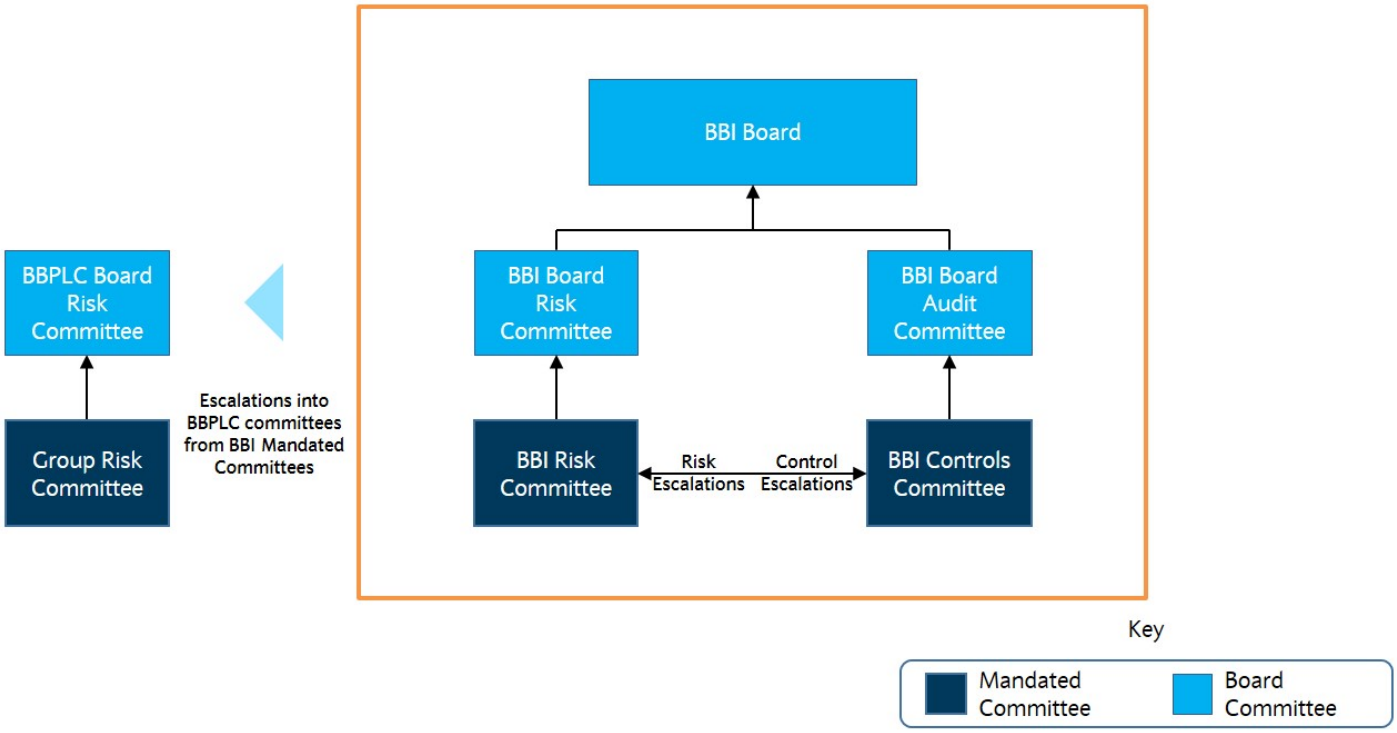
The Bank's product/risk type committees consider risk matters relevant to their business, and escalate as required to the Barclays Bank Ireland PLC Board Committees and the Barclays Bank Ireland PLC's Board.

The Barclays Bank Ireland PLC Board receives regular information on the Bank's risk profile, and has ultimate responsibility for risk appetite and capital plans, within the parameters set by the Barclays PLC Board. One of the responsibilities of the Bank's Board is the approval of risk appetite allocated to the Bank. The Bank's Board is also responsible for the adoption of the ERMF.

Further, there are two Board-level committees which oversee the application of the ERMF and review and monitor risk across the Bank. These are: the Barclays Bank Ireland PLC Board Risk Committee and the Barclays Bank Ireland PLC Board Audit Committee. Additionally, the Barclays Bank Ireland PLC Board Remuneration Committee oversees pay practices focusing on aligning pay to sustainable performance.

- The Barclays Bank Ireland PLC Board Risk Committee (BRC): The BRC monitors the Bank's risk profile against the agreed appetite. Where actual performance differs from expectations, the actions taken by management are reviewed to ascertain that the BRC is comfortable with them. The Bank's CRO regularly presents a report to the BRC summarising developments in the risk environment and performance trends in the key portfolios. The BRC receives regular reports on risk methodologies, the effectiveness of the risk management framework, and the Bank's risk profile, including the material issues affecting each business portfolio and forward risk trends. The committee also commissions in-depth analyses of significant risk topics, which are presented by the Bank's CRO or senior risk managers in the businesses.
- The Barclays Bank Ireland PLC Board Audit Committee (BAC): The BAC receives regular reports on the effectiveness of internal control systems, on material control issues of significance, and on accounting judgements (including impairment) and a quarterly review of the adequacy of impairment allowances, relative to the risk inherent in the portfolios, the business environment, and Barclays policies and methodologies.
- The Barclays Bank Ireland PLC Board Remuneration Committee (RemCo): The RemCo receives proposals on ex-ante and ex-post risk adjustments to variable remuneration based on risk management performance including events, issues and the wider risk profile. These inputs are considered in the setting of performance incentives.

Risk management strategy, governance and risk culture



Coverage of risk reports to executive and Board risk committees

Chairs of Risk Committees at executive and Board levels specify the information they require to discharge their duties. Advance committee calendars are agreed with the committee chairs. Topics that are regularly covered include:

- Risk profile
- Risk perspective on medium-term plans and strategy
- Risk Appetite
- Results of stress tests
- Risk and Conduct inputs into remuneration decisions
- Other technical topics, e.g. Model risk.

In addition to regular topics, committees consider ad hoc papers on current risk topics, such as:

- Political events and their potential impacts on the Bank and its customers
- Economic developments in major economies or sectors
- Impacts of key market developments on the risk management of the Bank.

Reports are generally presented by the CRO or other accountable executives. Occasionally subject matter experts are delegated to present specific topics of interest. Report presenters are responsible for following processes for creating reports that include appropriate controls and that these controls are operated effectively.

Roles and responsibilities in the management of risk

Certain roles within the Bank carry specific responsibilities and accountabilities with respect to risk management and the ERMF.

Barclays Bank Ireland PLC Chief Executive Officer (CEO)

The Barclays Bank Ireland PLC CEO is accountable for leading the development of the Bank's strategy and business plans that align to the Purpose, Values and Mindset within the approved Risk Appetite, and for managing and organising executive management to drive their execution. Managing the Bank's financial and operational performance within the approved Risk Appetite is ultimately the CEO's responsibility.

Specifically, a crucial role of the CEO is to appoint the most senior risk owners at the executive level including the Barclays Bank Ireland PLC Chief Risk Officer and the Barclays Bank Ireland PLC General Counsel. They must work with them to embed a strong risk culture within the legal entity, with particular regard to the identification, escalation and management of risk matters.

Barclays Bank Ireland PLC Chief Risk Officer (CRO)

The Barclays Bank Ireland PLC CRO leads the Risk Function across the legal entity. Specific accountabilities include:

- providing accurate, transparent and timely reporting of the actual Risk Profile of the legal entity relative to the set risk appetite to the Board
- bringing a risk perspective to compensation decisions
- reporting to all the relevant stakeholders on the legal entity's risk positions, adherence to risk appetite and enterprise wide risks and controls
- arranging for the adoption and overseeing the application of the ERMF in the entity.

Barclays Bank Ireland PLC Chief Compliance Officer

The Barclays Bank Ireland PLC Chief Compliance Officer is accountable to the Barclays Bank Ireland PLC CEO to lead the Compliance Function. The Chief Compliance Officer:

- provides oversight of conduct risk associated with regulated activities undertaken by the Bank
- oversees the effective management and escalation to the Board, as appropriate, of the Bank's Conduct and Reputation Risks
- sets Bank-wide compliance standards and monitoring compliance with these standards as set out specifically for conduct and reputation risks, including financial crime
- inputs into compensation structures, objectives and performance management of employees who can expose the Bank to significant risk
- ensures there is a robust Bank-wide whistleblowing process in place and for ensuring it is effectively managed

Risk management strategy, governance and risk culture

- using mandate to access any part of the legal entity and any information, bringing to the attention of line and senior management or the BBI Board, as appropriate, any situation that is of concern from a conduct or reputation risk management perspective that could materially violate the approved risk appetite guidelines.

Barclays Bank Ireland PLC General Counsel

The Barclays Bank Ireland PLC General Counsel provides legal advice and guidance to the Bank on the adoption of the Group legal risk framework policies and entity risk appetite for legal risk through non-financial legal risk tolerances aligned to the Group-wide legal risk appetite.

Barclays Bank Ireland PLC Chief Controls Officer

The Barclays Bank Ireland PLC Chief Controls Officer, reporting to the Barclays Bank Ireland PLC Chief Operating Officer, is responsible for overseeing the practical implementation of operational, conduct and reputation risk controls and control methodologies across the Bank. The Chief Controls Office has the following key responsibilities:

- reviewing tolerances for non-financial operational risk exposures set by the business, and maintaining their appropriateness
- maintaining the standard for the creation and maintenance of all control documentation in the Bank
- overseeing the execution of control framework requirements consistently across the Bank. Execution includes recording risk events, issues, and the completion of risk and control self-assessments.

Frameworks, Policies and Standards

Frameworks, policies and standards set out the governance around the Bank's activities:

- Frameworks cover the management processes for a collection of related activities and define the associated policies used to govern them
- Policies set out control objectives, principles and other core requirements for the activities of the Bank. Policies describe "what" must be done
- Standards set out the key control requirements that describe how the requirements set out in the Policy are met.

Frameworks, Policies and Standards are owned by the area responsible for performing the described activity.

The Barclays Group CRO is accountable for the development and implementation of frameworks, policies and associated standards for credit, market, treasury and capital, climate, operational and model risks. The BBI CRO is responsible for embedding the frameworks, policies and associated standards within BBI. These frameworks, policies and associated standards are adapted where appropriate to ensure they comply with any specific requirements of the jurisdictions where the Bank operates and the local regulatory frameworks which the Bank must adhere to.

The Barclays Group Chief Compliance Officer is likewise accountable for conduct risk and reputation risk, and the Barclays Group General Counsel for legal risk. Similar to the BBI CRO, the BBI Chief Compliance Officer and the BBI Head of Legal are accountable for ensuring their respective frameworks, policies and associated standards are embedded within their functions and throughout the Bank as appropriate. The Barclays Group CRO and Barclays Group Chief Compliance Officer have the right to require amendments to any Frameworks, Policies or Standards in the Barclays Group, for any reason, including inconsistencies or contradictions among them.

Frameworks, Policies and Standards are subject to annual review. These will then be recommended for adoption by the Bank's Board with modifications where needed at local legal entity level.

Assurance

Assurance is undertaken to assess the control environment. The Controls Assurance Standard defines the requirements for controls assurance and controls testing.

In addition, the Risk function carry out conformance reviews to assess the implementation of, and adherence to, principal risk framework and component policies. This activity is undertaken independently of the business.

Internal Audit is responsible for the independent review of risk management and the control environment. Its objective is to provide reliable, valued and timely assurance to the Board and executive management over the effectiveness of controls, mitigating current and evolving material risks and thus enhancing the control culture within the Bank.

The Barclays Bank Ireland PLC Board Audit Committee reviews and approves Internal Audit's plans and resources, and evaluates the effectiveness of Internal Audit. An assessment by independent external advisers is also carried out periodically.

Effectiveness of risk management arrangements

The embedding of the ERMF is monitored by executive and Board committees as described above. The ERMF and its component Principal Risks are subject to control testing assurance reviews to confirm its effectiveness or identify issues to be mitigated. Management and the Board are satisfied that these arrangements are appropriate given the risk profile of the Bank.

Learning from our mistakes

Learning from mistakes is central to Barclays' culture and values, demonstrating a commitment to excellence, service and stewardship and taking accountability for failure as well as success. The Barclays Group, including BBI, seek to learn lessons on a continuous basis to support achievement of strategic objectives, increase operational excellence and to meet commitments to stakeholders, including colleagues, customers, shareholders and regulators.

Barclays has implemented a Barclays Group Lessons Learned process, setting out requirements for the completion of Lessons Learned assessments in response to internal and external risk events. The approach is aligned to the Three Lines of Defence model (see page 85), with businesses and functions accountable for undertaking Lessons Learned Assessments; the Second Line providing oversight and challenge; and independent review by Internal Audit.

Core components of the Lessons Learned approach include:

- Defined triggers for when Lessons Learned Assessments must be completed
- Requirements and guidance for the completion of root cause analysis to identify the causes of risk events impacting the Barclays Group
- Standardised Templates to report conclusions consistently to relevant management fora and committees
- Use of a central system to record completed Lessons Learned Assessments and to facilitate sharing across the Barclays Group.

Barclays risk culture

Risk culture can be defined as the "norms, attitudes and behaviours related to risk awareness, risk taking and risk management". This is reflected in how the Bank identifies, escalates and manages risk matters.

The Bank is committed to maintaining a robust risk culture in which:

- Management expect, model and reward the right behaviours from a risk and control perspective
- Colleagues identify, manage and escalate risk and control matters, and meet their responsibilities around risk management.

The CEO works with the Executive Management to embed a strong risk culture within the Bank, with particular regard to the identification, escalation and management of risk matters, in accordance with the ERMF. Specifically, all employees regardless of their positions, functions or locations must play their part in the Bank's risk management. Employees are required to be familiar with risk management policies which are relevant to their responsibilities, know how to escalate actual or potential risk issues, and have a role-

Risk management strategy, governance and risk culture

appropriate level of awareness of the risk management process as defined by the ERMF.

Our Code of Conduct – the Barclays Way

Globally, all colleagues must attest to the "Barclays Way", our Code of Conduct, and all frameworks, policies and standards applicable to their roles. The Code of Conduct outlines the Purpose, Values and Mindset which govern our "Barclays Way" of working across our business globally. It constitutes a reference point covering all aspects of colleagues' working relationships, and provides guidance on working with other Barclays employees, customers and clients, governments and regulators, business partners, suppliers, competitors and the broader community.

Barclays Group-wide risk management tools

To support the Bank's management of risks, the Board uses risk appetite, mandate and scale, and stress testing as key inputs in the annual planning cycle, including setting of the Bank's strategy. The following describes in further detail the management tools used as part of this process.

Risk Appetite

Risk appetite is defined as the level of risk which the Bank is prepared to accept in the conduct of its activities.

Risk Appetite provides a basis for ongoing dialogue between management and Board with respect to the Bank's current and evolving risk profile, allowing strategic and financial decisions to be made on an informed basis.

The Risk Appetite setting process aims to consider the material risks the Bank is exposed to under its business plans.

The Risk Appetite of the Bank aims to:

- Specify the level of risk we are willing to take to enable specific risk taking activities.
- Consider all Principal Risks individually and, where appropriate, in aggregate.
- Consistently communicate the acceptable level of risk for different risk types.

Risk Appetite is approved by the Board and must be formally reviewed at least annually in conjunction with the Medium Term Planning (MTP) process.

The Board expresses risk appetite through setting an acceptable level of deterioration for a set of key financial parameters under a severe but plausible stress scenario i.e. the Internal Stress Test. For 2021, the key financial parameters are listed below with their link between strategy and risk profile.

- Common Equity Tier 1 ratio: Monitors capital adequacy in relation to capital plan, targets and regulatory hurdle rates.
- Liquidity Risk Appetite: Monitors and protects the liquidity position of the bank and its ability to meet financial obligations under normal conditions and in a stress.

Based on the specified Risk Appetite, BBI develops both stress loss and mandate and scale limits to control specific activities, the most material of which are approved by the Board.

Reflecting the increasing risks associated with climate change and following the Board Risk Committee's decision that climate risk would become a principal risk from 2022, a further risk appetite constraint has been introduced establishing a direct link between our strategic plans and risk appetite supporting Barclays' ambition to reduce emissions to net zero by 2050.

- Climate Risk: Protects the long term climate ambitions of the bank and its ability to meet disclosed targets.

Stress loss limits

Stress loss limits are derived from the results of the internal stress test. Limits are a reflection of the losses absorbed by the stressed capital plans within Risk Appetite and provide a crucial link between the strategic planning process and Risk Appetite. Stress loss limits are conservatively assumed to be additive but in practice stresses may not happen at the same time. Risk management may over-allocate stress loss limits where they deem it unlikely all businesses will require full limit utilisation at the same time. Aggregate utilisation across all risk types is monitored against both the aggregate of stress loss limits and losses absorbed by the stressed capital plan. It is the role of Risk to manage the over-allocation within capital constraints.

Mandate and scale

Mandate and scale is a risk management approach that seeks to formally review and control business activities to make sure that they are within mandate (i.e. aligned with expectations), and are of an appropriate scale (relative to the risk and reward of the underlying activities) based on an appropriately detailed system of limits. Using limits and triggers helps mitigate the risk of concentrations which would be out of line with expectations, and which may lead to unexpected losses of a scale that would be detrimental to the stability of the relevant business line or the Bank. For example, for leveraged finance and commercial property finance portfolios, there is a series of limits in place to control exposure within each business and geographic sector. To further align limits to the underlying risk characteristics, the mandate and scale limits differentiate between types of exposure. There are, for example, individual limits for property investment and property development.

The most material mandate and scale limits are designated by the BBI Board.

Further limits, such as those set by the Bank, are set by risk managers within each business, covering particular portfolios and are approved by the Board. Unapproved excesses of limits may result in performance management and disciplinary consequences. Business limits are approved by the relevant business risk team and reportable to the relevant risk committee.

There is explicit identification of the exposures that are captured by limits and any material exclusion must be agreed. Limits are reviewed at least annually. The factors taken into consideration when setting the limit include:

- the Bank's Risk Appetite
- current exposure/MTP forecasts
- risk return considerations
- senior risk management judgement.

Stress testing

The Bank's stress tests are an integrated within the MTP process and annual review of risk appetite. They aim to check that the Bank's financial position and risk profile provide sufficient resilience to withstand the impact of severe economic stress, allowing the Bank to make changes to plans as necessary. The stress testing process is supported by a Capital Stress Testing Standard which sets out the minimum control requirements and defines clear roles and responsibilities across businesses and central functions. The results also feed into our internal capital adequacy assessment process (ICAAP).

Risk management strategy, governance and risk culture

The following diagram outlines the key steps in the stress testing process, which are described below.

The Bank's stress testing process begins with a detailed scenario setting process, with the Risk Committee agreeing the scenario considering the range of vulnerabilities facing the entity. The scenarios are designed to be severe but plausible, and relevant to the business. A wide range of macroeconomic parameters are defined (such as GDP, unemployment, house prices, FX and interest rates), which allows the impact of the scenarios across the wide range of products and portfolios to be assessed across the Bank.

Businesses prepare detailed MTP business plans which form the baseline for the stress test assessment. The stress test process aims to support this level of complexity, using bottom-up analysis across all of our businesses including both on- and off-balance sheet positions, and combines running statistical models with expert judgement. An overview of the stress testing approach by Principal Risk is provided in the table on pages 89 to 91. As part of their stress test assessments, businesses are also required to identify potential management actions that could be taken to mitigate the impact of stress and document these within their results.

The governance process in place includes a detailed review of stress testing methodology, assumptions, judgements, results and management actions within each business and by central functions.

The businesses stress test results are consolidated to form a Bank view which is used to assess the stress impact on the Bank's capital plans. For the latter, capital management actions such as reducing dividends or redeeming certain capital instruments may be considered. The Bank also maintains recovery plans which take into consideration actions to facilitate recovery from severe stress or an orderly resolution. These actions are additional to those included in the Bank's stress testing results.

The overall stress testing results are reviewed and signed off by the Board, following review by the Group-wide Stress Testing Steering Committee in addition to the Bank's Risk Committee and the Board Risk Committee.

Summary of methodologies for the Bank's stress testing by risk

Principal Risk	Stress testing approach
Credit risk	Credit risk impairment: Credit risk impairment: For retail portfolios businesses use IFRS9 impairment forecast models to estimate stressed levels, leveraging the relationships between macroeconomic parameters such as unemployment, inflation, GDP etc. that are embedded in those models. In addition, house price reductions (for mortgages), increased customer drawdowns (for revolving facilities) and higher interest rates impacting customer affordability lead to higher losses which also contribute to increased impairment levels. For wholesale portfolios the stress shocks on credit risk drivers (probability of default (PD), loss given default (LGD) and exposure at defaults (EAD) are primarily calibrated using historical and expected relationships with key macro-economic parameters. Counterparty credit risk losses: The scenarios include market risk shocks that are applied to determine the market value under stress of contracts that give rise to Counterparty Credit Risk (CCR). Counterparty losses, including from changes to the Credit Valuation Adjustment and from defaults, are modelled based on the impact of these shocks as well as using stressed credit risk drivers (PDs and LGDs). The same approach is used to stress the market value of assets held as available for sale or at fair value in the banking book. Credit risk weighted assets: The impact of the scenarios is calculated via a combination of business volumes and using similar factors to impairment drivers above, as well as the regulatory calculation and the level of pro-cyclicality of underlying regulatory credit risk models.
Market risk	Trading book losses: Market risk factors on the balance sheet are stressed using specific market risk shocks (and are used for the CCR analysis, above). The severity of the shocks applied are dependent on the liquidity of the market under stress, e.g. illiquid positions are assumed to have a longer holding period than positions in liquid markets.

Risk management strategy, governance and risk culture

Principal Risk	Stress testing approach
Treasury and capital risk	**Liquidity Risk:** Liquidity risk is assessed through internal liquidity stress testing Liquidity Risk Appetite (LRA) and regulatory stress testing of BBI's Liquidity Coverage Ratio ("LCR"). The Bank analyses specific liquidity risk drivers such as wholesale funding and contingent funding needs based on the below scenarios: • Barclays idiosyncratic scenario: Barclays faces a loss of market confidence while the market overall is not impacted • Market wide scenario: Market-wide stress leading to increased market volatility and loss of confidence • Combined scenario: A simultaneous Barclays idiosyncratic and Market wide liquidity stress scenario • Long term LRA scenario: All financial institutions are impacted by a financial market-wide stress based on a prolonged global recession • Liquidity Coverage Ratio: Regulatory prescribed 30-day liquidity metric. • In addition, the regulatory Net Stable Funding Ratio ("NSFR") is also captured in Liquidity Risk Appetite which requires a minimum amount of stable funding relative to the amount of required stable funding over a one year time horizon. This minimum is set at 100%. **Capital Risk:** Capital risk is assessed by taking all modelled risk impacts as part of the stress test (as listed above) into consideration when assessing the Bank's ability to withstand a severe stress. The stressed results are considered against internally agreed risk appetite levels but also regulatory minima and perceived market expectations. The MTP can only be agreed by the Board if this is within the agreed risk appetite levels under stress. **Pension Risk:** The IAS19 position of pension funds is also stressed as part of the capital risk assessment, taking into account key economic drivers impacting future obligations (e.g. long-term inflation and interest rates) and the impact of the scenarios on the value of fund assets. **Interest Rate Risk in the Banking Book (IRRBB):** Risk assessment for interest rate risk on the banking books is driven by the economic risk of the underlying positions but also considers the accounting treatment: • Earnings based measures are used to assess risk to net interest income from positions in customer banking books, hedging portfolios (held to mitigate those risks), and Treasury investment and funding activities • Value based measures are used to assess risk to the fair value of assets held as part of investments in the liquid asset portfolio and associated risk management portfolios. Risk under stress is assessed by considering: • The impact on net interest income resulting from stressed product margins and volumes, which are dependent on the level of interest rates and funding costs under stress conditions. This can be partly mitigated by management actions, which may include repricing of variable rate products taking into account interbank lending rates under stress. • Securities in the liquid asset portfolio are subject to several market risk stresses designed to estimate potential losses in various scenarios. This includes, but is not limited to, an annual internal stress test, regulatory stress tests as well as various ad hoc exploratory exercises.
Operational risk	Operational risk loss projections take into account the effect of the stressed economic scenario. Operational risk is also included in the reverse stress testing framework through scenario assessment of idiosyncratic operational risk events.
Model risk	The Independent Valuation Unit (IVU) reviews and approve models for use in stress tests. IVU may require compensating controls, in the form of overlays to address model deficiencies. IVU may also reject a model that is not conceptually sound, or for which the marginal impact of findings (in aggregate or on a stand-alone basis) on model output is ≥ 30%.
Conduct risk	Stress projections of future losses for conduct risk matters are estimated by exercising expert judgment in accordance with the methodology provided by the Barclays Group regulator (PRA).
Reputation risk	Reputation risk is not quantified or stressed.
Legal risk	Legal risk is not quantified or stressed.

Risk management strategy, governance and risk culture

The stress testing framework also includes reverse stress testing techniques, which aim to identify the circumstances under which the Bank's business model would no longer be viable, leading to a significant change in business strategy and to the identification of appropriate mitigating actions. Examples include extreme macroeconomic downturn ('severely adverse') scenarios, or specific idiosyncratic events, covering both operational risk and capital/liquidity events.

Reverse stress testing is used to help support ongoing risk management and is an input to our Recovery Planning process.

Business and risk type specific stress tests

Stress testing techniques at portfolio and product level are also used to support risk management. For example, portfolio management in the German cards business employs stressed assumptions of loss rates to determine profitability hurdles for new accounts. In the Corporate and Investment Bank, global scenario testing is used to gauge potential losses that could arise in conditions of a severe but plausible market stress. Stress testing is also conducted on positions in particular asset classes, including interest rates, commodities, equities, credit and foreign exchange.

Regulatory stress testing

In addition to running internal Bank stress tests, the Bank also runs regulatory stress tests. In 2021, the Bank underwent the ECB's Comprehensive Assessment process which includes an EBA Stress test and is expected to be finalised in 2022.. As a "significant institution" the Bank is subject to the European Banking Authority (EBA) stress testing regime.

Risk management in the setting of strategy

The risk appetite and (internal) stress testing processes described above form the basis of the risk review of the MTP, performed annually. The MTP embeds the Bank's objectives into detailed business plans taking into account the likely business and macroeconomic environment. The strategy is informed by the risk review process, which includes reviewing Barclays Group and the Bank's risk profile and setting of risk appetite.

- The risk review process includes a review of of business plans under stress which is used to inform the MTP.
- If the business' plans entail too high a level of risk, management can challenge them. This assessment is based on a comparison of the businesses' own risk appetite assessment reflected in their business plans ('bottom-up' risk appetite) with the central risk team's view ('top-down' risk appetite) based on the financial constraints set by the Group's or the Bank's Board, depending on the limit.
- Businesses may be asked to update their business plans until the bottom-up risk appetite is within top-down appetite. There is also a detailed review of the stressed estimates and the methodology used to translate the economic scenario to these stressed estimates, as well as the management actions included in the businesses' results to verify that these are appropriate and realistic in a stressed environment.
- Interim internal capital adequacy assessments inform the capital planning process and are reviewed during the Risk Review meetings. These assessments are refreshed based on year-end positions and reflected in the ICAAP.

The BRC has overall responsibility for reviewing the Bank's risk profile and making appropriate recommendations to the Board. The Board is ultimately responsible for approving the MTP and the Bank's risk appetite. The risk appetite process allows senior management and the Board to understand the MTP's sensitivities by risk type, and includes a set of limits to help the Bank stay within its risk appetite, as described above.

Management of credit risk and the internal ratings-based approach

This section discusses the organisation specific to the management of credit risks, and provides details of the calculation of risk weighted assets under the Internal Ratings Based approach of the Basel framework.

- Pages 92 to 100 cover the aspects of BBI's risk management framework specific to credit risk, including committees and reporting structure
- Pages 100 to 107 detail how we approach the internal ratings models, and how the framework supports risk differentiation and management.

Management of credit risk and the internal ratings-based approach

Credit risk

The risk of loss to the Bank from the failure of clients, customers or counterparties, including sovereigns, to fully honour their obligations to the Bank, including the whole and timely payment of principal, interest, collateral and other receivables.

Overview

The credit risk that Barclays Bank Ireland PLC ("BBI") faces arises from wholesale and retail loans and advances together with the counterparty credit risk arising from derivative contracts with clients; trading activities, including: debt securities, settlement balances with market counterparties, FVOCI assets and reverse repurchase loans.

Credit risk management objectives are to:

1 maintain a framework of controls to oversee credit risk;

2 identify, assess and measure credit risk clearly and accurately across BBI and within each separate business, from the level of individual facilities up to the total portfolio;

3 control and plan credit risk taking in line with external stakeholder expectations and avoiding undesirable concentrations;

4 monitor credit risk and adherence to agreed controls

Organisation and structure

Wholesale and retail portfolios are managed separately to reflect the differing nature of the assets; wholesale balances tend to be larger and are managed on an individual basis, while retail balances are greater in number but lesser in value and are, therefore, managed at portfolio level.

The credit risk management teams are accountable to the BBI Head of Credit Risk and the BBI CRO.

Barclays Bank Ireland PLC Board Risk Committee

- Considers and recommends the Bank's risk appetite for wholesale and retail credit risk to the Board
- Reviews the Bank's risk profile for wholesale and retail credit on behalf of the Board
- Reviews the management of the Bank's wholesale and retail credit risk
- Commissions, receives and considers reports on key financial and non-financial risk issues in the Bank

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Barclays Bank Ireland PLC Risk Committee

- Reviews appetite for wholesale and retail credit risk and makes recommendations on the setting of limits to the Board Risk Committee
- Monitors the risk profile for wholesale and retail credit risk
- Reviews and monitors the control environment for wholesale and retail and credit risk

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Consumer Bank Europe Risk Management Committee

- Oversees activities and manages information relating to business portfolios and identify actions needed to mitigate current and arising credit risks
- Reviews and approves business mandate and scale limits and, where relevant, provides recommendations for limits managed by wholesale and retail risk committees
- Reviews relevant decisions made by, and material issues and topics raised by, other forums and committees

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Credit Risk Management Forum

- Monitors the wholesale and retail credit risk profile against plan and agrees required actions
- Reviews and approves legal entity mandate and scale limits and, where relevant, provides recommendations for limits managed by the Board Risk Committee
- Reviews wholesale and retail credit risk issues
- Reviews credit risk policies and framework
- Monitors risk appetite consumption – key credit portfolio (mandate and scale) limits

Roles and responsibilities

The responsibilities of the credit risk management teams in the businesses, the sanctioning team and other shared services include: sanctioning new credit agreements (principally wholesale); setting strategies for approval of transactions (principally retail); setting risk appetite; monitoring risk against limits and other parameters; maintaining robust processes, data gathering, quality, storage and reporting methods for effective credit risk management; performing effective turnaround and workout scenarios for wholesale portfolios via dedicated restructuring and recoveries teams and maintaining robust collections and recovery processes/units for retail portfolios.

For wholesale portfolios, credit risk approval is undertaken by experienced credit risk professionals operating within a clearly defined delegated authority framework, with only the most senior credit officers assigned the higher levels of delegated authority. Notable transactions require notification to BBI CEO and BBI CRO, where Principal Risk Gross Distribution amount exceeds EUR 2bn for Investment Grade and EUR 1bn for Non-Investment Grade credits.

In the wholesale portfolios, credit risk managers are organised in sanctioning teams by geography, industry and/or product.

The role of the Central Risk function in the Bank is to provide bank-wide direction, oversight and challenge of credit risk taking. Group Credit Risk sets the Credit Risk Control Framework, which provides the structure within which credit risk is managed, together with supporting credit risk policies and standards. The Group Framework, Policies and Standards are reviewed and recommended for adoption by the Bank's principal risk accountable executive.

Reporting

BBI dedicates considerable resources to gaining a clear and accurate understanding of credit risk across the business and maintaining that its balance sheet correctly reflects the value of the assets in accordance with applicable accounting principles. This process can be summarised in five broad stages:

- measuring exposures and concentrations
- monitoring performance and asset quality
- monitoring for weaknesses in portfolios
- raising allowances for impairment and other credit provisions
- returning assets to a performing status or writing off assets when the whole or part of a debt is considered irrecoverable.

Management of credit risk and the internal ratings-based approach

Measuring exposures and concentrations

Loans and advances to customers provide the principal source of credit risk to BBI although it is also exposed to other forms of credit risk. Risk management policies and processes are designed to identify and analyse risk, to set appropriate risk appetite, limits and controls, and to monitor the risks and adherence to limits by means of reliable and timely data.

One area of particular review is concentration risk. A concentration of credit risk exists when a number of counterparties or customers are engaged in similar activities or geographies, and have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic and other conditions. As a result, the Bank constantly reviews its concentration in a number of areas including, for example, geography and industry.

Mandate and scale limits are used to maintain concentrations at appropriate levels, which are aligned with the businesses' stated risk appetite. Limits are typically based on the nature of the lending and the amount of the portfolio meeting certain standards of underwriting criteria. Diversification, to reduce concentration risk, is achieved through setting maximum exposure limits to individual counterparties' exposures.

Monitoring performance and asset quality

Trends in the quality of BBI's loan portfolio are monitored in a number of ways including tracking loan loss rate and coverage ratios.

Coverage Ratio, or Expected Credit Loss as a percentage of Exposure, is one of the key credit risk management tool used by the Bank to assess its level of impairment. The table below provides information on the level of ECL Coverage for all of the Bank's exposures that use a model to estimate ECL, with the exception of Treasury assets. The Bank deploys five models in the course of its assessment; the table below provides the results of two of these: the weighted scenario and a severe downside scenario, which assumes a global depression, unemployment reaching 9% and considerable deterioration in the value of assets including house prices. Further details on the methodology, assumptions used and impacts of stresses on macroeconomic variables are set out in the Bank's Annual Report on pages 58 to 69.

		Retail mortgages		Credit card & unsecured lending		Wholesale Credit	
As at 31 December 2021		Weighted	Downside	Weighted	Downside	Weighted	Downside
Stage 1							
Model Exposure	€m	4,575	4,533	3,326	3,096	10,185	9,999
Model ECL	€m	3	4	22	31	9	11
Coverage	%	0.1	0.1	0.7	1.0	0.1	0.1
Stage 2							
Model Exposure	€m	250	293	582	812	2,441	2,627
Model ECL	€m	13	26	93	162	26	40
Coverage	%	5.2	8.9	16.0	20.0	1.1	1.5
Stage 3							
Model Exposure	€m	196	196	136	136	—	—
Model ECL	€m	37	45	92	96	—	—
Coverage	%	18.9	23.0	67.6	70.6	—	—
Model ECL – All Stages	€m	53	75	207	289	35	51

Management of credit risk and the internal ratings-based approach

Monitoring weaknesses in portfolios

While the basic principles for monitoring weaknesses in Wholesale and Retail exposures are broadly similar, they reflect the differing nature of the assets. As a matter of policy, all facilities granted to Corporate or Wholesale counterparties are subject to a review on at least an annual basis, even when they are performing satisfactorily.

Wholesale portfolios[2]

Within the Wholesale portfolios, the Basel definitions of default are used as default indicators, which have been aligned to IFRS9.

Definitions of default used by the Group, and adopted by the Bank, are:

- The Bank puts the credit obligation on a non-accrued status;
- The Bank makes a charge-off or account specific identified impairment resulting from a significant perceived decline in credit quality;
- The Bank sells the credit obligation at a material credit-related economic loss;
- The Bank triggers a petition for obligor's bankruptcy or similar order;
- The Bank becomes aware of the obligor having sought or having been placed in bankruptcy or similar protection where this would avoid or delay repayment of the credit obligation to the Bank;
- The Bank becomes aware of an acceleration of an obligation by a firm;
- where the obligor is a bank – revocation of authorisation;
- where the obligor is a sovereign – trigger of default definition of an approved External Credit Assessment Institution (ECAI) such as a rating agency;
- Obligor past due more than 90 days on any material credit obligation to the Bank.

Wholesale accounts that are deemed to contain heightened levels of risk are recorded on graded watchlists (WL) comprising four categories graded in line with the perceived severity of the risk attached to the lending, and its probability of default. Examples of heightened levels of risk may include, for example:

- a material reduction in profits;
- a material reduction in the value of collateral held;
- a decline in net tangible assets in circumstances which are not satisfactorily explained;
- periodic waiver requests or changes to the terms of the credit agreement over an extended period of time.

These lists are updated monthly and circulated to the relevant risk control points. Once an account has been placed on WL, the exposure is monitored and, where appropriate, exposure reductions are effected. While all counterparties, regardless of financial health, are subject to a full review of all facilities on at least an annual basis, more frequent interim reviews may be undertaken should circumstances dictate. Specialist recovery functions deal with counterparties in higher levels of WL, default, collection or insolvency.

Their mandate is to maximise shareholder value, ideally via working intensively with the counterparty to help them to either return to financial health or, in the cases of insolvency, obtain the orderly and timely recovery of impaired debts. Where a counterparty's financial health gives grounds for concern, it is immediately placed into the appropriate category.

Retail portfolios

Within the Retail portfolios, which tend to comprise homogeneous assets, statistical techniques more readily allow potential credit weaknesses to be monitored on a portfolio basis. Retail accounts can be classified according to specified categories of arrears status (or 30-day cycle), which reflects the level of contractual payments which are overdue. An outstanding balance is deemed to be delinquent when it is one day or "one cent" down.

Once a loan has passed through a prescribed number of cycles, it will be charged-off and enter recovery status. Charge-off refers to the point in time when collections activity changes from the collection of arrears to the recovery of the full balance. In most cases, charge-off will result in the account moving to a legal recovery function or debt sale and on unsecured assets will typically occur between 5 and 7 contractual payments in arrears. This may be accelerated or occur directly from a performing status, such as in the case of insolvency or death.

For Mortgage assets charge-off occurs at 12+ contractual payments in arrears. Once charged-off the mortgage moves through the foreclosure process.

[2] Includes certain Business Banking facilities which are recorded as Retail for management purposes.

Management of credit risk and the internal ratings-based approach

Returning assets to a performing status

Wholesale portfolios

In Wholesale portfolios, an account may only be returned to a performing status when it ceases to have any actual or perceived financial stress and no longer meets any of the WL criteria, or once facilities have been fully repaid or cancelled. Unless a facility is fully repaid or cancelled, the decision to return an account to performing status can be taken by the Watch List Committee or the Bank's credit risk team.

Retail portfolios

A Retail asset, pre-point of charge-off, may only be returned to a performing status in the following circumstances:

An up-to-date Non-Performing exposure (not classified as Forbearance) may be reclassified as Performing exposure upon receipt (on-time) of all contractually due payments, over a 12-month period.

An up-to-date (i.e. not in arrears in relation to the agreed Forbearance programme) Non-Performing Forbearance (NPF) may be reclassified as Performing Forbearance (PF) upon receipt (on-time) of all due payments (at current agreed repayment amount), over a 12-month period.

An up-to-date (i.e. not in arrears in relation to the agreed Forbearance programme) PF may be reclassified to the 'in order' book when the customer completes a minimum probation period of 24 months from the point of entering PF, even if they are no longer on a Forbearance programme. They must also meet the following criteria:

- 12 consecutive on-time payments have been made during the probation period at the agreed repayment amount (i.e. the forbearance amount while forbearance is continuing or the contractual monthly payment CMP once forbearance has concluded)
- Arrears must not have been >30 days past due during the probation period
- Account is not past due at the point of exit

If a performing forborne contract under probation is granted additional forbearance measures or becomes more than 30 days past-due, it is classified as non-performing.

For Italian residential mortgages, accounts may also be considered for rehabilitation post charge-off, where customer circumstances have changed. The customer must clear all unpaid capital and interest, and confirm their ability to meet full payments going forward.

Recovery units

Recovery units are responsible for exposures where deterioration of the counterparty/ customer credit profile is severe, to the extent that timely or full recovery of exposure is considered unlikely and default has occurred or is likely in the short term. Recovery teams set and implement strategies to recover BBI's exposure through realisation of assets and collateral, in co-operation with counterparties/ customers and where this is not possible through insolvency and legal procedures.

In Wholesale, for a case to be transferred to a recovery unit, it must be in default and have ceased to actively trade or be in insolvency. In Retail, the timings of the charge-off points to recovery units are established based on the type of loan. In most cases, charge-off will result in the account moving to a legal recovery function or debt sale and on unsecured assets will typically occur between 5 and 7 contractual payments in arrears, unless a Forbearance programme is agreed. Early points are prescribed for unsecured assets. For example, in case of customer bankruptcy or insolvency, associated accounts are charged off within 60 days of notification.

For mortgage assets charge-off occurs at 12+ contractual payments in arrears. Once charged-off the mortgage moves through the foreclosure process.

Foreclosures in process and properties in possession

Foreclosure is the process where BBI initiates legal action against a customer, with the intention of terminating the loan agreement whereby BBI may repossess the property subject to local law and recover amounts it is owned. This process can be initiated by BBI independent of the impairment treatment and it is therefore possible that the foreclosure process may be initiated while the account is still in collections (delinquent) or in recoveries (post charge-off) where the customer has not agreed a satisfactory repayment schedule with BBI.

Properties in possession include properties held as 'loans and advances to customers' and properties held as 'other real estate owned'.

Held as 'loans and advances to customers' (Italy) refers to the properties where the customer continues to retain legal title but where BBI has enforced the possession order as part of the foreclosure process to allow for the disposal of the asset, or the court has ordered the auction of the property.

Writing off assets

Write-off refers to the point where it is determined that the asset is irrecoverable, it is no longer considered economically viable to try and recover the asset, it is deemed immaterial, or full and final settlement is reached and a shortfall remains. In the event of write-off, the customer balance is removed from the balance sheet and the impairment reserve held against the asset is released.

The timing and extent of write-offs may involve some element of subjective judgement. Nevertheless, a write-off will often be prompted by a specific event, such as the inception of insolvency proceedings or other formal recovery action, which makes it possible to establish that some or the entire advance is beyond realistic prospect of recovery. The position of impaired loans is also reviewed at least quarterly to make sure that irrecoverable advances are being written off in a prompt and orderly manner and in compliance with any local regulations.

For Retail portfolios, the timings of the write-off points are established based on the type of loan. For unsecured, assets in the recoveries book will be written-off if the required qualifying repayments are not made within a rolling twelve-month period. For secured loans, the shortfall after the receipt of the proceeds from the disposal of the collateral is written off within three months of that date if no repayment schedule has been agreed with the borrower. Such assets are only written off once all the necessary procedures have been completed and the amount of the loss has been determined.

Subsequent recoveries of amounts previously written off are written back and hence decrease the amount of the reported loan impairment charge in the income statement.

Assessment of impairment under IFRS9

From 1 January 2018, a new accounting standard, IFRS 9, became effective which prescribes the rules for measuring impairment allowances for financial assets. Under the IFRS9 accounting standard, BBI assesses and recognises Expected Credit Losses (ECL) on financial assets from the point of origination or purchase, and to update said assessment at each reporting date, reflecting changes in the credit risk of the financial asset.

ECL represents present value measure of the credit losses expected to result from default events that may occur during a specified period of time. ECLs must reflect the present value of cash shortfalls, i.e. the difference between cash flows due under the contract and the cash flows that the business now expects to receive. Given ECLs take into account both the amount and the timing of payments, a credit loss may result if a contractual payment is missed or received late, even if the debt is ultimately paid in full. ECL assessments must reflect an unbiased and probability weighted assessment of a range of possible outcomes, including reasonable and supportable information about future economic conditions.

Exposures must be assessed and assigned to one of the following populations at each reporting point:

Stage 1: Performing risk assets.

In scope items classified as stage 1 exposure for IFRS9 purposes are those assets performing in line with expectations in place at the point of origination/acquisition. This includes new originations or purchased assets (from the point of initial origination), but excludes exposures deemed credit impaired at point of origination.

BBI must recognise an impairment allowance equal to 12 months expected credit losses. This allowance must be raised at point of initial

Management of credit risk and the internal ratings-based approach

reporting of an asset and the assessment updated at each subsequent reporting point.

Stage 2: Significantly deteriorated risk assets.

Assets classified as stage 2 exposures for IFRS9 purposes are those where credit risk has significantly increased compared with expectations at point of origination/acquisition, but which are not yet considered 'Credit Impaired'.

In order to maintain that individual exposures or groups of assets are correctly classified as stage 2 assets, businesses must undertake regular assessments to identify whether a significant increase in credit risk has occurred since initial recognition. This must take the form of the following:

1. **Quantitative Test**

Where the residual annualised weighted average lifetime PD for an individual exposure at the latest reporting date shows a material deterioration compared with that at the origination/acquisition point, then the assets must be classified under stage 2 as having significantly increased credit risk.

The assessment of materiality, i.e. at what point the PD increase is deemed 'significant', is based upon analysis of the portfolios risk profile against a common set of defined principles and key performance metrics.

2. **Qualitative Test**

For personal banking assets managed under Retail Portfolios, accounts meeting the portfolios 'high risk' criteria, must be classified under stage 2 as having significantly increased credit risk. For Wholesale portfolios and Business Banking assets managed under Retail portfolios where accounts are managed under the Watch List framework, then customers on WL 2/3, not breaching the quantitative test must be classified under stage 2 as having a Significant Increase in Credit Risk ('SICR'). Obligors on WL1 may be classified as stage 1 for a maximum period of 6 months. In exceptional circumstances for an obligor on WL2 where it can be proven that a specific exposure is not deteriorated e.g. it is newly originated and therefore cannot have deteriorated, stage 1 ECL may be applied.

3. **Backstop Criteria**

For Retail portfolios, adverse changes in payment status must be considered within the assessment, and accounts 1 or more contractual payment in arrears at reporting date classified under stage 2, except where:

a. The missed payment is a result of a bank error or technical issue;

b. The arrears can be analytically proven not to represent deterioration from risk performance expectations at point of origination/acquisition, e.g. where there is a very small period between cycle point and reporting date. Such exceptions must be approved by the GCRD or nominated delegate. Exposures at 30 days or more past contractual payment due date at the reporting date must be classified as stage 2 assets without exception.

For Wholesale portfolios adverse changes in payment status must be considered within the assessment, and accounts with contractual payment 30 days or more in arrears at reporting date are included within the entry criteria for stage 2, except where the missed payment is a result of a proven bank error or administrative issue. Where 30 days is used it must be proven that this is a backstop, not a lead driver of exposure moving to stage 2.

Where the assessment of SICR is undertaken on a collective basis, assets must be grouped on the basis of similar risk characteristics, taking into account asset type, industry, geographical location, collateral type, past-due status and other relevant factors.

The Bank raises an impairment allowance equivalent to the latest assessment of lifetime expected credit losses. This increased allowance must be recognised at the first reporting point following entry to stage 2 and the assessment updated at each subsequent reporting date.

The assessment of lifetime ECLs for stage 2 (and stage 3) assets must consider the maximum contractual period over which the business is exposed to credit risk, including the impact of permitted extensions and pre-payments, i.e. those available at the option of the borrower to which the business must agree.

For loan commitments, the lifetime assessment period is normally the maximum contractual life, i.e. the period from the point the loan commitment is established to closure/full repayment of the exposure. However, where customer use of contractually available pre-payments and/or extension has a material impact on the expected life of the asset, then use of behavioural life may be justified.

For revolving credit facilities, the lifetime assessment period may extend beyond the contractual life to include the period over which the business is expected to be exposed to credit risk, based on historical experience i.e. an assessment of the average time to default, closure or withdrawal of the facility.

Assets may be removed from stage 2 and re-assigned to stage 1 once there is objective evidence that the criteria used to indicate a significant increase in credit risk are no longer met.

Stage 3: Credit impaired risk assets.

Assets classified as stage 3 exposures for IFRS9 purposes are those where credit risk has increased to a point where they are now considered 'Credit Impaired'. For Retail portfolios, this incorporates all accounts in forbearance, regardless of whether classified as performing or non-performing for EBA reporting purposes. For Wholesale portfolios cases of forbearance not captured by stage 3 (i.e. those not meeting the regulatory definition of default - EBA classification of non-performing) must be classified as stage 2 until such time as the relevant forbearance probation period has been completed.

The Bank raises an impairment allowance equivalent to the latest assessment of lifetime expected credit losses, i.e. on the same basis as for stage 2 assets.

For Single Name Wholesale Assets, a threshold approach is taken with stage 3 impairment calculated individually. A discounted cash flow is completed establishing a base estimated impairment allowance, derived from the difference between asset carrying values and the recoverable amount.

Where the base allowance is greater than £10m, a bespoke assessment is performed reflecting individual work out strategies. The assessment is clearly and specifically articulated including how general economic scenarios and downside analyses have been applied.

Interest and fee income on stage 3 assets is recognised based on the net amortised value, i.e. the gross carrying amount adjusted for the loss allowance in line with IFRS principles.

For exposures that are considered credit-impaired on purchase or origination, lifetime ECLs must be taken into account within the estimated cash flows at point of initial recognition, and the asset classified as stage 3.

In subsequent reporting periods, businesses must recognise cumulative changes in lifetime ECLs since initial recognition as a loss allowance, i.e. the amount of change in lifetime ECLs is treated as an impairment gain or loss. Assets may only exit stage 3 and be reclassified into stage 1 or stage 2 once the original default trigger event no longer applies.

To fully embed this new standard into businesses, management requires frequent periodic reviews of ECL performance across BBI both in isolation and, more importantly, in comparison to the underlying performance of portfolios and product types.

Review and challenge is carried out through a hierarchy of committees confirming both the adequacy of provisions under the ECL requirements and that all policies, standards and processes have been adhered to (see below) and that appropriate controls are evidenced.

Governance and oversight of impairment under IFRS 9

BBI's organisational structure and internal governance processes oversee the estimation of ECL across several areas, including: i) setting requirements in policy, including key assumptions and the application of key judgements; ii) the design and execution of models; and iii) review of ECL results.

i. Impairment policy requirements are set and reviewed regularly, at a minimum annually, to maintain adherence to accounting

Management of credit risk and the internal ratings-based approach

standards. Key judgements inherent in policy, including the estimated life of revolving credit facilities and the quantitative criteria for assessing the SICR, are separately supported by analytical study. In particular, the quantitative thresholds used for assessing SICR are subject to a number of internal validation criteria, particularly in retail portfolios where thresholds decrease as the origination PD of each facility increases. Key policy requirements are also typically aligned to Barclays Group's credit risk management strategy and practices, for example, wholesale customers that are risk managed on an individual basis are assessed for ECL on an individual basis upon entering Stage 3; furthermore, key internal risk management indicators of high risk are used to set SICR policy, for example, retail customers identified as High Risk Account Management are automatically deemed to have met the SICR criteria.

ii. ECL is estimated in line with internal policy requirements using models which are validated by a qualified independent party to the model development area, the Independent Validation Unit (IVU), before first use and at a minimum annually thereafter. Each model is designated an owner who is responsible for:

- Monitoring the performance of the model, which includes comparing predicted ECL versus flow into stage 3 and coverage ratios; and
- Proposing post-model adjustments (PMA) to address model weaknesses or to account for situations where known or expected risk factors and information have not been considered in the modelling process. All PMAs relating to model deficiencies, regardless of value are approved by IVU for a set time period. PMAs representing Expert Judgement are validated by Risk, as the second line of defence and approved for a set time period.

Models must also assess ECL across a range of future economic conditions. These economic scenarios are generated via an independent model and ultimately set by the Senior Scenario Review Committee and oversight conducted within the Bank. Economic scenarios are regenerated at a minimum annually, to align with the Bank's medium term planning exercise, but also if the external consensus of the relevant economies materially worsen. Each model used in the estimation of ECL, including key inputs, are governed by a series of internal controls, which include the validation of completeness and accuracy of data in golden source systems, documented data transformations and documented lineage of data transfers between systems.

iii. The Bank's Impairment Forum consists of members from both Finance and Risk and is attended by both the Bank's Chief Financial Officer and Chief Risk Officer. The Forum is responsible for overseeing impairment policy and practice across the Bank and supports the CFO and CRO in their role of approving impairment results. Reported results and key issues are communicated to the Board Audit Committee and the Board Risk Committee, both of which have an oversight role and provide challenge of key assumptions, including the basis of the scenarios adopted.

Forbearance and other concession programmes

Forbearance programmes

Forbearance takes place when a concession is made on the contractual terms of a facility in response to an obligor's financial difficulties. BBI offers forbearance programmes to assist customers and clients in financial difficulty through agreements that may include accepting less than contractual amounts due where financial distress would otherwise prevent satisfactory repayment within the original terms and conditions of the contract. These agreements may be initiated by the customer, BBI or a third party.

In line with regulatory guidance, the use of payment holidays and/or similar schemes developed specifically in response to the COVID-19 pandemic, does not necessitate reclassification of assets as forborne.

Forbearance programmes for Wholesale portfolios

The majority of Wholesale client relationships are individually managed, with lending decisions made with reference to specific circumstances and on bespoke terms.

Forbearance measures consist of concessions made towards a debtor that is experiencing or about to experience difficulties in meeting their financial commitments.

A concession is a sanctioned action, outside of market terms that is beneficial to the debtor. The concession arises solely due to the financial distress of the debtor and the terms are more favourable than those which would be offered to a new or existing obligor with a similar risk profile. Concessions are represented by:

- A change or alteration to the previous terms and conditions of a contract,
- A total or partial refinancing of a troubled debt contract.

The following are some examples of concessions which would be deemed forbearance (where granted to debtors in financial difficulties and outside of market terms):

- A restructuring of the contractual terms of a credit facility (such as a reduction in the interest rate).
- An extension to the maturity date.
- Change to the collateral structure (typically resulting in a net reduction in collateral).
- Favourable adjustment to covenants where repayment profile changes, or non-enforcement of material covenant breach.
- Repayment in some form other than cash (e.g. equity).
- Capitalisation of accrued interest.
- Any other concession made which is designed to alleviate actual or apparent financial stress e.g. a capital repayment holiday.

Where a concession is granted that is not a result of financial difficulty and/or is within BBI's current market terms, the concession would not amount to forbearance. For example, a commercially balanced restructure within the BBI's current terms which involves the granting of concessions and receiving risk mitigation/structural enhancement of benefit to BBI would not be indicative of forbearance.

Forbearance is not deemed to have occurred in the following situations:

- There is a pending maturity event anticipated at the onset of lending i.e. the loan was never structured to amortise to zero.
- A maturity extension or a temporary covenant waiver (e.g. short term standstill) is granted to support a period of negotiation, subject to BBI being satisfied that:
  - the debtor is actively pursuing refinancing or the sale of an asset enabling full repayment at expiry of the extended term
  - no loss is anticipated
  - payments of interest and capital continues as originally scheduled,
  - there is a high probability of a successful outcome within a "reasonable" time scale (6 months for bilateral facilities, 9 months for multi-lender).
- Immaterial amendments to lending terms are agreed, including changes to non-financial internal risk triggers that are only used for internal monitoring purposes.

Forbearance is considered evidence of a Significant Increase in Credit Risk and all forborne debtors are impaired as IFRS9 stage 2 (Lifetime Expected Credit Loss) regardless of Watch List category as a minimum for the lifetime of the forbearance. Those forbearance cases in regulatory default will attract stage 3 impairment treatment.

Debtors granted forbearance are classified on watch list (WL) for the duration of the forbearance. Counterparties placed on WL status are subject to increased levels of credit risk oversight.

Forborne debtors are classified for reporting as either Performing or Non-Performing.

Management of credit risk and the internal ratings-based approach

Non-Performing debtors are defined as:

- More than 90 days past due at the point concession was granted.
- Assessed as unlikely to pay credit obligations in full without realisation of collateral, regardless of the existence of any past due amount or of the number of days past due.
- Credit impaired.
- Performing forborne debtors granted additional forbearance measures or becoming more than 30 days past-due on a facility obligation.

Performing debtors are classified as debtors that were less than 90 days past due at the point the concession was granted, are less than 30 days past due under their revised terms and are without risk of non-payment.

Non-performing status remains in force for a minimum 12 months from the date of classification before the debtor can be considered for performing status. Performing debtors remain forborne for a minimum 24 months before forborne status may be reviewed. The minimum time spent in forbearance for a case that is Non-Performing at the point forbearance is granted is therefore 36 months.

A control framework exists along with regular sampling so that policies for watch list and impairment are enforced as defined and all assets have suitable levels of impairment applied. Portfolios are subject to independent assessment.

Forbearance programmes for retail portfolios

Retail forbearance is available to customers experiencing financial difficulties. Forbearance solutions take a number of forms depending on individual customer circumstances. It is imperative that the solution agreed is both appropriate to that customer and sustainable, with a clear demonstration from the customer of both willingness and ability to repay. Affordability assessments are undertaken before any permanent programme of forbearance is granted, to understand the customer duration of financial difficulty and agree an affordable payment amount. Short-term solutions focus on temporary reductions to contractual payments and may suppress interest, or change from capital and interest payments to interest only. Long term solutions focus on full amortisation of the balance, and may also include an interest rate concession.

When an account is placed into a programme of forbearance, the asset will be classified as such until a defined cure period has been successfully completed, incorporating a successful track record of payment in line with the revised terms, upon which it will be returned to the up-to-date book. When BBI agrees a forbearance programme with a customer, impairment allowances recognise the impact on cash flows of the agreement to receive less than the original contractual payments. The Retail Impairment Policy prescribes the methodology for the impairment of forbearance assets, in line with the IFRS9 methodology adopted in January 2018. Forborne exposures are classified as stage 3 (credit impaired) assets under IFRS9, until such time as the prescribed stage 3 cure criteria have been met, resulting in higher impairment than for fully performing assets, reflecting the additional credit risk attached to loans subject to forbearance.

When customers exit forbearance, the accounts are ring-fenced as High Risk within the up-to-date book for a period of at least twelve months.

Barclays has continued to assist customers in financial difficulty through the use of forbearance programmes. However, the extent of forbearance offered by BBI to customers and clients remains small in comparison to the overall size of the loan book.

The level of forbearance extended to customers in other Retail portfolios is not material and, typically, does not currently play a significant part in the way customer relationships are managed. However, additional portfolios will be added to this disclosure should the forbearance in respect of such portfolios become material.

A Retail loan is not considered to be renegotiated where the amendment is at the request of the customer, there is no evidence of actual or imminent financial difficulty and the amendment meets with all underwriting criteria. In this case it would be treated as a new loan. In the normal course of business, customers who are not in financial difficulties frequently apply for new loan terms, for example to take advantage of a lower interest rate or to secure a further advance on a mortgage product. Where these applications meet our underwriting criteria and the loan is made at market interest rates, the loan is not classified as being in forbearance. Only in circumstances where a customer has requested a term extension, interest rate reduction or further advance and there is evidence of financial difficulty is the loan classified as forbearance and included in the disclosures on forbearance on page 258 of the Barclays PLC Annual Report 2021.

Other programmes

Retail re-aging activity

Re-aging refers to the placing of an account into an up-to-date position without the requisite repayment of arrears. The re-age policy applies to revolving products that have a minimum payment requirement only. No reduction is made to the minimum due payment amounts which are calculated, as a percentage of balance, with any unpaid principal included in the calculation of the following month's minimum due payment.

The changes in timing of cash flows following re-aging do not result in any additional cost to BBI. The following are the conditions required to be met before a re-age may occur:

- the account must not have been previously charged off or written off
- the borrower cannot be bankrupt, subject to a contractual arrangement with creditors for individuals wishing to avoid bankruptcy, or deceased
- the borrower must show a renewed willingness and ability to repay the debt. This will be achieved by the borrower making at least three consecutive contractual monthly payments or the equivalent cumulative amount. Contractual monthly payment is defined as the contractual minimum due. Funds may not be advanced for any part of this
- no account should be re-aged more than once within any twelve-month period, or more than twice in a five-year period.

Re-aged assets are included in portfolios High Risk population, and are classified as stage 2 assets (i.e. as having significantly increases credit risk) for IFRS9 impairment purposes. This results in an appropriately higher impairment allowance being recognised on the assets.

Retail small arrears capitalisation

All small arrears capitalisations are now considered a form of Forbearance, based on the European Banking Authority's requirements for Supervisory Reporting on Forbearance and Non-Performing exposures.

Refinancing risk

This is the risk that the borrower or group of correlated borrowers may be unable to repay bullet-repayment loans at expiry, and will therefore need refinancing.

From a large corporates perspective, refinancing risk will typically be associated with loans that have an element of bullet repayment incorporated into the repayment profile. Refinancing risk is taken into account on a case by case basis as part of the credit review and approval process for each individual loan. The review will consider factors such as the strength of the business model and sustainability of the cash flows; and for bridge loans, the certainty of the sources of repayment and any associated market risk.

Commercial real estate loans will frequently incorporate a bullet repayment element at maturity. Where this is the case, deals are sized and structured to enable BBI to term out the loan if the client were unable to refinance the loan at expiry. Credit review will incorporate an examination of various factors that are central to this consideration, such as tenant quality, tenancy agreement (including break clauses), property quality and interest rate sensitivity.

Environmental risk

Environmental risk is recognised as a credit risk driver and Barclays Group has a dedicated Environmental Risk Management team, as part of the Treasury, Enterprise, Credit and Climate Risk Transaction Cycle. Environmental issues are considered in credit risk assessment, and environmental risk standards are included in the Wholesale Credit Risk Control Framework.

Management of credit risk and the internal ratings-based approach

The direction and guidance is adopted by the Bank and its Credit Risk function.

The approach to environmental credit risk management addresses risk under two categories, namely Direct risk and Indirect risk, which are covered below.

Direct risk can arise when the Bank takes commercial land as collateral. In many jurisdictions, enforcement of a commercial mortgage by the Bank, leading to possession, potentially renders the Bank liable for the costs of remediating a site under Direct Lender Liability, if deemed by the regulator to be contaminated. The Bank's approach requires commercial land, if being pledged as collateral, to be subject to a screening mechanism. Where required, a further assessment of the commercial history of a piece of land or an asset and its potential for environmental contamination helps reflect any potential environmental degradation in the value ascribed to that security. It also identifies potential liabilities which may be incurred by the Bank, if realisation of the security were to become likely.

Indirect risk can arise when environmental issues may impact the creditworthiness of the borrower. For instance, incremental costs may be incurred in upgrading a business' operations to meet emerging environmental regulations or tightening standards, including those associated with managing the impacts of climate change. In other circumstances, failure to meet those standards may lead to fines. Environmental impacts on businesses may also include shifts in the market demand for goods or services generated by our customers, or changing supply chain pressures. Environmental considerations affecting our clients can be varied The Bank has developed a series of environmental risk briefing notes, covering ten broad industry headings ranging from Agriculture and Fisheries to Oil and Gas, from Mining and Metals to Utilities and Waste Management. These briefing notes are available to colleagues in business development and credit risk functions across the organisation, outlining the nature of environmental and social risks of which to be aware, as well as the factors which mitigate those risks.

Climate change is an increasing driver of environmental risk. More information on our approach to managing risks associated with climate change can be found on page 16 of the Barclays Bank Ireland PLC Annual Report 2021.

Internal ratings based (IRB) approach

BBI is currently using AIRB for:

- Wholesale exposures incurred as Counterparty Credit Risk subject to IMM
- Barclaycard Germany card portfolio
- Italy mortgages
- Specialised Lending

The IRB approach largely relies on internal models to derive the risk parameters/ components used in determining the capital requirement for a given exposure. The main risk components include measures of the probability of default (PD), loss given default (LGD) and the exposure at default (EAD). The IRB approach is divided into three alternative applications: Own-Estimates, Supervisory Estimates and Specialised Lending:

Own-Estimates IRB (OEIRB): Barclays uses its own models to estimate PD, LGD and EAD to calculate given risk exposures for various asset classes and the associated Risk Weighted Assets (RWAs).

Supervisory IRB (SIRB): Barclays uses its own PD estimates, but relies on supervisory estimates for other risk components. The SIRB approach is particularly used to floor risk parameters for wholesale credit exposures where default data scarcity may impact the robustness of the model build process.

Specialised Lending IRB: For specialised lending exposures for which PD cannot be modelled reliably, Barclays uses a set of risk weights defined in the relevant regulation, and takes into account a range of prescribed risk factors.

While in the past the industry has used the terms 'Advanced', 'Foundation' and 'Slotting' IRB, the current enforcing regulation (the Capital Requirements Regulation) does not use these terms.

The IRB calculation for credit risk

For both OEIRB and SIRB approaches, Barclays uses the regulatory prescribed risk-weight functions for the purposes of deriving capital requirements.

In line with regulatory requirements, Long Run Average PD and downturn LGD and CF (Conversion Factor) estimates are used for each customer/facility to determine regulatory capital for all exposures in scope.

For the purpose of pricing and existing customer management, point in time (PIT) PD, LGD and EAD are generally used as these represent the best estimates of risk given the current position in the credit cycle. Whilst Long Run Average PDs are always tested at grade/ pool level, PIT PDs are also used for the calculation of capital on certain retail unsecured products, in line with regulation.

Applications of internal ratings

The three components – PD, LGD and CF – are the building blocks used in a variety of applications that measure credit risk across the entire portfolio:

- credit approval: PD models are used in the approval process in both retail and wholesale portfolios. In high-volume retail portfolios, application and behaviour scorecards are frequently used as decision-making tools. In wholesale, PD models are used to direct applications to an appropriate credit-sanctioning level
- credit grading: this was originally introduced in the early 1990s to provide a common measure of risk across Barclays Group. Barclays now employs a 21-point scale of default probabilities. In some applications, grades in this scale are divided further to permit more detailed analysis. These are shown in Table 29 on page 45.
- risk-reward and pricing: RWA derived from the PD, LGD and CF estimate is used to assess the profitability of deals and portfolios and to facilitate risk-adjusted pricing and strategy decisions
- risk appetite: estimates are used to calculate the expected loss and the potential volatility of loss in Barclays Group's risk appetite framework. See page 84
- impairment calculation: under IFRS9, ECL outputs are produced based on PD, EAD and CF IRB feeder models, with scenario and weighting.
- collections and recoveries: PD model outputs are used to identify segments of the portfolio where collection and recovery efforts should be prioritised
- economic capital calculation: EC models for most portfolios use inputs from the IFRS9 impairment models
- risk management information: Risk generate reports to inform senior management on issues such as business performance, risk appetite and economic capital consumption. Model outputs are used as key indicators in those reports. Risk also generates regular reports on model risk, which covers model accuracy, model use, input data integrity and regulatory compliance among other issues.

Ratings processes and models for credit exposures

Wholesale credit

Barclays Group applies a range of modelling methods for PD, LGD and CF. Only some of which are relevant to BBI at this time.

To construct ratings for wholesale customers, including financial institutions, corporations, specialised lending, purchased corporate receivables and equity exposures, Barclays complements its internal models suite with external models and rating agencies' information. A model hierarchy is in place requiring users/credit officers to adopt a consistent approach/model to rate each counterparty based on the asset class type and the nature of the transaction.

Wholesale PD models

Barclays employs a range of methods in the construction of these models:

- structural models incorporate, in their specification, the elements of the industry-accepted Merton framework to identify the distance to default for a counterparty. This relies upon the modeller having access to specific time series data or data proxies for

Management of credit risk and the internal ratings-based approach

the portfolio. Data samples used to build and validate these models are typically constructed by appropriately combining data sets from internal default observations with comparable externally obtained data sets from commercial providers such as rating agencies and industry data gathering consortia.

- expert lender models are used for those parts of the portfolio where there is insufficient internal or external data to support the construction of a statistically robust model. These models utilise the knowledge and in-depth expertise of the senior credit officers dealing with the specific customer type being modelled. For all portfolios with a low number of default observations, Barclays Group adopts specific regulatory rules, methodologies and floors in its estimates so that the calibration of the model meets the current regulatory criteria for conservatism.

Wholesale LGD models

The LGD models typically rely on statistical analysis to derive the model drivers (including seniority of claim, collateral coverage, recovery periods, industry and costs) that best explain the Bank's historical loss experience, often supplemented with other relevant and representative external information where available. The models are calibrated to downturn conditions for regulatory capital purposes and, where internal and external data is scarce, they are subject to SIRB floors so that the calibration of the model meets the current regulatory criteria for conservatism.

Wholesale CF models

While not applicable to BBI at this time, wholesale CF models estimate the potential utilisation of the currently available headroom based on statistical analysis of the available internal and external data and past client behaviour. As is the case with the LGD models, the CF models are subject to downturn calibration for regulatory capital purposes and to floors where data is scarce.

Retail credit

Retail banking and cards operations have long and extensive experience of using credit models in assessing and managing risks. As a result, models play an integral role in customer approval and management decisions. Most retail portfolios are data rich; consequently, most models are built in-house using statistical techniques and internal data. Exceptions are some expert lender models (similar to those described in the wholesale context) where data scarcity precludes the statistically robust derivation of model parameters. In these cases, appropriately conservative assumptions are typically used, and wherever possible these models are validated/benchmarked against external data.

Retail PD models

Application and behavioural scorecards are most commonly used for retail PD modelling:

- application scorecards are derived from historically observed performance of new clients. They are built using customer demographic and financial information, supplemented by credit bureau information where available. Through statistical techniques, the relationship between these candidate variables and the default marker is quantified to produce output scores reflecting a PD. These scores are used primarily for new customer decisioning but are, in some cases, also used to allocate a PD to new customers for the purpose of capital calculation.
- behavioural scorecards differ from application scorecards in that they rely on the historically observed performance of existing clients. The statistically derived output scores are used for existing customer management activities as well as for the purpose of capital calculation.

Retail LGD models

Retail LGD models are built using bespoke methods chosen to best model the operational recovery process and practices. In a number of secured portfolios, LGD drivers are parameterised with market factors (e.g. house price indices, haircut of the property value) to capture market trends. For most unsecured portfolios, where recoveries are not based on collateral, statistical models of cash flows are used to estimate ultimate recoveries and LGDs. In all instances, cash flows are discounted to the point of default by using bespoke country and product level factors.

For capital calculations, customised economic downturn adjustments, taking into account loss and default dependency, are made to adjust losses to stressed conditions.

Retail CF models

CF models within retail portfolios are split into two main methodological categories. The general methodology is to derive product level credit conversion factors (CCFs) from historical balance migrations, typically for amortising product, such as mortgages, consumer loans. These are frequently further segmented at a bucket level (e.g. by delinquency). The most sophisticated CF models are based on behavioural factors, determining customer level CCFs from characteristics of the individual facility, typically for overdrafts and credit cards. For capital calculations, customised downturn adjustments, taking into account loss and default dependency, are made to adjust for stressed conditions.

The control mechanisms for the rating system

Model risk is a risk managed under the ERMF. Consequently, Barclays Group Model Risk Policy (GMRP) and its supporting standards covering the end-to-end model life cycle are in place to support the management of risk models.

Key controls captured by the GMRP cover:

- model governance is anchored in assigning accountabilities and responsibilities to each of the main stakeholders:
  - model owner – each model must have an owner who has overall accountability for the model
  - model developers – support the model owner and drive development according to the model owner's defined scope/purpose
  - Independent Validation Unit (IVU) – responsible for independent review, challenge and approval of all models.
- externally developed models are subject to the same governance standards as internal models
- models are classified by materiality (high/low) and complexity (complex/non-complex)
- all models must be validated and approved by IVU before initial implementation/use
- models are subject to annual review by the model owner and periodic validation and approval by IVU
- all models must be recorded in Barclays Group Models Database (GMD), which records model owners and developers
- model owners must evidence that model implementation is accurate and tested.

If a model is found to perform sub-optimally, it may be rejected and/or subjected to a Post Model Adjustment (PMA) before approval for continued use is granted.

The IVU reporting line is separate from that of the model developers. IVU is part of Model Risk Management (MRM), and the head of MRM reports to the Group Chief Risk Officer. The Board has designated the Model Management Committee (MMC) to facilitate Senior Management decision-making and oversight of models and their associated processes. All credit risk models are in scope. Further details on BBI's management of model risk are provided on page 131.

Under the Three Lines of Defence approach stated in the ERMF, the actions of all parties with responsibilities under the GMRP, adopted by BBI, are subject to independent review by Barclays Internal Audit.

Model owners are accountable for the identification of changes to the model aspects of the rating system, and submission to the Permission and Oversight Forum (POAF). POAF reviews the model owner decision on whether changes are required to be notified to the regulator. The model owner is supported by IVU in that decision.

Material model changes are subject to IVU review and approval.

Management of credit risk and the internal ratings-based approach

Validation processes for credit exposures

Validation of credit models covers observed model performance but also the scope of model use, interactions between models, data use and quality, the model's theoretical basis, regulatory compliance and any remediation to model risk that are proposed or in place. The following sections provide more detail on processes for validating the performance of each model type.

Wholesale PD models

To assess model calibration, the IVU compares the model prediction of default frequency to the realised internal default rate both over the latest year and over all observable model history. Due to the relative infrequency of default of large wholesale obligors, a long-run perspective on default risk is vital. Default rates are also compared to external benchmarks where these are relevant and available, such as default rates in rating-agency data.

For portfolios where few internal defaults have been observed, portfolio PD is compared to the 'most prudent PD' generated by the industry-standard Pluto-Tasche method, using conservative parameter assumptions.

To assess model discrimination performance, the IVU compares the rank-ordering of internal ratings with the pattern of defaults, if any, to construct the industry-standard Gini statistic or similar. The ordering of internal ratings is also compared to the ordering of internal and external comparator ratings where these are available.

Measures of grade stability and the degree to which PD tracks default rates over time are also routinely calculated to infer relevant aspects of the model performance (e.g. rating philosophy).

Wholesale LGD models

To assess model calibration, model outputs are compared to the LGD observed on facilities that entered default in 'downturn' periods, as requested by the regulator. Both internal and external data on observed LGD are examined, but preference is given to internal data, since these reflect Barclays' recovery policies. Comparisons are performed by product seniority and security status and for other breakdowns of the portfolio. Model outputs are also compared to the long-run average of observed LGD. The time-lapse between facility default and the closure of recovery is varied and may be long. In the construction of observed LGD, recoveries are discounted back to the date of default at a conservative interest rate. As noted above, regulatory floors are in place for the LGD used in calculating regulatory capital for exposure types where few default observations are available.

To assess model discrimination, the IVU compares the rank-ordering of model predictions to that of observed LGD and calculates the Spearman's Rank correlation coefficient and other measures of discrimination.

Wholesale CF models

To assess model calibration, the conversion factors observed in internal data are compared to model predictions, both in downturn periods as defined by the regulator, and on a long-run average basis. Comparisons are performed separately for different product types. Validation focuses on internal data, with external data used as a benchmark, because conversion factors are related to banks' facility management practices. Particular care is used in separating cases where facility limits changed between the date of observation and default, as these can lead to measurements of conversion factors that take extreme values. As a benchmark only, total predicted exposure at default for all defaulted facilities is compared to realised exposure at default. This comparison is done because it is relatively insensitive to extreme values for observed CF on some facilities. The primary validation tests are performed on facility-weighted rather than exposure-weighted basis, however, in line with the relevant regulations.

Retail PD models

To assess rating philosophy, i.e. whether it is a Point-in-Time system or Through-the-Cycle system, the IVU produces migration indices to investigate relevant grade migration.

To assess model calibration, the IVU compares the model prediction of default frequency to the realised internal default rate by grade/pool as required by CRR. As a minimum, IVU expects the expected default rate is at least equal or above the level of observed default rate.

To assess model discrimination performance, the IVU compares the rank-ordering of internal ratings with the pattern of defaults, if any, to construct the industry-standard Gini statistic or similar.

To assess model stability, the population distribution, the character distribution and parameter estimates are assessed individually.

A 0.03% regulatory floor is in place for the facility level PD used in calculating regulatory capital.

Retail LGD models

LGD model components are compared to observed value respectively, this may include but not limited to probability of possession/ charge off, forced sale discount, time from default to crystallisation and discount rate. Where components are similar to PD in nature, the approach stated in the PD section applies to assess the calibration, discrimination and stability of the component.

The calibration of the overall LGD is assessed through the expected against actual comparison by default flow and stock population respectively. The downturn LGD appropriateness is further assessed to test that the downturn LGD is equal to or above the long-run average of observed LGD. This exercise is performed at grade/pool level according to CRR. In the construction of observed LGD, recoveries are discounted back to the date of default at a conservative interest rate, following regulatory guidance. As noted above, regulatory floors are in place for the LGD used in calculating regulatory capital where appropriate (this includes but not limited to the non-zero LGD floor at account level, the collateral uncertainty consideration, and the portfolio level LGD floor).

The primary validation tests are performed on facility-weighted rather than exposure-weighted basis, however, in line with the relevant regulations.

Retail CF models

The calibration of the overall CF is assessed through the expected against actual comparison by default flow and stock population respectively. The downturn CF appropriateness is further assessed to test that the downturn CF is equal to or above the long-run average of observed CF. This exercise is performed at grade/pool level according to CRR. Particular care is used in separating cases where facility limits changed between the date of observation and default, as these can lead to measurements of conversion factors that take extreme values.

Depending on the modelling approach, the relevant measure used for PD/LGD may be used accordingly to assess calibration, discrimination and stability.

CF is floored so that the exposure at the point of default cannot be less than exposure observed at point of regulatory reporting.The primary validation tests are performed on facility-weighted rather than exposure-weighted basis, however, in line with the relevant regulations.

Model Governance

Model validation and approval is solely the responsibility of IVU. However, the Board has designated the Model Management Committee (MMC) to facilitate senior management decision-making and oversight of models and their associated processes. All risk models used by the Bank are in scope, including the Bank's IRB models. Models are reviewed at MMC upon approval by the Independent Validation Unit (IVU). MMC membership is drawn from across the BBI Risk and Finance functions and from model risk areas within Barclays Group. The CRO and CFO are joint Chairs of the Committee.

Management of credit risk and the internal ratings-based approach

Credit Risk IRB models performance back testing - estimated versus actual

The following tables compare the PDs and LGDs estimated by the BBIe's IRB models with the actual default and loss rates. Comparisons are based on the assets in IRB approach portfolios and are used to assess performance of the models. The estimates and actual figures represent direct outputs from the models rather than outputs used in regulatory capital calculations that may be adjusted to apply more conservative assumptions.

Risk models are subject to the Group Model Risk Policy, which contains detailed guidance on the minimum standards for model risk management. For example, PDs must be estimated over a sufficient period, show sufficient differentiation in predictions for different customers, show conservatism where data limitations exist, and follow prescriptive techniques. These standards are achieved via an independent validation process through appropriately independent experts. Once validated and correctly implemented, models are subject to regular monitoring to ensure they can still be used. Comparing model estimates with actual default rates for PD and loss rates for LGD form part of this monitoring. Such analysis is used to assess and enhance the performance of the models.

Further detail is provided in the management of model risk on page 131.

PD measures

- The model estimated PiT PDs are compared with the actual default rates by PD ranges within each IRB exposure class. PD ranges, estimated PDs and actual default rates are based on the existing models default definitions. The current set of IRB models used for BBIe capital calculation are not CRD IV compliant. Compliant models are either currently under PRA approval process or will be submitted as per the EBA IRB Repair roll out plan periodically reviewed with the PRA.
- The estimated PDs are forward-looking average PD by the model at the beginning of the twelve-month period, i.e. average PD of the Nov'20 non-defaulted obligors including inactive and non-borrowers. Both EAD weighted and simple average PDs have been reported.
- For the Retail book (Italy Mortgages and Germany Cards), the estimated PDs are compared with the simple average of historical annual default rates over the past 5 years, starting Nov'16. However, for the Wholesale book, "Average historical annual default" is calculated based on two years of data;as BBI's current Wholesale loan portfolios have only existed for this period. In future reporting periods, this average will be extended to include the additional data that will accrue..
- The PiT PD is used as a predicted measure in internal monitoring and annual validation of the models. In contrast, the capital calculation uses TTC or Regulatory PDs (not shown below), calibrated to long-run default averages with additional adjustments where modelled outputs display evidence of risk understatement (including credit expert overrides, regulatory adjustments etc.). The PiT measure is subject to under or over prediction depending on the relative position of the portfolio to the credit cycle.
- A mapping has been provided between external ratings and internal PD ranges based on the published reports from the two rating agencies - Moody's and S&P.
- For the wholesale models, the average default probabilities in the tables have been determined from the full scope of clients graded by Fund Grading model, which may include some clients that have either zero exposure or zero limits marked at the time of calculation.

LGD measures

- The model estimated PiT LGDs, unadjusted for regulatory floors and for downturn adjustments, are compared with the actual LGDs within each IRB exposure class.
- The estimated LGDs are derived from a simple average of LGDs at beginning of the year in which the default event occurred for the set of cases resolved over the twelve-month period (i.e., between Dec'20 to Nov'21).
- The actual LGD rate is the simple average observed loss rate for the set of cases resolved over the twelve-month period, regardless of the time of default.
- The LGD measures are used as a predicted measure in internal monitoring and annual validation of the models. The capital calculation uses Downturn LGDs with additional adjustments and regulatory floors where modelled outputs display evidence of risk understatement.

Management of credit risk and the internal ratings-based approach

Table 64: CR9 - IRB approach - Back-testing of PD per exposure class (fixed PD scale)

This table provides an overview of credit risk model performance, assessed by the analysis of average PDs and average LGDs. Please note these tables exclude exposures calculated under the supervisory slotting approach.

The table compares the raw model output to the actual experience in our portfolios. Such analysis is used to assess and enhance the adequacy and accuracy of models. The raw outputs are subject to a number of adjustments before they are used in the calculation of capital, for example to allow for the position in the credit cycle and the impact of stress on recovery rates.

As at 31 December 2021

Exposure class	EBA PD scale	Number of obligors at the end of the year	of which: number of obligors which defaulted during the year[a]	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
Wholesale	%	#	#	%	%	%	%
Financial Institutions	0.00 to <0.15	420	—	— %	0.03 %	0.04 %	— %
	0.00 to <0.10	407	—	— %	0.03 %	0.04 %	— %
	0.10 to <0.15	13	—	— %	0.12 %	0.12 %	— %
	0.15 to <0.25	72	—	— %	0.21 %	0.20 %	— %
	0.25 to <0.50	5	—	— %	0.40 %	0.35 %	— %
	0.50 to <0.75	—	—	— %	— %	— %	— %
	0.75 to <2.50	4	—	— %	1.40 %	1.41 %	— %
	0.75 to <1.75	4	—	— %	1.40 %	1.41 %	— %
	1.75 to <2.5	—	—	— %	— %	— %	— %
	2.50 to <10.00	—	—	— %	— %	— %	— %
	2.5 to <5	—	—	— %	— %	— %	— %
	5 to <10	—	—	— %	— %	— %	— %
	10.00 to <100.00	—	—	— %	— %	— %	— %
	10 to <20	—	—	— %	— %	— %	— %
	20 to <30	—	—	— %	— %	— %	— %
	30.00 to <100.00	—	—	— %	— %	— %	— %
	100.00 (default)	—	—	— %	— %	— %	— %
Retail	%	#	#	%	%	%	%
Secured by Real Estate	0.00 to <0.15	47,380	61	0.13 %	0.11 %	0.11 %	0.13 %
	0.00 to <0.10	11,973	15	0.13 %	0.09 %	0.09 %	0.10 %
	0.10 to <0.15	35,407	46	0.13 %	0.12 %	0.12 %	0.14 %
	0.15 to <0.25	14,503	18	0.12 %	0.19 %	0.19 %	0.19 %
	0.25 to <0.50	3,984	10	0.25 %	0.29 %	0.29 %	0.49 %
	0.50 to <0.75	1,489	10	0.67 %	0.63 %	0.63 %	0.87 %
	0.75 to <2.50	2,455	34	1.38 %	1.15 %	1.16 %	1.89 %
	0.75 to <1.75	2,244	26	1.16 %	1.07 %	1.08 %	1.53 %
	1.75 to <2.5	211	8	3.79 %	2.06 %	2.04 %	4.84 %
	2.50 to <10.00	599	40	6.68 %	5.03 %	5.16 %	8.42 %
	2.5 to <5	332	13	3.92 %	3.44 %	3.46 %	4.76 %
	5 to <10	267	27	10.11 %	7.25 %	7.28 %	11.78 %
	10.00 to <100.00	1,154	280	24.26 %	39.02 %	38.46 %	24.31 %
	10 to <20	264	42	15.91 %	14.31 %	14.24 %	16.93 %
	20 to <30	189	39	20.63 %	26.41 %	26.23 %	18.25 %
	30.00 to <100.00	701	199	28.39 %	51.42 %	50.88 %	29.20 %
	100.00 (default)	1,404	—	— %	100.00 %	100.00 %	— %

Management of credit risk and the internal ratings-based approach

As at 31 December 2021

Exposure class	EBA PD scale	Number of obligors at the end of the year	of which: number of obligors which defaulted during the year[a]	Observed average default rate	Exposures weighted average PD	Average PD	Average historical annual default rate
Retail	%	#	#	%	%	%	%
Qualifying Revolving Retail	0.00 to <0.15	874,542	114	0.01 %	0.07 %	0.08 %	0.02 %
	0.00 to <0.10	572,378	72	0.01 %	0.05 %	0.05 %	0.02 %
	0.10 to <0.15	302,164	42	0.01 %	0.12 %	0.12 %	0.03 %
	0.15 to <0.25	54,770	39	0.07 %	0.19 %	0.19 %	0.11 %
	0.25 to <0.50	60,851	107	0.18 %	0.36 %	0.35 %	0.21 %
	0.50 to <0.75	33,827	88	0.26 %	0.63 %	0.62 %	0.36 %
	0.75 to <2.50	150,100	1,027	0.68 %	1.33 %	1.35 %	0.92 %
	0.75 to <1.75	119,093	725	0.61 %	1.20 %	1.19 %	0.77 %
	1.75 to <2.5	31,007	302	0.97 %	2.00 %	1.97 %	1.31 %
	2.50 to <10.00	41,889	1,454	3.47 %	5.08 %	5.11 %	3.85 %
	2.5 to <5	22,775	601	2.64 %	3.45 %	3.48 %	2.84 %
	5 to <10	19,114	853	4.46 %	7.14 %	7.06 %	5.20 %
	10.00 to <100.00	13,713	4,008	29.23 %	33.71 %	32.54 %	31.81 %
	10 to <20	7,353	768	10.44 %	12.59 %	12.87 %	11.13 %
	20 to <30	1,639	315	19.22 %	24.83 %	24.69 %	20.36 %
	30.00 to <100.00	4,721	2,925	61.96 %	66.90 %	65.91 %	62.94 %
	100.00 (default)	21,823	—	— %	100.00 %	100.00 %	— %

[a] The category "of which number of obligors which defaulted during the year" refers to the number of obligors having defaulted during the last 12-month period that were not funded at the end of the previous financial year. In the case of Retail Exposures Secured by Real Estate, there were no unfunded exposures at the start of the year as the book is in a run-down situation and no new loans are being originated.

Table 65: CR9.1 - IRB approach - Back-testing of PD per exposure class

The table below is only for PD estimates according to point (f) of Article 180(1) CRR.

As at 31 December 2021

Exposure	PD range	External rating		Number of obligors at the end of the year	of which: number of obligors which defaulted during the year	Observed average default rate	Average PD	Average historical annual default rate
Wholesale	%	Moody's	S&P	#	#	%	%	%
Financial Institutions	0.00 to <0.15	Aaa, Aa1, Aa2,Aa3,A1,A2, A3,Baa1	AAA, AA+, AA,AA-,A+,A,A-,BBB+	420	—	—%	0.04%	—%
	0.00 to <0.10	Aaa, Aa1, Aa2,Aa3,A1,A2, A3	AAA, AA+, AA,AA-,A+,A,A-	407	—	—%	0.04%	—%
	0.10 to <0.15	Baa1	BBB+	13	—	—%	0.12%	—%
	0.15 to <0.25	Baa2	BBB	72	—	—%	0.20%	—%
	0.25 to <0.50	Baa3,Ba1	BBB-,BB+	5	—	—%	0.35%	—%
	0.50 to <0.75	Ba1,Ba2	BB+,BB	—	—	—%	—%	—%
	0.75 to <2.50	Ba2,Ba3,B1	BB,BB-,B+	4	—	—%	1.41%	—%
	0.75 to <1.75	Ba2,Ba3	BB,BB-	4	—	—%	1.41%	—%
	1.75 to <2.5	B1	B+	—	—	—%	—%	—%
	2.50 to <10.00	B1,B2,B3,Caa1	B+,B,B-,CCC+	—	—	—%	—%	—%
	2.5 to <5	B1,B2	B+	—	—	—%	—%	—%
	5 to <10	B3,Caa1	B, B-	—	—	—%	—%	—%
	10.00 to <100.00	Caa2,Caa3, Ca, C	CCC+,CCC,CCC-, CC+ ,CC, C	—	—	—%	—%	—%
	10 to <20	Caa2	CCC+,CCC	—	—	—%	—%	—%
	20 to <30	Caa3, Ca, C	CCC-, CC+ ,CC, C	—	—	—%	—%	—%
	30.00 to <100.00	Ca, C	CCC-, CC+ ,CC, C	—	—	—%	—%	—%
	100.00 (default)	D	D	—	—	—%	—%	—%

Management of credit risk and the internal ratings-based approach

As at 31 December 2021

Exposure				Number of obligors at the end of the year		Observed average default rate	Average PD	Average historical annual default rate
	PD range	External rating			of which: number of obligors which defaulted during the year			
Retail	%	Moody's	S&P	#	#	%	%	%
Secured by Real Estate	0.00 to <0.15	Aaa, Aa1, Aa2,Aa3,A1,A2, A3,Baa1	AAA, AA+, AA,AA-,A+,A,A-,BBB+	47,380	61	0.13%	0.11%	0.13%
	0.00 to <0.10	Aaa, Aa1, Aa2,Aa3,A1,A2, A3	AAA, AA+, AA,AA-,A+,A,A-	11,973	15	0.13%	0.09%	0.10%
	0.10 to <0.15	Baa1	BBB+	35,407	46	0.13%	0.12%	0.14%
	0.15 to <0.25	Baa2	BBB	14,503	18	0.12%	0.19%	0.19%
	0.25 to <0.50	Baa3,Ba1	BBB-,BB+	3,984	10	0.25%	0.29%	0.49%
	0.50 to <0.75	Ba1,Ba2	BB+,BB	1,489	10	0.67%	0.63%	0.87%
	0.75 to <2.50	Ba2,Ba3,B1	BB,BB-,B+	2,455	34	1.38%	1.16%	1.89%
	0.75 to <1.75	Ba2,Ba3	BB,BB-	2,244	26	1.16%	1.08%	1.53%
	1.75 to <2.5	B1	B+	211	8	3.79%	2.04%	4.84%
	2.50 to <10.00	B1,B2,B3,Caa1	B+,B,B-,CCC+	599	40	6.68%	5.16%	8.42%
	2.5 to <5	B1,B2	B+	332	13	3.92%	3.46%	4.76%
	5 to <10	B3,Caa1	B, B-	267	27	10.11%	7.28%	11.78%
	10.00 to <100.00	Caa2,Caa3, Ca, C	CCC+,CCC,CCC-, CC+ ,CC, C	1,154	280	24.26%	38.46%	24.31%
	10 to <20	Caa2	CCC+,CCC	264	42	15.91%	14.24%	16.93%
	20 to <30	Caa3, Ca, C	CCC-, CC+ ,CC, C	189	39	20.63%	26.23%	18.25%
	30.00 to <100.00	Ca, C	CCC-, CC+ ,CC, C	701	199	28.39%	50.88%	29.20%
	100.00 (default)	D	D	1,404	—	—%	100.00%	—%
Retail	%	Moody's	S&P	#	#	%	%	%
Qualifying Revolving Retail	0.00 to <0.15	Aaa, Aa1, Aa2,Aa3,A1,A2, A3,Baa1	AAA, AA+, AA,AA-,A+,A,A-,BBB+	874,542	114	0.01%	0.08%	0.02%
	0.00 to <0.10	Aaa, Aa1, Aa2,Aa3,A1,A2, A3	AAA, AA+, AA,AA-,A+,A,A-	572,378	72	0.01%	0.05%	0.02%
	0.10 to <0.15	Baa1	BBB+	302,164	42	0.01%	0.12%	0.03%
	0.15 to <0.25	Baa2	BBB	54,770	39	0.07%	0.19%	0.11%
	0.25 to <0.50	Baa3,Ba1	BBB-,BB+	60,851	107	0.18%	0.35%	0.21%
	0.50 to <0.75	Ba1,Ba2	BB+,BB	33,827	88	0.26%	0.62%	0.36%
	0.75 to <2.50	Ba2,Ba3,B1	BB,BB-,B+	150,100	1,027	0.68%	1.35%	0.92%
	0.75 to <1.75	Ba2,Ba3	BB,BB-	119,093	725	0.61%	1.19%	0.77%
	1.75 to <2.5	B1	B+	31,007	302	0.97%	1.97%	1.31%
	2.50 to <10.00	B1,B2,B3,Caa1	B+,B,B-,CCC+	41,889	1,454	3.47%	5.11%	3.85%
	2.5 to <5	B1,B2	B+	22,775	601	2.64%	3.48%	2.84%
	5 to <10	B3,Caa1	B, B-	19,114	853	4.46%	7.06%	5.20%
	10.00 to <100.00	Caa2,Caa3, Ca, C	CCC+,CCC,CCC-, CC+ ,CC, C	13,713	4,008	29.23%	32.54%	31.81%
	10 to <20	Caa2	CCC+,CCC	7,353	768	10.44%	12.87%	11.13%
	20 to <30	Caa3, Ca, C	CCC-, CC+ ,CC, C	1,639	315	19.22%	24.69%	20.36%
	30.00 to <100.00	Ca, C	CCC-, CC+ ,CC, C	4,721	2,925	61.96%	65.91%	62.94%
	100.00 (default)	D	D	21,823	—	—%	100.00%	—%

Management of credit risk and the internal ratings-based approach

2021 AIRB models back testing summary

Section below provides AIRB model performance summary based on the above back testing results, along with the remediation plans.

Wholesale

- For the PD models, there is no default in the reporting period. So, the estimated PD remains conservative compared to actual default rate.
- Newly developed PD models have been submitted to the PRA for the material wholesale portfolios and newly redeveloped LGD models will be submitted as per the EBA IRB Repair roll out plan periodically reviewed with the PRA.

Secured by Real Estate

- For Italy Mortgages, the PiT PD model over-estimates the default rate for Barclays portfolio (0.71% expected vs. 0.60% actual) and Macquarie portfolio (4.24% expected vs. 1.52% actual).
- The new set of models will be submitted for both the portfolios as per the EBA IRB Repair roll out plan, which is periodically reviewed with the PRA. Interim Post Model Adjustments (PMAs) are in place to address existing models' deficiencies for Italy.

Qualifying Revolving Retail

- For Germany Cards, the PiT PD model over-estimates (0.80% estimated vs. 0.56% actual) at an overall level.
- A new set of redeveloped models will be submitted for Germany Cards portfolio as per the EBA IRB Repair roll out plan, which is periodically reviewed with the PRA. Interim Post Model Adjustments (PMAs) are in place to address existing models' deficiencies.

Management of credit risk mitigation techniques and counterparty credit risk

Counterparty credit risk arises from derivatives and similar contracts. This section details the specific aspects of the risk framework related to this type of credit risk. As credit risk mitigation is one of the principal uses of derivative contracts by banks, this is also discussed in this section.

- On page 110 a high level description of the types of counterparty credit exposures incurred in the course of the Bank's activity supplements the analytical tables on pages 59 to 67.
- Mitigation techniques specific to counterparty credit risk are also discussed
- A more general discussion of credit risk mitigation (covering traditional credit risks) is also included from page 109.

Management of counterparty credit risk and credit risk mitigation techniques

Credit risk mitigation

BBI employs a range of techniques and strategies to actively mitigate credit risks. These can broadly be divided into three types:

- netting and set-off
- collateral
- risk transfer.

BBI has detailed policies in place to maintain that credit risk mitigation is appropriately recognised and recorded. The recognition of credit risk mitigation is subject to a number of considerations including legal certainty of enforceability and effectiveness, that the valuation and liquidity of the collateral is adequately monitored, and that the value of the collateral is not materially correlated with the credit quality of the counterparty.

All three types of credit risk mitigation may be used by different areas of BBI for exposures with a full range of counterparties. For instance, businesses may take property, cash or other physical assets as collateral for exposures to retailers, property companies or other client types.

Netting and set-off

In most jurisdictions within which BBI operates, credit risk exposures can be reduced by applying netting and set-off. In exposure terms, this credit risk mitigation technique has the largest overall impact on net exposure to derivative transactions, compared with other risk mitigation techniques.

For derivative transactions, BBI's normal practice is, on a legal entity basis, to enter into standard master agreements with counterparties (e.g. ISDAs). These master agreements typically allow for netting of credit risk exposure to a counterparty resulting from derivative transactions against the obligations to the counterparty in the event of default, and so produce a lower net credit exposure. These agreements may also reduce settlement exposure (e.g. for foreign exchange transactions) by allowing payments on the same day in the same currency to be set-off against one another.

Under IFRS, netting is permitted only if both of the following criteria are satisfied:

- the entity currently has a legally enforceable right to set off the recognised amounts
- the entity intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Collateral

BBI has the ability to call on collateral in the event of default of the counterparty, comprising:

- **home loans:** a fixed charge over residential property in the form of houses, flats and other dwellings. The value of collateral is impacted by property market conditions which drive demand and therefore value of the property. Other regulatory interventions on ability to repossess, longer period to repossession and granting of forbearance may also affect the collateral value.
- **wholesale lending:** a fixed charge over commercial property and other physical assets, in various forms.
- **other retail lending:** includes charges over motor vehicle and other physical assets; second lien charges over residential property, which are subordinate to first charges held either by BBI or another party; and finance lease receivables, for which typically BBI retains legal title to the leased asset and has the right to repossess the asset on the default of the borrower.
- **derivatives:** BBI also often seeks to enter into a margin agreement (e.g. Credit Support Annex) with counterparties with which BBI has master netting agreements in place. These annexes to master agreements provide a mechanism for further reducing credit risk, whereby collateral (margin) is posted on a regular basis (typically daily) to collateralise the mark to market exposure of a derivative portfolio measured on a net basis. BBI may additionally negotiate the receipt of an independent amount further mitigating risk by collateralising potential mark to market exposure moves.
- **reverse repurchase agreements:** collateral typically comprises highly liquid securities which have been legally transferred to BBI subject to an agreement to return them for a fixed price.
- **financial guarantees and similar off-balance sheet commitments:** cash collateral may be held against these arrangements.

Risk transfer

A range of instruments including guarantees, credit insurance, credit derivatives and securitisation can be used to transfer credit risk from one counterparty to another. These mitigate credit risk in two main ways:

- if the risk is transferred to a counterparty which is more creditworthy than the original counterparty, then overall credit risk is reduced
- where recourse to the first counterparty remains, both counterparties must default before a loss materialises. This is less likely than the default of either counterparty individually so credit risk is reduced.

Detailed policies are in place to appropriately recognise and record credit risk mitigation.

Risk transfer can also be used to reduce risk concentrations within portfolios lowering the impact of stress events.

Risk transfer transactions are undertaken with consideration to whether the collateral provider is correlated with the exposure, the credit worthiness of the collateral provider and legal certainty of enforceability and effectiveness. Where credit risk mitigation is deemed to transfer credit risk, this exposure is appropriately recorded against the credit risk mitigation provider.

In exposure terms, risk transfer is used most extensively as a credit risk mitigation technique for wholesale loans and derivative financial instruments.

Off-balance sheet risk mitigation

The Bank applies fundamentally the same risk management policies for off-balance sheet risks as it does for its on-balance sheet risks. In the case of commitments to lend, counterparties/customers will be subject to the same credit management policies as for loans and advances. Collateral may be sought depending on the strength of the counterparty and the nature of the transaction.

Recognition of credit risk mitigation in capital calculations

Credit risk mitigation is used to reduce credit risk associated with an exposure, which may reduce potential losses in the event of obligor default or other specified credit events.

Credit risk mitigation that meets certain regulatory criteria may be used to improve risk parameters and reduce RWA consumption against a given obligor. Collateral that meets these regulatory conditions is referred to as eligible collateral. Eligibility criteria are specified in articles 195 to 204 of the Capital Regulations Requirement (CRR).

The Bank's policies and standards set out criteria for the recognition of collateral as eligible credit risk mitigation and are designed to be fully consistent with all applicable local regulations and regulatory permissions.

Where regulatory capital is calculated under AIRB regulations, the benefit of collateral is generally taken by adjusting LGDs. For standardised portfolios, the benefit of collateral is taken using the financial collateral comprehensive method: supervisory volatility adjustments approach.

For instruments that are deemed to transfer credit risk, in AIRB portfolios the protection is generally recognised by using the PD and LGD of the protection provider.

For exposures treated under the standardised approach, the impact of eligible credit risk mitigation is primarily recognised by reducing the EAD associated with the exposure that benefits from the mitigation.

Managing concentrations within credit risk mitigation

Credit risk mitigation taken by BBI to reduce credit risk may result in credit or market risk concentrations.

Management of counterparty credit risk and credit risk mitigation techniques

Guarantees that are treated as eligible credit risk mitigation are marked as an exposure against the guarantor and aggregated with other credit exposure to the guarantor. Limit monitoring at the counterparty level is then used for monitoring of concentrations in line with the Bank's policy.

Commercial real estate lending is another potential source of concentration risk arising from the use of credit risk mitigation. The portfolio is regularly reviewed to assess whether a concentration in a particular region, industry or property type exists, and portfolio limits are in place to control the level of exposure. See page 109 for more information on collateral, valuation and monitoring of concentrations.

Counterparty credit risk

Counterparty credit exposures for derivatives and securities financing transactions

BBI enters into financial instruments that are traded or cleared on an exchange, including interest rate swaps, futures and options on futures. Holders of exchange traded instruments provide daily margins with cash or other securities at the exchange, to which the holders look for ultimate settlement.

BBI also enters into financial instruments that are traded over the counter, rather than on a recognised exchange. These instruments range from standardised transactions in derivative markets, to trades where the specific terms are tailored to the requirements of BBI's counterparties. In most cases, industry standard documentation is used, most commonly in the form of a master agreement, with individual transaction confirmations. The existence of a signed master agreement is intended to give BBI protection in situations where BBI's counterparty is in default.

Counterparty credit exposure arises from the risk that parties are unable to meet their payment obligations under certain financial contracts such as derivatives, securities financing transactions (SFTs) (e.g. repurchase agreements), or long settlement transactions.

A Monte Carlo simulation engine is used to estimate the Potential Future Exposure (PFE) to derivative and securities financing counterparties. The exposure simulation model simulates future market states and the MTM of the derivative transactions under those states. Simulated exposures including the effect of credit mitigants such as netting, collateral and mandatory break clauses can then be generated.

Credit limits for CCR are assessed and allocated using the PFE measure. A number of factors are taken into account when setting credit limits for individual counterparties, including but not limited to the credit quality and nature of the counterparty, the rationale for the trading activity entered into and any wrong-way risk considerations.

The expected exposures generated by this engine are also used as an input into both internal and regulatory capital calculations covering CCR.

'Wrong-way risk' in a derivative or SFT exposure arises when there is significant correlation between the underlying asset and the counterparty, which in the event of default would lead to a significant MTM loss to the counterparty. Specific wrong-way risk trades, which are self-referencing or reference to other entities within the same counterparty group, require approval by a senior credit officer. The exposure to the counterparty will reflect the additional risk generated by these transactions (the exposure will be consistent with jump-to-default of the reference asset assuming zero recovery).

Derivative CCR (credit value adjustments)

As BBI participates in derivative transactions it is exposed to CCR, which is the risk that a counterparty will fail to make the future payments agreed in the derivative contract. This is considered as a separate risk to the volatility of the MTM payment flows. Modelling this counterparty risk is an important part of managing credit risk on derivative transactions.

The counterparty risk arising under derivative transactions is taken into account when reporting the fair value of derivative positions. The adjustment to the value is known as credit value adjustment (CVA). It is the difference between the value of a derivative contract with a risk-free counterparty and that of a contract with the actual counterparty. This is equivalent to the cost of hedging the counterparty risk in the Credit Default Swap (CDS) market.

CVAs for derivative positions are calculated as a function of the expected exposure, which is the average of future hypothetical exposure values for a single transaction or group of transactions with the same counterparty, the credit spread for a given horizon and the LGD.

The expected exposure is calculated using Monte Carlo simulations of risk factors that may affect the valuation of the derivative transactions in order to simulate the exposure to the counterparty through time. These simulated exposures include the effect of credit mitigants such as netting, collateral and mandatory break clauses. Counterparties with appropriate credit mitigants will generate a lower expected exposure profile compared to counterparties without credit mitigants in place for the same derivative transactions.

Netting and collateral arrangements for derivatives and SFTs

Credit risk from derivatives and securities financing transactions (SFTs) is mitigated where possible through netting agreements whereby assets and liabilities with the same counterparty can be offset. Barclays Group policy requires all netting arrangements to be legally documented. The ISDA Master Agreement is the preferred agreement for documenting OTC derivatives. It provides the contractual framework within which dealing activities across a full range of OTC products are conducted, and contractually binds both parties to apply close-out netting across all outstanding transactions covered by an agreement if either party defaults or other predetermined events occur. The majority of the Bank's OTC derivative exposures are covered by ISDA master netting and ISDA CSA collateral agreements. Securities financing transactions are documented under Global Master Repurchase Agreement.

Collateral may be obtained against derivative and SFTs, depending on the creditworthiness of the counterparty and/or nature of the transaction. Any non-cash collateral taken in respect of OTC trading exposures will be subject to a 'haircut', which is negotiated at the time of signing the collateral agreement. A haircut is the valuation percentage applicable to each type of collateral and will be largely based on liquidity and price volatility of the underlying security. The collateral obtained for derivatives is predominantly either cash, direct debt obligation government (G14+) bonds denominated in the domestic currency of the issuing country, debt issued by supranationals or letters of credit issued by an institution with a long-term unsecured debt rating of A+/A3 or better. Where BBI has ISDA master agreements, the collateral document will be the ISDA CSA. The collateral document must give Barclays the power to realise any collateral placed with it in the event of the failure of the counterparty.

Management of securitisation risk

Securitisations give rise to credit, market and other risks. This section discusses the types of business activities and exposures that we incur in the course of activities related to securitisations.

- The objectives pursued in securitisation activities and the types of activities undertaken are discussed on page 112.
- A description of the risks incurred in the course of securitisation activities, and how we manage them, is contained on pages 112 to 113.

Management of securitisation risk

This section discloses information about BBI's securitisation activities distinguishing between the various functions performed in supporting its customers and managing its risks.

For the purposes of Pillar 3 disclosures on pages 68 to 72, a securitisation is defined as a transaction or scheme where the payments are dependent upon the performance of a single exposure or pool of exposures and where the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme. Such transactions are ordinarily undertaken to transfer risk for BBI or on behalf of a client.

Certain transactions undertaken by BBI are not disclosed in the quantitative section (pages 68 to 72) as they do not fall under the regulatory securitisation framework (the new securitisation Regulation (EU) 2017/2402 (the Securitisation Regulation) and Regulation (EU) 2017/2401 (amendments to Capital Requirements Regulation or CRR)). These include funding transactions for the purposes of generating term liquidity, and certain government guaranteed transactions.

Objectives of securitisation activities

In the course of its business, BBI has undertaken securitisations of third party assets via special purpose vehicles.

BBI participates in primary securitisations and distributes bonds to the market to facilitate term liquidity for its clients.

BBI also purchases asset backed loans and securities for the purpose of supporting client franchise. BBI makes a secondary market on behalf of BI for its European Clients for a range of securitised products formally under the Day One markets booking model.

The role and involvement of Barclays Group in securitisations in 2021

BBI adopts the following roles in the securitisation processes in which it is involved:

Originator of assets prior to securitisation

BBI does not originate.

Providing warehousing facilities collateralised by third party assets prior to securitisation or exit via whole-loan sale

BBI provides warehouse financing to third party loan originators and aggregators.

Executor of securitisation trades including bond marketing and syndication

BBI executes across the following products RMBS, ABS, CLO and CMBS with institutional investors and other broker-dealers on behalf of BI reflecting the Day One booking model.

In certain limited instances, BBI also holds a portion of securitisations, which is required for risk retention purposes.

Funding transactions to generate term liquidity

No funding securitisations were arranged in 2021. Alsertal is a retained securitisation with no immediate funding benefit. It will however be used for the purposes of generating contingent liquidity.

Risk transfer transactions

BBI has not entered into synthetic or cash securitisations of corporate or commercial loans (originated in the ordinary course of business) for the purposes of the transfer of credit risk to third party investors.

BBI does however employ a financial guarantee structure to transfer corporate loan credit risk from BBI to BBplc in respect of loans held by BBI and which have been hedged under BBplc's Colonande risk transfer programme.

Securitisation risks, monitoring and hedging policies

Capital requirements against securitisation exposures are subject to a separate framework under CRR to account for the particular characteristics of this asset class. For risk management purposes, however, a securitisation is aligned to the risk type to which it gives rise.

Credit risks

In a securitisation structure, the payments are dependent upon the performance of a single exposure or pool of exposures. As these underlying exposures are usually credit instruments, the performance of the securitisation is exposed to credit risk.

Securitisation exposures are subject to BBI Credit Risk policies and standards and business level procedures. This includes the requirement to review in detail each transaction at a minimum on an annual basis. As collateral risk is the primary driver the analysis places a particular focus on the underlying collateral performance, key risk drivers, servicer due diligence and cash flows, and the impact of these risks on the securitisation notes. The risk is addressed through the transaction structure and by setting an appropriate modelled tolerance level. Structural features incorporate wind-down triggers set against factors including, but not limited to, defaults/charge-offs, delinquencies, excess spread, dilution, payment rates and yield, all of which help to mitigate potential credit deterioration. Qualitative aspects such as counterparty risk and ancillary issues (operational and legal risk) are also considered. Changes to the credit risk profile of securitisation exposures will also be identified through ongoing transaction performance monitoring. In addition, periodic stress tests of the portfolio as part of ongoing risk management are conducted as well as in response to BBI-wide or regulatory requests.

The principal committee responsible for the monitoring of the credit risk arising from securitisations is Wholesale Credit Risk Management Committee (WCRMC) at Group level and BE CRMF at BBI level.

Market and liquidity risks

Market risk for securitised products is measured, controlled and limited through a suite of VaR, non-VAR and stress metrics in accordance with BBI's and group Market Risk Policies and Procedures. The key risks of securitisation structures are interest rate, credit, spread, prepayment and liquidity risk. Interest rate and spread risk are hedged with standard liquid interest rate instruments including interest rate swaps, Government bonds & futures). The universe of hedging instruments for credit and prepayment risk is limited and relatively illiquid, resulting in basis risks because in practice credit spread risk is typically macro-hedged via liquid credit index hedges. In providing warehouse financing, BBI is exposed to mark to market (if counterparty defaults on related margin call).

Hedging

Securitisation and re-securitisation exposures benefit from the relative seniority of the exposure in the capital structure. Due to lack of availability in the credit default swap market for individual asset backed securities, there are no material CDS hedge counterparties relating to the securitisation and re-securitisation population.

Operational risks

Operational risks are incurred in all of BBI's operations. In particular, all securitised (and re-securitised) assets are subject to a degree of risk associated with documentation and the collection of cash flows.

The Barclays Europe Risk Committee oversees the management of operational risks for the entire range of BBI's activities.

Rating methodologies, ECAIs and RWA calculations

RWAs reported for securitised and re-securitised banking book and trading book assets at 31 December 2021 are calculated in line with CRR rules and guidance. BBI has approval to use, and therefore applies, the internal ratings based approach for the calculation of RWAs where appropriate, and the Standardised Approach elsewhere.

BBI employs eligible ratings issued by nominated External Credit Assessment Institutions (ECAIs) to risk weight its securitisation and re- securitisation exposure

Management of securitisation risk

where their use is permitted and required as per the hierarchy. Ratings are considered eligible for use based on their conformance with the internal Barclays rating standard which is compliant with both CRR and European Credit Rating Agency regulation. The ECAIs nominated by BBI for this purpose are Standard & Poor's, Moody's, Fitch, DBRS and Kroll.

As required by CRR, BBI uses credit ratings issued by these ECAIs consistently for all exposures within the securitisation exposure class. For that reason, there is no systematic assignment of particular agencies to types of transactions within the securitisation exposure class.

In determining an internal rating, collateral risks are the primary driver and are addressed through the transaction structure and modelled statistical confidence. The analysis reflects BBI's view on the transaction, including dilution risk, concentration and tenor limits, as well as qualitative aspects such as counterparty risk and important ancillary issues (operational and legal risks). The adequacy and integrity of the servicer's systems and processes for underwriting, collections policies and procedures are also reviewed. BBI conducts a full due diligence review of the servicer for each transaction. Each transaction is reviewed on, at least, an annual basis with a focus on the performance of underlying assets. The results of any due diligence review and the financial strength of the seller/servicer, are also factored into the analysis. Ratings of the transaction are reaffirmed with the most up to date ECAI methodologies. Any transaction which deviates from the current methodology is amended accordingly.

Summary of the accounting policies for securitisation activities

Certain BBI sponsored entities have issued debt securities or have entered into funding arrangements with lenders in order to finance specific assets. An entity is consolidated by the BBI when BBI has control over the entity. BBI controls an entity if it has all of the three elements of control which are i) power over the entity; and ii) exposure, or rights, to variable returns from its involvement with the entity; iii) the ability to use its power over the entity to affect the amount of BBI'S returns. The consolidation treatment must be initially assessed at inception and is reassessed if facts and circumstances indicate that there are changes to one or more of the three elements of control.

The accounting measurement of assets initially recognised for the purpose of securitisation will depend on whether the securitisation entity is consolidated by BBI and whether the assets transferred to the securitisation entity meet the accounting derecognition test, meaning whether the transfer will be accounted for as a sale.

- Where assets on initial recognition are expected to be securitised by a transfer to an unconsolidated BBI entity, the accounting will depend on whether the transfer is expected to meets the accounting derecognition test. Assets will remain on BBI balance sheet, and consideration received will be treated as financings, unless the following criteria apply:
  - substantially all the risks and rewards associated with the assets have been transferred, in which case, they are derecognised in full; or
  - if a significant portion, but not all, of the risks and rewards have been transferred, the assets are derecognised in full if the transferee has the ability to sell the financial asset, otherwise the assets continue to be recognised only to the extent of BBI's continuing involvement.
- Where assets are expected to be derecognised in full as a result of pending securitisation, those assets will typically be measured at fair value through the income statement.
- Where a securitisation entity is consolidated by BBI or the assets fail to meet the derecognition test, such that BBI balance sheet includes the assets held for securitisation prior to and post transfer to the securitisation entity, the assets will typically be part of a 'Hold to Collect' business model, and if the contractual cash flows characteristics are solely payments of principal and interest (SPPI), the assets will be measured at amortised cost.

Any financial support or contractual arrangements provided to unconsolidated entities, over securitised assets, would be recognised as a liability on balance sheet if it met the relevant IFRS criteria, or gave rise to a provision under IAS 37, and have to be disclosed (see Note 35 in the Barclays Bank Ireland PLC Annual Report 2020). Note, however, that BBI has a Significant Risk Transfer policy that does not allow for any support to be provided to any transactions that fall under the securitisation framework.

Assets may be transferred to a third party through a legal sale or an arrangement that meets the 'pass-through' criteria where the substance of the arrangement is principally that BBI is acting solely as a cash collection agent on behalf of the eventual recipients.

Where the transfer applies to a fully proportionate share of all or specifically identified cash flows, the relevant accounting treatment is applied to that proportion of the asset.

When the above criteria support the case that the securitisation should not be accounted for as financing, the transaction will result in sale treatment or partial continued recognition of the assets to the extent of BBI'S continuing involvement in those assets. Gains are recognised to the extent that proceeds that can be measured using observable market data exceed the assets derecognised.

Any retained interests, which will consist of loans and/or securities depending on the nature of the transaction, are valued in accordance with the BBI's Accounting Policies, as set out in the Barclays Bank Ireland PLC Annual Report 2020. To the extent that these interests are measured at fair value, they will be included within the fair value disclosures in the financial statements in the Annual Report. As outlined in these disclosures, key valuation assumptions for retained interests of this nature will include spreads to discount rates, default and recovery rates and prepayment rates that may be observable or unobservable.

In a synthetic securitisation transaction, the underlying assets are not sold into the relevant special purpose entity (SPE). Instead, their performance is transferred into the vehicle through a synthetic instrument such as a CDS, a credit linked note or a financial guarantee. The accounting policies outlined above will apply to synthetic securitisations.

Management of market risk

This section describes the governance structure specific to the management of market risks, as well as a discussion of measurement techniques.

- Market risks are varied, and a range of techniques must be used to manage them. From page 115 we provide an overview of the market risks we incur across BBI.
- The governance structure specific to market risks is discussed on page 115.

The rest of the section consists of traded and other risks:

- Market risk, the risk of loss arising from potential adverse changes in the value of the Bank's assets and liabilities from fluctuation in market variables including, but not limited to, interest rates, foreign exchange, equity prices, commodity prices, credit spreads, implied volatilities and asset correlations, is covered on pages 115 to 120. Measurement techniques such as VaR, are discussed, as well as techniques applied when statistical techniques are not appropriate.

Management of market risk

Market Risk

The risk of loss arising from potential adverse changes in the value of the Bank's assets and liabilities from fluctuation in market variables including, but not limited to, interest rates, foreign exchange, equity prices, commodity prices, credit spreads, implied volatilities and asset correlations.

Overview

Market risk arises primarily as a result of client facilitation in wholesale markets, involving market making activities, risk management solutions and execution of syndications. Upon execution of a trade with a client, BBI will look to hedge against the value of the trade moving in an adverse direction. Mismatches between client transactions and hedges result in market risk due to changes in asset prices, volatility or correlations.

Organisation and structure

Barclays Bank Ireland PLC Board Risk Committee

- Reviews and recommends the Bank's risk appetite for market risk to the Board
- Reviews material events impacting market risk

↑

Barclays Bank Ireland PLC Risk Committee

- Monitors the risk profile with respect to financial risk appetite
- Debates and agrees actions on the financial risk profile and risk strategy across the Bank
- Considers issues escalated by risk type heads and business risk directors

↑

Barclays Bank Ireland PLC Market Risk Committee

- Oversees the management of the Bank's market risk profile
- Reviews arising market or regulatory issues

Market risk resides primarily in the Markets and Treasury businesses. These businesses have the mandate to assume market risk. Market risk oversight and challenge is provided by business committees and BBI committees, including the Market Risk Committee. The front office and Treasury trading desks are responsible for managing market risk on a day-to-day basis, where they are required to understand and adhere to all limits applicable to their businesses. The Market Risk team oversee the trading desks with the day-to-day limit management of market risk exposures through governance processes which are outlined in supporting market risk policies and standards.

Roles and responsibilities

The objectives of market risk management are to:

- identify, understand and control market risk by robust measurement, limit setting, reporting and oversight
- facilitate business growth within a controlled and transparent risk management framework
- control market risk in the businesses according to the allocated appetite.

To meet the above objectives, a governance structure is in place to manage these risks consistent with the ERMF.

The Board approves market risk appetite. The CRO is responsible for the Market Risk control processes and, agrees with the business a limit framework within the context of the approved market risk appetite.

The Barclays Europe Market Risk Committee reviews and makes recommendations concerning the BBI market risk profile. This includes reviewing market or regulatory issues and limits and utilisation. The committee is chaired by the Head of Market Risk and attendees include business aligned market risk managers and the heads of the Markets business.

Risk management in the setting of strategy

Appetite for market risk is recommended by the risk function to BRC for approval by the Board. Mandate and scale limits are set to control levels of market risk and ensure that BBI remains within the Board approved risk appetite. Barclays Group runs an annual Group-wide stress testing exercise which covers all entities including BBI. The aim is to measure the impact of a severe but plausible stress to BBI's business and capital plan, and is used to manage the wider strategy.

See page 91 for more detail on the role of risk in the setting of strategy.

Market risk culture

Market risk managers are independent from the businesses they cover, and their line management reports into the CRO. This embeds a risk culture with strong adherence to limits that support the BBI risk appetite constraint. See pages 87 to 88 for more detail on risk culture.

Management of market risk, mitigation and hedging policies

The risk management governance structure informs the risk identification process and governs the management and measurement for market risk. Market risk is generated primarily as a result of client facilitation in wholesale markets, involving market making activities, risk management solutions and execution of syndications. Treasury supports the businesses in managing their non-traded market risk. Positions will contribute both to market risk limits and regulatory capital if relevant.

As part of the continuous monitoring of the risk profile, Market Risk meets with the businesses to discuss the risk profile on a regular basis. The outcome of these reviews includes further detailed assessments of event risk via stress testing, risk mitigation and risk reduction.

Market risk measurement – management view

Market risk measures

A range of complementary approaches to measure market risk are used which aim to capture the level of losses that BBI is exposed to due to unfavourable changes in asset prices. The primary tools to control the exposures are:

Management of market risk

Measure	Description
Management Value at Risk (VaR)	An estimate of the potential loss arising from unfavourable market movements, if the current positions were to be held unchanged for one business day.
Primary stress tests	An estimate of the potential losses that might arise due to liquid risk factors from extreme market moves or scenarios.
Secondary stress tests	An estimate of the potential losses that might arise due to illiquid risk factors from extreme market moves of scenarios.
Business scenario stresses	Multi-asset scenario analysis of severe, but plausible events that may simultaneously impact market risk exposures across all primary and secondary stresses.

The use of Management VaR for market risk is broader than the application for use of VaR for regulatory capital, and captures standardised, advanced and certain banking books where market risks are deemed to exist. The wider scope of Management VaR includes positions whose accounting treatment is Fair Value through Profit or Loss (FVTL) in the banking book as defined in the Market Risk Framework. The scope used in Regulatory VaR is narrower as it applies only to trading book and FX and Commodity risk on banking book positions as defined by CRR and the ECB.

Stress testing and scenario analysis are also an important part of the risk management framework, to capture potential losses that may arise in severe but plausible events.

Management VaR

- estimates the potential loss arising from unfavourable market movements, over one day for a given confidence level:
- differs from the Regulatory VaR used for capital purposes in scope and confidence level.

VaR is an estimate of the potential loss arising from unfavourable market movements if the current positions were to be held unchanged for one business day. For internal market risk management purposes, a historical simulation methodology with a one-year equally weighted historical period, at the 95% confidence level is used for all trading books and some banking books. Risk factors driving VaR are grouped into key risk types as summarised below:

Risk factor	Description
Interest rate	Risk arises from changes in the level or shape of interest rate curves and volatilities can impact the price of interest rate sensitive assets, such as bonds and derivatives instruments. For example, the price of an interest rate swap will vary due to changes in the absolute level of interest rates and/or in the shape of the yield curve
Foreign exchange	Risk arises from changed in foreign exchange rates and volatilities
Equity	Risk due to changes in equity prices, volatilities and dividend yields, for example as part of market making activities, syndication or underwriting of initial public offerings.
Commodity	Risk arises from providing clients and investors with access to a range of commodity products on both a derivative and physical basis.
Traded credit	Risk arises from changes in credit quality impacting the prices of assets, for example positions such as corporate bonds, securitised products and credit based derivative instruments, including credit default swaps. Similar to interest rate risk, the price of these assets will change as the credit quality of the asset (or its pricing index in the case of credit based derivative instruments) changes.
Securitised products	Risk arises from structured cash flow positions predominantly of an asset-backed nature, and their derivatives. The market value of these positions is influenced by the interplay of the cash-flow structure with changes in credit quality and value of assets backing the positions, as well as changes in the level and shape of interest rate curves.

The Management VaR model in some instances may not appropriately measure some market risk exposures, especially for market moves that are not directly observable via prices, especially for risks that are not suitable for capture within VaR, such as correlation risk. Market risk managers are required to identify risks which are not adequately captured in VaR ('Risks Not In Model Engines' or 'RNIMEs', discussed below).

When reviewing VaR estimates, the following considerations are taken into account:

- the historical simulation uses the most recent year of past data to generate possible future market moves, but the past may not be a good indicator of the future
- the one-day time horizon may not fully capture the market risk of positions that cannot be closed out or hedged within one day
- VaR is based on positions as at close of business and consequently, it is not an appropriate measure for intra-day risk arising from a position bought and sold on the same day
- VaR does not indicate the potential loss beyond the VaR confidence level.

Limits are applied at the total level as well as by risk factor type, which are then cascaded down to particular trading desks and businesses by the market risk management function.

Primary stress tests

Primary stress tests are key tools used by management to measure liquid market risks from extreme market movements or scenarios in each major trading asset class.

Stress testing provides an estimate of potential significant future losses that might arise from extreme market moves or scenarios. Primary stress tests apply stress moves to key liquid risk factors for each of the major trading asset classes, namely:

- interest rates: shock to the level and structure of interest rates and inflation across currencies
- credit: impact on traded corporate credit exposures and securities structures, including across rating grades, geography, sectors and products
- foreign exchange: impact of unfavourable moves in currency prices and volatility
- equity: shocks to share prices including exposures to specific markets and sectors
- commodities: adverse commodity price changes across both physical and derivative markets.

Primary stresses apply moves to liquid assets incorporating up to 10 days holding period. Shock scenarios are determined by a combination of observed extreme historical moves and forward looking elements as appropriate.

Primary stresses are calculated for each asset class on a standalone basis. Risk managers calculate several stress scenarios and communicate the results to senior managers to highlight concentrations and the level of exposures. Primary stress loss limits are applied across the trading businesses and is a key market risk control.

Secondary stress tests

Secondary stress tests are key tools used by management to measure illiquid, directional or concentrated market risks from extreme market movements or scenarios in each major trading asset class.

Secondary stress tests are used in measuring potential losses arising from market risks that

Management of market risk

are not captured in the primary stress tests. These may relate to financial instruments or risk exposures which are not readily or easily tradable or markets that are naturally sensitive to a rapid deterioration in market conditions.

For each asset class, secondary stresses are aggregated to a single stress loss which allows the business to manage its liquid and illiquid risk factors.

Stresses are specific to the exposure held and are calibrated on both observed extreme moves and some forward-looking elements as appropriate.

Business scenario stresses

Business scenario stresses are key tools used by management to measure aggregated losses across the entire trading book as a result of extreme forward-looking scenarios encompassing simultaneous shocks to multiple asset classes.

Business scenario stresses apply simultaneous shocks to all risk factors assessed by applying changes to foreign exchange rates, interest rates, credit spreads, commodities and equities to the entire portfolio, for example, the impact of a rapid and extreme slowdown in the global economy. The measure shows results on a multi-asset basis across all trading exposures. Specific business scenarios are used for risk appetite monitoring purposes and are useful in identifying concentrations of exposures and highlighting areas that may provide some diversification.

The estimated impacts on market risk exposures are calculated and reported by the market risk management function on a frequent and regular basis. The stress scenario and the calibration on the shocks are also reviewed by market risk managers periodically for its relevance considering any market environment.

Scenarios focusing on adverse global recession, deterioration in the availability of liquidity, contagion effects of a slowdown in one of the major economies, easing of global growth concerns, and a historical event scenario are examples of business scenarios. If necessary, market event-specific scenarios are also calculated, such as:

- the impact of a large financial institution collapse, or
- a disorderly exit of quantitative easing programmes, including unexpected rapid and continuous interest rate rises as a result.

Market risk measurement – regulatory view

Regulatory view of traded positions

For regulatory purposes, the trading book is defined as one that consists of all positions in CRD financial instruments and commodities held either with trading intent, or in order to hedge other elements of trading, and which are either free of any restrictive covenants on their tradability, or able to be hedged. A CRD financial instrument is defined as a contract that gives rise to both a financial asset of one party and a financial liability or equity instrument of another party.

All of the below regulatory measures, including the standardised approach, generate market risk capital requirements, in line with the regulatory requirements set out in the Capital Requirements Directive ('CRD V') and Regulation. Positions which cannot be included in the trading book are included within the banking book and generate risk capital requirements in line with this treatment.

Inclusion of exposures in the regulatory trading book

The Barclays Group maintains a Trading Book Policy which BBI adopts, which defines the minimum requirements a business must meet to run trading positions and the process by which positions are allocated to trading or banking books. Trading intent is a key element in deciding whether a position should be treated as a trading or banking book exposure.

Positions in the trading book are subject to market risk capital, computed using models where regulatory approval has been granted, otherwise the market risk capital requirement is calculated using standard rules as defined in the Capital Requirement Regulation (CRR), part of the CRD V package. If any of the criteria specified in the policy are not met for a position, then that position must be allocated to the banking book.

Most of BBI's market risk regulatory models are assigned the highest model materiality rating. Consequently, the Regulatory VaR model is subject to annual re-approval by the Independent Validation Unit. The Independent Validation Unit makes an assessment of model assumptions and considers evidence of model suitability provided by the model owner. The following table summarises the models used for market risk regulatory purposes and the applicable regulatory thresholds.

Valuation standards

CRR article 105 defines regulatory principles which need to be applied to fair value assets and liabilities, in order to determine a prudent valuation.

The Prudent Valuation Adjustment (PVA) is applied to accounting fair values where there are a range of plausible alternative valuations. It is calculated in accordance with Article 105 of the CRR, and includes (where relevant) adjustments for the following factors: unearned credit spreads, close-out costs, operational risk, market price uncertainty, early termination, investing and funding costs, future administrative costs and model risk. The PVA includes adjustment for all fair valued financial instruments and commodities, irrespective of whether they are in the trading or banking book.

Regulatory measures for Market risk

There are a number of regulatory measures which the Group has permission to use in calculating regulatory capital (internal models approval):

Management of market risk

Measure	Definition
Regulatory Value at Risk (VaR)	An estimate of the potential loss arising from unfavourable market movements calibrated to 99% confidence interval and ten-day holding period.
Stressed Value at Risk (SVaR)	An estimate of the potential loss arising from a twelve-month period of significant financial stress calibrated to 99% confidence interval and ten-day holding period.
Incremental Risk Charge (IRC)	An estimate of the incremental risk arising from rating migrations and defaults, beyond what is already captured in specific market risk VaR for the non-correlation trading portfolio. Uses a 99.9% confidence level and a one-year horizon.

Regulatory VaR

- Estimates the potential loss arising from unfavourable market movements.
- Regulatory VaR differs from the management approach in the following respects.

VaR Variable	Regulatory	Management
Confidence interval	99%	95%
Scope	As approved by the regulator	Management view of market risk exposures. Includes trading books and banking books exposed to price risk
Look-back period	1 year	1 year
Liquidity Horizon (holding period)	10 days	1 day

Regulatory VaR allows oversight of the total potential losses, at a given confidence level, of those trading books which received approval from the regulator to be covered via an internal model. BBI uses a Regulatory VaR model that diversifies general and specific market risk for regulatory capital. Market risks are captured in the Regulatory VaR model using either full revaluation or an approximate revaluation approach depending on the type of product. When simulating potential movements in risk factors, returns are modelled using a combination of absolute changes, proportional changes or a blended mix of these two approaches.

Management VaR allows BBI to supervise the total market risk across BBI, including all trading books and some banking books.

Regulatory VaR is calculated using a historical simulation method similar to Management VaR (see page 115), with the key differences listed above.

Stressed Value at Risk (SVaR)

- Estimates the potential loss arising from unfavourable market movements in a stressed environment.
- Identical in scope to Regulatory VaR, but calibrated over a one-year stressed period.
- For regulatory capital calculation purposes BBI computes a market risk capital requirement based on a one-day scaled to ten-day, 99% VaR metric calibrated to a period of significant financial stress. This SVaR capital requirement is added to the market risk capital requirement arising from regulatory VaR and the Incremental Risk Charge on an undiversified basis.

The SVaR model is similar to the VaR model used by BBI, with the exception that the SVaR model must be calibrated to a one-year period of significant financial stress for the entity ('the SVaR period'). BBI selects the SVaR period to be a one-year period that maximises Regulatory VaR for positions in scope of regulatory approval. The SVaR period is reviewed on a monthly basis or when required by material changes in market conditions or the trading portfolio.

SVaR cannot be meaningfully backtested as it is not sensitive to current market conditions. Many market risk factors with complete historical data over a one-year period may not have complete data covering the SVaR period and consequently, more proxies may be required for SVaR than for VaR. The SVaR metric itself has the same strengths and weaknesses as BBI's VaR model.

Incremental Risk Charge (IRC)

- Captures risk arising from rating migrations and defaults for traded debt instruments incremental to that already captured by Regulatory VaR and SVaR.

IRC captures the risk arising from ratings migrations or defaults in the traded portfolio. IRC measures this risk at a 99.9% confidence level with a one-year holding period and applies to all positions in scope for specific risk including sovereign exposure.

BBI's IRC model simulates default and ratings transition events for individual names. The behaviour of names is correlated with one another to simulate a systemic factor to model the possibility of multiple downgrades or defaults. The correlations between non-sovereign names are based on the Basel-defined correlations stipulated in the IRB approach to measuring credit risk capital, with a fixed correlation between sovereign names, where the parameters are reviewed annually.

BBI's IRC model simulates the impact of a ratings transition by estimating the improvement or deterioration in credit spreads resulting from the transition and assumes that the historically observed average change in credit spreads (measured in relative terms) resulting from ratings transitions provides an accurate estimate of likely widening or tightening of credit spreads in future transitions. For each position, the model computes the impact of spread moves up or down at pre-specified relative movements, and the actual impact is obtained by interpolating or extrapolating the actual spread move from these pre-computed values.

BBI's IRC model assumes that ratings transitions, defaults and any spread increases occur on an instantaneous basis.

See page 119 for a review of regulatory measures.

Management of market risk

Table 66: Market risk models selected features

Component modelled	Number of significant models and sizes of associated portfolio (RWAs)	Model description and methodology	Applicable regulatory thresholds
Regulatory VaR	1 model; €613m	Equally-weighted historical simulation of potential daily P&L arising from market moves	Regulatory VaR is computed with ten-day holding period and 99% confidence level
SVaR	1 model; €2,019m	Same methodology as used for VaR model, but using a different time series	Regulatory SVaR is computed with ten-day holding period and 99% confidence level
IRC	1 model; €1,004m	Monte Carlo simulation of P&L arising from ratings migrations and defaults	IRC is computed with one-year holding period and 99.9% confidence level
RNIV	1 model; €1,858m	N/A	Commensurate with stress testing liquidity horizons

Regulatory back testing

Backtesting is the method by which BBI checks and affirms that its procedures for estimating VaR are reasonable and serve its purpose of estimating the potential loss arising from unfavourable market movements. The back testing process is a regulatory requirement and seeks to estimate the performance of the regulatory VaR model.

Performance is measured by the number of exceptions to the model i.e. actual or hypothetical P&L loss in one trading day is greater than the estimated VaR for the same trading day.

BBI procedures could be underestimating VaR if exceptions occur more frequently than expected (a 99% confidence interval indicates that one exception will occur in 100 days). Back testing is performed at a legal entity level using BBI's regulatory VaR model.

Regulatory backtesting compares Regulatory VaR at 99% confidence level (one-day holding period equivalent) to actual and hypothetical[1] changes in portfolio value as defined in CRR Article 366.

A backtesting exception is generated when a loss is greater than the daily VaR for any given day. As defined in the CRR, a green status is consistent with a good working VaR model and is achieved for models that have four or fewer backtesting exceptions in a 250-day period. Backtesting counts the number of days when a loss exceeds the corresponding VaR estimate, measured at the 99% regulatory confidence level.

During the year, BBI's regulatory VaR model did not experience any backtesting exceptions against actual or hypothetical P&L and was in green status as at 31 December 2021.

The table below shows the BBI VaR back testing exceptions as at 31 December 2021.

	Actual P&L		Hypo P&L	
Legal Entity	Total Exceptions	Status[a]	Total Exceptions	Status[a]
BBI	0	Green	0	Green

Note
a. Status is accurate as at year end.

[1] Hypothetical changes in portfolio value are the change in the value of the portfolio held at the end of the previous day using market data at the end of the current day

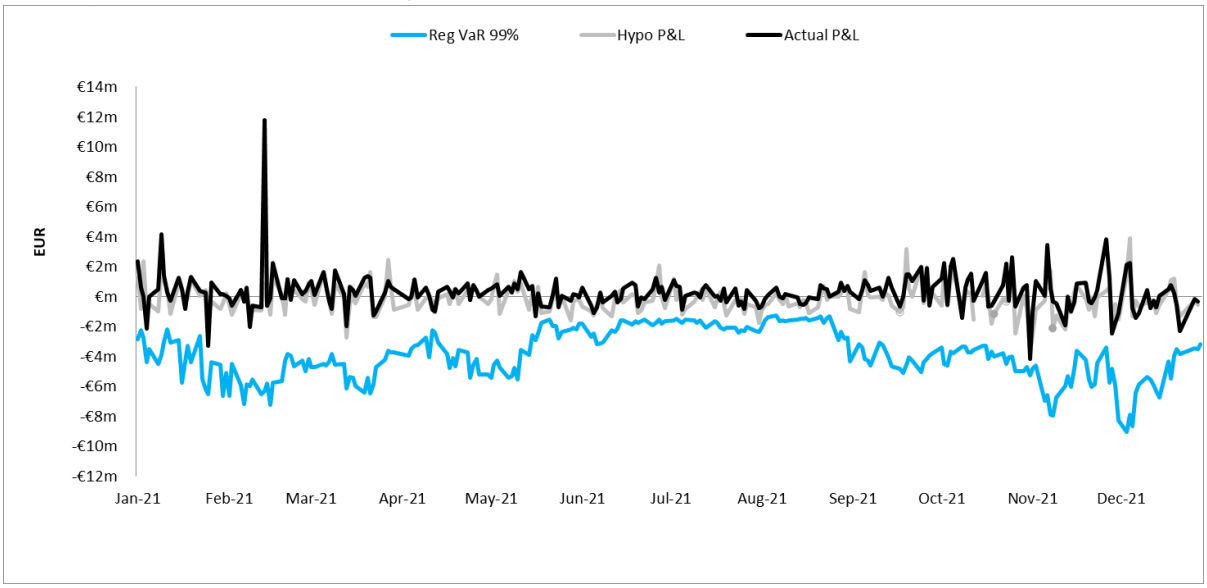
Management of market risk

The chart below shows VaR for BBI. The dark blue point on the chart indicates the losses on the day on which actual P&L respectively exceeded the VaR amount.

In addition to being driven by market moves in excess of the 99% confidence level, back testing exceptions can be caused by risks that impact P&L not captured directly in the VaR itself but separately captured as non VaR-type, namely Risks Not in Model Engine (RNIMEs).

Exceptions are reported to internal management and regulators on a regular basis and investigated to evaluate the model performs as expected.

MR4-Comparison of VaR estimates with gains/losses



Management of risks not fully captured in models, including Risks Not in Model Engine (RNIMEs)

BBI's risk identification process captures risks that either have been observed to, or have the capacity to, produce material losses in normal and stressed market conditions. To maintain risk coverage, the range of core risks is continually assessed for completeness using either market convention, regulatory guidance, or portfolio monitoring; and for new products or changes to existing products, is considered as part of the New and Amended Product Approval (NAPA) process.

In some instances, the Management and Regulatory VaR model may not appropriately measure some market risks, especially where market moves are not directly observable via prices. Barclays Group has policies (which BBI adopts) to apply add-ons where risks are not captured by the model. RNIMEs refer to those core risks that are not captured, or not adequately captured, in VaR and SVaR. RNIMEs can include:

- risks not fully captured elsewhere and/or illiquid risk factors such as cross-risks;
- basis risks;
- higher-order risks;
- calibration parameters, for instance to model parameter uncertainty; and
- potential losses in excess of fair valuation adjustments taken in line with the Valuation Control Framework. Please see Note 15 in the BBI PLC Annual Report 2021 'Fair value of assets and liabilities' for more details of fair value adjustments.

The treatment of RNIMEs follows whether the risks are considered VaR type or non-VaR type, which depends on, and can change with, the evolving state of financial markets:

- VaR-type RNIMEs: Typically represent risks that are not well captured in VaR, mainly because of infrastructure limitations or methodology limitations. In this instance two metrics are calculated, a VaR RNIME and a SVaR RNIME, using the same confidence level, capital horizon and observation period as VaR and SVaR respectively and are capitalised using the same multipliers as VaR and SVaR
- Non VaR-type RNIMEs: Typically represent risks which would not be well captured by any VaR model either because it represents an event not historically observed in the VaR time series (e.g., currency peg break) or a market risk factor which is not seen to move frequently (e.g. correlation). These are typically estimated using stress scenarios. The stress methodology is calibrated equivalently to at least 99% confidence level and a capital horizon of at least 10 days over an appropriate observation period, depending on the liquidity of the risk. For the purpose of regulatory capital, the capital charge is equal to the loss arising from the stress test except when these risks are already adequately captured elsewhere e.g. via the IRC model, which is intended to capture certain risks not adequately covered by VaR.

For regulatory capital these RNIMEs are aggregated without any offsetting or diversification benefit.

Market risk control

The metrics that are used to measure market risk are controlled through the implementation of appropriate limit frameworks. Limits are set at the total BBI level, asset class level, for example, interest rate risk, and at business level, for example, rates trading. Stress limits and portfolio sensitivity limits are also used to control risk appetite.

BBI limits are reported to the BBI BRC and are set at the BBI level for total management VaR, primary stresses, secondary stresses and scenario stress. Lower level limits by business are set by risk managers to monitor and control overall risk appetite utilisation.

Each limit is set after consideration is given to revenue generation opportunities and overall risk appetite approved by the Board. Compliance with limits is monitored by the independent control functions in the trading businesses with oversight provided by BBI Market Risk.

Throughout 2021, BBI Market Risk continued its ongoing programme of control testing and conformance testing on the trading businesses' market risk management practices. These reviews are intended to verify the business's conformance with the Market Risk Control Framework and best practices.

Market risk reporting

Trading businesses market risk managers produce a number of detailed and summary market risk reports daily, weekly, fortnightly and monthly for business and risk managers. Summaries are presented at Market Risk Sub Committee and the trading businesses' various market risk committees. The overall market risk profile is also presented to BRC on a regular basis.

Management of treasury and capital risk

This section provides an overview of the management of liquidity risk, capital risk and interest rate risk in the banking book.

- Liquidity risk, with a focus on how it is managed so that high quality liquid assets are adequate to meet all its contractual and contingent funding obligations at all times, is discussed on pages 122 to 123.
- Capital risk, including how the risk of insufficient capital and leverage ratios and pension risk are managed, is discussed on pages 123 to 125.
- The management of Interest rate risk in the banking book is discussed on pages 125 to 126.

Management of treasury and capital risk

Treasury and capital risk

Liquidity risk: The risk that the Bank is unable to meet its contractual or contingent obligations or that it does not have the appropriate amount, tenor and composition of funding and liquidity to support its assets.

Capital risk: The risk that the Bank has an insufficient level or composition of capital to support its normal business activities and to meet its regulatory capital requirements under normal operating environments and stressed conditions (both actual and as defined for internal planning or regulatory testing purposes). This also includes the risk from the Bank's pension plans.

Interest rate risk in the banking book: The risk that the Bank is exposed to capital or income volatility because of a mismatch between the interest rate exposures of its (non-traded) assets and liabilities.

Overview

BBI Treasury manages treasury and capital risk exposure on a day-to-day basis with the Asset and Liability Committee (ALCO) acting as the principal management body. To enforce effective oversight and segregation of duties and in line with the ERMF, the Treasury and Capital Risk function is responsible for oversight of key capital, liquidity, interest rate risk in the banking book (IRRBB) and pension risk management activities. The following describes the structure and governance associated with the risk types within the Treasury and Capital Risk function.

Organisation and structure

Barclays Bank Ireland PLC Board Risk Committee

- Reviews and recommends the Bank's risk appetite for treasury and capital risk to the Board
- Reviews material issues impacting treasury and capital risk
- Recommends the approval of Internal Capital Adequacy Assessment Process (ICAAP) and Internal Liquidity Adequacy Assessment Process (ILAAP) to the Board

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BBI Risk Committee

- Reviews and recommends risk appetite to the Board Risk Committee
- Escalates material issues impacting treasury and capital risk to the Board Risk Committee
- Reviews and recommends the ICAAP and ILAAP to the Board Risk Committee for approval

Liquidity risk management

Overview

The efficient management of liquidity is essential to the Bank in retaining the confidence of the financial markets and maintaining the sustainability of the business. There is a control framework in place for managing liquidity risk and this is designed to maintain liquidity resources that are sufficient in amount and quality and funding tenor profile to remain within the liquidity risk appetite as expressed by the Board based on internal and regulatory liquidity metrics.

This is achieved via a combination of policy formation, review and governance, analysis, stress testing, limit setting and monitoring.

Roles and responsibilities

The Treasury and Capital Risk function is responsible for the management and governance of the liquidity risk mandate defined by the Board. Treasury has the primary responsibility for managing liquidity risk within the set risk appetite and for the production of the ILAAP.

BBI's comprehensive control framework for managing the Bank's liquidity risk is designed to deliver the appropriate term and structure of funding, consistent with the liquidity risk appetite set by the Board.

The control framework incorporates a range of ongoing business management tools to monitor, limit and stress test the Bank's balance sheet and contingent liabilities and the Recovery Plan. Limit setting and transfer pricing are tools that are designed to control the level of liquidity risk taken and drive the appropriate mix of funds. Together, these tools reduce the likelihood that a liquidity stress event could lead to an inability to meet the Bank's obligations as they fall due. The control framework is subject to internal conformance testing and internal audit review.

The Board approves the Bank's funding plan, internal stress tests and results of regulatory stress tests, Contingency Funding Plan and the Bank's Recovery Plan. The ALCO is responsible for monitoring and managing liquidity risk in line with the Bank's funding management objectives, funding plan and risk frameworks. The Risk Committee monitors and reviews the liquidity risk profile and control environment, providing second line oversight of the management of liquidity risk. The Board Risk Committee reviews the risk profile, and annually reviews risk appetite and the impact of stress scenarios on the Bank's funding plan/ forecast in order to agree its projected funding abilities.

BBI maintains a range of management actions for use in a liquidity stress, these are documented in the Contingency Funding Plan. Since the precise nature of any stress event cannot be known in advance, management actions are designed to be flexible to the nature and severity of the stress event and provide a menu of options that can be drawn upon as required.

The Bank's Recovery Plan contains more severe recovery options to generate additional liquidity in order to facilitate recovery in a severe stress. Any stress event would be regularly monitored and reviewed using key management information by Treasury, Risk and business representatives.

Management of treasury and capital risk

Ongoing business management	Early signs/mild stress	Severe stress	Recovery
▪ stress testing and planning ▪ liquidity limits ▪ early warning indicators	▪ monitoring and review ▪ management actions requiring minimal business rationalisation	▪ monitoring and review ▪ management actions with limited impact on franchise	▪ activate appropriate recovery options to restore the capital and/or liquidity position of the entity

Risk Appetite and planning

The Bank has established a liquidity risk appetite (LRA) over internally derived liquidity stress tests to represent the level of liquidity risk it chooses to take in pursuit of its business objectives and in meeting its regulatory obligations.

The key expression of the liquidity risk is through both external (Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR)) and internal stress tests. Internal stress tests comprise of three short term scenarios and one long term scenario. The internal scenarios are measured with reference to the liquidity pool compared to anticipated net stressed outflows under each respective stress.

The Long Term LRA stress test based on a one-year macroeconomic scenario represented by an increased risk aversion against financial institutions driven by a global recession.

The LRA for internal stress tests is approved by the Board. The LRA is reviewed on a continuous basis and is subject to formal review at least annually as part of the ILAAP.

Statement of LRA: For 2021, the Board had approved that BBI should maintain an amount of available liquidity resources to meet modelled and prescribed regulatory liquidity stress outflows over a period of time (minimum buffer duration):

- 30 days in a Barclays specific stress
- 90 days in a market wide stress
- 30 days in a combined stress
- 1 year in a market wide stress
- LCR 30 days minimum ratio 110%
- In addition, the regulatory NSFR is also captured in Liquidity Risk Appetite which requires a minimum amount of stable funding relative to the amount of required stable funding over a one-year time horizon. This minimum is set at 100%.

The stress outflows are used to determine the size of the Bank's Liquidity Pool, which represents those resources immediately available to meet outflows in a stress. In addition to the liquidity pool, the control framework and policy provides for other management actions, including generating liquidity from other liquid assets on BBI's balance sheet in order to meet additional stress outflows, or to preserve or restore the Liquidity Pool in the event of a liquidity stress.

Liquidity limits

The Bank manages limits on a variety of on and off-balance sheet exposures. These limits serve to control the overall extent and composition of liquidity risk taken by managing exposure to the cash outflows.

Early warning indicators

Treasury monitors a range of market indicators for early signs of liquidity risk either in the market or specific to the Bank, a sample of which are shown in the table below. These are designed to immediately identify the emergence of increased liquidity risk to maximise the time available to execute appropriate mitigating actions. Early Warning Indicators (EWIs) are used as part of the assessment of whether to invoke the Bank's Contingency Funding Plan, which provides a framework for how the liquidity stress would be managed.

Examples of Early Warning Indicators		
Reduction in 'sticky' deposits	Deterioration in stress test surplus	Rising fund costs
Widening CDS spreads	Change in maturity profile	Stress in financial markets

Recovery and resolution planning

The Bank maintains an entity Recovery Plan (RP) which is designed to provide a framework to effectively manage a severe financial stress. The RP is proportionate to the nature, scale and complexity of the business and is tested to evaluate that it is operationally robust. The RP details the escalation and invocation process for the plan, including integration with:

i) BAU monitoring of capital and liquidity EWIs to detect signs of approaching financial stress;

ii) existing processes within Treasury and Risk to respond to mild/moderate stress; and

iii) a governance process for formally invoking the RP.

The RP would be formally invoked by the Board and would be overseen and executed by the Bank's Executive Committee. In invoking and executing the plan, the Executive Committee (in consultation with the Board) would assess the likely impact of the stress event on the Bank and determine the appropriate response for the nature and severity of the stress. The RP includes a range of recovery options to respond to severe financial stresses and includes detailed information on financial and non-financial impacts of options and a communications plan.

Liquidity risk governance

Treasury and Capital Risk have created a framework for liquidity risk under which the Treasury function operates. The control framework describes liquidity risk management processes, associated policies and controls that Barclays Group and Barclays Bank Ireland have implemented to manage liquidity risk within the Liquidity Risk Appetite and is subject to annual review. Internal architecture is in place to record and measure our Group-wide liquidity metrics reporting.

The Board sets the Liquidity Risk Appetite based on the internal liquidity stress test (LRA) and external regulatory requirements, namely LCR and NSFR. The Liquidity Risk Appetite is represented as the level of liquidity risk the Bank is prepared to accept in pursuit of its business objectives and in meeting its regulatory obligations. The approved Liquidity Risk Appetite is implemented in line with the control framework and policy for liquidity risk.

Capital risk management

Overview

Capital risk is managed through ongoing monitoring and management of the capital position, regular stress testing and a robust capital governance framework.

Roles and responsibilities

The management of capital risk is integral to the Bank's approach to financial stability and sustainability management, and is embedded in the way businesses and legal entities operate.

Capital risk management is underpinned by a control framework and policy. The capital

Management of treasury and capital risk

management strategy, outlined in BBI capital plans, is developed in alignment with the control framework and policy for capital risk, and is implemented consistently in order to deliver on Barclays Bank Ireland's objectives.

The Board approves the Bank's capital plan, internal stress tests and results of regulatory stress tests, and the Bank's recovery plan. The ALCO is responsible for monitoring and managing capital risk in line with the Bank's capital management objectives, capital plan and risk frameworks. The Risk Committee monitors and reviews the capital risk profile and control environment, providing second line oversight of the management of capital risk. The Board Risk Committee reviews the risk profile, and annually reviews risk appetite and the impact of stress scenarios on the Bank's capital plan/forecast in order to agree BBI's projected capital adequacy.

Local management assures compliance with an entity's minimum regulatory capital requirements by reporting to the local Asset and Liability Committees with oversight also from the Risk Committee.

Treasury has the primary responsibility for managing and monitoring capital adequacy. The Treasury and Capital Risk function provides oversight of capital risk. Production of the Bank's ICAAP is the responsibility of BBI Finance.

In 2021, the Bank complied with all regulatory minimum capital requirements.

Capital risk management strategy

The Bank's capital management strategy is driven by its strategic aims and the risk appetite set by the Board. BBI's objectives are achieved through well embedded capital management practices.

Capital planning and allocation

The Bank assesses its capital requirements on multiple bases, with the capital plan set in consideration of its risk profile and appetite, strategic and performance objectives, regulatory requirements, international financial reporting standards (including IFRS 9), and market and internal factors, including the results of stress testing. The capital plan is managed on a top-down and bottom-up basis through both short-term and medium-term financial planning cycles, and is developed with the objective that Barclays Bank Ireland maintains an adequate level of capital in line with internal and regulatory requirements. The planning process captures the impact of IFRS 9 to the capital plan, both including and excluding the impacts of transitional regulatory adjustments.

The ECB determines the regulatory capital requirements for Barclays Bank Ireland. Under these regulatory frameworks, capital requirements are set in consideration of the level of risk that BBI is exposed to and the factors described above, and are measured through both risk-based Risk Weighted Assets (RWAs) and leverage-based metrics. An internal assessment of the Bank's capital adequacy is undertaken through the ICAAP and is used to inform the Bank's capital requirements.

As part of the ICAAP, capital adequacy is assessed from two perspectives. Firstly, under the normative or regulatory perspective baseline (medium term plan) and adverse (internal stress test) scenarios are assessed over a 5 year forward looking period to determine if the Bank meets all its regulatory capital requirements. Secondly, the Bank assesses capital adequacy from an internal or economic perspective using internal models. Under this view capital supply, based on an internal definition approved by the Board, is compared to total economic capital demand for all risks, Pillar 1 and Pillar2, to which the bank is exposed.

The Bank expects to meet the minimum requirements for capital and leverage at all times and also holds an internal buffer sized according to its assessment of capital risk.

Through the capital planning process, capital limits allocations are approved by the Executive Committee, taking into consideration the risk appetite and strategic aims of the Bank.

Monitoring and reporting

Capital is managed and monitored to maintain that BBI's capital plans remain appropriate and that risks to the plans are considered. Limits are set by Risk to control the level of capital risk within the Bank. Treasury are responsible for complying with these limits as the first line of deference for the management of capital risk. Limits are monitored through appropriately governed committees in the first and second line of defence.

To support compliance with risk limits, Treasury monitor capital risks against Bank-specific and macroeconomic early warning indicators and report on these to the ALCO. This enables a consistent and objective approach to monitoring the capital outlook against the capital plan, and supports the early identification when outlooks deteriorate.

Capital management information is readily available to support management's strategic and day-to-day business decision making.

Stress testing and risk mitigation

Internal Group-wide stress testing is undertaken to quantify and understand the impact of sensitivities on the capital plan and capital ratios arising from stressed macroeconomic conditions. Recent economic, market and peer institution stresses are used to inform the assumptions developed for internal stress tests and to assess the effectiveness of mitigation strategies.

The Bank is expected to be subject to supervisory stress testing exercises, designed to assess the resilience of banks to adverse economic or financial developments and ensure that they have robust, forward-looking capital planning processes that account for the risks associated with their business profile. Assessment by regulators is on both a quantitative and qualitative basis, the latter focusing on such elements as data provision, stress testing capability including model risk management and internal management processes and controls.

Actions are identified as part of the stress tests that can be taken to mitigate the risks that may arise in the event of material adverse changes in the current economic and business outlook. As an additional layer of protection, Barclays Bank Ireland Recovery Plan defines the actions and implementation strategies available to the Bank to increase or preserve capital resources in the situation that a stress occurs that is more severe than anticipated.

Transferability of capital

Where capital is surplus to internal capital ratio targets, the Board may consider if a repatriation to the immediate parent is appropriate. This repatriation would be in the form of dividends and/or capital repatriation. All dividends and capital repatriations would require both Board and regulatory approval. This approach provides optimal flexibility on the re-deployment of capital across legal entities. At Barclays Group, capital is managed as a whole as well as for its operating subsidiaries to allow fungibility and redeployment of capital while meeting relevant internal and regulatory targets at entity levels.

Foreign exchange risk

The Bank has capital resources solely in euro. Its risk weighted assets are mainly denominated in euro currency. Changes in foreign exchange rates result in changes in the euro equivalent value of foreign currency denominated RWAs. Due to the composition of the balance sheet being largely euro, BBI's CET1 ratio is not materially sensitive to foreign currency movements.

Pension risk

The Bank maintains a number of defined benefit pension schemes for past and current employees. The ability of the pension fund to meet pension payments is maintained through investments and contributions.

Pension risk arises because the estimated market value of the pension fund assets might decline; investment returns might reduce; or the estimated value of the pension liabilities might increase. Barclays Bank Ireland monitors the pension risks arising from its defined benefit pension schemes and works with the relevant pension fund's trustees to address shortfalls. In these circumstances, Barclays Bank Ireland could be required or might choose to make extra contributions to the pension fund. Barclays Bank Ireland's main defined benefit scheme was closed to future accrual in 2013, a plan in Hamburg was transferred to a multi-employer scheme during 2020, while another small plan in Portugal is closed to new

Management of treasury and capital risk

members but still accruing benefits for a small number of employees.

Management of pension risk

Due to the legal structure of the Bank's defined benefits pension funds and the role of the Trustees, risk appetite cannot be determined or enforced with regard to pension risk. However, whilst risk appetite cannot be controlled for individual schemes Barclays must ensure that the Risk Appetite at Group and entity levels is calibrated to accommodate exposure to pension risk.

Pension Forums

The Pension Executive Board (PEB) has accountability for the effective operation of pensions across Barclays Group and Barclays Bank Ireland. It is the most senior executive body for pensions in Barclays.

The Pension Management Group (PMG) is accountable for the oversight and management of the Barclays Group and the Bank's responsibilities relating to its pension arrangements. The PMG is accountable to the PEB.

The PEB and PMG are not created or mandated under the ERMF. However, these forums provide Risk the opportunity to discuss and comment on pension risk in a wider context with other relevant stakeholders from HR, Legal, Treasury and Finance.

Key Pension Risk controls and governance include:

- Annual review, challenge and proposal of the IAS19 financial assumptions used for the calculation of the pension scheme liabilities used in Barclays Bank Ireland disclosures.
- Representation and input at key pension forums.
- Input into Barclays Bank Ireland's ICAAP for pension risk.
- Input into Barclays Bank Ireland's strategic planning and stress test exercises.
- Provision of independent oversight of the pension risk profiles from Barclays Bank Ireland's perspective.
- Coordination of response to regulatory initiatives, developments and proposals on pensions, which may include inputs from material overseas schemes.

Interest rate risk in the banking book management

Definition

Interest rate risk in the banking book (IRRBB) is defined as the risk that the firm is exposed to capital or income volatility because of a mismatch between the interest rate exposures of its (non-traded) assets and liabilities.

Overview

IRRBB is driven by customer deposit taking and lending activities, investments in the liquid asset portfolio and funding activities. Hedging strategies are executed to manage IRRBB in line with the IRRBB policy and the Bank's defined risk appetite. Interest rate risk arises from a number of sources:

- **Interest rate and repricing risk (Gap Risk):** the risk that net interest income could be adversely impacted by a change in interest rates, differences in the timing of interest rate changes between assets and liabilities, and other constraints on interest rate changes as per product terms and conditions.
- **Customer behavioural risk (Option Risk):** the risk that net interest income could be adversely impacted by the discretion that customers and counterparties may have in respect of being able to vary their contractual obligations with the Bank. This risk is often referred to by industry regulators as 'embedded option risk'.
- **Basis Risk:** the risk that arises when floating rate products are linked to different interest rate indices, which are imperfectly correlated, especially under stressed market conditions.

Roles and responsibilities

The Bank's ALCO is responsible for monitoring and managing IRRBB risk in line with the Bank's management objectives and risk frameworks. Certain key approval items are taken to Parent and Group Treasury Committees. The Bank's Risk Committee and Group Treasury and Capital Risk Committee monitors and reviews the IRRBB risk profile and control environment, providing second line oversight of the management of IRRBB. The Bank's Board Risk Committee reviews the interest rate risk profile, including annual review of the risk appetite and the impact of stress scenarios on the Bank's IRRBB position.

In addition, the IRRBB policy sets out the processes and key controls required to identify all IRRBB risks arising from banking book operations, to monitor the risk exposures via a set of metrics with a frequency in line with the risk management horizon, and to manage these risks within agreed risk appetite and limits.

Management of IRRBB

IRRBB management begins with the identification of risk across the balance sheet, where it is modelled and measured to reflect any behavioural assumptions such as customer optionality and duration. IRRBB management also forms part of new product approval processes and/or product design, the terms of which may be formally revised in response to a changing interest rate environment (e.g. to allow for negative rate charging). Hedging strategies are designed and implemented to manage the IRRBB within the business and entity risk appetite. External hedges may be entered into to manage within the risk appetite and the accounting treatment of these hedges will be aligned to the accounting treatment of the assets and liabilities being hedged to best manage any accounting volatility.

Summary of measures for non-traded market risk

IRRBB is measured monthly using the following risk metrics:

Measure	*Definition*
Earnings at Risk (EaR)	A measure of the potential change in Net Interest Income (NII) due to an adverse interest rate movement over a specified time horizon.
Economic Value of Equity (EVE)	A measure of the potential change in the present value of expected future cash flows due to an adverse interest rate movement, based on the existing balance sheet expected run-off profile.
Behavioural Stress Loss	A measure of the potential loss from an adverse shock to market variables, combined with changes in customer behaviour and mismatches between product and hedge profiles (residual risk).

Management of treasury and capital risk

Earnings at Risk (EaR)

EaR measures the sensitivity of net interest income over a specified time horizon, typically one-year, although multi-year projections are also run. It is calculated as the difference between the estimated income using the expected rate forecast and the lowest estimated income following a parallel increase or decrease in interest rates. The main model assumptions are:

- The balance sheet is kept at the current level, i.e. no growth is assumed, and run-off balances are reinvested to maintain a constant balance sheet
- Contractual positions are adjusted for an assumed behavioural profile, to align with the expected product life-cycle.

This metric provides a measure of how interest rate risk may impact the Bank's earnings, providing a simple comparison between risk and returns. EaR sensitivity is measured against a range of instantaneous parallel shocks (both up and down) on a monthly basis, in all yield curves. Limits are set against some of these shocks for the purposes of risk appetite monitoring. The European Banking Authority (EBA) prescribed post-shock interest rate floor is not implemented for internal limit monitoring. Risk limits are reviewed annually in line with the internal risk appetite review process and relevant adverse interest rate shocks are selected to be monitored against the limit framework.

As EaR provides a view on the earnings impacts of interest rate risk over a defined time horizon, economic value metrics are also monitored to complement the view, as this captures the IRRBB impact of risk exposures over the full expected behavioural life.

Economic Value of Equity (EVE)

EVE calculates the change in the present value of the Bank's expected future cash-flows from a parallel upward or downward interest rate shock. The EVE calculation measures sensitivity in terms of present value, while EaR measures income sensitivity, and as such are complimentary. The EVE measure is applied to the full life of transactions and hedges allowing the risk over the whole life of positions to be considered. It does not capture the impact of business growth or management actions, and is based on the expected balance sheet run-off profile.

EVE sensitivity is measured against a range of instantaneous parallel shocks (both up and down) on a monthly basis, in all yield curves. Limits are set against some of these shocks for the purposes of risk appetite monitoring. EVE scenarios are run which both include and exclude commercial margins, so that this impact can be isolated. Consistent with EaR, the EBA prescribed post-shock interest rate floor is not implemented for internal limit monitoring. Risk Free Rates (RFRs) are used for discounting cash flows. Risk limits are reviewed annually in line with the internal risk appetite review process and relevant adverse interest rate shocks are selected to be monitored against the limit framework.

EVE sensitivity is also monitored quarterly against the six supervisory shock scenarios. For these scenarios commercial margins are excluded and the EBA prescribed post-shock interest rate floor is implemented.

Management of operational risk

The sources of operational risks, and how those risks are managed, are detailed in this section.

- The types of risks that are classified as operational risks are described on page 128
- Governance, management and measurement techniques are covered on pages 128 to 130.

Management of operational risk

Operational risk

The risk of loss to the Bank from inadequate or failed processes, systems, human factors or due to external events (for example fraud) where the root cause is not due to credit or market risks.

Overview

The management of operational risk has three key objectives:

- Deliver an operational risk capability owned and used by business leaders.
- Provide the frameworks and policies to enable management to meet their risk management responsibilities while the second line of defence provides robust, independent, and effective oversight and challenge.
- Deliver a consistent and aggregated measurement of operational risk that will provide clear and relevant insights, so that the right management actions can be taken to keep the operational risk profile consistent with BBI and Barclays Group strategy, the stated risk tolerance and stakeholder needs.

BBI has regulatory approval to use the Standardised Approach (TSA) for operational risk regulatory capital purposes. BBI and the Barclays Group operates within a strong system of internal controls that enables business to be transacted and risk taken without exposing Barclays Group to unacceptable potential losses or reputational damages. Barclays Group has an overarching Enterprise Risk Management Framework (ERMF) that sets out the approach to internal governance, and which is adopted by BBI.

Organisation and structure

Barclays Bank Ireland PLC Board Risk Committee – Approves operational risk framework – Oversees operational risk capital – Recommends and monitors operational risk appetite and the residual risk position, supported by feedback from the Barclays Bank Ireland PLC Board Audit Committee	**Barclays Bank Ireland PLC Board Audit Committee** – Oversees the operating effectiveness of the control environment – Oversees remediation of control issues – Gives feedback to the Barclays Bank Ireland PLC Board Risk Committee where concerns exist over the impact on residual risk through either the design or operating effectiveness of the control environment
Barclays Bank Ireland PLC Risk Committee – Reviews and recommends risk appetite across operational risk to the Barclays Bank Ireland PLC Board – Monitors the BBI risk profile and the utilisation of risk appetite – Reviews deep dives of specific risks as requested – Reviews remediation plan and actions taken, and agrees any further action required – Escalates to the Barclays Bank Ireland PLC Board level	**Barclays Bank Ireland PLC Controls Committee** – Oversees the effectiveness of the control environment – Reviews and recommends the control framework – Oversees control remediation activities – Oversees the execution of the Operational Risk Management Framework consistently across BBI – Oversees risk and internal **control matters including significant issues** – **Escalates to Barclays Bank Ireland PLC Board level**
Barclays Bank Ireland PLC Business Risk & Control Fora – Manage and oversee the risk and control environments at BBI business unit / function /country level – Escalate to Barclays Bank Ireland PLC Risk and Control Committees	

BBI adopts the Barclays Group Operational Risk Framework, leveraging Barclays Group-wide and implementing BBI – specific processes as appropriate: Operational risk comprises a number of specific risk categories defined as follow:

- **Data Management & Information Risk:** The risk that Barclays data and records are not defined, captured, stored or managed in accordance with their value and legal and regulatory requirements.
- **Financial Reporting Risk:** The risk of a material misstatement or omission within Barclays' external financial reporting, regulatory reporting or internal financial management reporting.
- **Fraud Risk:** The risk of financial loss when an internal or external party acts dishonestly with the intent to obtain an undue benefit, cause a loss to, or to expose either Barclays Group or its customers and clients to a risk of loss.
- **Information Security Risk:** The risk that Barclays information is not protected against potential unauthorised access, use, modification, disruption or destruction.
- **Operational Resilience Planning Risk:** The risk that is introduced as a consequence of inadequate or ineffective (i) Front to Back Process Planning, (ii) Business Recovery Planning, or (iii) Crisis Management Planning, thereby impacting service provision to customer, clients and / or financial infrastructure.
- **Payments Process Risk:** The risk of payments being processed inaccurately, with delays, without appropriate authentication and authorisation. It also covers the risk associated with ineffective management associated with Payment/ Card Scheme membership.
- **People Risk:** The set of risks associated with employing and managing people, including compliance with regulations, appropriate resourcing for requirements, recruitment and development risks.
- **Premises Risk:** The risk of business detriment or harm to people due to premises and infrastructure issues.
- **Physical Security Risk:** The risk of business detriment, financial loss or harm to people as a result of any physical security incident impacting Barclays Group or a Barclays Group's employee - relating to harm to people, unauthorised access, intentional damage to premises or theft or intentional damage to moveable assets.
- **Strategic Investment Change Management Risk:** the risk of failing to deliver and implement the agreed initiatives, priorities and outcomes required to deliver the Group strategy, within agreed timelines. Strategic Investment Change Management Risk exists whenever there is 'change' underway.
- **Supplier Risk:** The risk that is introduced to the firm or entity as a consequence of obtaining services or goods from another legal entity or entities whether External or Internal as a result of inappropriate and/or inadequate selection, management, or exit management.
- **Tax Risk:** The risk of unexpected tax cost in relation to any tax for which Barclays is liable, or of reputational damage on tax matters with key stakeholders such as tax authorities, regulators, shareholders or the

Management of operational risk

public. Tax cost includes tax, interest or penalties levied by a taxing authority.

- **Technology Risk:** The risk to Barclays that comes about through its dependency on Technological solutions.
- **Transaction Operations Risk:** The risk of an unintentional error in the execution of a customer transaction resulting in delayed or inaccurate processing.

In addition to the above, operational risk encompasses risks associated with prudential regulation. This includes the risk of failing to: adhere to prudential regulatory requirements, including capital adequacy requirements; provide regulatory submissions; or monitor and manage adherence to new prudential regulatory requirements.

These risks may result in financial and/or non-financial impacts including legal/regulatory breaches or reputational damage.

Barclays also recognises that there are certain threats/risk drivers that are more thematic and have the potential to impact Barclays' strategic objectives. These are risk themes which require an overarching and integrated risk management approach. Including:

1 **Cyber:** The potential loss or detriment to Barclays caused by individuals or groups (threat actors) with the capabilities and intention to cause harm or to profit from attacks committed via network information systems against us, our suppliers, or customers/clients.

2 **Data:** Aligned to the data strategy of Barclays and encompassing data risks to Barclays from multiple risk categories, including data management, data architecture, data security & protection, data resilience, data retention and data privacy.

3 **Resilience:** The risk of the organisation's ability to anticipate, prevent, adapt, respond to, recover and learn from internal or external disruption, continuing to provide important business services to customers and clients, and minimise any impact on the wider financial system.

Roles and Responsibilities

The prime responsibility for the management of operational risk and the compliance with control requirements rests with the legal entities, business and functional units where the risk arises. The operational risk profile and control environment is reviewed by business management through specific meetings which cover these items. Operational risk issues escalated from these meetings are considered through the second line of defence review meetings. Depending on their nature, the outputs of these meetings are presented to the Operational Risk Profile Forum, the BBI Risk Committee, the Barclays Bank Ireland PLC Board Risk Committee or the Barclays Bank Ireland PLC Board Audit Committee.

Businesses and functions are required to report their operational risks on both a regular and an event-driven basis. The reports include a profile of the material risks that may threaten the achievement of their objectives and the effectiveness of key controls, operational risk events and a review of scenarios.

The Barclays Group Head of Operational Risk is responsible for establishing, owning and maintaining an appropriate Barclays Group-wide Operational Risk Management Framework and for overseeing the portfolio of operational risk across Barclays Group. The BBI Head of Operational Risk is responsible for recommending BBI's adoption of the Operational Risk Framework, ensuring BBI-specific requirements are recognised through BBI Addenda where appropriate, and is responsible for monitoring the portfolio of operational risk across BBI.

The Operational Risk function acts in a second line of defence capacity, and is responsible for defining and overseeing the implementation of the framework and monitoring Barclays' operational risk profile. The Operational Risk function alerts management when risk levels exceed acceptable tolerance in order to drive timely decision making and actions by the first line of defence.

Specific reports are prepared by Operational Risk on a regular basis for the BBI Risk Committee, and the Barclays Bank Ireland PLC Board Risk Committee.

Operational Risk Framework

The Operational Risk Framework comprises a number of elements which allow BBI to manage and measure its operational risk profile and to calculate the amount of operational risk capital that BBI needs to hold to absorb potential losses. The minimum, mandatory requirements for each of these elements are set out in the Operational Risk Framework and supporting policies. This framework is implemented across Barclays Group with all businesses and functions required to implement and operate an Operational Risk Framework that meets, as a minimum, the requirements detailed in the operational risk policies.

The Operational Risk Framework is a key component of the ERMF and has been designed to improve risk management and meet a number of external governance requirements including the Basel Capital Accord, the Capital Requirements Directive and Turnbull guidance as an evaluation framework for the purposes of Section 404(a) of the Sarbanes-Oxley Act. It also supports the Sarbanes-Oxley requirements.

The Operational Risk Framework includes the following elements:

Risk and Control Self-Assessments

Risk and control self-assessments (RCSAs) are the way in which BBI identifies and assesses the risks which are inherent in the material processes operated by BBI. Managers in the business use the RCSA approach to evaluate the key controls in place to mitigate those risks and assess the residual risk exposure to BBI. The businesses / functions are then able to make decisions on what action, if any, is required to reduce the level of residual risk to BBI. These risk assessments are monitored on a regular basis to maintain that each business understands the risks it faces.

Risk Events

An operational risk event is any circumstance where, through the lack or failure of a control, BBI has actually, or could have, made a loss. The definition includes situations in which BBI could have made a loss, but in fact made a gain, as well as incidents resulting in reputational damage or regulatory impact only.

A standard threshold is used across Barclays Group for reporting risk events and part of the analysis includes the identification of improvements to processes or controls, to reduce the recurrence and/or magnitude of risk events. For significant events, both financial and non-financial, this analysis includes the completion of a formal lessons learned report.

Barclays Group also maintains a record of external risk events which are publicly available and is a member of the Operational Risk data eXchange (ORX), a not-for-profit association of international banks formed to share anonymous loss data information. This external loss information is used to support and inform risk identification, assessment and measurement.

Operational Risk Appetite

The Barclays Bank Ireland PLC Board approves an Operational Risk Appetite Statement on an annual basis, establishing the level of operational risk that is acceptable in pursuit of the Bank's strategic objectives.

Operational risks are assessed and monitored against the Board approved Operational Risk Appetite statement, with Risk Reduction Plans established for any risks that are above the acceptable level.

The Operational Risk Profile is monitored through BBI Risk Committee in the context of Operational Risk Tolerance.

Management of operational risk

Key Indicators

Key indicators (KIs) are metrics which allow the Operational Risk Profile to be measured and monitored against Management's Risk Tolerance. KIs include defined thresholds and performance is reported regularly to Management to drive action when risk exceeds acceptable limits.

Risk Scenarios

Risk scenarios are a summary of the extreme potential risk exposures for Barclays Group covering the complete range of risks. The scenarios include an assessment of the key drivers for the exposure, occurrence and impact of the scenario and a review of the corresponding control environment. The risk scenario assessments are a key input to the calculation and benchmarking of economic capital requirements (see following section on operational risk measurement). The assessment considers analysis of internal and external loss experience, Key Risk Indicators, Risk and Control Self-Assessments and other relevant information. The businesses and functions analyse potential extreme scenarios, considering the:

- circumstances and contributing factors that could lead to an extreme event;
- potential financial impacts;
- controls that seek to limit the likelihood of such an event occurring; and
- the mitigating actions that would be taken if the event were to occur (for example crisis management procedures, business continuity or disaster recovery plans).

Management then determine whether the potential risk exposure is acceptable or whether changes in risk management control or business strategy are required.

The risk scenarios are regularly re-assessed, taking into account trends in risk factors.

Reporting

The ongoing monitoring and reporting of operational risk is a key component of the Operational Risk Framework. Reports and management information are used by the Operational Risk function and by legal entity and business management to understand, monitor, manage and control operational risks and losses.

The operational risk profile is reviewed by senior management at the BBI Risk Committee meetings as well as the Operational Risk Profile Forum and the relevant Barclays Bank Ireland PLC Board Risk Committees.

Operational Risk Measurement

The Bank assesses its Operational Risk Capital requirements using the Standardised Approach (TSA).

Management of model risk

The types of model risk, and how they are managed, are detailed in this section.

- Model risk is the potential for adverse consequences from decisions based on incorrect or misused model outputs and reports.

Management of model risk

Model risk

The potential for adverse consequences from decisions based on incorrect or misused model outputs and reports.

Overview

BBI uses models to support a broad range of activities, including informing business decisions and strategies, measuring and limiting risk, valuing exposures, conducting stress testing, assessing capital adequacy, managing client assets, and meeting reporting requirements.

Since models are imperfect and incomplete representations of reality, they may be subject to uncertainty, errors and inappropriate use affecting the accuracy of their output. This can result in inappropriate business decisions being made, financial loss, regulatory risk, reputational risk and/or inadequate capital reporting. Models may also be misused, for instance applied to products that they were not intended for, or not adjusted, where fundamental changes to their environment would justify re-evaluating their core assumptions.

Robust model risk management is crucial to assessing and managing model risk. Strong model risk culture, appropriate technological environment, and adequate focus on understanding and resolving model limitations are crucial components.

Organisation and structure

Barclays allocates substantial resources to identify and record models and their usage, document and monitor the performance of models, validate models and adequately address model limitations. Barclays manages model risk as an enterprise level risk similar to other Principal Risks.
Barclays Group has a dedicated Model Risk Management (MRM) function that consists of four teams:

(i) Independent Validation Unit (IVU), responsible for model validation and approval;

(ii) Model Governance (MG), responsible model risk governance, controls and reporting, including ownership of Model Risk Framework, the Group Model Risk Policy, and the associated standards;

(iii) Strategy and Transformation responsible for inventory, strategy, communications and business management; and

(iv) Model Risk Measurement and Quantification (MRMQ), responsible for the design of the framework and methodology to measure and, where possible, quantify model risk. It is also responsible for the strategic Validation Center of Excellence (VCoE), which is an independent quality assurance function within MRM with the mandate to review and challenge validation outcomes.

The primary responsibility for identifying and managing model risk and adherence to the control requirements sits with model users and support functions where the risk arises. Barclays Group's Global Head of Model Risk Management is responsible for providing effective oversight, management and escalation of model risk in line with the Model Risk Principal Risk Framework.

The Bank's Board has designated the Model Management Committee to provide executive oversight of model issues and model risk within the Bank. The Model Management Committee escalates issues to BBI's Executive Risk or Control Committees as appropriate, and regular updates are provided to the Bank's Board. The Model Management Committee is supported by the model management function. The head of model management reports to the Bank's CRO and is accountable for ensuring that all risk models remain appropriate for the Bank's portfolio, as well as complying with all aspects of Barclays' Model Risk Governance.

The model risk management framework consists of the model risk policy and standards. The policy prescribes Barclays Group-wide, end-to-end requirements for the identification, measurement and management of model risk, covering model documentation, development, monitoring, annual review, independent validation and approval, change and reporting processes. The policy is supported by global standards covering model inventory, documentation, validation, complexity and materiality, testing and monitoring, overlays, as well as vendor models and stress testing challenger models.

The Board designated the Model Management Committee (MMC) to facilitate Senior Management decision-making and oversight of models and their associated processes. All risk models used by BBI are in scope.

Roles and responsibilities

The key model risk management activities include:

- Correctly identifying models across all relevant areas of Barclays Group, and recording models in the Barclays Group Models Database (GMD), the Barclays Group-wide model inventory. The heads of the relevant model ownership areas (typically, the business Chief Risk Officers, business Chief Executive Officers, Group Finance Director, Treasurer, etc.) annually attest to the completeness and accuracy of the model inventory.
- Enforcing that every model has a model owner who is accountable for the model. The model owner must sign off models prior to submission to IVU for validation. The model owner works with the relevant technical teams (model developers, implementation, monitoring, data services, and regulatory) to maintain that the model presented to IVU is and remains fit for purpose.
- Overseeing that every model is subject to validation and approval by IVU, prior to being used and on a continual basis. While all models are reviewed and re-approved for continued use each year, the validation frequency and the level of review and challenge applied by IVU is tailored to the materiality and complexity of each model. Validation includes a review of the model assumptions, conceptual soundness, data, design, performance testing, compliance with external requirements if applicable, as well as any limitations, proposed remediation and overlays with supporting rationale. Material model changes are subject to prioritised validation and approval.
- Maintaining specific standards that cover model risk management activities relating to stress testing challenger models, model overlays, vendor models, and model complexity and materiality.

Management of conduct risk

This section provides an overview of the management of conduct risk.

- Conduct risk is the risk of poor outcomes for, or harm to, customers, clients and markets, arising from the delivery of the Bank's products and services.

Management of conduct risk

Conduct risk

The risk of poor outcomes for, or harm to, customers, clients and markets, arising from the delivery of the Bank's products and services.

Overview

The Group defines, manages and mitigates conduct risk with the objective of providing good customer and client outcomes, protecting market integrity and promoting effective competition.

Conduct Risk incorporates market integrity, customer protection, financial crime and product design and review risks.

Organisation and structure

The Bank fulfils the governance of conduct risk through management committees operated by the first and second lines of defence with clear escalation and reporting lines to the Board.

The BBI Risk Committee is the primary second line governance committee for the oversight of the conduct risk profile.

The BBI Conduct and Reputational Risk Committee, a subcommittee of the Bank's Executive Committee, is dedicated to providing executive oversight of conduct risk within the Bank.

The BBI Control Committee provides oversight of the effectiveness of the Control Environment in relation to Conduct Risk, including remediation of control failures relating to conduct issues and risk events.

The Board Risk Committee reviews, on behalf of the Board, the management of conduct risk and the conduct risk profile for the entity.

Roles and responsibilities

The Conduct Risk Management Framework (CRMF) outlines how the Bank manages and measures its conduct risk profile. The Group Chief Compliance Officer is accountable for developing, maintaining and overseeing a Group-wide CRMF. This includes defining and owning the relevant conduct risk policies which detail the control objectives, principles and other core requirements for the activities of the Group. It is the responsibility of the first line of defence to establish controls to manage its performance and assess conformance to these policies and controls.

Senior managers are accountable within their areas of responsibility for owning and managing Conduct Risk in accordance with the CRMF, as defined within their regulatory statement of responsibilities.

Compliance as an independent second line function is designed to help prevent, detect and manage breaches of applicable laws, rules, regulations and procedures and has a key role in helping the Bank achieve the right conduct outcomes and evolve a conduct-focused culture.

The BBI Chief Compliance Officer is responsible for providing effective oversight, management and escalation of conduct risk, in line with the Conduct Risk Management Framework, for BBI.

Management of reputation risk

This section provides an overview of the management of reputation risk.

- Reputation risk is the risk that an action, transaction, investment, event, decision or business relationship will reduce trust in the Bank's integrity and/or competence.

Management of reputation risk

Reputation risk

The risk that an action, transaction, investment, event, decision, or business relationship will reduce trust in the Bank's integrity and/or competence.

Overview

A reduction of trust in Barclays Group's integrity and competence may reduce the attractiveness of Barclays Group to stakeholders and could lead to negative publicity, loss of revenue, regulatory or legislative action, loss of existing and potential client business, reduced workforce morale and difficulties in recruiting talent. Ultimately it may destroy shareholder value.

Organisation and structure

The governance of Reputation Risk within the Bank is fulfilled through management committees, clear escalation and reporting lines to the Bank's Board level committees.

Business Risk Committees / Forums review and escalate reputation risks in accordance with Barclays Group's Reputational Risk Management Framework (RRMF).

Within BBI the Conduct and Reputational Risk Committee, a subcommittee of the BBI Executive Committee, is dedicated to providing executive oversight of reputation risk within the Bank.

The Board is the most senior governance body responsible for reviewing and monitoring the effectiveness of the Bank's management of reputation risk.

Roles and responsibilities

The Group Chief Compliance Officer is accountable for developing a Reputation Risk Management Framework, and the Head of Public Policy and Corporate Responsibility is responsible for developing a reputation risk policy and associated standards, including tolerances against which data is monitored, reported on and escalated, as required. Reputation risk is by nature pervasive and can be difficult to quantify, requiring more subjective judgement than many other risks. RRMF sets out what is required to manage reputation risk across the Group.

The primary responsibility for identifying and managing reputation risk and adherence to the control requirements sits with the business and support functions where the risk arises.

The BBI Chief Compliance Officer is responsible for providing independent second line oversight of BBI Business' adherence to the RRMF.

BBI is required to operate within established reputation risk appetite, and the component businesses of BBI prepare regular updates highlighting their most significant current and potential reputation risks and issues and how they are being managed. These updates are presented to the BBI Conduct and Reputational Risk Committee and where required escalated to the BBI Board.

Management of legal risk

This section provides an overview of the management of legal risk.

- Legal risk is the risk of loss or imposition of penalties, damages or fines from the failure of the Bank to meet its legal obligations, including regulatory or contractual requirements.

Management of legal risk

Legal risk

The risk of loss or imposition of penalties, damages or fines from the failure of the Bank to meet its legal obligations, including regulatory or contractual requirements.

Overview

The Bank has no tolerance for willful breaches of laws, regulations or other legal obligations. However, the multitude of laws and regulations across the globe are highly dynamic and their application to particular circumstances is often unclear. This results in a high level of inherent legal risk which the Bank seeks to mitigate through the operation of a Barclays Group-wide legal risk management framework, including the implementation of Barclays Group-wide legal risk policies requiring the engagement of legal professionals in situations that have the potential for legal risk. Notwithstanding these mitigating actions, the Bank operates with a level of residual legal risk, for which the Bank has limited tolerance.

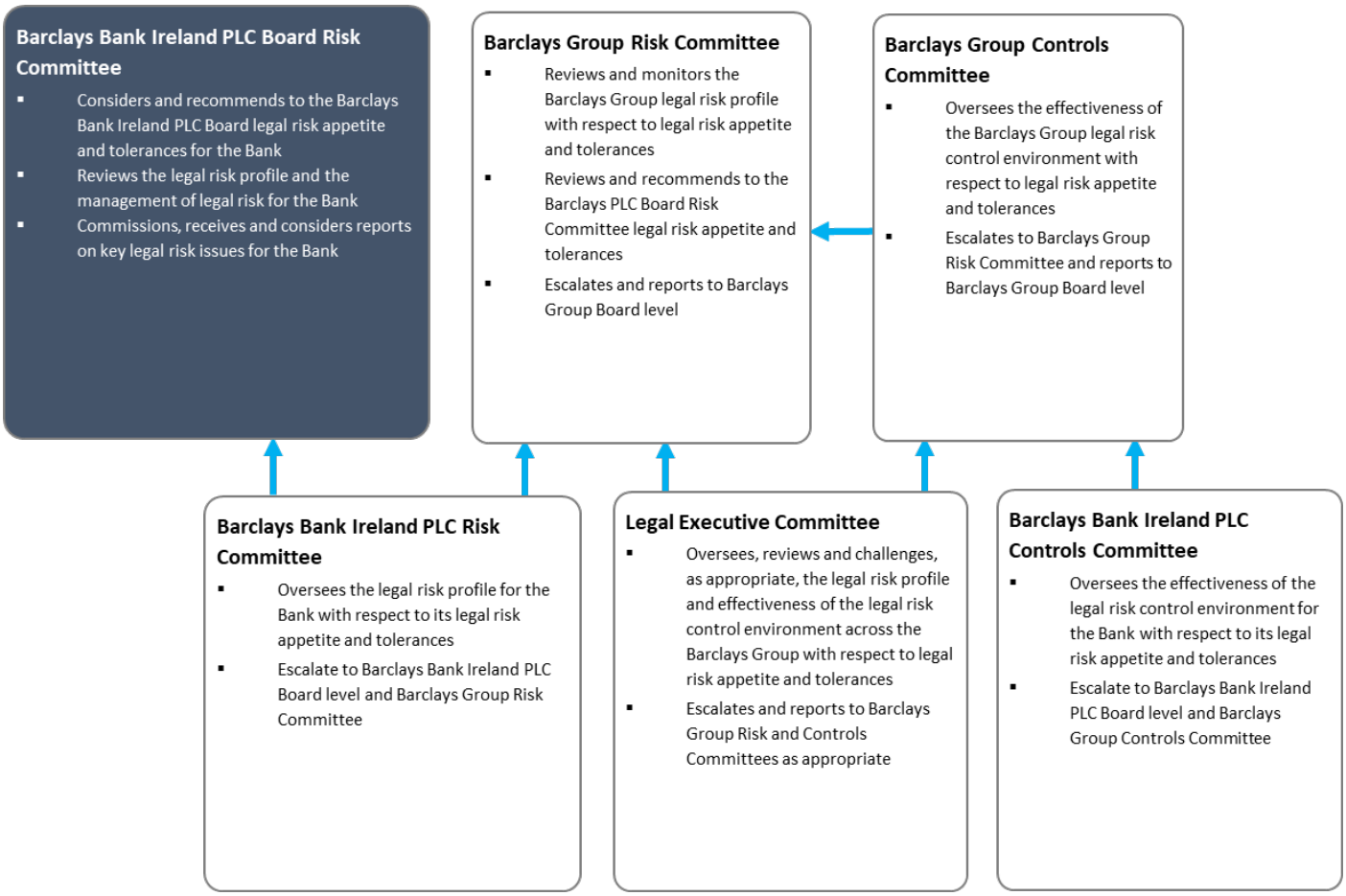
Organisation, roles and responsibilities

The Bank's businesses and functions have primary responsibility for identifying and escalating legal risk in their area as well as responsibility for adherence to minimum control requirements.

The Legal Function organisation and coverage model aligns legal expertise to businesses, functions, products, activities and geographic locations so that the Bank receives support from appropriate legal professionals, working in partnership to manage legal risk. The Bank is supported specifically by the BBI General Counsel, who draws on the support of the wider Barclays Legal Function as appropriate. The senior management of the Legal Function oversees, challenges and monitors the legal risk profile and effectiveness of the legal risk control environment across the Barclays Group. The Legal Function does not sit in any of the Three Lines of Defence but supports them all.

The Barclays Group General Counsel is responsible for developing and maintaining a Barclays Group-wide legal risk management framework. This includes defining the relevant legal risk policies, developing Barclays Group-wide risk appetite for legal risk and oversight of the implementation of controls to manage and escalate legal risk.

The legal risk profile and control environment is reviewed by management through business risk committees and control committees. The BBI Risk Committee is the most senior executive body responsible for reviewing and monitoring the effectiveness of risk management across the Bank. Escalation paths from this committee exist to the Barclays Group Risk Committee and BBI Board Risk Committee.



Appendix A – Countercyclical capital Buffer

Table 67: CCyB1 - Geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer

The below table shows the geographical distribution of credit exposures relevant to the calculation of the countercyclical buffer in line with CRR Article 440.

Note that exposures in the below table are prepared in accordance with CRD, Article 140. Hence exclude exposures to central governments/banks, regional governments, local authorities, public sector entities, multilateral development banks, international organisations and institutions and as such the exposure values differ to those found in the Analysis of credit risk section.

	General Credit Exposures		Relevant credit exposures – Market risk				Own Funds requirements						
	Exposure Value for SA	Exposure Value for IRB	Sum of long and short positions for trading book exposures for SA	Value of trading book exposures for internal models	Securitisations exposure value for non-trading book	Total exposure value	Of which: Relevant credit risk exposures - Credit risk	Of which: Relevant credit exposures – Market risk	Of which: Relevant credit exposures – Securitisation positions in the non-trading book	Total	RWA	Own Funds Requirements weights	Counter-cyclical capital buffer rate
Breakdown by Country	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	%	%
Bulgaria	—	—	—	—	—	—	—	—	—	—	—	— %	0.50 %
Czech Republic	8	—	—	1	—	10	—	—	—	—	6	0.03 %	0.50 %
Hong Kong	1	1	—	—	—	2	—	—	—	—	3	0.01 %	1.00 %
Luxembourg	991	821	—	3	—	1,815	83	1	—	84	1,045	5.27 %	0.50 %
Norway	543	—	—	18	—	561	26	—	—	26	329	1.66 %	1.00 %
Slovakia	—	—	—	—	—	—	—	—	—	—	—	— %	1.00 %
Total (countries with existing CCyB rate)	**1,543**	**823**	**—**	**22**	**—**	**2,387**	**110**	**1**	**—**	**111**	**1,382**	**6.97 %**	
Denmark	228	3	—	9	—	241	18	—	—	18	231	1.16 %	n/a
Finland	231	14	—	10	—	255	18	—	—	18	230	1.16 %	n/a
France	2,964	184	—	291	141	3,580	184	1	2	187	2,337	11.79 %	n/a
Germany	3,881	5,791	—	217	—	9,889	396	2	—	399	4,982	25.13 %	n/a
Ireland	2,950	236	—	14	—	3,200	178	—	—	178	2,225	11.23 %	n/a
Italy	1,270	5,425	33	32	—	6,761	245	7	—	252	3,144	15.86 %	n/a
Netherlands	1,883	37	1	121	—	2,043	149	2	—	151	1,885	9.51 %	n/a
Portugal	233	—	—	—	—	233	19	—	—	19	235	1.19 %	n/a
Spain	871	2	2	18	—	893	68	9	—	77	961	4.85 %	n/a
Sweden	233	163	—	33	36	465	20	—	—	21	260	1.31 %	n/a
United Kingdom	611	54	1	17	12	695	42	3	—	45	561	2.83 %	n/a
United States	1,164	69	—	45	—	1,278	68	1	—	69	858	4.33 %	n/a
Total (countries with own funds requirements weights 1% or above)	**16,520**	**11,979**	**38**	**807**	**188**	**29,532**	**1,405**	**25**	**2**	**1,433**	**17,909**	**90.36 %**	
Total (rest of the world less than 1% requirement)	**507**	**47**	**—**	**150**	**—**	**704**	**36**	**6**	**—**	**42**	**529**	**2.67 %**	**— %**
Total	**18,569**	**12,848**	**38**	**979**	**189**	**32,623**	**1,550**	**33**	**3**	**1,586**	**19,821**	**100.0 %**	

Appendix A – Countercyclical capital Buffer

Table 68: CCyB2 - Amount of institution-specific countercyclical capital buffer

Amount of institution-specific countercyclical capital buffer		
Total risk exposure amount (€m)	€	32,120
Institution specific countercyclical buffer rate (%)		0.04 %
Institution specific countercyclical buffer requirement (€m)	€	14

Appendix B – Disclosure on asset encumbrance

Asset encumbrance arises from collateral pledged against secured funding and other collateralised obligations. BBI funds a portion of trading portfolio assets and other securities via repurchase agreements and other similar borrowing and pledges a portion of customer loans and advances as collateral for TLTRO funding or in securitisations. BBI monitors the mix of secured and unsecured funding sources within the BBI funding plan and seeks to efficiently utilise available collateral to raise secured funding and meet other collateral requirements. The encumbered assets below will not agree to those disclosed in the Annual Report (Note 35 for Assets pledged, collateral received and assets transferred). The reported values represent the median of the values reported to the regulator via supervisory returns over the period 31 December 2020 to 31 December 2021.

Table 69: AE1 - Encumbered and unencumbered assets

		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
As at 31 December 2021		€m	€m	€m	€m	€m	€m	€m	€m
010	**Assets of the institution**	23,344	20,258			121,464	23,863		
030	Equity instruments	—	—	—	—	146	81	146	81
040	Debt securities	7,381	6,387	7,381	6,387	1,877	1,004	1,877	1,004
050	of which: covered bonds	505	490	505	490	150	75	150	75
060	of which: securitisations	—	—	—	—	29	10	29	10
070	of which: issued by general governments	5,468	5,117	5,468	5,117	731	685	731	685
080	of which: issued by financial corporations	1,056	456	816	217	552	183	552	183
090	of which: issued by non-financial corporations	371	219	371	219	260	97	260	97
120	Other assets	15,967	13,687			119,444	22,572		

Table 70: AE2 - Collateral received and own debt securities issued

		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
As at 31 December 2021		€m	€m	€m	€m
130	**Collateral received by the institution**	49,667	45,060	3,312	2,483
140	Loans on demand	—	—	—	—
150	Equity instruments	3,360	1,288	326	175
160	Debt securities	46,700	43,772	2,877	2,308
170	of which: covered bonds	903	647	108	105
180	of which: securitisations	—	—	—	—
190	of which: issued by general governments	41,009	40,652	2,307	2,006
200	of which: issued by financial corporations	2,777	1,304	245	97
210	of which: issued by non-financial corporations	1,706	1,007	182	68
220	Loans and advances other than loans on demand	—	—	—	—
230	Other collateral received	—	—	—	—
240	Own debt securities issued other than own covered bonds or securitisations	—	—	—	—
241	Own covered bonds and asset-backed securities issued and not yet pledged			50	—
250	**TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES**	73,064	65,742		

Appendix B – Disclosure on asset encumbrance

Table 71: AE3 - Sources of encumbrance

As at 31 December 2021		Matching liabilities, contingent liabilities or securities lent €m	Assets, collateral received and own debt securities issued other than covered bonds and securitisations encumbered €m
010	**Carrying amount of selected financial liabilities**	35,316	56,581

Appendix C – Disclosures on remuneration

Barclays Bank Ireland PLC remuneration

The following disclosures are made in accordance with the EBA Implementing Technical Standards on public disclosures by institutions (2020).

Remuneration Governance

The mandate and responsibilities of the Barclays Bank Ireland PLC ("BBIPLC") Board Remuneration Committee (the "Committee") are included in the Directors' Report in the 2021 BBIPLC Annual Report. Willis Towers Watson provided the Committee in 2021 with market data on compensation when considering incentive levels and remuneration packages.

The Committee held four meetings during 2021 and all members were present at each meeting:

Member	Meetings attended
Eoin O'Driscoll (Chair)	4/4
Jennifer Allerton	4/4
Tom Huertas	4/4
Helen Keelan (until 15 April 2021)	1/1

The Committee has adopted the overarching principles and parameters of the remuneration policy set by the Barclays PLC Remuneration Committee, as disclosed in the Remuneration report within the Barclays PLC 2021 Annual Report.

Performance management and remuneration

Barclays' remuneration philosophy (set out below) links remuneration to achieving sustained high performance and creating long-term value. The remuneration philosophy applies to all employees of Barclays PLC globally (including those individuals identified as material risk takers ('MRTs')) and aims to reinforce our belief that effective performance management is critical to enabling the delivery of our business strategy in line with our Values. Employees who adhere to the Barclays' Values and contribute to Barclays' success are rewarded accordingly.

This is achieved by basing performance assessment on clear standards of delivery and behaviour, which starts with employees aligning their objectives ('what' they will deliver) to business and team goals in order to support the delivery of the business strategy and good client/customer outcomes. Behavioural expectations ('how' people will achieve their objectives) are set in the context of our Values and Mindset.

Performance is assessed against both financial and non-financial criteria. Other factors are also taken into consideration within the overall performance assessment, including core job responsibilities, behaviours towards risk and control, colleague and stakeholder feedback as well as input from the Risk and Compliance functions, where appropriate.

Through our approach to performance, the equal importance of both what an individual has delivered and how the individual has achieved this is emphasised, encouraging balanced consideration of each dimension. Both of these elements are assessed and rated independently of each other. There is no requirement to have an overall rating. This allows for more robust and reflective conversations between managers and team members on the individual components of performance.

Appendix C – Disclosures on remuneration

Barclays' remuneration philosophy

The remuneration philosophy below sets out the basis upon which Barclays made remuneration decisions and set remuneration policies during 2021. Barclays' remuneration philosophy applies to all employees globally.

Attract and retain talent needed to deliver Barclays' strategy	Long-term success depends on the talent of our employees. This means attracting and retaining an appropriate range of talent to deliver against our strategy, and paying the right amount for that talent
Align pay with investor and other stakeholder interests	Remuneration should be designed with appropriate consideration of the views, rights and interests of stakeholders. This means listening to our shareholders, other investors, regulators, government, customers and employees and ensuring their views are appropriately considered in remuneration decision-making
Reward sustainable performance	Sustainable performance means making a positive and enduring difference to investors, customers and communities, taking pride in leaving things better than we found them, and playing a valuable role in society
Support Barclays' Values and culture	Results must be achieved in a manner consistent with our Values. Our Values, culture and Mindset should drive the way that business is conducted
Align with risk appetite, risk exposure and conduct expectations	Designed to reward employees for achieving results in line with the Group's risk appetite and conduct expectations
Be fair, transparent and as simple as possible	We are committed to ensuring pay is fair, simple and transparent for all our stakeholders. This means all employees and stakeholders should understand how we reward our employees and fairness should be a lens through which we make remuneration decisions

The Barclays Group remuneration policy is reviewed annually by the Group Remuneration Committee. The Committee is asked to review and adopt any changes to the policy, where appropriate.

Risk adjustment and remuneration

Another key feature of our remuneration philosophy is the alignment of remuneration with our risk appetite and with the conduct expectations of Barclays, our regulators and other stakeholders. The Committee takes risk and conduct events very seriously and ensures that there are appropriate adjustments to individual remuneration and, where necessary, the incentive pool.

The Remuneration Review Panel (the "Panel") supports the Committee in this process. The Panel is chaired by the Group HR Director and includes the Group Heads of Risk, Compliance, Legal and Internal Audit as well as the CEO of Barclays Bank UK PLC and the President of Barclays Bank PLC. It applies Barclays' policies and processes for assessing compensation adjustments for risk and conduct events.

We have robust processes for considering risk and conduct as part of individual performance management with outcomes reflected in individual remuneration decisions. Line managers have primary accountability for ensuring that risk and conduct issues are considered when assessing performance and making remuneration decisions. In addition, there is a secondary review by the control functions for individuals involved in significant failures of risk management, conduct issues, regulatory actions or other major incidents that impact either the Group or business to ensure these issues are also considered. When considering individual responsibility, a variety of factors are taken into account such as whether an individual was directly responsible, or whether the individual could be deemed indirectly responsible by virtue of seniority, including staff who drive BBIPLC's culture and set its strategy.

Actions that may be taken where risk management and conduct falls below required standards include:

Adjustment	Current year annual bonuses may be adjusted downwards where individuals are found to be involved (either directly or indirectly) in a risk or misconduct event.
Malus	Unvested deferred bonuses from prior years are subject to malus provisions which enable the Committee to reduce the vesting level of deferred bonuses (including to nil) at its discretion. Events that may lead the Committee to do this include, but are not limited to, employee misconduct or a material failure of risk management.
Clawback	Clawback applies to any variable remuneration awarded to a MRT on or after 1 January 2015 in respect of years for which they were a MRT. Barclays may apply clawback if, at any time during the seven-year period from the date on which variable remuneration is awarded to a MRT: (i) there is reasonable evidence of employee misbehaviour or material error, and/or (ii) the firm or the business unit suffers a material failure of risk management, taking account of the individual's proximity to and responsibility for that incident.

Appendix C – Disclosures on remuneration

In addition to reductions to individuals' bonuses, the Committee considers collective adjustments to the incentive pool for specific risk and conduct events. Adjustments to the incentive pool also take account of an assessment of a wide range of future risks including conduct, non-financial factors that can support the delivery of a strong risk management, control and conduct culture and other factors including reputation and impact on customers, markets and other stakeholders. The Committee is supported in its consideration of this adjustment by the BBIPLC Board Risk Committee.

Remuneration structure

Employees receive salary, pension and other benefits and are eligible to be considered for an annual bonus. Some employees, including some MRTs, also receive Role Based Pay (RBP). Remuneration of all MRTs is subject to the 2:1 maximum ratio of variable to fixed remuneration.

The remuneration of employees engaged in control functions is set independently from the business and for certain senior employees is approved by the Committee. Remuneration for control function employees is less weighted towards variable remuneration compared to front-office employees with the value of variable remuneration typically limited to one times fixed remuneration.

Fixed remuneration	
Salary	Salaries reflect individuals' skills and experience and are reviewed annually. They are increased where justified by role change, increased responsibility or a change in the appropriate market rate. Salaries may also be increased in line with local statutory requirements and union and works council commitments.
Role Based Pay	Some MRTs receive a class of fixed pay called RBP to recognise the seniority, scale and complexity of their role. RBP may be adjusted where justified by a role or responsibility change or a change in the appropriate market rate.
Pension and benefits	The provision of a competitive package of benefits is important to attracting and retaining the talented staff needed to deliver Barclays' strategy. Employees have access to a range of country-specific company-funded benefits, including pension schemes, healthcare, life assurance and Barclays' share plans as well as other voluntary employee funded benefits. The cost of providing these benefits is defined and controlled.

Variable remuneration	
Annual bonus	Annual bonuses incentivise and reward the achievement of Group, business and individual objectives, and reward employees for demonstrating individual behaviours in line with Barclays' Values and Mindset. The ability to recognise performance through variable remuneration enables the Group and BBIPLC to control their cost base flexibly and to react to events and market circumstances. Bonuses remain a key feature of remuneration practice in the highly competitive and mobile market for talent in the financial services sector. Awards of guaranteed variable remuneration are only made in exceptional circumstances in the context of hiring and typically only when a new hire starts in the last quarter of the year. Bonus deferrals The Committee is careful to control the proportion of variable to fixed remuneration paid to individuals and also to ensure an appropriate amount is deferred to future years. The typical deferral structures are:
Share plans	Alignment of MRTs with shareholders is achieved through deferral of incentive pay. Additional shareholding is encouraged through the all-employee share plans.

For MRTs:	
Incentive award	Amount deferred
< £500,000	40% of total award
£500,000 to £1,000,000	60% of total award
> £1,000,000	60% up to £1,000,000

For de minimis MRTs/non-MRTs	
Incentive award	Amount deferred
Up to £65,000	0%
> £65,000	Graduated level of deferral

Deferred bonuses are generally delivered in equal portions as deferred cash and deferred shares subject to the rules of the deferred cash and share plans (as amended from time to time) and continued service. Deferred bonuses are subject to either a 3, 4, 5 or 7-year deferral period in line with regulatory requirements.

Where dividend equivalents cannot be delivered on deferred bonus shares, the number of deferred bonus shares awarded will be calculated using a share price discounted to reflect the absence of dividend equivalents during the vesting period.

When determining a termination payment, Barclays considers any applicable: (a) contractual requirements; (b) policies; (c) local legal and regulatory requirements; and (d) legal and reputational risk.

Appendix C – Disclosures on remuneration

Remuneration of MRTs in respect of the financial year

On 14 December 2017, the Board of Barclays PLC as shareholder of Barclays Bank PLC approved the resolution that Barclays Bank PLC and any of its current and future subsidiaries be authorised to apply a ratio of fixed to variable components of total remuneration of their MRTs that exceeds 1:1, provided the ratio does not exceed 1:2.

MRTs are members of the BBIPLC Board and BBIPLC's employees and employees of other Barclays Group entities whose professional activities could have a material impact on BBIPLC's risk profile. A total of 135 individuals were MRTs in 2021 (2020: 130).

In the tables below, the following terms mean the following:

- "MB" means the BBIPLC's management body (i.e. the BBIPLC Board)
- "MB Supervisory function" means those individuals who were Non-Executive Directors of BBIPLC during 2021;
- "MB Management function" means those individuals who were Executive Directors of BBIPLC during 2021;
- "Other senior management" means those individuals (excluding the Executive Directors of BBIPLC) who were members of the BBIPLC Executive Committee during 2021 in accordance with Article 3(1)(9) of CRD IV; and
- "Other identified staff" means MRTs excluding MRTs included in MB Supervisory function, MB Management function and Other senior management.

REM1: Remuneration awarded for the financial year

		MB Supervisory function	MB Management function	Other senior management	Other identified staff
Fixed remuneration[a]	Number of identified staff	8	3	15	108.8
	Total fixed remuneration (€m)	1.2	1.9	7.5	35.5
	Of which: cash-based (€m)	1.2	1.8	7.0	32.8
	Of which: shares or equivalent ownership interests (€m)	—	—	—	—
	Of which: share-linked instruments or equivalent non-cash instruments (€m)	—	—	—	—
	Of which: other instruments (€m)	—	—	—	—
	Of which: other forms (€m)[b]	—	0.1	0.5	2.7
Variable remuneration[c]	Number of identified staff	0	3	14	98.8
	Total variable remuneration (€m)	0.0	2.6	10.4	29.5
	Of which: cash-based (€m)	0.0	1.3	6.0	15.6
	Of which: deferred (€m)	0.0	0.9	3.1	7.7
	Of which: shares or equivalent ownership interests (€m)	0.0	1.3	4.4	13.9
	Of which: deferred (€m)	0.0	0.9	3.1	7.7
	Of which: share-linked instruments or equivalent non-cash instruments (€m)	—	—	—	—
	Of which: deferred (€m)	—	—	—	—
	Of which: other instruments (€m)	—	—	—	—
	Of which: deferred (€m)	—	—	—	—
	Of which: other forms (€m)	—	—	—	—
	Of which: deferred (€m)	—	—	—	—
Total remuneration (€m)		**1.2**	**4.5**	**17.9**	**65.0**

Notes
a. Fixed remuneration takes the form of cash and/or shares and pensions and benefits in line with policy. Fixed remuneration does not take the form of share-linked instruments, equivalent non-cash instruments or other instruments.
b. "Other forms" of fixed remuneration represents an estimate for pensions and benefits during the year.
c. Variable remuneration takes the form of cash and/or shares and there are no other forms of variable remuneration.

Appendix C – Disclosures on remuneration

REM2: Special payments to staff whose professional activities have a material impact on institution's risk profile

	MB Supervisory function	MB Management function	Other senior management	Other identified staff
Guaranteed variable remuneration awards				
Guaranteed variable remuneration awards - Number of identified staff	0	0	0	1
Guaranteed variable remuneration awards -Total amount (€m)	—	—	—	1.3
Of which guaranteed variable remuneration awards paid during the financial year, that are not taken into account in the bonus cap (€m)	—	—	—	—
Severance payments awarded in previous periods, that have been paid out during the financial year				
Severance payments awarded in previous periods, that have been paid out during the financial year - Number of identified staff	—	—	—	—
Severance payments awarded in previous periods, that have been paid out during the financial year - Total amount (€m)	—	—	—	—
Severance payments awarded during the financial year[a]				
Severance payments awarded during the financial year - Number of identified staff	0	1	1	4
Severance payments awarded during the financial year - Total amount (€m)	—	0.0	1.5	0.5
Of which paid during the financial year (€m)	—	0.0	1.5	0.5
Of which deferred (€m)	—	—	—	—
Of which severance payments paid during the financial year, that are not taken into account in the bonus cap (€m)	—	0.0	1.5	0.5
Of which highest payment that has been awarded to a single person (€m)	—	0.0	1.5	0.3

Note

a. The severance payments shown are variable remuneration but in accordance with paragraph 172 of the EBA Guidelines on sound remuneration policies they have not been taken into account for the purposes of the calculation of the 2:1 ratio. Had these severance payments been taken into account, the 2:1 ratio would have continued to have been met for 3 of the 6 individuals.

Appendix C – Disclosures on remuneration

REM3: Deferred remuneration[a]

Deferred and retained remuneration	Total amount of deferred remuneration awarded for previous performance periods (€m)	Of which due to vest in the financial year (€m)	Of which vesting in subsequent financial years (€m)	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in the financial year (€m)[b]	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in future performance years (€m)[b]	Total amount of adjustment during the financial year due to ex post implicit adjustments (€m)[c]	Total amount of deferred remuneration awarded before the financial year actually paid out in the financial year (€m)	Total of amount of deferred remuneration awarded for previous performance period that has vested but is subject to retention periods (€m)
MB Supervisory function	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash-based	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shares or equivalent ownership interests	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Share-linked instruments or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments	—	—	—	—	—	—	—	—
Other forms	—	—	—	—	—	—	—	—
MB Management function	3.2	1.0	2.2	0.0	0.0	0.3	-1.1	0.4
Cash-based	1.4	0.3	1.1	0.0	0.0	0.0	-0.3	0.0
Shares or equivalent ownership interests	1.8	0.7	1.1	0.0	0.0	0.3	-0.8	0.4
Share-linked instruments or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments	—	—	—	—	—	—	—	—
Other forms	—	—	—	—	—	—	—	—
Other senior management	19.0	5.6	13.4	0.0	0.0	2.3	-6.0	1.3
Cash-based	8.2	2.1	6.1	0.0	0.0	0.0	-2.1	0.0
Shares or equivalent ownership interests	10.8	3.5	7.3	0.0	0.0	2.3	-3.9	1.3
Share-linked instruments or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments	—	—	—	—	—	—	—	—
Other forms	—	—	—	—	—	—	—	—
Other identified staff	40.7	13.9	26.8	0.0	0.0	3.9	-14.9	5.0
Cash-based	14.8	3.8	11.0	0.0	0.0	0.0	-3.8	0.0
Shares or equivalent ownership interests	25.9	10.1	15.8	0.0	0.0	3.9	-11.1	5.0
Share-linked instruments or equivalent non-cash instruments	—	—	—	—	—	—	—	—
Other instruments	—	—	—	—	—	—	—	—
Other forms	—	—	—	—	—	—	—	—
Total amount	62.9	20.5	42.4	0.0	0.0	6.5	-22.0	6.7

Notes
a. Deferred remuneration takes the form of cash-based and share-based awards. There are no other forms of deferred variable remuneration.
b. Reduction of deferred remuneration due to direct adjustments such as malus and clawback, and forfeiture on cessation of employment.
c. Change in value of deferred remuneration due to movements in share price or exchange rate during the year.

Appendix C – Disclosures on remuneration

REM4: Remuneration of 1 million EUR or more per year[a]

EUR	Identified staff that are high earners as set out in Article 450(i) CRR
1 000 000 to below 1 500 000	22
1 500 000 to below 2 000 000	7
2 000 000 to below 2 500 000	1
2 500 000 to below 3 000 000	1
3 000 000 to below 3 500 000	2
3 500 000 to below 4 000 000	0
4 000 000 to below 4 500 000	0
4 500 000 to below 5 000 000	0
5 000 000 to below 6 000 000	1

Note

a. The table is prepared in Euros in accordance with Article 450 of the Capital Requirements Regulation. Data has been converted into Euros using the rates published by the European Commission for financial programming and budget for December of the reported year.

REM 5: Information on remuneration of staff whose professional activities have a material impact on institutions' risk profile (identified staff)

	Management body remuneration			Business areas						
	MB Supervisory function	MB Management function	Total MB	Investment banking	Retail banking	Asset management	Corporate functions	Independent internal control functions	All other	Total
Total number of identified staff										**134.8**
Of which: members of the MB	8	3	11							**11.0**
Of which: other senior management				6	3	0	3	3	0	**15.0**
Of which: other identified staff				43.8	2	0	13	50	0	**108.8**
Total remuneration of identified staff (€m)	1.2	4.5	5.7	58.7	3.0	0.0	8.6	12.6	0.0	**88.6**
Of which: variable remuneration (€m)	0.0	2.6	2.6	32.9	1.4	0.0	2.6	3.0	0.0	**42.5**
Of which: fixed remuneration (€m)	1.2	1.9	3.1	25.8	1.6	0.0	6.0	9.6	0.0	**46.1**

Appendix D – CRD V reference

Table 82: CRD V reference

CRR ref.	High-level summary	Compliance reference
Scope of disclosure requirements		
431 (1)	Requirement to publish Pillar 3 disclosures	BBI publishes Pillar 3 disclosures
431 (2)	Firms with permission to use specific operational risk methodologies must disclose operational risk information.	The Operational Risk section on pages 127 to 131 contains a description of the operational risk framework, and required Pillar 3 disclosures.
431 (3)	Institution must have a policy covering frequency of disclosures. Their verification, comprehensiveness and overall appropriateness.	BBI has has a framework of disclosure controls and procedures in place to support the approval of the Bank's Pillar 3 disclosure.
431 (4)	Institutions to ensure that quantitative disclosures are accompanied by a qualitative narrative and any other supplementary information where deemed appropriate.	Compliance with this provision is covered by BBI's framework.
431 (5)	Explanation of ratings decision upon request	BBI provides explanations of rating decisions to SMEs whose loan applications were declined in writing, and suggests alternative sources of finance. In the case of larger corporates, written explanations are not usually requested as direct discussions with relationship managers take place.
Non-material, proprietary or confidential information		
432 (1)	Institutions may omit information that is not material if certain conditions are respected.	Compliance with this provision is covered by BBI's framework.
432 (2)	Institutions may omit information that is proprietary or confidential if certain conditions are respected.	Compliance with this provision is covered by BBI's framework.
432 (3)	Where 432 (1) and (2) apply this must be stated in the disclosures, and more general information must be disclosed.	This table specifies where disclosures are omitted.
Frequency of disclosure		
433	Institutions are required to publish their disclosures in accordance with 433a, 433b or 433c, in conjunction with Article 4 (145), (146), (147) and (148).	Compliance with this provision is covered by BBI's framework. See under "Basis of preparation" (page 6).
433a	Specifies the information to be disclosed by Large Institutions together with the frequency.	Compliance with this provision is covered by BBI's framework.
433b	Specifies the information to be disclosed by Small and Non-Complex Institutions together with the frequency.	Does not apply to BBI.
433c	Specifies the information to be disclosed by Other Institutions and the frequency.	Does not apply to BBI.
Means of disclosures		
434 (1)	To include disclosures in one appropriate medium, or provide clear cross-references.	Most disclosures are contained within this document. Signposting directs the reader to other publications where appropriate.
434 (2)	Institutions shall make available on their website an archive of the information required to be disclosed.	https://home.barclays/investor-relations/reports-and-events/latest-financial-results/
Uniform disclosure formats		
434a	EBA have developed uniform disclosure formats for use in publications	Compliance with this provision is covered by BBI's framework.
Risk management objectives and policies		
435 (1) (a)	Disclose information on strategies and processes; organisational structure, reporting systems and risk mitigation/hedging.	Page 11 / Table 2: Summary of the scope of application of regulatory methodologies for CVA, market and operational risk Risk management strategy: page 84 Credit Risk: page 92 Market Risk: page 114 Operational Risk: page 127 Counterparty Credit Risk: page 108 Treasury and Capital Risk: page 121 Operational Risk: page 127 Model Risk: page 131 Conduct Risk: page 133 Reputation Risk: page 135 Legal Risk: page 137
435 (1) (b)		
435 (1) (c)		
435 (1) (d)		
435 (1) (e)	Inclusion of a declaration approved by the Board on adequacy of risk management arrangements.	See page 84. This statement covers all Principal Risks.

Appendix D – CRD V reference

Table 82: CRD V reference (Continued)

<table>
<tr><th>CRR ref.</th><th>High-level summary</th><th>Compliance reference</th></tr>
<tr><td>435 (1) (f)</td><td>Inclusion of a concise risk statement approved by the Board.</td><td>Please see pages 88 to 89. This statement covers all Principal Risks.</td></tr>
<tr><td>435 (2)</td><td>Information on governance arrangements, including information on Board composition and recruitment, and risk committees.</td><td>See page 85 for a description of the risk committees. Page 11-12 of the 2021 Annual Report contains information on Board composition, experience and recruitment.</td></tr>
<tr><td>435 (2) (a)</td><td>Number of directorships held by directors.</td><td>Directorships
<table><tr><th>Director</th><th>Number of Directorships Effectively held as at 31 December 2021</th><th>Number of Directorships held for purposes of Article 91(3) and (4) of Directive (EU) 2013/36[1](“CRD”) as at 31 December 2021</th></tr><tr><td>Tim Breedon</td><td>6 *</td><td>3</td></tr><tr><td>Jennifer Allerton</td><td>4</td><td>4</td></tr><tr><td>Etienne Boris</td><td>4</td><td>4</td></tr><tr><td>Tom Huertas</td><td>4</td><td>4</td></tr><tr><td>Eoin O’Driscoll</td><td>2</td><td>1</td></tr><tr><td>Francesco Ceccato</td><td>2</td><td>1</td></tr><tr><td>Jasper Hanebuth</td><td>2</td><td>1</td></tr></table>* Number of actual Directorships reduced to 5 on 28 February 2022</td></tr>
<tr><td>435 (2) (b)</td><td>Recruitment policy of Board members, their experience and expertise.</td><td>Please see Page 12 of the 2021 Annual Report.
The skills, experience and expertise held across the Board includes, but is not limited to, regulatory experience, Financial Services – including Relevant Banking Experience, Risk Management, Accounting & Auditing, Operations & Technology, Multinational Corporations, Financial Institutions, Transformation, Strategy Development & Implementation, Outsourcing & Supplier Management, Business/Financial performance, Capital and Liquidity Management.</td></tr>
<tr><td>435 (2) (c)</td><td>Policy on diversity of Board membership and results against targets.</td><td>Please see Pages 14 and 17 of the 2021 Annual Report. In terms of gender, the Board’s current target is to ensure that the proportion of women on the Board is 25% by 2022, increasing to 33% by 2024.</td></tr>
<tr><td>435 (2) (d)</td><td>Disclosure of whether a dedicated risk committee is in place, and number of meetings in the year.</td><td>Please see Page 12 of the 2021 Annual Report. The Board Risk Committee met seven times during 2021</td></tr>
<tr><td>435 (2) (e)</td><td>Description of information flow on risk to Board.</td><td>Figure on page 86 in the risk management strategy section illustrates the reporting structure to Board committees.</td></tr>
<tr><td colspan="3">Scope of application</td></tr>
<tr><td>436 (a)</td><td>Name of institution</td><td>See under “Foreword” page 3.</td></tr>
<tr><td>436 (b)</td><td>Difference in basis of consolidation for accounting and prudential purposes.</td><td>The Bank owns three nominee companies, each with a fully paid up share capital of €2. These companies are not included in the accounting or prudential consolidation of the Bank.</td></tr>
<tr><td>436 (c)</td><td>Disclosure of the breakdown of assets and liabilities of the financial statements prepared in accordance with requirements on regulatory consolidation.</td><td>Page 12 / Table 3: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories (LI1).</td></tr>
<tr><td>436 (d)</td><td>Disclosure of the reconciliation of the carrying value amounts in the financial statements under regulatory scope of consolidation and the exposure amount used for regulatory purposes.</td><td>Page 13 / Table 4: Main sources of differences between regulatory exposure amounts and carrying values in financial statements (LI2) / Explanations of differences between accounting and regulatory exposure amounts (LIA).</td></tr>
<tr><td>436 (e)</td><td>Disclosure of the breakdown of the amounts of the constituent elements of an institution’s prudent valuation adjustment.</td><td>Page 35 / Table 21: Prudential valuation adjustments (PV1).</td></tr>
<tr><td>436 (f)</td><td>Disclosure of any current or expected material practice or legal impediment to the prompt transfer of own funds or repayment of liabilities between parent and subsidiaries.</td><td>See page 123</td></tr>
<tr><td>436 (g)</td><td>Disclosure of the aggregated amount by which the actual own funds are less than required in all subsidiaries.</td><td>Does not apply to BBI.</td></tr>
<tr><td>436 (h)</td><td>Application of the derogation referred to in Article 7 of the CRR or the individual consolidation method laid down in Article 9 of the CRR.</td><td>Does not apply to BBI.</td></tr>
</table>

Appendix D – CRD V reference

Table 82: CRD V reference (Continued)

CRR ref.	High-level summary	Compliance reference
Own funds		
437	Disclosure of requirements regarding capital resources table	
437 (a)		Page 19 / Table 8: Own funds disclosure template (CC1) / Reconciliation of regulatory own funds to balance sheet in the audited financial statements (CC2).
437 (b)		Standalone document: Summary of terms and conditions of own funds and eligible liabilities
437 (c)		
437 (d) (i)		Page 19 / Table 8: Own funds disclosure template (CC1).
437 (d) (ii)		
437 (d) (iii)		
437 (e)		
437 (f)		
Own funds and eligible liabilities		
437a	Disclosure of requirements regarding MREL / TLAC tables	Pages 17 - 18 / Table 6: Internal loss absorbing capacity: internal MREL and, where applicable, requirement for own funds and eligible liabilities for non-EU G-SIIs (iLAC) / Table 7 : Creditor ranking - Entity that is not a resolution entity (TLAC2)
437a (a)		
437a (b)		
437a (c)		
437a (d)		
Own funds requirements and risk-weighted exposure amounts		
438 (a)	Summary of Bank's approach to assessing the adequacy of internal capital to support current and future activities;	Discussions of capital calculations are contained in each risk type management section (credit, market and operational).
438 (b)	Disclosure of additional own funds requirements based on supervisory review (SREP) and its capital related composition.	Page 15 / Table 5 : Key Metrics (KM1)
438 (c)	Result of the Bank's internal capital adequacy assessment process (ICAAP) on demand from authorities.	BBI has not received this request from its regulator.
438 (d)	Disclosure of total risk-weighted exposure amount and the corresponding total own funds requirements by different risk categories	Page 23 / Table 12: Overview of risk-weighted exposure amount (OV1); Page 37/ Table 22: Detailed view of credit risk EAD, RWAs and Capital Requirement Various other tables contain capital requirements throughout the report.
438 (e)	Disclosure of on and off-balance sheet exposures, risk weighted exposure amounts and associated expected losses for each category of specialised lending / equity exposures	Page 46 / Table 30: Specialised lending and equity exposures under the simple risk weighted approach (CR10); Page 37 / Table 22: Detailed view of credit risk EAD, RWAs and Capital Requirement
438 (f)	Disclosure of the exposure value and risk-weighted exposure amount of own funds instruments held in relation to insurance activities that institutions do not deduct from own funds.	Does not apply to BBI.
438 (g)	Disclosure of the supplementary own funds requirement and the capital adequacy ratio of the financial conglomerate.	Does not apply to BBI.
438 (h)	Disclosure of the movement in risk-weighted exposure amounts between the current and preceding disclosure periods regarding internal models, outlining the key drivers	Pages 25 & 26 / Table 13, 14 & 15: RWA flow statements across Credit Risk (CR8), Counterparty Credit Risk (CCR7) and Market Risk (MR2B)
Exposure to counterparty credit risk (CCR)		
439 (a)	Description of process to assign internal capital and credit limits to CCR exposures.	Pages 108 - 110
439 (b)	Discussion of process to secure collateral and establishing reserves.	
439 (c)	Discussion of management of wrong-way exposures.	
439 (d)	Disclosure of collateral to be provided (outflows) in the event of a ratings downgrade.	See the liquidity risk management section on pages 122 -123
439 (e)	Disclosure of the composition of collateral between segregated and unsegregated received and posted.	Page 65 / Table 48: Composition of collateral for CCR exposures (CCR5)
439 (f)	Disclosure of the derivation of net derivative credit exposure.	Page 62 / Table 44: Analysis of CCR exposure by approach (CCR1)
439 (g)	Disclosure of the derivation of net securities financing transactions exposure.	Page 62 / Table 44]: Analysis of CCR exposure by approach (CCR1)
439 (h)	Disclosure of own funds requirements relating to credit valuation adjustment	Page 67 / Table 51: Transactions subject to own funds requirements for CVA risk (CCR2)

Appendix D – CRD V reference

Table 82: CRD V reference (Continued)

CRR ref.	High-level summary	Compliance reference
439 (i)	Disclosure of exposures to central counterparties	Page 66 / Table 50: Exposures to CCPs (CCR8)
439 (j)	Disclosure of credit derivative exposures	Page 66 / Table 49: Credit derivative exposures (CCR6)
439 (k)	Estimate of alpha, if applicable.	The alpha used by BBI is 1.4. See page 9
439 (l)	Disclosure of counterparty credit risk exposures by both standardised and internal ratings based approaches.	Page 63 / Table 45: Standardised approach - CCR exposures by regulatory exposure class and risk weights (CCR3); Page 64 / Table 46: IRB approach - CCR exposures by exposure class and PD scale (CCR4)
439 (m)	*Disclosure of the size of the on and off-balance sheet*	
Capital buffers		
440 (a)	Disclosure of geographical distribution of relevant credit exposures.	BBI's countercyclical buffer is currently set at 0.04%. See pages 139 - 140 / Table 67: Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer (CCYB1) / Table 68: Amount of institution-specific countercyclical capital buffer (CCYB2)
440 (b)	Disclosure of amount of the institution specific countercyclical capital buffer.	
Indicators of global systemic importance		
441	Disclosure of the indicators of global systemic importance	BBI is not a Globally Systemic Important Institution, although it was designated an Other Systemically Important Institution by the CBI in 2019.
Credit risk adjustments		
442 (a)	Disclosure of bank's definitions of past due and impaired.	Pages 92 to 98 provide a complete description of credit quality measures. See also Note 7 "Definition of default, credit impaired assets, write-offs, and interest income recognition" on page 121 of the BBI PLC 2021 Annual Report.
442 (b)	Approaches for calculating credit risk adjustments.	Pages 92 to 108
442 (c)	Disclosure on the amount and quality of performing, non-performing and forborne exposures	Pages 50 to 55 / Tables 35 to 39 / Credit quality of forborne exposures (CQ1) / Credit quality of performing and non-performing exposures by past due days (CQ3) / Quality of non-performing exposures by geography (CQ4) / Credit quality of loans and advances by industry (CQ5) / Performing and non-performing exposures and related provisions (CR1).
442 (d)	Disclosure of past due exposures by ageing profile	
442 (e)	Disclosure of breakdown of impaired, past due, specific and general credit adjustments, accumulated write-offs by geographical area and industry type	
442 (f)	Disclosure of reconciliation of changes to the gross amount of defaulted and non-defaulted exposures stock within the period.	Page 38 / Table 23: CR2 - Changes in the stock of non-performing loans and advances
442 (g)	Breakdown of loans and debt securities by residual maturity.	Page 50 / Table 34 / Maturity of exposures (CR1-A)
Encumbered and unencumbered assets		
443	Disclosures on encumbered and unencumbered assets	See page 141: Disclosures on asset encumbrance
Use of Standardised Approach		
444 (a)	Names of the ECAIs used in the calculation of Standardised Approach RWAs, and reasons for any changes	Page 42: Qualitative disclosure requirements related to standardised model (CRD) Page 11 / Table 1: The scope of the Standardised and IRB approaches for credit and counterparty credit risk excluding CVA
444 (b)	Exposure classes associated with each ECAI	
444 (c)	Explanation of the process used to transfer the issuer and issue credit ratings onto items not included in the trading book.	
444 (d)	Mapping of external rating to credit quality steps	
444 (e)	Disclosure of exposure value pre- and post-credit risk mitigation, by credit quality step.	Page 39 / Table 25: Standardised approach - Credit risk exposure and CRM effects (CR4) ; Page 43 / Table 28: Analysis of exposures by asset classes and risk weight under the standardised approach (CR5) ; Page 63/ Table 45: Standardised approach - CCR exposures by regulatory exposure class and risk weights (CCR3)
Exposure to market risk		
445	Disclosure of position risk, large exposures exceeding limits, FX, settlement and commodities risk.	Page 76 / Table 59: Market risk under the standardised approach (MR1)

Appendix D – CRD V reference

Table 82: CRD V reference (Continued)

CRR ref.	High-level summary	Compliance reference
Operational risk		
446 (a)	Disclosure of the scope of approaches used to calculate operational risk, discussion of advanced methodology and external factors considered.	Page 81 / Table 63: Operational risk own funds requirements and risk-weighted exposure amounts (OR1) / Qualitative information on operational risk (ORA)
446 (b)	Discussion on the advanced measurement approach where considered together with relevant internal / external factors.	
446 (c)	Discussion on the scope and coverage of the different methodologies used in case of partial use.	
Key Metrics		
447	Disclosure of Key Metrics	Page 15 / Table 5: Key Metrics (KM1)
447 (a)	Disclosure of the composition of own funds and own funds requirements.	
447 (b)	Disclosure of the total risk exposure amount.	
447 (c)	Disclosure of the composition of additional own funds required as part of the Supervisory Review (SREP) process.	
447 (d)	Disclosure of the combined buffer requirement.	
447 (e)	Disclosure of the leverage ratio and total exposure measure.	
447 (f)(i-iii)	Disclosure of the composition of the liquidity coverage ratio.	
447 (g)(i-iii)	Disclosure of the composition of the net stable funding requirement.	
447 (h)	Disclosure of the own funds and eligible liabilities ratios in relation to each resolution group.	
Exposure to interest rate risk on positions not held in the trading book		
448	Disclosure of quantitative and qualitative information of the risks arising from potential changes in interest rates.	
448 (1)(a)	Disclosure of the changes in the economic value of equity.	Page 79 / Table 61: Quantitative information on IRRBB (IRRBB1)
448 (1)(b)	Disclosure of the changes in the net interest income.	
448 (1)(c)	Description of key modelling and parametric assumptions	Page 125-126 / IRRBB risk management objectives and policies.
448 (1)(d)	Explanation of the significance of the risk measures in relation to the economic value of equity / net interest income including variations since previous disclosure date.	
448 (1)(e)(i-v)	Description of how institutions define, measure, mitigate and control the interest rate risk of their non-trading book activities.	
448 (1)(f)	Description of overall risk management in relation to interest rate risk.	
448 (1)(g)	Average and longest repricing maturity assigned to non-maturity deposits.	
448 (2)	Derogation of the requirements under 448(1) in relation to institutions applying standardised methodology or simplified standardised methodology.	

Appendix D – CRD V reference

Table 82: CRD V reference (Continued)

CRR ref.	High-level summary	Compliance reference
Exposure to securitisation positions		
449	Exposure to securitisations positions.	Page 111 - 113: Qualitative disclosure requirements related to securitisations exposures (SECA). No explicit reference to STS as not currently used.
449 (a)	Description of securitisation and re-securitisation activities	
449 (b)	The type of risk the Bank is exposed to in its securitisation and re-securitisation activities by level of seniority of the relevant securitisation positions, providing a distinction between STS and non-STS positions	
449 (b) (i)	Risk retained in own-originated transactions;	
449 (b) (ii)	Risk incurred in relation to transactions originated by third parties.	
449 (c)	Approaches to calculating the risk-weighted exposure amounts that the Bank applies to securitisation activities,	
449 (d)	List of SSPEs falling into any of the following categories, with a description of types of exposures to those SSPEs, including derivatives contracts:	SSPE categories do not apply to BBI. No implicit support is provided by any Barclays entity to any securitisation. No affiliates.
449 (d) (i)	SSPEs which acquire exposures originated by the Bank;	
449 (d) (ii)	SSPEs sponsored by the Bank;	
449 (d) (iii)	SSPEs and other legal entities for which the Bank provides securitisation-related services, such as advisory, asset servicing or management services;	
449 (d) (iv)	SSPEs included in the Bank's' regulatory scope of consolidation;	
449 (e)	List of any legal entities in relation to which the Bank have disclosed that it has provided support in accordance with Chapter 5 of Title II of Part Three.	
449 (f)	List of legal entities affiliated with the Bank and that invest in securitisations originated by the Bank or in securitisation positions issued by SSPEs sponsored by the Bank.	
449 (g)	Summary of accounting policies for securitisation activity, including where relevant a distinction between securitisation and re-securitisation positions.	Page 111 - 113: Qualitative disclosure requirements related to securitisation exposures (SECA).
449 (h)	Names of the ECAIs used for securitisations and the types of exposure for which each agency is used.	
449 (i)	Description of the Internal Assessment Approach	
449 (j)	Disclosure of the carrying amount of securitisation exposures, shown separately for the trading book and the non-trading book.	Page 69 / Table 52: Securitisation exposures in the non-trading book (SEC1); BBI has no securitisation exposures in the trading book (SEC2)
449 (k)(i)	Disclosure of the aggregate amount of securitisation positions where institutions act as originator or sponsor and the associated risk-weighted assets and capital	Page 70 / Table 53: Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor (SEC3)
449 (k)(ii)	Disclosure of the aggregate amount of securitisation positions where institutions act as investor and the associated risk-weighted assets and capital	Page 71 / Table 54: Securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor (SEC4).
449 (l)	Disclosure of exposures in default relating to exposures securitised by the institution.	Page 72 / Table 55: Exposures securitised by the institution - Exposures in default and specific credit risk adjustments (SEC5).
Environmental, social and governance risks (ESG risks)		
449a	*Disclosure of environmental, social and governance risks*	*Only applicable from 28th June 2022.*
Remuneration disclosures		
450	Remuneration	Page 143: Remuneration disclosures
Leverage		
451 (1) (a)	Leverage ratio, and breakdown of total exposure measure, including reconciliation to financial statements, and derecognised fiduciary items	Pages 28 - 31 / Tables 16-18: LRSum: Summary reconciliation of accounting assets and leverage ratio exposures (LR1) / LRCom: Leverage ratio common disclosure (LR2) / LRSpl: Split-up on balance sheet exposures (excluding derivatives, SFTs and exempted exposures) (LR3).
451 (1) (b)		
451 (1) (c)		
451 (1) (d)	Description of the risk management approach to mitigate excessive leverage, and factors that impacted the leverage ratio during the year.	See page 123 - 125, management of capital risk
451 (1) (e)		

Appendix D – CRD V reference

Table 82: CRD V reference (Continued)

CRR ref.	High-level summary	Compliance reference
451 (2)	Disclosures for public development credit institutions	Page 29 / Table 17: LRCom: Leverage ratio common disclosure (LR2)
451 (3)	Disclosures for large institutions to be based on averages calculated in accordance with the implementing act referred to in Article 430(7).	
Liquidity requirements		
451a	Disclosures on the liquidity coverage ratio, net stable funding ratio and liquidity risk management.	
451a (1)		
451a (2)		Page 32 - 34 / Table 19: Quantitative and Qualitative information on LCR (LIQ1)(LIQB)
451a (2)(a)		
451a (2)(b)		
451a (2)(c)		
451a (3)		Page 34 / Table 20: Net Stable Funding Ratio (LIQ2)
451a (3)(a)		
451a (3)(b)		
451a (3)(c)		
451a (4)		See page 121 - 123 Liquidity risk management (LIQA)
Use of the IRB approach to credit risk		
452	Disclosure of the use of the IRB Approach to credit risk	Page 49 / Table 33: Scope of the use of IRB and SA approaches (CR6A)/ Qualitative disclosure requirements related to IRB approach (CRE). Page 11 / Table 1: The scope of the Standardised and IRB approaches for credit and counterparty credit risk excluding CVA Page 100-103, starting 'Internal ratings based (IRB) approach'
452 (a)	Permission for use of the IRB approach from authority	
452 (b)	Disclosure on the scope of Internal Ratings Based and Standardised approaches	
452 (c)	Description of the control around rating systems.	
452 (c)(i)		
452 (c)(ii)		
452 (c)(iii)		
452 (c)(iv)		
452 (d)	Description of institution's process relating to the development and approval of credit risk models.	
452 (e)	Description of reporting relating to credit risk models.	
452 (f)	Description of the internal ratings process by exposure class.	
452 (f)(i)		
452 (f)(ii)		
452 (f)(iii)		
452 (g)(i)	Disclosure of exposure values by internal ratings based (IRB) exposure class.	Pages 47 - 48 / Tables 31 - 32: IRB approach - Credit risk exposures by exposure class and PD range (CR6); Pages 64 / Tables 46 - 47: IRB approach - CCR exposures by exposure class and PD scale (CCR4).
452 (g)(ii)		
452 (g)(iii)		
452 (g)(iv)		
452 (g)(v)		
452 (h)	Disclosure of back-testing of probability of default (PDs) by exposure class.	Page 103 / Table 64: IRB approach - Back-testing of PD per exposure class (fixed PD scale) (CR9) /Table 65: IRB approach - Back-testing of PD per exposure class (only for PD estimates according to Article 180(1)(f)) (CR9.1)
Use of credit risk mitigation techniques		
453 (a)	Description of CRM techniques	Page 108 - 110: Qualitative disclosure requirements related to CRM techniques (CRC)
453 (b)		
453 (c)		
453 (d)		
453 (e)		
453 (f)		Page 38 / Table 24: CRM techniques overview (CR3)
453 (g)		Page 41 / Table 27: IRB approach - Disclosure of the extent of the use of CRM techniques (CR7A); Page 39 / Table 25: Standardised approach - Credit risk exposure and CRM effects (CR4)
453 (h)		
453 (i)		
453 (j)		Page 40 / Table 26: IRB approach: Effect on the RWEAs of credit derivatives used as CRM techniques (CR7).

Appendix D – CRD V reference

Table 82: CRD V reference (Continued)

CRR ref.	High-level summary	Compliance reference
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	Page 81 / Table 63: Operational risk own funds requirements and risk-weighted exposure amounts (OR1) / Qualitative information on operational risk (ORA).
Use of internal market risk models		
455 (a) (i)	Disclosure of the characteristics of the market risk models.	Page 114 - 120 : Qualitative disclosure requirements for institutions using the IMA (MRB) / Table 66: Market risk models selected features Page 11 / Table 2: Summary of the scope of application of regulatory methodologies for CVA, market and operational risk
455 (a) (ii)	Disclosure of the methodology and description of all-price risk measure and incremental risk charge.	
455 (a)(iii)	Description of stress testing applied to sub-portfolios.	
455 (a)(iv)	Description of approaches used for back-testing.	
455 (b)	Scope of permission for use of the models.	
455 (c)	Policies and processes to determine which exposures are to be included in the trading book, and to comply with prudential valuation requirements.	
455 (d)	High/Low/Mean values over the year of VaR, sVaR, all-price risk measure and incremental risk charge.	Page 75 / Table 57: IMA values for trading portfolios (MR3).
455 (d) (i)		
455 (d) (ii)		
455 (d) (iii)		
455 (e)	The elements of the own fund calculation.	Page 77 / Table 60: Market risk under the IMA (MR2A).
455 (f)	Weighted average liquidity horizons of portfolios covered by models.	Page 117 - 118: Qualitative disclosure requirements for institutions using the IMA (MRB) / Table 66: Market risk models selected features Page 11 / Table 2: Summary of the scope of application of regulatory methodologies for CVA, market and operational risk
455 (g)	Comparison of end-of-day VaR measures compared with one-day changes in portfolio's value.	Page 120 : Comparison of VaR estimates with gains/losses (MR4).

Appendix E - EBA and BCBS reference

EBA Pillar 3 compliance reference

Table no	Page	High-level summary	Compliance reference
Table 3	12	Present the mapping of financial statement categories with regulatory risk categories	Template EU LI1 Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories In accordance with Article 436(c) in the CRR.
Table 4	13	Main sources of differences between regulatory exposure amounts and carrying values in financial statements	Template EU LI2 Present the main sources of differences between the financial statements' carrying value amounts and the exposure amounts used for regulatory purposes In accordance with Article 436(d) in the CRR.
Table 5	15	Provide an overview of a bank's prudential regulatory metrics	Template EU KM1: Key metrics Present an overview of prudential regulatory metrics as per the BCBS Pillar 3 disclosure requirements –consolidated and enhanced framework and as set out in points (a) to (g) of Article 447 CRR and in application of point (b) of Article 438 CRR.
Table 6	17	An overview of bank's loss absorbing capacity: internal MREL and requirements for own funds and eligible liabilities	Template EU iLAC Discloses own funds and eligible liabilities for the purpose of the requirement for own funds and eligible liabilities of entities that are not themselves resolution entities pursuant to Article 45f BRRD.
Table 7	18	Creditor ranking of the entity that is not a resolution entity	Template EU TLAC2a Captures all funding that is pari passu or junior to MREL - eligible instruments, including own funds and other capital instruments as per Article 45i(3) BRRD.
Table 8	19	Shows the components of regulatory capital	Template EU CC1 Provides details of the composition of regulatory own funds in accordance with points (a), (d), (e) and (f) of Article 437 of CRR. It also includes information on the linkages with the reconciliation disclosures in Template CC2.
Table 9	20	Reconciliation of regulatory own funds to balance sheet in the audited financial statements	Template EU CC2 Provides the audited balance sheet included in the Annual Report in accordance with point (a) of Article 437 CRR. It also includes the linkage with composition of regulatory capital in Template CC1.
Table 10	21	Key ratios with and without transitional arrangements for IFRS 9	Template EU IFRS 9-FL: Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs in accordance with EBA/GL/2018/01
Table 12	23	Overview of risk weighted assets by risk type and capital requirements	Template EU OV1 RWAs and minimum capital requirements under Part Three, Title I, Chapter 1 of the CRR. In accordance with Article 438(d) in the CRR.
Table 13	25	Flow statement explaining variations in the credit risk-weighted assets (RWA) under an IRB approach and the corresponding capital requirements	Template EU CR8 Present a flow statement explaining variations in the credit RWAs of exposures for which the risk-weighted amount is determined in accordance with Part Three, Title II, Chapter 3 Article 438(h) of the CRR. The information disclosed in this template excludes counterparty credit risk exposures from Part Three, Title II, Chapter 6.
Table 14	25	Flow statement explaining variations in the counterparty credit risk-weighted assets (RWA) under the IMM approach and the corresponding capital requirements	Template EU CCR7 Present a flow statement explaining changes in the CCR RWAs determined under the IMM for CCR (derivatives and SFTs) in accordance with point (h) of Article 438 CRR.
Table 15	26	Flow statement explaining variations in the market risk-weighted assets (RWA) under the IMA approach and the corresponding capital requirements	Template EU MR2-B Present a flow statement explaining variations in the market RWAs under IMA as specified in point (h) of Article 438 CRR.
Table 16	28	Summary reconciliation of accounting assets and leverage ratio exposures	Template EU LR1 - LRSum Reconciliation of the total leverage exposure and comprises of total IFRS assets used for statutory purposes, accounting consolidation and other leverage adjustments in application of point (b) of Article 451(1) of CRR.

Appendix E - EBA and BCBS reference

Table no	Page	High-level summary	Compliance reference
Table 17	29	Leverage ratio common disclosure	Template EU LR2 - LRCom Leverage ratio calculation and includes additional breakdowns for the leverage exposure measure in application of points (a) and (b) of Article 451(1) CRR and of Article 451(3) CRR, taking into account, where applicable, point (c) of Article 451(1) and Article 451(2) CRR.
Table 18	31	Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	Template EU LR3 - LRSpl Breakdown of the on-balance sheet exposures excluding derivatives, SFTs and exempted exposures in application of point (b) Article 451(1) CRR.
Table 19	32	Present the breakdown of a bank's cash outflows and cash inflows, as well as its available high-quality liquid assets (HQLA)	Template EU LIQ1- Quantitative information of Liquidity Coverage Ratio Present the breakdown of a bank's cash outflows and cash inflows, as well as its available high-quality liquid assets (HQLA), as measured and defined according to Article 451a(2) CRR.
Table 20	34	Presents the breakdown of bank's assets, liabilities and off-balance sheet items and its Net Stable Funding Ratio (NSFR)	Template EU LIQ2 - Net Stable Funding Ratio Present information about all assets, liabilities and off-balance sheet items in application of Article 451a(3) CRR.
Table 21	35	Present the breakdown of PVA for all assets measured at fair value (marked to market or marked to model) and for which PVA are required	PV1 Prudent valuation adjustments (PVA) Present the core approach for the determination of the additional valuation adjustment for prudent valuation in accordance with Chapter III of the Commission Delegated Regulation (EU) 2016/101 and in accordance with point (e) of Article 436 CRR.
Table 23	38	Flow statement explaining changes in the stock of non-performing loans and advances	Template EU CR2 - Changes in the stock of non-performing loans and advances Present a flow statement of changes in the stock of non-performing loans and advances as specified in point (f) of Article 442 CRR.
Table 24	38	Disclose the extent of the use of CRM techniques	Template EU CR3 Present all CRM techniques recognised under the applicable accounting framework regardless of whether these techniques are recognised under CRR, including, but not only, all types of collateral, financial guarantees and credit derivatives used for all secured exposures, irrespective of whether the standardised approach or the IRB approach is used for the calculation of risk weighted exposure amount in application of point (f) of Article 453 CRR.
Table 25	39	Credit risk exposure and CRM effects	Template EU CR4 Presents on-balance-sheet and off-balance-sheet exposure under the regulatory scope of consolidation before CCF and before CRM and post CCF and post CRM as well as RWA density to show the effect of all CRM techniques applied in accordance with Part Three, Title II, Chapter 4 of the CRR in application of points (g), (h) and (i) of Article 453 CRR and of point (e) of Article 444 CRR.
Table 26	40	This table provides the effect on the RWA amounts of credit derivatives used as CRM techniques	Template EU CR7 - IRB approach Presents pre-credit derivatives risk weighted exposures as well as actual risk weighed exposures split by exposure class in application of point (j) of Article 453 CRR. This template excludes counterparty credit risk exposures (Chapter 6 of Title II of Part Three CRR), securitisation exposures, other non-credit obligation assets and equity exposures.
Table 27	41	Disclosure of the extent of the use of CRM techniques	Template EU CR7A Presents exposure value post conversion factor, part of exposure covered by financial, immovable property and by other eligible collaterals, financial and physical collateral as well as upfront collaterals in application of point (g) of Article 453 CRR separately for exposures under A-IRB and F-IRB.
Table 28	43	Analysis of credit risk exposures by asset classes and risk weight after the application of CCF and CRM under the standardised approach	Template EU CR5 Regulatory exposure values broken down by risk weights. Institutions should disclose exposures post conversion factor and post risk mitigation techniques. The risk weight used for the breakdown corresponds to the different credit quality steps applicable in accordance with point (e) of Article 444 CRR.

Appendix E - EBA and BCBS reference

Table no	Page	High-level summary	Compliance reference
Table 30	46	This table provides a quantitative disclosure of counterparty credit risk specialised lending and equity exposures using the simple risk weight approach	Template EU CR10 (CR) The template applies to all institutions using one of the approaches included in the template in accordance with point (e) of Article 438 of CRR.
Table 31 & 32	47 to 48	Analysis of credit risk exposures by exposure classes and PD range under IRB approach	Template EU CR6 - IRB approach Present the information on the main parameters used for the calculation of capital requirements for IRB approach in application of point (g)(i)-(v) of Article 452 CRR. Information disclosed in this template excludes the data on specialised lending referred to in Article 153(4) CRR. This template excludes counterparty credit risk exposures (Chapter 6 of Title II of Part Three CRR), securitisation exposures and equity exposures.
Table 33	48	Represent the analysis of scope of the use of IRB and SA approaches	Template EU CR6A -IRB Approach Present the allocation of risk-weighted exposure amounts exposures subject to the Standardised Approach laid down in Chapter 2 of Title II of Part Three or to the IRB Approach laid down in Chapter 3 of Title II of Part Three to the exposure classes as defined under the IRB Approach. This template excludes counterparty credit risk exposures (Chapter 6 of Title II of Part Three CRR), and securitisation exposures in application of point (b) of Article 452 CRR.
Table 34	50	This table provides the information about maturity of exposures	Template EU CR1-A Present net exposure values split by maturity of exposures for loans and advances and debt securities in application of point (g) of Article 442 CRR.
Table 35	50	This table present credit quality of forborne exposures	Template EU CQ1 Provide a comprehensive picture of the credit quality of forborne exposures of the bank's cash balances at central banks and other demand deposits, loans and advances, counterparty breakdown, debt security and loan commitments given in nominal amounts with performing and non-performing forborne in accordance with point (c) of Article 442 CRR.
Table 36	51	Analysis of credit quality of performing and non-performing exposures by past due days	Template EU CQ3 Provide a comprehensive picture of the credit quality of performing and non-performing exposures by past due days in accordance with point (d) of Article 442 CRR.
Table 37	53	Analysis of the quality of non-performing exposures by geography	Template EU CQ4 Provide an overview of the quality of non-performing exposures by geography in application of points (c) and (e) of Article 442 CRR when non-domestic original exposures in all non-domestic countries in all exposure classes are equal to or higher than 10% of the total original exposures.
Table 38	54	Analysis of credit quality of loans and advances by industry	Template EU CQ5 Provide an overview of credit quality of loans and advances to non-financial corporations by industry in application of points (c) and (e) of Article 442 CRR.
Table 39	55	Analysis of performing and non-performing exposures and related provisions	Template EU CR1 Provide an overview of performing and non-performing exposures and related provisions in application of points (c) and (f) of Article 442 CRR.
Table 40	57	Loans and advances subject to legislative and non-legislative moratoria	This table provides an overview of the credit quality of loans and advances subject to moratoria or 'payment deferrals' on loan repayments applied in the light of the COVID-19 crisis, in accordance with the EBA guidance on payment deferrals.
Table 41	58	Breakdown of loans and advances subject to legislative and non-legislative moratoria by residual maturity of moratoria	This table provides an overview of the volume of loans and advances subject to legislative and non-legislative moratoria or 'payment deferrals' on loan repayments applied in light of the COVID-19 crisis, in accordance with the EBA guidance on payment deferrals - Further guidance on initial and further payment deferrals', by residual maturity of these moratoria
Table 42	58	Newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis	This table provides an overview of the stock of newly originated loans and advances subject to public guarantee schemes introduced in response to COVID-19 crisis

Appendix E - EBA and BCBS reference

Table no	Page	High-level summary	Compliance reference
Table 44	62	Analysis of counterparty credit risk exposures by approach	Template EU CCR1 Template present a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method in accordance with points (f), (g), and (k) of Article 439 CRR. This template excludes own funds requirements for CVA risk and exposures to a central counterparty. For securities financing transactions, it includes the exposure values before and after the effect of credit risk mitigation.
Table 45	63	Analysis of counterparty credit risk exposures by regulatory portfolio and risk weight under standardised approach	Template EU CCR3 Presents the analysis of counterparty credit risk exposures by regulatory portfolio and risk weight in accordance with point (l) of Article 439 CRR referring to point (e) of Article 444 CRR. This applies to institutions using the credit risk standardised approach to compute risk weighted exposure amounts for all or part of their CCR exposures in accordance with Article 107 CRR, irrespective of the CCR approach used to determine exposure values in accordance with Chapters 4 and 6 of Title II of Part Three CRR.
Table 46-47	64	Analysis of counterparty credit risk exposures by exposure classes and PD scale under IRB approach	Template EU CCR4 Presents the analysis of counterparty credit risk exposures by exposure classes and PD grade in accordance with point (l) of Article 439 CRR referring to point (g) of Article 452 CRR. RWAs and parameters used in RWA calculations (excluding those derived from own funds requirements for CVA risk and for exposures cleared through a CCP) for all or part of their CCR exposures in accordance with Article 107 CRR.
Table 48	65	This table shows the composition of collateral for exposures to CCR	Template EU CCR5 Provide a breakdown of fair values of collateral (posed or received) used in CCR exposures related to derivative transactions or to SFTs, whether or not the transactions are cleared through a CCP and whether or not collateral is posted to a CCP in application of point (e) of Article 439 CRR.
Table 49	66	This table shows credit derivatives exposures	Template EU CCR6 Provide a breakdown extent of an institution's exposures to credit derivative transactions broken down between derivatives bought or sold in application of point (j) of Article 439 CRR.
Table 50	66	This table shows the EAD and RWAs corresponding to exposures to central counterparties	Template EU CCR8 Provide a comprehensive picture of the Bank's exposures to CCPs in accordance with point (i) of Article 439 CRR including contracts and transactions listed in Article 301 (1) CRR for as long as they are outstanding with a CCP, as well as exposures to CCP-related transactions in accordance with Article 300 (2) CRR.
Table 51	67	This table provide CVA regulatory calculations (with a breakdown by standardised and advanced approaches).	Template EU CCR2 The template applies to all institutions with transactions subject to own funds requirements for capital valuation adjustment risk in accordance with Part Three, Title VI, point (h) of Article 439 in the CRR.
Table 52	69	This table shows securitisation exposures in the non-trading book	Template EU SEC1 Present securitisation exposures in the non-trading book in application of point (j) of Article 449 CRR.
Table 53	70	This table provide securitisation exposures in the non-trading book and associated regulatory capital requirements	Template EU SEC3 Present securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as originator or as sponsor in application of point (k)(i) of Article 449 CRR.
Table 54	71	This table show securitisation exposures in the non-trading book and associated regulatory capital requirements	Template EU SEC4 Present securitisation exposures in the non-trading book and associated regulatory capital requirements - institution acting as investor in application of point (k)(ii) of Article 449 CRR.
Table 55	72	This table show exposures securitised by the Bank	Template EU SEC5 Present exposures securitised by the institution, exposures in default and specific credit risk adjustments in application of Article 449(l) CRR.

Appendix E - EBA and BCBS reference

Table no	Page	High-level summary	Compliance reference
NA	118	Present a comparison of the results of estimates from the regulatory VaR model	Template EU MR4 Present a comparison of gains/losses with the regulatory VaR model approved in application of Part Three, Title IV, Chapter 5 of Regulation (EU) 575/2013 with both hypothetical and actual trading outcomes, to highlight the frequency and the extent of the back-testing exceptions, and to give an analysis of the main outliers in back-tested results in application of point (g) of Article 455 CRR .
Table 57	75	This template display the values (maximum, minimum, average and the ending for the reporting period) resulting from the different types of models approved to be used for computing the market risk regulatory capital charge at the group level before any additional capital charge is applied	Template EU MR3 Outputs of internal models approved for use in accordance with Part Three, Title IV, Chapter 5 point (d) of Article 455 CRR for regulatory capital purposes at the group level (according to the scope of regulatory consolidation as per Part One, Title II of the same regulation).
Table 59	76	Market risk under the standardised approach	Template MR1 Presents RWAs for interest rate, equity, foreign exchange and commodity risk as well as exposures related to options and securitisation in application of Article 445 CRR.
Table 60	77	Market risk under the internal models approach	Template MR2-A Capital requirements and RWAs in application of point (e) of Article 455 CRR.
Table 63	81	Operational risk own funds requirements and risk-weighted exposure amounts	Template OR1 Presents the information on operational risk own funds and RWAs in application of Articles 446 and 454 CRR. Provides the calculation of own funds requirements in accordance with Articles 312 to 324 of Title III of Part Three CRR.
Table 64 & 65	103	This table provides backtesting data to validate the reliability of PD calculations	Template EU CR9 and EU CR9.1 Present back-testing analysis under IRB approach split by PD grade for different exposure classes in application of point (h) of Article 452 CRR. This template applies to all institutions included in paragraph 7 of these guidelines using the AIRB approach and/or the FIRB approach. Where an institution makes use of an FIRB approach for certain exposures and an AIRB approach for others, it must disclose two separate sets of portfolio breakdowns in separate templates. For CR9.1 only PD estimates in accordance with point (f) of Article 180(1) CRR.
Table 67 & 68	139 - 140	This table provide a geographical distribution of credit exposures by country	CCYB Template requires institutions to disclose the geographical distribution by country of credit exposures of an institution that are relevant for the calculation of its countercyclical capital buffer in accordance with point (a) of Article 440 of CRR.

Appendices

Index of Tables

Appendices

Index of Tables

Note:

1 Pages 169 to 170 of the Annual Report (which is available at www.barclays.com/annualreport) includes information required to be disclosed on remuneration in accordance with CRR article 450.

Non applicable disclosures

Disclosures that are not included in this report

Frequency	Template/Table	Name of template/table	Rationale for exclusion
Quarterly	EU KM2	Key metrics - MREL and, where applicable, G-SII Requirement for own funds and eligible liabilities	BBI is not a G-SII.
Semi annual	EU TLAC1	Composition - MREL and, where applicable, the G-SII Requirement for own funds and eligible liabilities	BBI is not a G-SII.
Semi annual	EU TLAC3	Creditor ranking - resolution entity	BBI is not a resolution entity.
Semi annual	CR6	Credit risk exposures by exposure class and PD range for central governments and central banks	There were no credit risk exposures measured using IRB for central governments and central banks.
Semi annual	CR6	Credit risk exposures by exposure class and PD range for institutions	There were no credit risk exposures measured using IRB for institutions.
Semi annual	CR6	Credit risk exposures by exposure class and PD range for corporates	There were no credit risk exposures measured using IRB for corporates.
Semi annual	CR6	Credit risk exposures by exposure class and PD range for corporate of which: SMEs	There were no credit risk exposures measured using IRB for corporate of which: SMEs.
Semi annual	CQ2	Quality of forbearance	There are no such reportable forborne exposures.
Semi annual	CQ7	Collateral obtained by taking possession and execution processes	There was no collateral obtained by taking possession and execution processes.
Semi annual	CQ8	Collateral obtained by taking possession and execution processes – vintage breakdown	There was no collateral obtained by taking possession and execution processes for the vintage breakdown.
Semi annual	CQ6	Collateral valuation - loans and advances	This table is not required as BBI has not breached the 5% NPL ratio.
Semi annual	CR2-A	Changes in the stock of non-performing loans and advances and related net accumulated recoveries	This table is not required as BBI has not breached the 5% NPL ratio.
Semi annual	CCR4	Counterparty credit risk exposures by portfolio and PD range for institutions	BBI does not have counterparty credit risk exposures for institutions.
Semi annual	SEC2	Securitisation exposures in the trading book	BBI does not have securitised exposures in the trading book.

Appendices

Abbreviations used

AT1	Additional tier 1
AIRB	Advanced internal ratings based
ASA	Alternative Standardised Approach
AEaR	Annual Earnings at Risk
ALCO	Asset & Liability Committee
AQR	Asset Quality Review
BoE	Bank of England
BRRD	Bank Recovery and Resolution Directive
BBI	Barclays Bank Ireland PLC
BB PLC	Barclays Bank PLC
BCSL	Barclays Capital Securities Limited
B PLC	Barclays PLC
BCBS	Basel Committee on Banking Supervision
BIA	Basic Indicator Approach
bps	Basis points
BAC	Board Audit Committee
BRC	Board Risk Committee
CCB	Capital conservation buffer
CAPD	Capital deduction approach
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CBI	Central Bank of Ireland
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CRO	Chief Risk Officer
CIU	Collective investment undertaking
CET1	Common Equity Tier 1
CRMF	Conduct Risk Management Framework
CF	Conversion Factor
CCyB	Countercyclical capital buffer
CCR	Counterparty credit risk
CCF	Credit conversion factor
CDS	Credit default swap
CRM	Credit risk mitigation

CSA	Credit Support Annex
CVA	Credit Valuation Adjustment
CLT	Crisis Leadership Team
DVaR	Daily Value at Risk
DSVP	Deferred Share Value Plan
DTA	Deferred tax asset
DBO	Defined benefit Obligation
DC	Defined contribution
DGS	Deposit Guarantee Scheme
DIRT	Deposit Interest Retention Tax
DCF	Discounted Cash Flow
DDoS	Distributed denial of service
EWI	Early warning indicator
EaR	Earnings at Risk
EVE	Economic Value of Equity
EFPE	Effective expected positive exposure
EIR	Effective interest rate
ERMF	Enterprise Risk Management Framework
Euribor	Euro Inter Bank Offered Rate
EONIA	Euro Overnight Index Average
EBA	European Banking Authority
ECB	European Central Bank
EC	European Commission
EEA	European Economic Area
EMIR	European Market Infrastructure Regulation
EU	European Union
ECL	Expected credit losses
ELBE	Expected loss best estimate
EAD	Exposure at Default
ECAIs	External Credit Assessment Institutions
FVTPL	Fair Value Through Profit or Loss
FDIC	Federal Deposit Insurance Corporation
FRB	Federal Reserve Board
FCCM	Financial Collateral Comprehensive Method

Appendices

Abbreviations used

FCA	Financial Conduct Authority
FCRA	Financial Crime Risk Assessment
FPC	Financial Policy Committee
FPC	Financial Policy Committee
FSB	Financial Stability Board
TCFD	Financial Stability Board's Task Force on Climate-related Financial Disclosures
F&P	Fitness and Probity
FX	Foreign Exchange
FLI	Forward looking information
FIRB	Foundation IRB
FRTB	Fundamental Review of the Trading Book
FFVA	Funding Fair Value Adjustment
FTR	Funds Transfer Regulation
GDPR	General Data Protection Regulation
GHG	Global greenhouse gas emissions
G-SIB	Global systemically important banks
GDP	Gross domestic product
GMRP	Group Model Risk Policy
GMD	Group Models Database
HQLA	High quality liquid assets
HPI	House Price Index
IRC	Incremental Risk Charge
IBOR	Interbank Offered Rates
IRRBB	Interest Rate Risk in the Banking Book
IPU	Intermediate parent undertaking
IAA	Internal assessment approach
ICAAP	Internal Capital Adequacy Assessment Process
ILAAP	Internal Liquidity Adequacy Assessment Process
IMM	Internal Model Method
IRB	Internal ratings based
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IFRIC	International Financial Reporting Interpretations Committee
IFRS	International Financial Reporting Standard
IOSCO	International Organisation of Securities Commissions
ISDA	International Swaps and Derivative Association
ICA	Investor Compensation Act
ICS	Investor Compensation Scheme
JRAD	Joint Risk and Assessment Decision
KMP	Key management personnel
LCR	Liquidity Coverage Ratio
LRA	Liquidity Risk Appetite
LTV	Loan to Value
LIBOR	London Inter Bank Offered Rate
KIRB	Look through approach
LGD	Loss Given Default
MTM	Mark to Market
MAR	Market Abuse Regulation
MiFID	Markets in Financial Instruments Directive in Europe
MRT	Material Risk Taker
MREL	Minimum Requirement for own Funds and Eligible Liabilities
MSR	Mortgage Servicing Right(s)
NII	Net interest income
NSFR	Net Stable Funding Ratio
O-SII	Other systemically important institution
OTC	Over the Counter
OEIRB	Own-Estimates IRB
PSD2	Payments Services Directive
P2G	Pillar 2 guidance
P2R	Pillar 2 requirement
PFE	Potential future exposure
PD	Probability of Default
PVA	Prudent Valuation Adjustment
PRA	Prudential Regulation Authority

Appendices

Abbreviations used

POCI	Purchased or originated credit-impaired financial asset
QCCP	Qualifying central counterparty
RP	Recovery plan
EL	Regulatory expected loss
RoI	Republic of Ireland
RRMF	Reputational Risk Management Framework
RoW	Rest of World
RPI	Retail Price Index
RoU	Right of Use
RCSA	Risk and Control Self-Assessment
RFR	Risk free rate
RWAs	Risk weighted assets
RWEA	Risk weighted exposure amounts
SOFR	Secured Overnight Funding Rate
SFT	Securities Financing Transaction
SVP	Share Value Plan
SICR	Significant Increase in Credit Risk
SRB	Single Resolution Board
SRF	Single Resolution Fund
SRMR	Single Resolution Mechanism Regulations
SSM	Single Supervisory Mechanism
SME	Small or Medium Enterprise
SPPI	Solely payments of principal and interest
S&P	Standard and Poor's
SONIA	Sterling Overnight Index Average
SRA	Strategic risk assessment
SVaR	Stressed Value at Risk
SCA	Strong Customer Authentication
SFA	Supervisory formula approach
SREP	Supervisory Review & Evaluation Process
TSA	The Standardised Approach
TTC	Through-the-cycle
T1	Tier 1 capital
T2	Tier 2 capital
TLAC	Total Loss Absorbing Capacity
TREA	Total Risk Exposure Amount
Brexit	UK's withdrawal from the EU
UK	United Kingdom
US	United States
VaR	Value at Risk