



Barclays Bank Ireland PLC

Pillar 3 Report

31 December 2020



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Foreword

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 is comprised of 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 complete by the end of 2020, in advance of the end of the Brexit transition period. Further migrations during 2021 are expected.

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 2020

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 increased to 16.7% (December 2019: 14.5%) as a result of capital issuances to support business migrations, partly offset by an increase in the amount of risk weighted assets

The leverage ratio increased to 6.5% (December 2019: 5.7%) primarily driven by capital issuances, partly offset by an increase in the amount of leverage exposures

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. During 2020 the Bank operated within its risk appetite. The following risk metrics reflect the risk profile of BBI:

Common Equity Tier 1 ratio

16.7%

2019: 14.5%

(see page 17)

CRR leverage ratio

6.5%

2019: 5.7%

(see page 17)

Management Value at Risk

€0.7m

2019: €0.2m

(see page 90)

Common Equity Tier 1 capital

€4.0bn

2019: €2.6bn

(see page 18)

Liquidity pool

€21.0bn

2019: €14.9bn

(see page 30)

Liquidity coverage ratio

218%

2019: 187%

(see page 30)

Risk weighted assets

€23.7bn

2019: €17.9bn

(see page 22)

Pillar 3 report regulatory framework

The Pillar 3 report is prepared in accordance with the Capital Requirements Regulation and Capital Requirement Directive ('CRR' and 'CRD IV', also known as the 'CRD IV legislative package'). In particular, articles 431 to 455 of the CRR specify the Pillar 3 framework requirements. The CRD IV legislative package came into force on 1 January 2014.

The Pillar 3 disclosures have also been prepared in accordance with the European Banking Authority "Guidelines on materiality, proprietary and confidentiality and on disclosure frequency under Articles 432(1), 432(2) and 433 of CRR" and EBA "Guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013", as amended by Regulation (EU) 2019/876, in effect at the reporting date.



See 'Application of the Basel framework' on page 8 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 2020, 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.



See page 105 of the Annual Report for a more detailed description of the migration of business between Barclays Bank PLC (BBPLC) and BBI.

Key changes in the 2020 Pillar 3 Report

Regulatory updates

The following regulatory updates form part of the CRR, as amended by CRR II:

On 22 April 2020, the regulatory technical standards on prudent valuation were amended to include an increase to diversification factors applied to certain additional valuation adjustments. The amendments temporarily reduced the additional value adjustment deduction (PVA).

On 27 June 2020, CRR as amended by CRR II was further amended by Regulation (EU) 2020/873 to accelerate specific CRR II measures and introduce temporary reliefs to ensure that institutions are able to channel funds to businesses and households effectively and to mitigate the economic shock caused by the COVID-19 pandemic. The accelerated provisions, some of which are temporary, are

known as the 'CRR II quick fix'. Some of the quick fixes relevant to the Bank as follows:

- The implementation of a new IFRS 9 transitional relief calculation. The IFRS 9 transitional arrangements have been extended by two years and a new modified calculation has been introduced. 100% relief will be applied to 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.
- A temporary measure relating to the calculation of the leverage ratio that excludes certain exposures to central banks from the total exposure measure. An institution may exclude certain exposures to central banks from the total exposure measure if the competent authority has determined, in conjunction with the relevant central bank, and declared that exceptional circumstances exist that warrant the exclusion. The derogation from Article 429(4) CRR is permitted until 27 June 2021.
- Competent authorities have been provided with the ability to mitigate the negative effects of the extreme market volatility observed during the COVID-19 pandemic and exclude the effects of overshootings on the measurement of market risk under approved internal models, that occurred or may arise between 1 January 2020 and 31 December 2021 which are not a result of deficiencies in those internal models.
- On 23 December 2020, a new regulatory technical standard on the prudential treatment of qualifying software assets was adopted into EU law replacing the CET1 capital deduction with prudential amortisation up to a 3-year period. Intangible assets that are no longer deducted are subject to 100% risk weight instead.

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

This report includes three new tables 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 Directive¹ ('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.

¹ 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

Notes on basis of preparation

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.

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.

Certain aspects of CRR II are dependent on the final technical standards to be issued by the EBA and adopted by the European Commission.

On 22 February 2021 the SRB notified the Bank that an individual MREL target (to be met by 1 January 2024, on an ongoing basis thereafter) and an interim individual MREL target (effective 1 January 2022) had been set.

The Bank is also subject to Total Loss Absorption Capacity ("TLAC") requirements from 1 January 2021 when the Bank became a material EU subsidiary of a non EU Globally Systemically Important Bank ('G-SIB') following the end of the Brexit transitional period.

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.

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

This report includes three tables; Table 45 to Table 47, per the EBA guideline (EBA/GL/2018/10) published in December 2018 and was introduced to improve the uniform disclosure format for the information on NPEs, forbore exposures and foreclosed assets.

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 2020, 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 F for a reference to BBI compliance with the CRD IV.'

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. In addition, we have made every effort to comply with the "EBA's Guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013."

Rhys Kiff

Chief Risk Officer

Jasper Hanebuth

Chief Financial Officer

Scope and application of Basel rules

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

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

Table 7 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 'CRDIV' also known as the 'CRDIV legislative package').

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 IV 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 i.e. Advanced IRB (AIRB).

The Bank had temporary regulatory approval to use Group internal credit models in the calculation of the majority of its credit risk and

counterparty credit risk exposures. On 1 October 2020 the ECB advised the Bank that the temporary approval, as it related to its wholesale credit businesses but not including counterparty credit risk or retail credit risk, would be withdrawn. The effective date of the withdrawal of this 'Temporary Tolerance' was 31 December 2020 and from that date affected credit risk exposures will be measured using the Standardised Approach. The Bank continues to use AIRB for a substantial proportion of its retail exposures.



See page 33 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 Mark to Market method (MTM, also known as Current Exposure Method) used for derivatives which is the sum of the current market value of the instrument plus an add-on (dependent on potential future exposure, or PFE) that accounts for the potential change in the value of the contract over its residual maturity
- 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 75 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, and incorporates the effective maturity and EAD from the CCR calculation (outlined above)
- Advanced approach: this approach requires the calculation of the charge as; a) a 10-day 99% value at risk (VaR) measure for the current two-year period; and b) the same measure for a stressed period. The sum of the two VaR measures is scaled by the VaR multiplier (3.4 at year end) to yield the capital charge.



See page 87 for more details on CVA

Application of the Basel framework

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 88 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
- an average of three years projected income for those business lines where historical income is not clearly identifiable, for example from the Bank's Markets business. For 2020, projected income was used which were based off projections from the 2019 Medium Term Plan (MTP).



See page 94 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.

This CET1 requirement excludes Pillar 2 guidance (P2G) which is not publicly disclosed.

The combined buffer requirement as at 31 December 2020 includes a capital conservation buffer (CCB) of 2.5%, a countercyclical buffer (CCyB) requirement of 0.23% and an O-SII capital buffer of 0.5%. National authorities determine the appropriate countercyclical buffer that should be applied to exposures in their jurisdiction. As at 31 December 2020, the CBI had set a countercyclical buffers of 0% for Irish exposures.

BBI's Pillar 2R and O-SII buffer requirements are subject to annual review by the Single Supervisory Mechanism (SSM) and CBI respectively. The current Pillar 2R 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. All capital, RWA and leverage calculations reflect the Bank's interpretation of the current rules.

The European Commission introduced a binding leverage requirement of 3% as part of the introduction of the second phase of the CRR. The binding leverage requirement is applicable from 28 June 2021.

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

Application of the Basel framework

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 sees the introduction of a binding reporting requirement by banks to their supervisor for the standardised approach (FRTB-SA). It will be introduced in the third quarter of 2021 and is mandatory for all banks with trading activity above a certain level. In the second phase, the EU Commission has been asked to submit a legislative proposal that will require banks to meet their capital requirements under the new rules. It is

anticipated that, once these new rules have been adopted, a three-year implementation period will follow.

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 had temporary regulatory approval to use Group internal credit models in the calculation of the majority of its credit risk and counterparty credit risk exposures up to 31 December 2020. On 1 October 2020 the ECB advised the Bank that the temporary approval, as it related to its wholesale credit businesses but not including counterparty credit risk or retail credit risk, would be withdrawn. The effective date of the withdrawal of this 'Temporary Tolerance' was 31 December 2020 and from that date affected credit risk exposures will be measured using the Standardised Approach. The Bank continues to use AIRB for a substantial proportion of its retail exposures. Those internal credit risk models are now included in the Bank's roll-out plan for regulatory approval. The following table summarises the principal portfolios within BBI that use the Standardised and Advanced IRB approaches as at 31 December 2020.

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

As at 31 December 2020	Credit risk (see Table 22)			Counterparty credit risk excl. CVA (see Table 55)			Advanced Internal Ratings Based (IRB) approaches	Standardised approach
	RWA €m	Average risk weight	EAD post-CRM €m	RWA €m	Average risk weight	EAD post-CRM €m		
	15,409	35%	44,330	3,866	45%	8,664	<ul style="list-style-type: none"> Counterparty credit risk exposures <ul style="list-style-type: none"> Germany retail credit cards Italy home loans 	<ul style="list-style-type: none"> Most investment bank portfolios High quality liquidity pool assets European corporate portfolio <ul style="list-style-type: none"> 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

Risk Type	RWAs €m	Scope
Credit value adjustment	342	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	1,865	<p>As explained on page 132 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 9 on page 22 for capital requirements related to each approach and risk category.</p> <p>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.</p> <p>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.</p>
Operational risk	2,235	BBI applies the Standardised Approach (TSA) for operational risk regulatory capital purposes.

Linkage between financial statements and regulatory risk

Table 3:L11 – Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk

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 132.

	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework ^a	Not subject to capital requirements or subject to deduction from capital ^b
As at 31 December 2020	€m	€m	€m	€m	€m	€m	€m
Assets							
Cash and balances at central banks	20,066	20,066	20,066	-	-	-	-
Cash collateral and settlement balances	19,061	19,061	20	14,736	-	-	4,305
Loans and advances at amortised cost	13,049	13,049	13,049	-	-	-	-
Reverse repurchase agreements and other similar secured lending	3,174	3,174	-	3,174	-	-	-
Trading portfolio assets	7,379	7,379	119	-	-	7,260	-
Financial assets at fair value through the income statement	14,749	14,749	357	14,392	-	-	-
Derivative financial instruments	56,842	56,842	-	56,842	-	56,516	-
Financial assets at fair value through other comprehensive income	-	-	-	-	-	-	-
Investments in associates and joint ventures	-	-	-	-	-	-	-
Goodwill and intangible assets	50	50	-	-	-	-	50
Property, plant and equipment	106	106	106	-	-	-	-
Current tax assets	6	6	6	-	-	-	-
Deferred tax assets	188	188	188	-	-	-	-
Retirement benefit assets	-	-	-	-	-	-	-
Other assets	267	267	267	-	-	-	-
Total assets	134,937	134,937	34,178	89,144	-	63,776	4,355
Liabilities							
Deposits at amortised cost	23,108	23,108	-	-	-	-	23,108
Cash collateral and settlement balances	19,432	19,432	-	15,691	-	-	3,741
Repurchase agreements and other similar secured borrowing	3,583	3,583	-	527	-	-	3,056
Debt securities in issue	2,297	2,297	-	-	-	-	2,297
Subordinated liabilities	1,061	1,061	-	-	-	-	1,061
Trading portfolio liabilities	7,771	7,771	-	-	-	7,771	-
Financial liabilities designated at fair value	14,871	14,871	-	11,309	-	2,038	1,524
Derivative financial instruments	57,733	57,733	-	57,733	-	57,733	-
Current tax liabilities	7	7	-	-	-	-	7
Deferred tax liabilities	-	-	-	-	-	-	-
Retirement benefit liabilities	28	28	-	-	-	-	28
Other liabilities	416	416	-	-	-	-	416
Provisions	72	72	-	-	-	-	72
Total liabilities	130,379	130,379	-	85,260	-	67,542	35,310

Notes

The following points should be considered in conjunction with table L11:

- a The column "Subject to market risk framework" is based on trading book asset, as shown in the table "balance sheet split by trading and banking books" see page 89
- b For liabilities, balances shown in column "Not subject to capital requirements or subject deduction from capital" are balancing amount 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 assets 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, which reflect regulatory add on such as those applied for the FCCM calculation.

	Total €m ^a	Subject to the credit risk framework €m	Subject to the CCR framework €m	Subject to the securitisation framework €m
As at 31 December 2020				
Assets carrying value amount under the scope of regulatory consolidation (as per template LI1)	123,322	34,178	89,144	-
Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	(85,260)	-	(85,260)	-
Total net amount under the regulatory scope of consolidation	38,062	34,178	3,884	-
Off-balance-sheet amounts ^b	59,255	13,982	38,658	-
Differences in valuations	-	-	-	-
Differences due to different netting rules	(35,925)	-	(35,925)	-
Differences due to consideration of provisions	346	346	-	-
Differences due to prudential filters	-	-	-	-
Differences between input balance and modelled regulatory output	5,268	1,391	3,877	-
Regulatory exclusion –CCP trades for a client where Barclays acts as clearing member on behalf of a counterparty	(1,830)	-	(1,830)	-
Credit Enhancement Exposure for Sponsor trades	-	-	-	-
Exposures of Synthetic Securitisation trades	-	-	-	-
Other	849	849	-	-
Exposure amounts considered for regulatory purposes	66,025	50,746	8,664	-

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

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Analysis of treasury and capital risk

This section details BBI's capital position providing information on capital resources, requirements, leverage and liquidity

Key Metrics

*2020 Common Equity
Tier 1 ratio*

16.7%

2019: 14.5%

*2020 CRR leverage
ratio*

6.5%

2019: 5.7%

*2020 Liquidity coverage
ratio*

218%

2019: 187%

Analysis of treasury and capital risk

Table 5: KM1 - Key metrics and movements

	As at 31 December 2020 €m	As at 31 December 2019 €m
Available capital (amounts)		
1 Common Equity Tier 1 (CET1) ^a	3,955	2,599
1a Fully loaded Expected Credit Loss (ECL) accounting model ^b	3,808	2,552
2 Tier 1	4,520	3,164
2a Fully loaded ECL accounting model Tier 1	4,373	3,117
3 Total capital	5,236	3,753
3a Fully loaded ECL accounting model total capital	5,108	3,730
Risk-weighted assets (amounts)		
4 Total risk-weighted assets (RWA) ^a	23,717	17,879
4a Fully loaded ECL accounting model total risk-weighted assets (RWA) ^b	23,611	17,849
Risk-based capital ratios as a percentage of RWA		
5 Common Equity Tier 1 ratio (%)	16.7%	14.5%
5a Fully loaded ECL accounting model Common Equity Tier 1 (%)	16.1%	14.3%
6 Tier 1 ratio (%)	19.1%	17.7%
6a Fully loaded ECL accounting model Tier 1 ratio (%)	18.5%	17.5%
7 Total capital ratio (%)	22.1%	21.0%
7a Fully loaded ECL accounting model total capital ratio (%)	21.6%	20.9%
Additional CET1 buffer requirements as a percentage of RWA		
8 Capital conservation buffer requirement (%)	2.5%	2.5%
9 Countercyclical buffer requirement (%)	0.2%	0.2%
10 Bank O-SII buffer requirements (%) ^c	0.5%	0.3%
11 Total of bank CET1 specific buffer requirements (%) (row 8 + 9 + 10)	3.2%	3.0%
12 CET1 available after meeting the bank's minimum capital requirements (%)	7.2%	11.5%
CRR leverage ratio		
13 Total CRR leverage ratio exposure measure	69,562	54,431
14 Fully loaded CRR leverage ratio (%) ^d	6.5%	5.7%
Liquidity Coverage Ratio		
15 Total HQLA	21,007	14,873
16 Total net cash outflows	9,631	7,933
17 LCR ratio (%)	218%	187%

Notes:

a CET1 capital and RWAs 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 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 is calculated without applying the transitional arrangements of the CRR as amended by the CRR II applicable as at the reporting date.

Analysis of treasury and capital risk

Table 6: CC1 – Composition of regulatory capital

This table shows the components of regulatory capital presented on both a transitional and fully loaded basis as at 31 December 2020.

	Ref	As at 31 December 2020 Transitional position	As at 31 December 2020 Fully Loaded position
		€m	€m
Common Equity Tier 1 capital: instruments and reserves			
1	(h)	2,282	2,282
2		67	67
3		1,571	1,571
6		3,920	3,920
Common Equity Tier 1 capital: regulatory adjustments			
7		(18)	(18)
8	(a) less (b)	(37)	(37)
12		(26)	(26)
14		87	87
EU-25a		(118)	(118)
27a		147	-
28		35	(112)
29		3,955	3,808
Additional Tier 1 capital: instruments			
30	(i)	565	565
31		565	565
36		565	565
Additional Tier 1 capital: regulatory adjustments			
43		-	-
44		565	565
45		4,520	4,373
Tier 2 capital: instruments and provisions			
46		735	735
51		735	735
Tier 2 capital: regulatory adjustments			
		(20)	-
57		(20)	-
58		715	735
59		5,236	5,108
60		23,717	23,611
Capital ratios and buffers			
61		16.7%	16.1%
62		19.1%	18.5%
63		22.1%	21.6%
64		9.47%	9.51%
65		2.5%	2.5%
66		0.4%	0.2%
67		0.0%	0.0%
68		0.5%	0.5%
68		7.2%	6.6%
Amounts below the thresholds for deduction (before risk weighting)			
75		102	102
Applicable caps on the inclusion of provisions in Tier 2			
77		179	179
79		29	29

Notes:

† The references (a) - (i) identify balance sheet components in Table 10 on page 22 which are used in the calculation of regulatory capital.

Analysis of treasury and capital risk

Table 7: CC2 – Reconciliation of regulatory capital to balance sheet

The following tables show the reconciliation between balance sheet for statutory and regulatory scope of consolidation. The amount shown under the regulatory scope of consolidation is not a risk weighted asset measure; it is based on an accounting measure and cannot be directly reconciled to other tables in this report.

Ref†	Accounting balance sheet per published financial statements €m	Deconsolidation of insurance/other entities €m	Consolidation of banking associates/other entities €m	Balance sheet per regulatory scope of consolidation €m
As at 31 December 2020				
Assets				
	20,066	-	-	20,066
Cash and balances at central banks	19,061	-	-	19,061
Cash collateral and settlement balances	13,049	-	-	13,049
Loans and advances at amortised cost				
Reverse repurchase agreements and other similar secured lending	3,174	-	-	3,174
Trading portfolio assets	7,379	-	-	7,379
Financial assets at fair value through the income statement	14,749	-	-	14,749
Derivative financial instruments	56,842	-	-	56,842
Financial assets at fair value through other comprehensive income	-	-	-	-
Investments in associates and joint ventures	-	-	-	-
Goodwill and intangible assets	50	-	-	50
Of which: goodwill	(a) -	-	-	-
Of which: other intangibles (excluding MSRs)	(b) 50	-	-	50
Property, plant and equipment	106	-	-	106
Current tax assets	6	-	-	6
Deferred tax assets	188	-	-	188
Retirement benefit assets	-	-	-	-
Other assets	267	-	-	267
Total assets	134,937	-	-	134,937
Liabilities				
Deposits at amortised cost	23,108	-	-	23,108
Cash collateral and settlement balances	19,432	-	-	19,432
Repurchase agreements and other similar secured borrowing	3,583	-	-	3,583
Debt securities in issue	2,297	-	-	2,297
Subordinated liabilities	1,061	-	-	1,061
Trading portfolio liabilities	7,771	-	-	7,771
Financial liabilities designated at FV	14,871	-	-	14,871
Derivative financial instruments	57,733	-	-	57,733
Current tax liabilities	7	-	-	7
Deferred tax liabilities	-	-	-	-
Retirement benefit liabilities	28	-	-	28
Other liabilities	416	-	-	416
Provisions	72	-	-	72
Total liabilities	130,379	-	-	130,379
Equity				
Called up share capital and share premium	2,282	-	-	2,282
Of which: amount eligible for CET1	(h) 2,282	-	-	2,282
Other equity instruments	(i) 565	-	-	565
Other reserves	(132)	-	-	(132)
Retained earnings	1,843	-	-	1,843
Total equity excluding non-controlling interest	4,558	-	-	4,558
Non-controlling interest	-	-	-	-
Total equity	4,558	-	-	4,558
Total liability and equity	134,937	-	-	134,937

Note:

† The references (a) - (h) identify balance sheet components that are used in the calculation of regulatory capital in Table 9 on page 22

Analysis of treasury and capital risk

IFRS 9 – Transitional capital arrangements

On 1 January 2018, IFRS9 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. The transitional benefit 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 benefit from 2023.

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

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.

Any increases in impairment allowances as a result of IFRS 9, net of tax, decreases shareholders' equity through retained earnings. This is somewhat mitigated by the transitional relief applied on eligible impairment.

For regulatory 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.

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.

Standardised RWAs decrease due to the increase in impairment being offset against the Standardised Credit Risk exposures.

Analysis of treasury and capital risk

Table 8: 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 2020 €m	As at 31 December 2019 €m
Available capital (amounts)		
1 Common Equity Tier 1 (CET1) capital ^a	3,955	2,599
2 Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	3,808	2,552
3 Tier 1 capital ^b	4,520	3,164
4 Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	4,373	3,117
5 Total capital ^b	5,236	3,753
6 Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	5,108	3,730
Risk-weighted assets (amounts)		
	€m	€m
7 Total risk-weighted assets ^a	23,717	17,879
8 Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	23,611	17,849
Capital ratios		
9 Common Equity Tier 1 (as a percentage of risk exposure amount)	16.7%	14.5%
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	16.1%	14.3%
11 Tier 1 (as a percentage of risk exposure amount)	19.1%	17.7%
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%	17.5%
13 Total capital (as a percentage of risk exposure amount)	22.1%	21.0%
14 Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	21.6%	20.9%
Leverage ratio		
	€m	€m
15 Leverage ratio total exposure measure	69,562	54,431
16 Leverage ratio ^c	6.5%	5.8%
17 Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	6.3%	5.7%

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 is calculated applying the fully phased in treatment of the CRR.

Analysis of treasury and capital risk

Table 9: Risk weighted assets by risk type

This table shows risk weighted assets by risk type.

	Credit risk		Counterparty credit risk				Market risk		Operational risk	Total RWAs €m
	Std €m	A-IRB €m	Std €m	A-IRB €m	Settlement risk €m	CVA €m	Std €m	IMA €m	TSA €m	
As at 31 December 2020	10,941	4,468	3,529	316	21	342	6	1,859	2,235	23,717
As at 31 December 2019	4,531	8,105	606	1,194	120	322	-	766	2,235	17,879

Table 10: 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		Minimum Capital Requirements	
	As at 31 December 2020 €m	As at 31 December 2019 €m	As at 31 December 2020 €m	As at 31 December 2019 €m
1 Credit risk (excluding counterparty credit risk) (CCR)	15,409	12,636	1,232	1,011
2 Of which standardised approach	10,941	4,531	875	363
3 Of which the foundation IRB (FIRB) approach	-	-	-	-
4 Of which the advanced IRB (AIRB) approach	4,468	8,105	357	648
5 Of which Equity IRB under the Simple risk-weight or the internal models approach	-	-	-	-
6 CCR	4,187	2,122	335	170
7 Of which mark to market	374	436	30	35
8 Of which original exposure	-	-	-	-
9 Of which standardised approach	-	-	-	-
9a Of which financial collateral comprehensive method	56	3	5	-
10 Of which internal model method	3,287	1,312	263	105
11 Of which risk exposure amount for contributions to the default fund of a CCP	128	49	10	4
12 Of which CVA	342	322	27	26
13 Settlement risk	21	120	2	10
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	766	149	61
20 Of which the standardised approach	6	-	-	-
21 Of which IMA	1,859	766	149	61
22 Large exposures	-	-	-	-
23 Operational risk	2,235	2,235	179	179
24 Of which basic indicator approach	-	-	-	-
25 Of which standardised approach	2,235	2,235	179	179
26 Of which advanced measurement approach	-	-	-	-
27 Amounts below the thresholds for deduction (subject to 250% risk weight)	255	-	20	-
28 Floor Adjustments	-	-	-	-
29 Total	23,717	17,879	1,897	1,430

For further detail on movements in RWAs for each risk type please see Analysis of credit risk (page 33), Analysis of counterparty credit risk (page 75), Analysis of market risk (page 88), and Analysis of operational risk (page 94).

Analysis of treasury and capital risk

Table 11: Movements in risk weighted assets

The below tables show movements in RWAs, split by risk types and macro drivers

Risk Weighted Assets	Credit Risk €m	Counterparty Credit Risk ^a €m	Market Risk €m	Operational Risk €m	Total €m
1 As at 1 January 2020	12,636	2,242	766	2,235	17,879
2 Book size	207	938	1,167	-	2,312
3 Acquisitions and disposals	1,456	-	-	-	1,456
4 Book quality	121	125	-	-	246
5 Model updates	-	(47)	-	-	(47)
6 Methodology and policy	989	935	(68)	-	1,856
7 Foreign exchange movement	-	-	-	-	-
8 Other	-	15	-	-	15
9 As at 31 December 2020	15,409	4,208	1,865	2,235	23,717

Notes:

a RWAs in relation to default fund contributions are included in counterparty credit risk.

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 2020, 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.

Tables 12, 13 and 14 below show a subset of the information included in table 11, focused on positions captured under modelled treatment.

Table 12: CR8 - RWA flow statement of credit risk exposures under the IRB approach

	RWA amount €m	Capital requirements €m
1 As at 1 January 2020	8,105	648
2 Asset size	350	28
3 Asset quality	(114)	(9)
4 Model updates	242	19
5 Methodology and policy	(3,737)	(299)
6 Acquisitions and disposals	-	-
7 Foreign exchange movements	-	-
8 Other	-	-
9 As at 31 December 2020	4,468	357

The movement in "Methodology and policy" is attributable to the withdrawal of approval to use certain of the Group's internal credit risk models.

Analysis of treasury and capital risk

Table 13: 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) and will not directly reconcile to CCR AIRB RWAs in table 9.

	RWA amount €m	Capital requirements €m
1 As at 1 January 2020	1,312	105
2 Asset size	1,150	92
3 Credit quality of counterparties	122	10
4 Model updates (IMM only)	-	-
5 Methodology and policy (IMM only)	703	56
6 Acquisitions and disposals	-	-
7 Foreign exchange movements	-	-
8 Other	-	-
9 As at 31 December 2020	3,287	263

IMM RWAs increased €2.0bn to €3.3bn primarily due to migrations, an increase in collateral, trading activity and volatility.

Table 14: MR2-B - RWA flow statement of market risk exposures under the IMA

	VaR €m	SVaR €m	IRC €m	CRM €m	Other ^a €m	Total RWA €m	Total Capital requirements €m
1 As at 1 January 2020	107	281	376	-	2	766	61
2 Movement in risk levels	286	434	129	-	312	1,161	93
3 Model updates/changes	-	-	-	-	-	-	-
4 Methodology and policy	(52)	(115)	-	-	99	(68)	(5)
5 Acquisitions and disposals	-	-	-	-	-	-	-
6 Foreign exchange movements	-	-	-	-	-	-	-
7 Other	-	-	-	-	-	-	-
8 As at 31 December 2020	341	600	505	-	413	1,859	149

Note:

a "Other" column includes all Risks Not In Model Engines (VaR type Risks Not In VaR and Stress Risks Not In VaR)

Internal Model Approach (IMA) RWAs increased €1.1bn to €1.9bn primarily due to an increase in risk levels as the Bank' parent transferred some European Government Bond trading desks, notably German, Italian, Spanish and French sovereign bonds.

Methodology and Policy decreased by €68m due to changes in the minimum multiplication factor throughout the year.

Analysis of treasury and capital risk

Basis of preparation for movements in risk weighted assets

This analysis splits RWA movement by 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 completeness purposes.

1. 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.

2. 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.

3. 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.

4. 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.

5. 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.

Analysis of treasury and capital risk

6. Foreign exchange movements

This is the movement in RWAs as a result of changes in the exchange rate between the functional currency of the BBI business area or portfolio and our presentational currency for consolidated reporting. It should be noted that foreign exchange movements shown in Table **Error! Reference source not found.** do not include the impact of foreign exchange for the counterparty credit risk or market risk RWAs.

7. 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. This category had a nil balance for the year ended 31 December 2020.

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 2020.

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 15: LR1 - Summary 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 2020	As at 31 December 2019
		€m	€m
1	Total assets as per published financial statements	134,937	69,045
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-	-
4	Adjustments for derivative financial instruments	(57,778)	(22,617)
5	Adjustments for securities financing transactions (SFTs)	767	64
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	11,785	7,992
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)	-	-
7	Other adjustments	(72)	(53)
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	54,431

Notes:

a Capital and leverage measures are calculated applying CRR as amended by CRR II applicable as at the reporting date.

b Leverage ratio is calculated applying the fully loaded treatment of the CRR.

Analysis of treasury and capital risk

Table 16: 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 2020 €m	As at 31 December 2019 €m
On-balance sheet exposures (excluding derivatives and SFTs)		
1	60,925	37,409
EU-1a	(3,738)	-
2	(81)	(53)
3	57,106	37,356
Derivative exposures		
4	3,708	1,700
5	12,747	10,487
7	(14,158)	(5,034)
8	(3,282)	(2,440)
9	14,891	14,945
10	(14,842)	(14,945)
11	(936)	4,712
Securities financing transaction exposures		
12	36,026	5,829
13	(18,847)	(1,522)
14	767	64
16	17,946	4,371
Other off-balance sheet exposures		
17	28,387	21,893
18	(16,602)	(13,901)
19	11,785	7,992
EU-19b	(16,339)	-
Capital and total exposures		
20	4,373	3,117
21	69,562	54,431
EU-21a	85,892	-
Leverage ratio		
22	6.5%	5.7%
EU-22a	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 CRR leverage ratio increased to 6.5%. The Tier 1 capital increased by €1.3bn to €4.4bn, which included a net increase in Common Equity Tier 1 capital. The CRR leverage exposure increased by €15.1bn to €69.6bn primarily driven by increase in cash balances held with central banks and increases in SFTs.

Analysis of treasury and capital risk

Table 17: 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 2020	As at 31 December 2019
	€m	€m
EU-1 Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	25,573	31,547
EU-2 Trading book exposures	7,593	3,077
EU-3 Banking book exposures, of which:	17,980	28,470
EU-4 Covered bonds	-	-
EU-5 Exposures treated as sovereigns	3,875	13,021
EU-6 Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns	77	-
EU-7 Institutions	962	2,779
EU-8 Secured by mortgages of immovable properties	5,904	5,831
EU-9 Retail exposures	3,501	3,775
EU-10 Corporate	2,824	2,503
EU-11 Exposures in default	334	238
EU-12 Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	503	323

Risk and capital position review

Analysis of treasury and capital risk

Table 18: 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 Annexure II which complements Article 435(1)(f) of Regulation (EU) No 575/2013.

Liquidity coverage ratio (period end)		Total period end value				
		31.12.20	30.09.20	30.06.20	31.03.20	31.12.19
		€m	€m	€m	€m	€m
Liquidity buffer		21,007	21,833	20,367	20,424	14,873
Total net cash outflows		9,631	10,708	9,678	10,515	7,933
Liquidity coverage ratio (%) (period end)		218%	204%	210%	194%	187%

Liquidity coverage ratio (average)		Total unweighted value (average)					Total weighted value (average)				
		31.12.20	30.09.20	30.06.20	31.03.20	31.12.19	31.12.20	30.09.20	30.06.20	31.03.20	31.12.19
Number of data points used in calculation of averages		12	12	12	12	1 ^a	12	12	12	12	1 ^a
High-quality liquid assets		€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
1	Total high-quality liquid assets (HQLA)						19,954	18,380	16,500	15,685	14,873
Cash outflows											
2	Retail deposits and deposits from small business customers, of which:	1,596	1,601	1,603	1,465	1,677	158	158	158	144	165
3	Stable deposits	44	46	47	50	53	2	2	2	3	3
4	Less stable deposits	1,552	1,555	1,552	1,415	1,624	155	156	156	142	163
5	Unsecured wholesale funding, of which:	14,601	14,856	12,713	12,662	11,020	7,492	7,822	6,429	7,145	5,629
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	2,964	2,588	2,442	2,205	1,891	739	645	611	551	473
7	Non-operational deposits (all counterparties)	11,500	12,140	10,230	10,364	9,129	6,616	7,049	5,778	6,500	5,156
8	Unsecured debt	137	128	40	94	-	137	128	40	94	-
9	Secured wholesale funding						822	605	381	266	356
10	Additional requirements, of which:	18,225	16,786	15,500	14,475	15,699	7,576	7,041	6,293	5,408	5,092
11	Outflows related to derivative exposures and other collateral requirements	5,530	5,223	4,547	3,495	3,280	5,530	5,223	4,547	3,495	3,280
12	Outflows related to loss of funding on debt products	382	285	182	156	145	382	285	182	156	145
13	Credit and liquidity facilities	12,312	11,277	10,771	10,823	12,275	1,663	1,533	1,564	1,756	1,668
14	Other contractual funding obligations	-	-	-	-	-	-	-	-	-	-
15	Other contingent funding obligations	8,244	8,210	7,900	7,746	8,522	451	434	436	364	470
16	Total cash outflows						16,498	16,061	13,987	13,327	11,356
Cash inflows											
17	Secured lending (e.g. reverse repos)	13,104	9,434	7,270	4,120	5,691	584	360	286	166	251
18	Inflows from fully performing exposures	1,720	1,606	1,446	1,362	1,393	1,375	1,246	1,079	1,006	948
19	Other cash inflows	4,600	4,322	3,751	2,802	2,581	4,600	4,322	3,751	2,802	2,581
20	Total cash inflows	19,424	15,362	12,466	8,284	9,665	6,559	5,928	5,116	3,975	3,780
	Fully exempt inflows	-	-	-	-	-	-	-	-	-	-
	Inflows subject to 90% cap	-	-	-	-	-	-	-	-	-	-
	Inflows subject to 75% cap	19,424	15,362	12,467	8,284	9,665	6,559	5,928	5,117	3,975	3,780
21	Liquidity buffer						19,954	18,380	16,500	15,685	14,873
22	Total net cash outflows						9,939	10,132	9,251	9,353	7,933
23	Liquidity coverage ratio (%) (average)						201%	181%	178%	168%	187%

Notes:

a Total unweighted and weighted average values for 31 December 2019 were based on period end data

Analysis of treasury and capital risk

As at 31 December 2020, BBI's LCR was 218%, equivalent to a surplus of €10bn to 110% regulatory requirement, as shown on Table 18: LIQ1. 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.

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 2020, 94% of the liquidity pool consisted of EUR cash, with the remaining 6% comprising of high quality EUR and USD government securities held on reverse repo.

The strong deposit franchise in BBI is a primary funding source for the Bank. The successful launch of the BBI Structured Notes programme, along with the an existing portfolio of Schuldschein notes, European Commercial Paper issued and unsecured intragroup funding facilities compliment the well diversified and stable sources of funding for BBI.

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.

Key sources of wholesale funding for BBI include money markets, commercial paper, medium-term issuances (including structured notes). BBI also has access to ECB monetary policy operations such as Main Refinancing Operations ('MRO') and Targeted Long Term Refinancing Operations ('TLTRO').

Analysis of treasury and capital risk

Table 19: PV1 - Prudent valuation adjustment

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 and 105 define regulatory principles that are applied to all fair valued assets and liabilities in order to determine a prudent valuation. The Prudent Valuation Adjustment (PVA) is the difference between the financial statement fair valuation and the prudent valuation.

Category level AVA	Risk category				Category level AVA - Valuation uncertainty		Total category level post-diversification	Of which in the trading book	Of which in the banking book	
	Equity	Interest rates	Foreign exchange	Credit	Unearned credit spreads	Investment and funding costs				
	€m	€m	€m	€m	AVA	AVA				
As at 31 December 2020										
1	Market price uncertainty	-	4	-	31	1	4	14	7	7
2	Set not applicable in the EU									
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
8	Set not applicable in the EU									
9	Set not applicable in the EU									
10	Future administrative costs	-	-	-	-			-	-	-
11	Set not applicable in the EU									
12	Total Additional Valuation Adjustments (AVAs)							18	10	8
As at 31 December 2019										
1	Market price uncertainty	-	1	-	18	1	5	13	7	6
2	Set not applicable in the EU									
3	Close-out cost	-	-	-	-	-	-	-	-	-
4	Concentrated positions	-	-	-	-			-	-	-
5	Early termination	-	-	-	-			-	-	-
6	Model risk	-	-	-	-	-	-	1	-	-
7	Operational risk	-	-	-	1			1	1	1
8	Set not applicable in the EU									
9	Set not applicable in the EU									
10	Future administrative costs	-	-	-	-			-	-	-
11	Set not applicable in the EU									
12	Total Additional Valuation Adjustments (AVAs)							15	8	7

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.

Prudential valuation adjustment remained broadly stable at €18m (December 2019: €15m) considering temporary regulatory change to the diversification factor for 2020 as part of the EBA's response to the market dislocation resulting from COVID-19.

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, probabilities of default and actual losses.

Key Metrics

**2020 Risk weighted assets
for credit risk**
€15.4bn

2019: €12.6 bn

Risk and capital position review

Analysis of credit risk

Analysis of capital requirements and exposures for credit risk

Table 20: Credit risk exposures – Note on pre- and post- credit risk mitigation (CRM) EAD

This table summarises credit risk information presented in the rest of this report and shows exposure at default pre- and post-CRM. In accordance with regulatory requirements, credit mitigation is either reflected in regulatory measures for exposure at default (EAD), or in the risk inputs: probability of default (PD) and loss given default (LGD). For the majority of the Bank's exposures, in particular mortgages and those under the AIRB treatment, the impact of CRM is primarily reflected in the PD or LGD rather than EAD measures.

RWAs and post-CRM exposures are analysed by business in Table 22 on page 37. Pre-CRM exposures are further analysed by geography in Table 23 on page 38, by industry in Table 24 on page 40, and residual maturity in Table 25 on page 42. Information on the impact of CRM on EAD is set out on pages 45 to 47.

Credit exposure class	EAD pre-CRM ^a		EAD post-CRM ^a	
	Year end	Average ^b	Year end	Average ^b
As at 31 December 2020	€m	€m	€m	€m
Standardised approach				
Central governments or central banks	20,254	5,195	20,255	5,195
Regional governments or local authorities	-	-	-	-
Public sector entities	381	98	381	98
Multilateral development banks	-	-	-	-
International organisations	-	-	-	-
Institutions	5,645	1,551	633	264
Corporates	10,431	4,911	9,835	4,665
Retail	1,803	1,918	1,803	1,918
Secured by mortgages	57	20	57	20
Exposures in default	217	187	217	187
Items associated with high risk	-	-	-	-
Covered bonds	-	-	-	-
Securitisation positions	-	-	-	-
Collective investment undertakings	-	-	-	-
Equity positions	-	-	-	-
Other items	210	186	210	186
Total Standardised Approach Credit Risk Exposure	38,998	14,066	33,391	12,533
Advanced IRB approach				
Central governments or central banks	-	14,359	-	14,358
Institutions	-	1,290	-	1,290
Corporates	157	5,076	157	5,076
Retail	-	-	-	-
- Small and medium-sized enterprises (SMEs)	-	-	-	-
- Secured by real estate collateral	6,096	6,356	6,096	6,356
- Qualifying revolving retail	4,387	4,424	4,387	4,424
- Other retail	-	-	-	-
Equity	-	-	-	-
Securitisation positions	-	-	-	-
Non-credit obligation assets	299	313	299	313
Total advanced IRB credit risk exposure	10,939	31,818	10,939	31,817
Total credit exposure	49,937	45,884	44,330	44,350

Notes:

a Collateral and guarantees for advanced IRB are not included within EAD as these are incorporated in loss given default (LGD) calculations.
b Averages are calculated from the past four quarters. This is to show intra-year fluctuations.

Risk and capital position review

Analysis of credit risk

Table 20: Credit risk exposures – Note on pre- and post- credit risk mitigation (CRM) EAD continued

	EAD pre-CRM		EAD post-CRM	
	Year end	Average	Year end	Average
As at 31 December 2019	€m	€m	€m	€m
Standardised approach				
Central governments or central banks	165	122	165	122
Regional governments or local authorities	-	15	-	15
Public sector entities	6	5	6	5
Multilateral development banks	-	-	-	-
International organisations	-	-	-	-
Institutions	76	67	76	66
Corporates	2,936	2,618	2,898	2,590
Retail	2,011	1,918	2,011	1,917
Secured by mortgages	9	37	9	37
Exposures in default	118	137	118	137
Items associated with high risk	-	-	-	-
Covered bonds	-	-	-	-
Securitisation positions	-	-	-	-
Collective investment undertakings	-	-	-	-
Equity positions	-	-	-	-
Other items	17	133	17	133
Total Standardised Approach Credit Risk Exposure	5,338	5,052	5,300	5,022
Advanced IRB approach				
Central governments or central banks	12,957	14,775	12,957	14,775
Institutions	3,528	4,128	3,528	4,128
Corporates	6,686	5,263	6,687	5,263
Retail	-	-	-	-
- Small and medium-sized enterprises (SMEs)	-	-	-	-
- Secured by real estate collateral	6,787	7,762	6,787	7,762
- Qualifying revolving retail	4,585	4,509	4,585	4,509
- Other retail	-	8	-	8
Equity	-	-	-	-
Securitisation positions	-	-	-	-
Non-credit obligation assets	204	126	204	126
Total advanced IRB credit risk exposure	34,747	36,571	34,748	36,571
Total credit exposure	40,085	41,623	40,048	41,593

Exposure at default pre-CRM increased by €9.9bn to €49.9bn, primarily driven by an increase in the liquidity pool.

Risk and capital position review

Analysis of credit risk

Table 21: CRB-B Total and average net amount of exposures

This table provides the total and the average amount of net exposures over the period by exposure class. The “Net value of exposure” column represents gross exposures pre-CRM and CCF.

	Net value of exposures as at 31 December 2020	Average net exposures as at 31 December 2020	Net value of exposures as at 31 December 2019	Average net exposures as at 31 December 2019
	€m	€m	€m	€m
1 Central governments or central banks	-	14,449	13,079	14,806
2 Institutions	-	2,777	5,300	5,355
3 Corporates	220	8,320	11,099	9,205
4 Of Which: Specialised Lending	220	210	168	250
5 Of Which: SMEs	-	2	1	1
6 Retail	12,671	12,982	13,681	14,497
7 Secured by real estate property	6,036	6,293	6,720	7,685
8 SME	-	-	-	-
9 Non-SMEs	6,036	6,294	6,720	7,685
10 Qualifying Revolving	6,635	6,688	6,961	6,804
11 Other Retail	-	-	-	8
12 SME	-	-	-	-
13 Non-SMEs	-	-	-	8
14 Equity	-	-	-	-
15 Total IRB Approach	12,891	38,528	43,159	43,863
16 Central governments or central banks	20,262	5,214	180	135
17 Regional governments or local authorities	-	-	-	15
18 Public sector entities	931	237	9	7
19 Multilateral development banks	-	-	-	-
20 International organisations	-	-	-	-
21 Institutions	3,450	941	79	70
22 Corporates	22,652	10,197	6,088	5,384
23 Of Which: SMEs	1,392	549	365	475
24 Retail	2,004	2,099	2,122	2,180
25 Of Which: SMEs	-	-	-	1
26 Secured by mortgages on immovable property	59	20	9	38
27 Of Which: SMEs	-	1	3	3
28 Exposures in default	272	208	126	149
29 Items associated with particularly high risk	-	-	-	-
30 Covered bonds	-	-	-	-
31 Claims on institutions and corporates with a short-term credit assessment	-	-	-	-
32 Collective investments undertakings	-	-	-	-
33 Equity exposures	-	-	-	-
34 Other exposures	210	186	17	133
35 Total standardised approach	49,840	19,102	8,630	8,111
36 Total	62,731	57,630	51,789	51,975

Note:

a Average net exposures values are calculated based on the last four quarters.

For details of key movements, see Table 20.

Risk and capital position review

Analysis of credit risk

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

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

	As at 31 December 2020			As at 31 December 2019		
	EAD	RWA	Capital requirements	EAD	RWA	Capital requirements
	€m	€m	€m	€m	€m	€m
Credit risk						
Standardised approach						
Central governments or central banks	20,255	12	1	165	7	1
Regional governments or local authorities	-	-	-	-	-	-
Public sector entities	381	197	16	6	6	1
Multilateral development banks	-	-	-	-	-	-
International organisations	-	-	-	-	-	-
Institutions	633	255	20	76	55	4
Corporates	9,835	8,644	692	2,898	2,821	226
Retail	1,803	1,352	108	2,011	1,508	121
Secured by mortgages	57	53	4	9	5	-
Exposures in default	217	248	20	118	126	10
Items associated with high risks	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-
Securitisation positions	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-
Equity positions	-	-	-	-	-	-
Other items	210	180	14	17	3	-
Total standardised approach credit risk exposure	33,391	10,941	875	5,300	4,531	363
Advanced IRB approach						
Central governments or central banks	-	-	-	12,957	592	47
Institutions	-	-	-	3,528	170	14
Corporates	157	97	8	6,687	2,728	218
Retail	10,483	3,906	313	11,372	4,164	333
- Small and medium-sized enterprises (SMEs)	-	-	-	-	-	-
- Secured by real estate collateral	6,096	2,299	184	6,787	2,506	200
- Qualifying revolving retail	4,387	1,607	129	4,585	1,658	133
- Other retail	-	-	-	-	-	-
Equity	-	-	-	-	-	-
Securitisation positions	-	-	-	-	-	-
Non-credit obligation assets	299	465	37	204	451	36
Total advanced IRB credit risk exposure	10,939	4,468	358	34,748	8,105	648
Total credit risk weighted assets	44,330	15,409	1,233	40,048	12,636	1,011

Analysis of credit risk

Table 23: CRB-C Geographic analysis of credit exposure

This table shows exposure at default pre-CCF and pre-CRM, broken down by credit exposure class and geographic location of the counterparty.

As at 31 December 2020	Europe €m	Germany €m	Italy €m	France €m	Ireland €m	UK €m	Americas €m	United States €m	Asia €m	India €m	Africa and Middle East €m	Total €m
Central governments or central banks	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	-	-	-	-	-	-
Corporates	220	-	-	-	220	-	-	-	-	-	-	220
Retail	12,656	6,637	6,005	1	-	8	4	3	1	-	2	12,671
Equity	-	-	-	-	-	-	-	-	-	-	-	-
Total IRB approach	12,876	6,637	6,005	1	220	8	4	3	1	-	2	12,891
Central governments or central banks	20,250	17,333	189	236	2,217	12	-	-	-	-	-	20,262
Regional governments or local authorities	-	-	-	-	-	-	-	-	-	-	-	-
Public sector entities	777	204	10	389	159	154	-	-	-	-	-	931
Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-
International organisations	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	308	3	46	1	54	2,905	83	83	100	47	54	3,450
Corporates	18,459	2,398	2,680	5,503	1,716	3,600	558	541	19	3	16	22,652
Retail	2,004	2,004	-	-	-	-	-	-	-	-	-	2,004
Secured by mortgages on immovable property	59	-	5	-	54	-	-	-	-	-	-	59
Exposures in default	238	73	68	4	58	14	20	20	-	-	-	272
Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-	-	-	-	-	-	-
Equity positions	-	-	-	-	-	-	-	-	-	-	-	-
Other items	210	129	43	7	28	-	-	-	-	-	-	210
Total Standardised approach	42,305	22,144	3,041	6,140	4,286	6,685	661	644	119	50	70	49,840
Total	55,181	28,781	9,046	6,141	4,506	6,693	665	647	120	50	72	62,731

Analysis of credit risk

Table 23: CRB-C Geographic analysis of credit exposure continued

	Europe	Germany	Italy	France	Ireland	UK	Americas	United States	Asia	India	Africa and Middle East	Total
As at 31 December 2019	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
Central governments or central banks	13,079	10,886	153	134	1,700	-	-	-	-	-	-	13,079
Institutions	783	-	-	364	257	4,463	16	14	20	-	18	5,300
Corporates	10,227	1,038	121	3,963	2,064	411	453	403	1	-	7	11,099
Retail	13,665	6,964	6,686	2	-	9	4	3	1	-	2	13,681
Equity	-	-	-	-	-	-	-	-	-	-	-	-
Total IRB approach	37,754	18,888	6,960	4,463	4,021	4,883	473	420	22	-	27	43,159
Central governments or central banks	173	-	-	173	-	7	-	-	-	-	-	180
Regional governments or local authorities	-	-	-	-	-	-	-	-	-	-	-	-
Public sector entities	9	-	9	-	-	-	-	-	-	-	-	9
Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-
International organisations	-	-	-	-	-	-	-	-	-	-	-	-
Institutions	29	-	22	5	3	-	-	-	50	50	-	79
Corporates	5,706	538	1,657	1,232	323	199	131	126	52	52	-	6,088
Retail	2,122	2,122	-	-	-	-	-	-	-	-	-	2,122
Secured by mortgages on immovable property	9	-	7	-	-	-	-	-	-	-	-	9
Exposures in default	126	28	71	3	-	-	-	-	-	-	-	126
Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-	-	-	-	-	-	-
Equity positions	-	-	-	-	-	-	-	-	-	-	-	-
Other items	17	-	17	-	-	-	-	-	-	-	-	17
Total Standardised approach	8,191	2,688	1,783	1,413	326	206	131	126	102	102	-	8,630
Total	45,946	21,576	8,743	5,876	4,347	5,089	604	546	124	102	27	51,789

Exposures at default pre-CCF and CRM increased by €10.9bn to €62.7bn, while the overall movement are primarily driven by the change from AIRB to Standardised approach due to Temporary Tolerance removal for PD models.

Analysis of credit risk

Table 24: CRB -D - Concentration of exposures by industry

This table shows exposure at default pre-CCF and pre-CRM, broken down by credit exposure class and the industrial sector associated with the obligor or counterparty.

	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply	Water supply	Construction	Wholesale and retail trade	Transport and storage	Accommodation and food service activities	Information and communication	Real estate activities	Professional, scientific and technical activities	Administrative and support service activities	Public administration and defence compulsory social security	Education	Human health services and social work activities	Arts, entertainment and recreation	Other services	Total
As at 31 December 2020	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
1 Central Governments or central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Corporates	-	-	-	-	-	57	-	-	-	-	163	-	-	-	-	-	-	-	220
6 Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,671	12,671
5 Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Total IRB Approach	-	-	-	-	-	57	-	-	-	-	163	-	-	-	-	-	-	12,671	12,891
16 Central governments or central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	179	-	-	-	20,083	20,262
17 Regional governments or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 Public sector entities	-	-	-	652	50	-	-	-	-	-	-	-	-	-	-	25	-	204	931
19 Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 International organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,450	3,450
22 Corporates	-	2,299	5,810	3,042	278	1,055	1,547	679	394	3,053	538	691	383	-	-	49	103	2,731	22,652
24 Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,004	2,004
26 Secured by mortgages on immovable property	-	-	-	-	-	25	-	-	-	-	-	-	-	-	-	29	-	5	59
28 Exposures in default	-	26	34	-	-	-	64	-	-	-	-	-	72	-	-	-	3	73	272
29 Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31 Claims on institutions and corporate with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32 Collective investments undertakings(CIU)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33 Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34 Other exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	210	210
35 Total Standardised approach	-	2,325	5,844	3,694	328	1,080	1,611	679	394	3,053	538	691	455	179	-	103	106	28,760	49,840
36 Total	-	2,325	5,844	3,694	328	1,137	1,611	679	394	3,053	701	691	455	179	-	103	106	41,431	62,731

Analysis of credit risk

Table 24: CRB -D - Concentration of exposures by industry continued

	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply	Water supply	Construction	Wholesale and retail trade	Transport and storage	Accommodation and food service activities	Information and communication	Real estate activities	Professional, scientific and technical activities	Administrative and support service activities	Public administration and defence, compulsory social security	Education	Human health services and social work activities	Arts, entertainment and recreation	Other services	Total
As at 31 December 2019	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
1 Central Governments or central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	53	-	-	-	13,026	13,079
2 Institutions	-	-	-	331	100	-	-	121	-	-	-	-	-	-	-	-	-	4,748	5,300
3 Corporates	-	898	3,297	1,617	134	334	538	377	220	1,153	709	227	15	-	-	31	209	1,340	11,099
6 Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,681	13,681
5 Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Total IRB Approach	-	898	3,297	1,948	234	334	538	498	220	1,153	709	227	15	53	-	31	209	32,795	43,159
16 Central governments or central banks	-	-	-	-	-	-	-	-	53	-	-	-	-	120	-	-	-	7	180
17 Regional governments or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 Public sector entities	-	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
19 Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 International organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	79	79
22 Corporates	-	879	1,895	378	156	387	416	71	70	407	12	373	236	17	-	29	3	758	6,088
24 Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,122	2,122
26 Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	7	9
28 Exposures in default	-	29	3	-	-	-	2	-	-	-	-	-	2	-	-	-	-	91	126
29 Items associated with particularly high risk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 Covered bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31 Claims on institutions and corporate with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32 Collective investments undertakings(CIU)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33 Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34 Other exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	17
35 Total Standardised approach	-	908	1,897	388	156	387	417	71	123	407	14	373	238	137	-	29	3	3,081	8,630
36 Total	-	1,806	5,193	2,336	391	722	956	569	343	1,560	723	600	253	190	-	59	212	35,876	51,789

Exposures at default pre-CCF and CRM increased by €10.9bn to €62.7bn primarily due to an increase in the liquidity pool, while the overall movement are primarily driven by the change from AIRB to Standardised approach due to Temporary Tolerance removal for PD models.

Risk and capital position review

Analysis of credit risk

Table 25: CRB-E - Residual maturity analysis credit exposures

This table shows exposure at default pre-CCF and pre-CRM, broken down by credit exposure class and residual maturity. Residual maturity is the remaining number of years before an obligation becomes due according to the existing terms of the agreement.

		Net Exposure Value					Total €m
		On Demand €m	<= 1 year €m	> 1 year <= 5 years €m	> 5 years €m	No stated maturity €m	
As at 31 December 2020							
1	Central Governments or central banks	-	-	-	-	-	-
2	Institutions	-	-	-	-	-	-
3	Corporates	-	1	219	-	-	220
4	Retail	6,634	49	281	5,707	-	12,671
5	Equity	-	-	-	-	-	-
6	Total IRB Approach	6,634	50	500	5,707	-	12,891
7	Central governments or central banks	19,883	278	88	1	12	20,262
8	Regional governments or local authorities	-	-	-	-	-	-
9	Public sector entities	-	322	552	57	-	931
10	Multilateral development banks	-	-	-	-	-	-
11	International organisations	-	-	-	-	-	-
12	Institutions	2,255	1,086	88	21	-	3,450
13	Corporates	464	3,323	18,145	720	-	22,652
14	Retail	-	360	1,601	43	-	2,004
15	Secured by mortgages on immovable property	-	25	29	5	-	59
16	Exposures in default	13	17	180	62	-	272
17	Items associated with particularly high risk	-	-	-	-	-	-
18	Covered bonds	-	-	-	-	-	-
19	Claims on institutions and corporate with a short-term credit assessment	-	-	-	-	-	-
20	Collective investments undertakings	-	-	-	-	-	-
21	Equity exposures	-	-	-	-	-	-
22	Other exposures	-	-	-	-	210	210
23	Total standardised approach	22,615	5,411	20,683	909	222	49,840
24	Total	29,249	5,461	21,183	6,616	222	62,731

Risk and capital position review

Analysis of credit risk

Table 25: CRB-E - Residual maturity analysis of credit exposures continued

		Net Exposure Value					Total €m
		On Demand €m	<= 1 year €m	> 1 year <= 5 years €m	> 5 years €m	No stated maturity €m	
As at 31 December 2019							
1	Central Governments or central banks	12,650	376	53	-	-	13,079
2	Institutions	2,122	1,033	399	1,746	-	5,300
3	Corporates	59	951	10,007	82	-	11,099
4	Retail	6,960	55	254	6,412	-	13,681
5	Equity	-	-	-	-	-	-
6	Total IRB Approach	21,791	2,415	10,713	8,240	-	43,159
7	Central governments or central banks	16	83	74	-	7	180
8	Regional governments or local authorities	-	-	-	-	-	-
9	Public sector entities	-	7	2	-	-	9
10	Multilateral development banks	-	-	-	-	-	-
11	International organisations	-	-	-	-	-	-
12	Institutions	5	72	2	-	-	79
13	Corporates	441	2,059	3,134	454	-	6,088
14	Retail	2,101	-	-	-	21	2,122
15	Secured by mortgages on immovable property	-	-	3	6	-	9
16	Exposures in default	13	3	24	72	14	126
17	Items associated with particularly high risk	-	-	-	-	-	-
18	Covered bonds	-	-	-	-	-	-
19	Claims on institutions and corporate with a short-term credit assessment	-	-	-	-	-	-
20	Collective investments undertakings	-	-	-	-	-	-
21	Equity exposures	-	-	-	-	-	-
22	Other exposures	-	-	-	-	17	17
23	Total standardised approach	2,576	2,224	3,239	532	59	8,630
24	Total	24,367	4,639	13,952	8,772	59	51,789

Exposures at default pre-CCF and CRM increased by €10.9bn to €62.7bn primarily due to an increase in the liquidity pool, while the overall movement is primarily driven by the change from AIRB to Standardised approach due to Temporary Tolerance removal for PD models.

Risk and capital position review

Analysis of credit risk

Credit risk mitigation

BBI employs a range of techniques and strategies to actively mitigate credit risks. Within the regulatory framework this is commonly referred to as credit risk mitigation (CRM) and is fully discussed on page 128 of this document. In the case of collateral, the recognition of the mitigant is reflected through regulatory calculations in several different ways. This is dependent on the nature of the collateral and the underlying approach applied to the exposure.

Table 26: Exposures covered by guarantees and credit derivatives

This table shows the proportion of credit risk exposures, covered by unfunded credit protection in the form of guarantees or credit derivatives and funded credit protection.

Under the Standardised approach, the risk weight of the underlying exposure covered is substituted by that of the credit protection provider – generally a central government or institution. Any uncovered exposure is risk weighted using the normal framework. The below table has been populated post-substitution effect for Standardised approach.

Under the Advanced approach, BBI typically recognises eligible collateral by reducing the modelled downturn loss given default (LGD) metric. The below table represents exposures covered by eligible collateral for Advanced calculations.

Financial collateral includes, but is not exclusive to; cash, debt securities, equities and gold that can be used to directly reduce credit exposures subject to the Standardised approach. The impact of financial collateral CRM can be observed in Table 20 on page 34, as a component of the difference between EAD pre-CRM and EAD-post CRM.

Credit exposure class		Exposures covered by unfunded credit protection		Exposures covered by funded credit protection
		Standardised €m	Advanced IRB €m	Advanced IRB €m
As at 31 December 2020				
1	Central governments or central banks	-	-	-
2	Institutions	15	-	-
3	Corporates	3,848	-	-
4	Retail	5	-	-
5	Exposures in default	-	-	-
6	Items associated with high risk	-	-	-
7	Equity	-	-	-
8	Public sector entities	153	-	-
9	Non-credit obligation assets	-	-	-
10	Total	4,021	-	-
As at 31 December 2019				
1	Central governments or central banks	-	-	-
2	Institutions	-	24	-
3	Corporates	-	2,808	2
4	Retail	-	-	-
5	Exposures in default	-	-	-
6	Items associated with high risk	-	-	-
7	Equity	-	-	-
8	Public sector entities	-	-	-
9	Non-credit obligation assets	-	-	-
10	Total	-	2,832	-

Exposures covered by unfunded credit protection has increased under standardised approach by €1.2 bn due to Temporary Tolerance removal and financial guarantee from BBPLC to BBI.

Risk and capital position review

Analysis of credit risk

Table 27: CR3 – CRM 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 €m	Exposures secured: Carrying amount €m	Exposures secured by		
				Collateral €m	Financial guarantees €m	Credit derivatives €m
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	-	-
As at 31 December 2019						
1	Total loans	29,272	11,297	11,278	19	-
2	Total debt securities	-	-	-	-	-
3	Total exposures	29,272	11,297	11,278	19	-
4	Of which defaulted	187	71	71	-	-

The increase in unsecured exposure of €18bn arises as follows:

- an increase in placements with Central Banks of €7bn;
- an increase in cash collateral that supports derivative trading of €9.5bn; and
- an increase in settlement balances of €0.5bn

The €12bn increase in secured exposures arises from an increase in reverse repos of € 12.9bn and a decrease of €0.7bn in lending for house purchases.

Risk and capital position review

Analysis of credit risk

Table 28: 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.

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	€m
As at 31 December 2020						
1	20,214	47	20,255	-	12	0%
2	-	-	-	-	-	-
3	77	855	67	314	197	52%
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	962	2,488	393	241	255	40%
7	2,687	19,964	1,806	8,028	8,644	88%
8	1,808	196	1,803	-	1,352	75%
9	54	5	54	2	53	94%
10	152	121	152	65	248	114%
11	-	-	-	-	-	-
12	-	-	-	-	-	-
13	-	-	-	-	-	-
14	-	-	-	-	-	-
15	-	-	-	-	-	-
16	210	-	210	-	180	86%
17 Total	26,164	23,676	24,740	8,650	10,941	33%
As at 31 December 2019						
1	165	15	165	-	7	4%
2	-	-	-	-	-	-
3	-	9	-	6	6	100%
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	27	52	27	49	55	73%
7	1,343	4,745	1,305	1,593	2,821	97%
8	2,011	111	2,011	-	1,508	75%
9	9	-	9	-	5	53%
10	110	16	110	8	126	107%
11	-	-	-	-	-	-
12	-	-	-	-	-	-
13	-	-	-	-	-	-
14	-	-	-	-	-	-
15	-	-	-	-	-	-
16	17	-	17	-	3	16%
17 Total	3,682	4,948	3,644	1,656	4,531	86%

On-Balance sheet exposures increased by €22.5bn to €26.2bn driven by increase in central banks exposures related to Standardised approach movement from AIRB due to Temporary Tolerance removal and book size increase in corporate

Further information about the key drivers for RWA, Pre-CCF and CRM exposures and post-CCF CRM exposures are provided in Tables 22, 32 and 33.

Risk and capital position review

Analysis of credit risk

Table 29: CR7– Effect on RWA of credit derivatives used as CRM techniques (IRB)

This table shows the effect of credit derivatives on the IRB approach to capital requirements' calculations. It assumes the absence of recognition of credit derivative as a CRM technique (pre – credit derivatives RWAs).

	Pre-credit derivatives RWAs		Actual RWAs	
	As at 31 December 2020	As at 31 December 2019	As at 31 December 2020	As at 31 December 2019
	€m	€m	€m	€m
1 Exposures under Foundation IRB	-	-	-	-
2 Central governments and central banks	-	-	-	-
3 Institutions	-	-	-	-
4 Corporates - SME	-	-	-	-
5 Corporates - Specialised Lending	-	-	-	-
6 Corporates - Other	-	-	-	-
7 Exposures under Advanced IRB	4,468	8,105	4,468	8,105
8 Central governments and central banks	-	592	-	592
9 Institutions	-	170	-	170
10 Corporates - SME	-	1	-	1
11 Corporates - Specialised Lending	97	126	97	126
12 Corporates - Other	-	2,601	-	2,601
13 Retail - Secured by real estate SME	-	-	-	-
14 Retail - Secured by real estate non-SME	2,299	2,506	2,299	2,506
15 Retail - Qualifying revolving	1,607	1,658	1,607	1,658
16 Retail - Other SME	-	-	-	-
17 Retail - Other non-SME	-	-	-	-
18 Equity IRB	-	-	-	-
19 Other non credit-obligation assets	465	451	465	451
20 Total	4,468	8,105	4,468	8,105

The decrease in pre-credit derivatives RWAs and Actual RWAs by €3.6bn to €4.5bn were primarily driven by decreases in the central government and central banks, institutions and corporates asset classes. The removal of Temporary Tolerance to use Group credit risk models for certain wholesale credit risk exposures accounts for the change in those asset classes. Changes in the size of the portfolios as well as movements in borrowers credit quality accounts for changes in the retail asset class.

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

Risk and capital position review

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 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^b. After being assigned to a specific quality step, exposure class and maturity are then used to determine the risk weight percentage. The following table is a simplified version of the risk weight allocation process.

Table 30: Relationship of long-term external credit ratings to credit quality steps under the Standardised approach

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

Risk and capital position review

Analysis of credit risk

Table 31: Credit quality steps and risk weights under the standardised approach

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

Credit Quality Step	Institution (includes banks)					
	Corporates	Sovereign method		Credit assessment method		Central governments or central banks
		Credit assessment method	Maturity > 3 months	Maturity 3 months or less		
Credit Quality Step 1	20%	20%	20%	20%	20%	0%
Credit Quality Step 2	50%	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 2020 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 32: CR5-A Analysis of exposures by asset classes and risk weight pre-CCF and CRM under the standardised

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

EAD by asset classes and risk weights pre CCF and CRM																		
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted	Total	of which: Unrated
	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
As at 31 December 2020																		
1	20,250	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	20,262	383
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	203	-	-	-	46	-	580	-	-	102	-	-	-	-	-	-	931	148
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	219	-	-	-	339	-	2,825	-	-	67	-	-	-	-	-	-	3,450	866
7	-	-	-	-	637	-	4,510	-	-	17,316	189	-	-	-	-	-	22,652	8,463
8	-	-	-	-	-	-	-	-	2,004	-	-	-	-	-	-	-	2,004	2,004
9	-	-	-	-	-	5	-	-	-	54	-	-	-	-	-	-	59	59
10	-	-	-	-	-	-	-	-	-	198	74	-	-	-	-	-	272	270
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1	-	-	-	36	-	-	-	-	173	-	-	-	-	-	-	210	210
17	20,673	-	-	-	1,058	5	7,915	-	2,004	17,922	263	-	-	-	-	-	49,840	12,403

Analysis of credit risk

Table 32: CR5-A Analysis of exposures by asset classes and risk weight pre-CCF and CRM under the standardised approach continued

	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted	Total	of which: Unrated
	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m
As at 31 December 2019																		
1 Central governments or central banks	173	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	180	180
2 Regional governments or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 Public sector entities	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	-	9	9
4 Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Institutions	-	-	-	-	27	-	-	-	-	52	-	-	-	-	-	-	79	78
7 Corporates	-	-	-	-	64	-	376	-	-	5,461	187	-	-	-	-	-	6,088	3,814
8 Retail	-	-	-	-	-	-	-	-	2,122	-	-	-	-	-	-	-	2,122	2,122
9 Secured by mortgages on immovable property	-	-	-	-	-	7	-	-	-	3	-	-	-	-	-	-	9	9
10 Exposures in default	-	-	-	-	-	-	-	-	-	103	23	-	-	-	-	-	126	123
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 CIU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 Other items	3	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	17	17
17 Total	176	-	-	-	105	7	376	-	2,122	5,635	210	-	-	-	-	-	8,630	6,354

Standardised Credit Risk Exposure Pre-CCF and CRM increased €41.2bn to €49.8bn primarily due to the change in approach from AIRB to Standardised as a result of Temporary Tolerance removal.

Analysis of credit risk

Table 33: CR5-B Analysis of exposures by asset classes and risk weight post-CCF and CRM under the standardised approach

The difference between exposure at default pre-CRM set out in Table 32 and exposure at default post-CRM below is the impact of financial collateral and CCF as described in Table 28.

	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted	Total	of		
	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	Unrated	which:	
As at 31 December 2020																				
1 Central governments or central banks ¹	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 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 CIU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
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		

Analysis of credit risk

Table 33: CR5-B Analysis of exposures by asset classes and risk weight post-CCF and CRM under the standardised approach continued

	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted	Total	of which:	
	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	Unrated	
As at 31 December 2019																			
1 Central governments or central banks ¹	157	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	165	165	
2 Regional governments or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3 Public sector entities	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	6	6	
4 Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5 International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6 Institutions	-	-	-	-	27	-	-	-	-	49	-	-	-	-	-	-	76	75	
7 Corporates	-	-	-	-	38	-	190	-	-	2,566	104	-	-	-	-	-	2,898	1,876	
8 Retail	-	-	-	-	-	-	-	-	2,011	-	-	-	-	-	-	-	2,011	2,011	
9 Secured by mortgages on immovable property	-	-	-	-	-	7	-	-	-	3	-	-	-	-	-	-	9	9	
10 Exposures in default	-	-	-	-	-	-	-	-	-	102	16	-	-	-	-	-	118	115	
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 CIU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15 Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16 Other items	3	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	17	17	
17 Total	160	-	-	-	79	7	190	-	2,011	2,733	120	-	-	-	-	-	5,300	4,274	

Standardised Credit Risk Exposure Pre-CCF and CRM increased €28.1bn to €33.4bn primarily due to the change in approach from AIRB to Standardised as a result of Temporary Tolerance removal.

Risk and capital position review

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 120 for a discussion of IRB models.

Table 34: 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. The EBA and internal Default Grade (DG) bands are based on TTC PD. Note that this relationship is dynamic, and therefore, varies over time, region and industry.

EBA PD Range %	Internal DG Band	Default Probability			Moody's	Standard and Poor's
		>Min	Mid	<=Max		
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%	-	Caa2	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	

Risk and capital position review

Analysis of credit risk

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: central governments and central banks (Table 35), institutions (Table 36), corporates (Table 37), corporates subject to slotting (Table 39), secured retail (Table 40), revolving retail (Table 41).

The application of post model adjustments to models that do not fully reflect the risk of the underlying exposures is subject to approval by the Barclays Group Independent Validation Unit (IVU), and review and approval from the Bank's Model Management Committee.

Table 35: CR6 Credit risk exposures by exposure class and PD range for central governments and central banks IRB

	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average Maturity	RWA	RWA Density	EL	Value Adjustment and Provisions
	€m	€m	%	€m	%		%	Years	€m	%	€m	€m
As at 31 December 2020												
0.00 to < 0.15	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.15 to < 0.25	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.25 to < 0.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.50 to < 0.75	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.75 to < 2.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
2.50 to < 10.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
10.00 to < 100.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
100.00 (Default)	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
Total	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
As at 31 December 2019												
0.00 to < 0.15	12,651	223	45.0%	12,751	0.0%	7	45.7%	1	498	3.9%	1	-
0.15 to < 0.25	206	-	0.0%	206	0.2%	2	46.3%	2	94	45.7%	-	-
0.25 to < 0.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.50 to < 0.75	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.75 to < 2.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
2.50 to < 10.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
10.00 to < 100.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
100.00 (Default)	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
Total	12,857	223	45.0%	12,957	0.0%	9	45.7%	1	592	4.6%	1	-

As noted on page 9, the withdrawal of temporary tolerance approval as it related to wholesale credit businesses, but not counterparty credit risk or retail credit risk, with an effective date of 31 December 2020 means that there are no disclosures at that date.

Risk and capital position review

Analysis of credit risk

Table 36: CR6 Credit risk exposures by exposure class and PD range for institutions

	Original on-balance sheet gross exposure	Off- balance sheet exposures pre CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average Maturity	RWA	RWA Density	EL	Value Adjustment and Provisions
	€m	€m	%	€m	%		%	Years	€m	%	€m	€m
As at 31 December 2020												
0.00 to < 0.15	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.15 to < 0.25	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.25 to < 0.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.50 to < 0.75	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.75 to < 2.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
2.50 to < 10.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
10.00 to < 100.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
100.00 (Default)	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
Total	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
As at 31 December 2019												
0.00 to < 0.15	3,105	2,191	17.3%	3,524	0.1%	43	9.3%	4	165	4.7%	-	-
0.15 to < 0.25	-	-	0.0%	-	0.2%	1	45.0%	1	-	46.0%	-	-
0.25 to < 0.50	1	1	100.0%	2	0.3%	2	51.3%	1	2	73.3%	-	-
0.50 to < 0.75	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.75 to < 2.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
2.50 to < 10.00	-	2	96.1%	2	3.5%	3	57.7%	2	3	177.6%	-	-
10.00 to < 100.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
100.00 (Default)	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
Total	3,106	2,194	17.4%	3,528	0.1%	49	9.4%	4	170	4.8%	-	-

As noted on page 9, the withdrawal of temporary tolerance approval as it related to wholesale credit businesses, but not counterparty credit risk or retail credit risk, with an effective date of 31 December 2020 means that there are no disclosures at that date.

Risk and capital position review

Analysis of credit risk

Table 37: CR6 Credit risk exposures by exposure class and PD range for corporates

	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average Maturity	RWA	RWA Density	EL	Value Adjustment and Provisions
	€m	€m	%	€m	%		%	Years	€m	%	€m	€m
As at 31 December 2020												
0.00 to < 0.15	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.15 to < 0.25	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.25 to < 0.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.50 to < 0.75	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.75 to < 2.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
2.50 to < 10.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
10.00 to < 100.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
100.00 (Default)	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
Total	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
As at 31 December 2019												
0.00 to < 0.15	194	6,091	53.0%	3,442	0.1%	69	27.5%	3	724	21.0%	1	-
0.15 to < 0.25	160	2,220	62.3%	1,542	0.2%	29	32.9%	3	595	38.6%	2	-
0.25 to < 0.50	346	970	46.4%	853	0.3%	51	39.0%	3	572	67.1%	2	-
0.50 to < 0.75	59	64	79.2%	97	0.6%	5	56.3%	2	102	104.4%	-	-
0.75 to < 2.50	291	138	44.5%	355	1.4%	16	40.5%	3	377	106.3%	3	-
2.50 to < 10.00	82	273	41.3%	196	5.1%	43	26.3%	3	151	77.4%	4	-
10.00 to < 100.00	20	19	45.0%	28	18.5%	3	44.6%	1	75	265.3%	2	-
100.00 (Default)	2	-	0.0%	2	100.0%	1	56.3%	3	5	200.1%	1	-
Total	1,154	9,775	54.2%	6,515	0.5%	217	31.5%	3	2,601	39.9%	15	(8)

As noted on page 9, the withdrawal of temporary tolerance approval as it related to wholesale credit businesses, but not counterparty credit risk or retail credit risk, with an effective date of 31 December 2020 means that there are no disclosures at that date.

Risk and capital position review

Analysis of credit risk

Table 38: CR6 Credit risk exposures by exposure class and PD range for corporate of which: SMEs

	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average Maturity	RWA	RWA Density	EL	Value Adjustment and Provisions
	€m	€m	%	€m	%		%	Years	€m	%	€m	€m
As at 31 December 2020												
0.00 to < 0.15	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.15 to < 0.25	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.25 to < 0.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.50 to < 0.75	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.75 to < 2.50	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
2.50 to < 10.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
10.00 to < 100.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
100.00 (Default)	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
Total	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
As at 31 December 2019												
0.00 to < 0.15	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.15 to < 0.25	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.25 to < 0.50	-	-	0.0%	1	0.4%	2	65.1%	3	1	84.2%	-	-
0.50 to < 0.75	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.75 to < 2.50	-	1	49.5%	-	0.9%	2	51.7%	1	-	64.7%	-	-
2.50 to < 10.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
10.00 to < 100.00	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
100.00 (Default)	-	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%	-	-
Total	-	1	47.2%	1	0.6%	4	58.6%	2	1	76.7%	-	-

As noted on page 9, the withdrawal of temporary tolerance approval as it related to wholesale credit businesses, but not counterparty credit risk or retail credit risk, with an effective date of 31 December 2020 means that there are no disclosures at that date.

Risk and capital position review

Analysis of credit risk

Table 39: CR10 Corporate exposures subject to the slotting approach

Slotting, also known as specialised lending, 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	Exposure amount	RWA	Expected losses
			€m	€m	€m	€m	€m
As at 31 December 2020							
Category 1	Strong	Less than 2.5 years	37	36	79	38	-
		Equal to or more than 2.5 years	68	47	56	39	-
Category 2	Good	Less than 2.5 years	-	-	-	-	-
		Equal to or more than 2.5 years	32	-	22	20	-
Category 3	Satisfactory	Less than 2.5 years	-	-	-	-	-
		Equal to or more than 2.5 years	-	-	-	-	-
Category 4	Weak	Less than 2.5 years	-	-	-	-	-
		Equal to or more than 2.5 years	-	-	-	-	-
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	-
As at 31 December 2019							
Category 1	Strong	Less than 2.5 years	5	-	5	3	-
		Equal to or more than 2.5 years	121	10	134	94	1
Category 2	Good	Less than 2.5 years	-	-	-	-	-
		Equal to or more than 2.5 years	32	-	32	29	-
Category 3	Satisfactory	Less than 2.5 years	-	-	-	-	-
		Equal to or more than 2.5 years	-	-	-	-	-
Category 4	Weak	Less than 2.5 years	-	-	-	-	-
		Equal to or more than 2.5 years	-	-	-	-	-
Category 5	Default	Less than 2.5 years	-	-	-	-	-
		Equal to or more than 2.5 years	-	-	-	-	-
Total		Less than 2.5 years	5	-	5	3	-
		Equal to or more than 2.5 years	153	10	166	123	1

RWA decreased €29m to €97m primarily in the 'Strong' category, is driven by book size movement which is partially offset by new exposures coming in December 2020.

Risk and capital position review

Analysis of credit risk

Table 40: CR6 Credit risk exposures by exposure class and PD range for secured retail

	Original on-balance sheet gross exposure €m	EAD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average Maturity Years	RWA €m	RWA Density ^a %	EL €m	Value Adjustment and Provisions €m
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)
As at 31 December 2019										
0.00 to < 0.15	4,364	4,407	0.1%	50,795	22.1%	17	1,048	23.8%	9	
0.15 to < 0.25	1,410	1,424	0.2%	17,124	22.3%	16	500	35.1%	5	
0.25 to < 0.50	340	344	0.3%	4,042	23.5%	16	175	50.8%	2	
0.50 to < 0.75	127	129	0.6%	1,473	26.1%	17	56	43.6%	2	
0.75 to < 2.50	230	232	1.1%	2,603	27.3%	18	142	61.2%	6	
2.50 to < 10.00	50	50	5.1%	671	24.6%	18	118	234.1%	5	
10.00 to < 100.00	95	96	37.5%	1,105	24.2%	18	394	412.4%	29	
100.00 (Default)	104	105	100.0%	1,046	29.1%	11	73	69.9%	30	
Total	6,720	6,787	2.3%	78,859	22.6%	17	2,506	36.9%	88	(65)

Note:

a. BBI has applied factors in 2019 to distribute on 8195/2119 the Flooring adjustment which were split only by Model and Cood / Bad, and this adversely skewed the highest PD banding RWA. While in 2020 the Flooring adjustments were assessed on account by account basis and rolled up by bands in a more precise and granular way.

The RWA density associated with IRB exposures to secured retail remained broadly stable at 37.7% (December 2019: 36.9%).

Risk and capital position review

Analysis of credit risk

Table 41: CR6 Credit risk exposures by exposure class and PD range for revolving retail

	Original on-balance sheet gross exposure	Off-balance sheet exposure	Average CCF ^a	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average Maturity	RWA	RWA Density	EL	Value Adjustment and Provisions
	€m	€m	%	€m	%		%	Years	€m	%	€m	€m
As at 31 December 2020												
0.00 to < 0.15	307	3,989	0.0%	2,449	0.0%	908,360	75.8%	-	124	5.0%	5	
0.15 to < 0.25	74	167	0.0%	130	0.2%	34,425	75.8%	-	26	19.8%	1	
0.25 to < 0.50	356	323	0.0%	466	0.4%	82,952	78.9%	-	154	33.0%	10	
0.50 to < 0.75	163	42	0.0%	181	0.5%	21,055	81.8%	-	83	45.7%	6	
0.75 to < 2.50	734	124	0.0%	851	1.1%	113,977	82.8%	-	702	82.4%	58	
2.50 to < 10.00	154	14	0.0%	168	4.7%	34,042	78.8%	-	350	208.4%	43	
10.00 to < 100.00	30	2	0.0%	31	25.3%	7,026	77.1%	-	132	425.6%	41	
100.00 (Default)	110	46	0.0%	110	100.0%	20,559	47.4%	-	37	33.4%	73	
Total	1,928	4,707	0.0%	4,387	3.2%	1,222,396	77.1%	-	1,607	36.6%	237	(237)
As at 31 December 2019												
0.00 to < 0.15	383	3,913	0.0%	2,404	0.0%	870,998	75.8%	-	109	4.5%	2	
0.15 to < 0.25	94	201	0.0%	161	0.2%	42,398	75.9%	-	27	17.0%	1	
0.25 to < 0.50	407	382	0.0%	532	0.4%	91,341	78.8%	-	143	27.0%	4	
0.50 to < 0.75	161	47	0.0%	179	0.5%	19,617	81.9%	-	272	152.4%	13	
0.75 to < 2.50	823	130	0.0%	936	1.2%	112,453	83.2%	-	499	53.3%	18	
2.50 to < 10.00	194	16	0.0%	207	4.7%	37,439	79.1%	-	348	167.9%	21	
10.00 to < 100.00	39	2	0.0%	41	25.6%	8,732	77.1%	-	145	354.6%	22	
100.00 (Default)	125	44	0.0%	125	100.0%	25,807	49.2%	-	115	91.3%	54	
Total	2,226	4,735	0.0%	4,585	3.5%	1,208,785	77.3%	-	1,658	36.2%	135	(216)

Note:

a. The Bank uses an Exposure Value Approach to model EAD hence Average CCF is 0% across all PD ranges

The RWA density associated with IRB exposures to revolving retail remained broadly stable at 36.6% (December 2019: 36.2%).

Risk and capital position review

Analysis of credit risk

Table 42: CR1-A – Credit quality of exposures by exposure class and instrument

This table provides a comprehensive picture of the credit quality of BBI's on balance sheet and off balance sheet exposures

	Defaulted exposures	Non-defaulted exposure	Specific credit risk adjustment	General credit risk adjustment	Credit risk adjustment charges in the period	Net values	Accumulated write-offs
	€m	€m	€m	€m	€m	€m	€m
As at 31 December 2020							
1 Central governments or central banks	-	-	-	-	-	-	-
2 Institutions	-	-	-	-	-	-	-
3 Corporates	-	220	-	-	(8)	220	-
4 Of which Specialised lending	-	220	-	-	-	220	-
5 Of which SMEs	-	-	-	-	-	-	-
6 Retail	299	12,373	335	-	54	12,337	32
7 Secured by real estate property	142	5,894	98	-	33	5,939	2
8 SMEs	-	-	-	-	-	-	-
9 Non-SMEs	142	5,894	98	-	33	5,939	2
10 Qualifying revolving	157	6,479	237	-	21	6,399	30
11 Other retail	-	-	-	-	-	-	-
12 SMEs	-	-	-	-	-	-	-
13 Non-SMEs	-	-	-	-	-	-	-
14 Equity	-	-	-	-	-	-	-
15 Total IRB approach	299	12,593	335	-	46	12,557	32
16 Central governments or central banks	-	20,261	-	-	-	20,261	-
17 Regional governments or local authorities	-	-	-	-	-	-	-
18 Public sector entities	-	931	-	-	-	931	-
19 Multilateral development banks	-	-	-	-	-	-	-
20 International organisations	-	-	-	-	-	-	-
21 Institutions	-	3,455	5	-	-	3,450	-
22 Corporates	252	22,786	187	-	150	22,851	33
23 Of which: SMEs	-	1,446	54	-	53	1,392	-
24 Retail	162	2,068	153	-	35	2,077	15
25 Of which: SMEs	-	-	-	-	-	-	-
26 Secured by mortgages on immovable property	-	59	-	-	(1)	59	-
27 Of which: SMEs	-	-	-	-	-	-	-
28 Exposures in default	414	-	142	-	40	272	-
29 Items associated with particularly high risk	-	-	-	-	-	-	-
30 Covered bonds	-	-	-	-	-	-	-
31 Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-
32 Collective investments undertakings	-	-	-	-	-	-	-
33 Equity exposures	-	-	-	-	-	-	-
34 Other exposures	-	210	-	-	-	210	-
35 Total standardised approach	414	49,770	345	-	184	49,840	48
36 Total	713	62,363	680	-	230	62,396	80
37 Of which: Loans	546	34,011	551	-	130	34,006	80
38 Of which: Debt securities	-	-	-	-	-	-	-
38a Of which: Other exposures	-	-	-	-	-	-	-
39 Of which: Off-balance-sheet exposures	167	28,352	129	-	100	28,390	-

Risk and capital position review

Analysis of credit risk

Table 42: CR1 -A – Credit quality of exposures by exposure class and instrument - continued

		Defaulted exposures €m	Non-defaulted exposure €m	Specific credit risk adjustment €m	General credit risk adjustment €m	Credit risk adjustment charges in the period €m	Net values €m	Accumulated write-offs €m
1	Central governments or central banks	-	13,079	-	-	-	13,079	-
2	Institutions	-	5,300	-	-	-	5,300	-
3	Corporates	2	11,097	8	-	7	11,091	-
4	Of which Specialised lending	-	168	-	-	-	168	-
5	Of which SMEs	-	1	-	-	-	1	-
6	Retail	274	13,407	281	-	60	13,400	52
7	Secured by real estate property	104	6,616	65	-	65	6,655	-
8	SMEs	-	-	-	-	-	-	-
9	Non-SMEs	104	6,616	65	-	65	6,655	-
10	Qualifying revolving	170	6,791	216	-	(5)	6,745	52
11	Other retail	-	-	-	-	-	-	-
12	SMEs	-	-	-	-	-	-	-
13	Non-SMEs	-	-	-	-	-	-	-
14	Equity	-	-	-	-	-	-	-
15	Total IRB approach	276	42,883	289	-	67	42,870	52
16	Central governments or central banks	-	180	-	-	-	180	-
17	Regional governments or local authorities	-	-	-	-	-	-	-
18	Public sector entities	-	9	-	-	-	9	-
19	Multilateral development banks	-	-	-	-	-	-	-
20	International organisations	-	-	-	-	-	-	-
21	Institutions	-	84	5	-	5	79	-
22	Corporates	64	6,104	38	-	35	6,130	2
23	Of which: SMEs	-	367	2	-	2	365	-
24	Retail	165	2,157	117	-	42	2,205	24
25	Of which: SMEs	-	-	-	-	-	-	-
26	Secured by mortgages on immovable property	-	10	1	-	1	9	-
27	Of which: SMEs	-	3	-	-	-	3	-
28	Exposures in default	229	-	103	-	102	126	-
29	Items associated with particularly high risk	-	-	-	-	-	-	-
30	Covered bonds	-	-	-	-	-	-	-
31	Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-
32	Collective investments undertakings	-	-	-	-	-	-	-
33	Equity exposures	-	-	-	-	-	-	-
34	Other exposures	-	17	-	-	-	17	-
35	Total standardised approach	229	8,561	161	-	83	8,629	26
36	Total	505	51,444	450	-	150	51,499	78
37	Of which: Loans	445	14,481	422	-	122	14,504	78
38	Of which: Debt securities	-	-	-	-	-	-	-
38a	Of which: Other exposures	-	15,137	-	-	-	15,137	-
39	Of which: Off-balance-sheet exposures	60	21,827	28	-	28	21,859	-

Non-defaulted exposures increased €10.9bn to €62.4bn primarily within Retail due to the movements of counterparties from AIRB to STD approach: resulted from Temporary Tolerance removal and foreign exchange impact over the year.

Specific credit risk adjustments increased €0.2bn to €0.7bn due to an increase in loan balances due to COVID scenario and Temporary Tolerance removal.

Risk and capital position review

Analysis of credit risk

Table 43: CR1-B – Credit quality of exposures by industry or counterparty types

This table provides a comprehensive picture of the credit quality of BBI's on balance sheet and off balance sheet exposures by industry types.

	Defaulted exposures €m	Non-defaulted exposures €m	Specific credit risk adjustment €m	General credit risk adjustment €m	Credit risk adjustment charges in the period €m	Net values €m	Accumulated write-offs €m
As at 31 December 2020							
1 Agriculture, forestry and fishing	-	-	-	-	-	-	-
2 Mining and quarrying	40	2,308	23	-	11	2,325	-
3 Manufacturing	40	5,833	30	-	21	5,844	-
4 Electricity, gas, steam and air conditioning supply	-	3,694	1	-	(1)	3,694	-
5 Water supply	-	328	-	-	-	328	-
6 Construction	-	1,139	2	-	2	1,138	-
7 Wholesale and retail trade	69	1,552	10	-	9	1,611	-
8 Transport and storage	-	731	52	-	52	679	-
9 Accommodation and food service activities	-	400	6	-	5	394	-
10 Information and communication	-	3,066	12	-	11	3,053	-
11 Real estate activities	1	701	1	-	(1)	701	-
12 Professional, scientific and technical activities	-	694	3	-	2	691	-
13 Administrative and support service activities	98	390	33	-	28	455	-
14 Public administration and defence, compulsory social security	-	179	-	-	-	179	-
15 Education	-	-	-	-	-	-	-
16 Human health services and social work activities	-	104	1	-	1	103	-
17 Arts, entertainment and recreation	3	105	2	-	2	106	-
18 Other services	462	41,139	504	-	88	41,095	80
19 Total	713	62,363	680	-	230	62,396	80
As at 31 December 2019							
1 Agriculture, forestry and fishing	-	-	-	-	-	-	-
2 Mining and quarrying	38	1,779	12	-	12	1,805	-
3 Manufacturing	3	5,199	9	-	9	5,192	2
4 Electricity, gas, steam and air conditioning supply	-	2,337	2	-	(1)	2,335	-
5 Water supply	-	391	-	-	-	391	-
6 Construction	-	722	-	-	-	722	-
7 Wholesale and retail trade	2	955	1	-	-	955	-
8 Transport and storage	-	569	-	-	-	569	-
9 Accommodation and food service activities	-	343	1	-	1	342	-
10 Information and communication	-	1,560	1	-	1	1,559	-
11 Real estate activities	1	723	2	-	1	723	-
12 Professional, scientific and technical activities	2	598	1	-	1	599	-
13 Administrative and support service activities	5	252	5	-	5	253	-
14 Public administration and defence, compulsory social security	-	190	-	-	-	190	-
15 Education	-	-	-	-	-	-	-
16 Human health services and social work activities	-	60	-	-	-	59	-
17 Arts, entertainment and recreation	-	212	-	-	-	212	-
18 Other services	454	35,552	416	-	121	35,593	76
19 Total	505	51,444	450	-	150	51,499	78

Non-defaulted exposures increased €10.9bn to €62.4bn primarily within “Other services” due to the movements of counterparties from AIRB to STD approach resulted from Temporary Tolerance removal and foreign exchange impact over the year.

Specific credit risk adjustments increased €0.2bn to €0.7bn due to an increase in loan balances due to COVID scenario and Temporary Tolerance removal.

Risk and capital position review

Analysis of credit risk

Table 44: CR1-C – Credit quality of exposures by geography

This table provides a comprehensive picture of the credit quality of BBI's on balance sheet and off balance sheet exposures by geography.

	Defaulted exposures €m	Non-defaulted exposures €m	Specific credit risk adjustment €m	General credit risk adjustment €m	Credit risk adjustment charges of the period €m	Net values €m	Accumulated write-offs €m
As at 31 December 2020							
Europe	670	54,829	653	-	208	54,846	80
Germany	296	28,621	373	-	86	28,544	45
Italy	258	8,850	159	-	35	8,949	2
France	6	6,155	20	-	14	6,141	-
Ireland	58	4,503	55	-	49	4,506	34
UK	21	6,696	24	-	20	6,693	-
Americas	22	646	3	-	2	665	-
United States	22	628	3	-	2	647	-
Asia	-	120	-	-	-	120	-
India	-	50	-	-	-	50	-
Africa and Middle East	-	72	-	-	-	72	-
Total	713	62,363	680	-	230	62,396	80
As at 31 December 2019							
Europe	501	45,603	445	-	145	45,658	78
Germany	228	21,418	287	-	(8)	21,359	75
Italy	225	8,579	125	-	125	8,679	1
France	6	5,875	7	-	7	5,874	-
Ireland	1	4,348	6	-	6	4,342	-
UK	4	5,087	4	-	4	5,088	-
Americas	1	603	1	-	1	603	-
United States	1	546	1	-	1	545	-
Asia	-	124	-	-	-	124	-
India	-	102	-	-	-	102	-
Africa and Middle East	-	27	-	-	-	26	-
Total	505	51,444	450	-	150	51,499	78

Non-defaulted exposures increased €10.9bn to €62.4bn primarily across Europe due to the movements of counterparties from AIRB to STD approach resulted from Temporary Tolerance removal and foreign exchange impact over the year.

Specific credit risk adjustments increased €0.2bn to €0.7bn due to an increase in loan balances due to COVID scenario and Temporary Tolerance removal.

Analysis of credit risk

Table 45: 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				On performing forborne exposures €m	On non-performing forborne exposures €m	Total €m	Of which collateral and financial guarantees received on non-performing exposures with forbearance measures €m
	Performing forborne €m	Total €m	Of which defaulted €m	Of which impaired €m				
As at 31 December 2020								
1 Loans and Advances	62	204	72	198	(6)	(77)	93	93
2 Central banks	-	-	-	-	-	-	-	-
3 General governments	-	-	-	-	-	-	-	-
4 Credit institutions	-	-	-	-	-	-	-	-
Other financial								
5 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
As at 31 December 2019								
1 Loans and Advances	4	213	72	206	-	(70)	100	100
2 Central banks	-	-	-	-	-	-	-	-
3 General governments	-	-	-	-	-	-	-	-
4 Credit institutions	-	-	-	-	-	-	-	-
Other financial								
5 corporations	-	-	-	-	-	-	-	-
6 Non-financial corporations	2	23	23	23	-	(10)	-	-
7 Households	2	190	49	183	-	(60)	100	100
8 Debt securities	-	-	-	-	-	-	-	-
9 Loan commitments given	-	3	-	3	-	-	-	-
10 Total	4	216	72	209	-	(70)	100	100

Analysis of credit risk

Table 46: Credit quality of performing and non-performing exposures by past due dates

		Gross carrying amount/nominal amount											
		Performing exposures			Non-performing exposures								
		Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days	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	
1	Loans and advances	69,955	69,897	58	736	286	187	72	45	104	27	15	707
2	Central banks	20,173	20,173	-	-	-	-	-	-	-	-	-	-
3	General governments	1,108	1,108	-	-	-	-	-	-	-	-	-	-
4	Credit institutions	15,485	15,485	-	-	-	-	-	-	-	-	-	-
5	Other financial corporations	20,643	20,643	-	13	-	-	-	13	-	-	-	13
6	Non-financial corporations	2,888	2,878	10	179	25	132	2	2	12	5	1	179
7	Of which SMEs	-	-	-	4	1	-	-	-	-	2	1	4
8	Households	9,658	9,610	48	544	261	55	69	43	80	22	14	515
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	26,569			117								109
16	Central banks	-			-								-
17	General governments	-			-								-
18	Credit institutions	976			-								-
19	Other financial corporations	1,710			-								-
20	Non-financial corporations	18,906			113								105
21	Households	4,977			4								4
22	Total	76,459	49,832	58	853	286	187	72	45	104	27	15	816

Analysis of credit risk

Table 46: Credit quality of performing and non-performing exposures by past due dates continued

		Gross carrying amount/nominal amount											
		Performing exposures			Non-performing exposures								Of which defaulted
		Total	Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days	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 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years		
€m	€m		€m	€m		€m	€m	€m	€m	€m	€m		
As at 31 December 2019													
1	Loans and advances	38,245	38,175	71	529	249	57	67	153	3	-	505	
2	Central banks	12,826	12,826	-	-	-	-	-	-	-	-	-	
3	General governments	478	478	-	-	-	-	-	-	-	-	-	
4	Credit institutions	5,916	5,916	-	-	-	-	-	-	-	-	-	
5	Other financial corporations	6,125	6,125	-	13	-	-	-	13	-	-	13	
6	Non-financial corporations	2,444	2,444	-	40	20	-	4	14	3	-	40	
7	Of which SMEs	-	-	-	4	-	-	-	4	-	-	4	
8	Households	10,456	10,386	71	476	229	57	63	126	-	-	452	
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	20,606			74							74	
16	Central banks	-			-							-	
17	General governments	16			-							-	
18	Credit institutions	858			-							-	
19	Other financial corporations	1,262			-							-	
20	Non-financial corporations	13,639			24							24	
21	Households	4,831			50							50	
22	Total	58,851	38,175	71	603	249	57	67	153	3	-	579	

Analysis of credit risk

Table 47: 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	
	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	€m
As at 31 December 2020																
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	26,569	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 47: 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	
	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	€m
As at 31 December 2019																
1 Loans and advances	38,245	36,428	1,819	527	21	505	(224)	(40)	(184)	(204)	(3)	(200)	-	9,288	235	
2 Central banks	12,826	12,826	-	-	-	-	-	-	-	-	-	-	-	-	-	
3 General governments	478	478	-	-	-	-	-	-	-	-	-	-	-	-	-	
4 Credit institutions	5,916	5,916	-	-	-	-	-	-	-	-	-	-	-	2,946	-	
5 Other financial corporations	6,125	6,119	7	13	-	13	(1)	(1)	-	(4)	-	(4)	-	15	9	
6 Non-financial corporations	2,444	2,202	243	40	-	40	(12)	(6)	(6)	(23)	-	(23)	-	237	5	
7 Of which SMEs	-	-	-	4	-	4	-	-	-	(4)	-	(4)	-	-	-	
8 Households	10,456	8,887	1,569	474	21	452	(211)	(33)	(178)	(177)	(3)	(173)	-	6,090	221	
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	20,606	19,595	1,010	74	-	74	(10)	(4)	(6)	-	-	-	-	-	-	
16 Central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17 General governments	16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	
18 Credit institutions	858	836	22	-	-	-	-	-	-	-	-	-	-	-	-	
19 Other financial corporations	1,262	1,259	2	-	-	-	-	-	-	-	-	-	-	-	-	
20 Non-financial corporations	13,639	12,823	816	24	-	24	(10)	(4)	(6)	-	-	-	-	-	-	
21 Households	4,831	4,661	170	50	-	50	-	-	-	-	-	-	-	-	-	
22 Total	58,851	56,023	2,829	601	21	579	(234)	(44)	(190)	(204)	(3)	(200)	-	9,288	235	

Analysis of credit risk

Table 48: 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	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	Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	Total	Total	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	Of which: exposures with forbearance measures	Of which: Unlikely to pay that are not past-due or past-due <= 90 days	
As at 31 December 2020															
1 Loans and advances subject to moratorium	203	189	-	177	13	5	11	(7)	(6)	-	(6)	(1)	-	(1)	-
2 of which: Households	203	189	-	177	13	5	11	(7)	(6)	-	(6)	(1)	-	(1)	-
3 of which: Collateralised by residential immovable property	202	189	-	177	13	5	11	(7)	(6)	-	(6)	(1)	-	(1)	-
4 of which: Non-financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 of which: Small and Medium-sized Enterprises	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6 of which: Collateralised by commercial immovable property	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Risk and capital position review

Analysis of credit risk

Table 49: 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.

As at 31 December 2020	Number of obligors	Gross carrying amount								
		Total €m	Of which: legislative moratoria €m	Of which: expired €m	Residual maturity of moratoria					
					<= 3 months €m	> 3 months <= 6 months €m	> 6 months <= 9 months €m	> 9 months <= 12 months €m	> 1 year €m	
1	Loans and advances for which moratorium was offered	22,620	833							
2	Loans and advances subject to moratorium (granted)	14,931	497	451	294	66	64	24	40	10
3	of which: Households		497	451	294	66	64	24	40	10
4	of which: Collateralised by residential immovable property		386	341	184	66	64	24	40	10
5	of which: Non-financial corporations		-	-	-	-	-	-	-	-
6	of which: Small and Medium-sized Enterprises		-	-	-	-	-	-	-	-
7	of which: Collateralised by commercial immovable property		-	-	-	-	-	-	-	-

Table 50: 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.

As at 31 December 2020	Gross carrying amount		Maximum amount of the guarantee that can be considered	Gross carrying amount	
	Total €m	of which: forborne €m	Public guarantees received €m	non-performing exposures €m	
1	Newly originated loans and advances subject to public guarantee schemes	52	-	40	-
2	of which: Households	-			-
3	of which: Collateralised by residential immovable property	-			-
4	of which: Non-financial corporations	52	-	40	-
5	of which: Small and Medium-sized Enterprises	-			-
6	of which: Collateralised by commercial immovable property	-			-

Risk and capital position review

Analysis of credit risk

Table 51: CR2-B - Changes in the stock of defaulted and impaired loans and debt securities

This table provides an overview of the BBI's stock of defaulted and impaired loans and debt securities.

	Gross carrying value defaulted exposures ^a €m
1 As at 1 January 2020	531
2 Loans and debt securities that have defaulted or impaired since the last reporting period	381
3 Returned to non-defaulted status	(37)
4 Amounts written off	(81)
5 Other changes ^b	(87)
10 As at 31 December 2020	707

Notes:

a Defaulted exposures are defined as all stage 3 impaired gross loans and debt securities under IFRS9 and any stage 1 and stage 2 gross loans and debt securities under IFRS9 more than 90 days past due.

b Other changes include repayments and disposals net drawdowns.

Table 52: CR2-A – Changes in the stock of general and specific credit risk adjustments

This table shows the movement in the impairment allowance in 2020.

	Accumulated specific credit risk adjustment ^a €m	Accumulated general credit risk adjustment €m
1 As at 1 January 2020	437	-
2 Increases due to amounts set aside for estimated loan losses during the period ^b	290	-
3 Decreases due to amounts reversed for estimated loan losses during the period ^c	(75)	-
4 Decreases due to amounts taken against accumulated credit risk adjustments	-	-
5 Transfers between credit risk adjustments	-	-
6 Impact of exchange rate differences	-	-
7 Business combinations, including acquisitions and disposals of subsidiaries	-	-
9 Other adjustments	(7)	-
10 As at 31 December 2020	645	-
11 Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	(20)	-
12 Specific credit risk adjustments directly recorded to the statement of profit or loss	-	-

Notes:

a Excludes other assets impairment.

b Increases due to amounts set aside for estimated loan losses during the period includes the net impact of changes made to parameters (such as probability of default, exposure at default and loss given default), changes in macro-economic variables, new assets originated, repayments and drawdowns.

c Represents amounts written off.

Regulatory adjustments to statutory impairment

The IFRS impairment allowance is adjusted to reflect a regulatory view, which is used to calculate the provision misalignment adjustment to regulatory capital. There is no difference between IFRS and regulatory allowance for impairments as of 2020 year end.

Table 53: Regulatory adjustments to statutory Impairment

As at 31 December 2020	€m
IFRS allowance for impairment	593
Scope of consolidation	-
Regulatory impairment allowance	593

Analysis of credit risk

Loss analysis – regulatory expected loss (EL) versus actual losses

The following table compares BBI regulatory expected loss (EL) measure against the view of actual loss for those portfolios where credit risk is calculated using the IRB approach.

As expected loss best estimate (ELBE) represents a charge for assets already in default, it has been separately disclosed from total EL. This facilitates comparison of actual loss during the period to the expectation of future loss or EL, as derived by our IRB models in the prior period.

The following should be considered when comparing EL and actual loss metrics:

- The purpose of EL is not to represent a prediction of future impairment charges
 - Whilst the impairment charge and the EL measure respond to similar drivers, they are not directly comparable
 - The EL does not reflect growth of portfolios or changes in the mix of exposures. In forecasting and calculating impairment, balances and trends in the cash flow behaviour of customer accounts are considered.

Regulatory Expected Loss

EL is an input to the capital adequacy calculation which can be seen as an expectation of average future loss based on IRB models over a one year period as follows:

- Non-defaulted assets: EL is calculated using probability of default, downturn loss given default estimates and exposures at default.
- Defaulted assets: EL is based upon an estimate of likely recovery levels for each asset and is generally referred to as ELBE.

Actual Loss

Actual loss where subject to the IRB approach is the amount charged against profit.

Table 54: Analysis of expected loss versus actual losses for IRB exposures

IRB Exposure Class	Total expected loss as at 31		Total actual loss as at 31	
	EL €m	ELBE €m	December 2019 €m	December 2020 €m
Central governments or central banks	1	-	1	-
Institutions	1	-	1	-
Corporates	15	1	16	-
Retail	140	83	223	117
- SME	-	-	-	-
- Secured by real estate collateral	57	31	88	27
- Qualifying revolving retail	83	52	135	90
- Other retail	-	-	-	-
Equity	-	-	-	-
Securitisation positions	-	-	-	-
Non-credit obligation assets	-	-	-	-
Total IRB	157	84	241	117

IRB Exposure Class	Total expected loss as at 31		Total actual loss as at 31	
	EL €m	ELBE €m	December 2018 €m	December 2019 €m
Central governments or central banks	-	-	-	-
Institutions	-	-	-	-
Corporates	3	-	3	-
Retail	85	55	140	46
- SME	-	-	-	-
- Secured by real estate collateral	-	-	-	4
- Qualifying revolving retail	85	55	140	42
- Other retail	-	-	-	-
Equity	-	-	-	-
Securitisation positions	-	-	-	-
Non-credit obligation assets	-	-	-	-
Total IRB	88	55	143	46

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

***Risk weighted assets
for counterparty credit risk***

€3.9bn

2019: €1.8 billion

- 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 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 CCR using three methods: Internal Model Method (IMM), Financial Collateral Comprehensive Method (FCCM), and Mark to Market Method (MTM).

The following tables analyse counterparty credit risk exposures and risk weighted assets split by regulatory exposure class

Table 55: Detailed view of counterparty credit risk RWAs and Capital Requirement

	EAD	RWA	Capital Requirements
	€m	€m	€m
As at 31 December 2020			
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

Counterparty credit risk exposure post-CRM and RWAs increased €3.5bn to €8.7bn and €1.9bn to €3.9bn respectively, primarily due to ERRP migration activity from BBPLC to BBI and several counterparties movements from AIRB to STD as a result of temporary tolerance removal.

Risk weighted assets on default fund contributions increased €49mn to €128mn driven by the change in C-Factor from 0.22% to 7.25%.

Analysis of counterparty credit risk

Table 55: Detailed view of counterparty credit risk RWAs and Capital Requirement continued

	EAD	RWA	Capital Requirements
As at 31 December 2019	€m	€m	€m
Counterparty credit risk exposure class			
Standardised approach			
Central governments or central banks	-	-	-
Regional governments or local authorities	-	-	-
Public sector entities	-	-	-
Multilateral development banks	-	-	-
International organisations	-	-	-
Institutions	491	122	10
Corporates	550	555	44
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	1,041	677	54
Advanced IRB approach			
Central governments or central banks	364	43	3
Institutions	1,643	628	51
Corporates	2,032	523	42
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	4,039	1,194	96
Default fund contributions	87	49	4
Total Counterparty Credit Risk	5,167	1,920	154

Analysis of counterparty credit risk

Table 56: CCR1 – Analysis of CCR exposure by approach

This table provides the CCR regulatory requirements split between the method and main parameters used. This table excludes default fund contribution and as such cannot be directly reconciled to Table 55.

	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
	€m	€m	€m	€m		€m	€m
As at 31 December 2020							
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
As at 31 December 2019							
1 Mark to market		506	2,183			1,506	556
2 Original exposure	-					-	-
3 Standardised approach		-				-	-
4 IMM (for derivatives and SFTs)				2,527	1.4	3,538	1,312
5 Of which securities financing transactions				103	1.4	144	15
6 Of which derivatives and long settlement transactions				2,424	1.4	3,394	1,297
7 Of which from contractual cross-product netting				-		-	-
8 Financial collateral simple method (for SFTs)						-	-
9 Financial collateral comprehensive method (for SFTs)						36	3
10 VaR for SFTs						-	-
11 Total							1,871

Counterparty Credit Risk RWAs increased €1.9bn to €3.7bn primarily driven by portfolio level moves and removal of temporary tolerance.

Analysis of counterparty credit risk

Table 57: CCR3 Counterparty credit risk exposures by exposure classes 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%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted	Total	of which: Unrated
As at 31 December 2020																		
1 Central governments or central banks	201	-	-	-	-	-	3	-	-	20	-	-	-	-	-	-	224	215
2 Regional governments or local authorities	541	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	541	-
3 Public sector entities	158	-	-	-	71	-	22	-	-	-	-	-	-	-	-	-	251	71
4 Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 International Organisations	105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	105	-
6 Institutions	-	530	-	-	613	-	1,263	-	-	11	6	-	-	-	-	-	2,423	505
7 Corporates	-	-	-	-	143	-	468	-	-	2,305	2	-	-	-	-	-	2,918	1,908
8 Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Exposures in default	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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 CIU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 Other items	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Total	1,005	530	-	-	827	-	1,756	-	-	2,336	8	-	-	-	-	-	6,462	2,699

Analysis of counterparty credit risk

Table 57: CCR3 Counterparty credit risk exposures by exposure classes and risk weight under standardised approach - continued

Exposures by regulatory portfolio and risk		0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted	Total	of which: Unrated	
As at 31 December 2019																				
1	Central governments or central banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Regional governments or local authorities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Public sector entities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Multilateral development banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	International Organisations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Institutions	-	377	-	-	63	-	-	-	-	-	-	-	-	-	-	-	-	440	440
7	Corporates	-	-	-	-	-	-	-	-	-	537	-	-	-	-	-	-	-	537	537
8	Retail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Secured by mortgages on immovable property	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Exposures in default	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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 CIU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Equity exposures	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Other items	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Total	-	377	-	-	63	-	-	-	-	537	-	-	-	-	-	-	-	977	977

Standardised counterparty risk exposures increased €5.5bn to €6.5bn primarily driven by ERRP migration activity from BBPLC to BBI and due to several counterparties moved from AIRB to STD due to removal of temporary tolerance.

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 58), institutions (Table 59), corporates (Table 60).

Table 58: CCR4 Counterparty credit risk exposures by portfolio and PD range for central governments and central banks

	EAD post CRM	Average PD	Number of obligors	Average LGD	Average Maturity	RWA	RWA Density	Expected Loss	Value Adjustment and Provisions
	€m	%		%		€m	%	€m	€m
As at 31 December 2020									
0.00 to < 0.15	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.15 to < 0.25	7	0.2%	1	55.4%	1	3	44.1%	-	-
0.25 to < 0.50	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.50 to < 0.75	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.75 to < 2.50	-	0.0%	-	0.0%	-	-	0.0%	-	-
2.50 to < 10.00	-	0.0%	-	0.0%	-	-	0.0%	-	-
10.00 to < 100.00	-	0.0%	-	0.0%	-	-	0.0%	-	-
100.00 (Default)	-	0.0%	-	0.0%	-	-	0.0%	-	-
Total	7	0.2%	1	55.4%	1	3	44.1%	-	-
As at 31 December 2019									
0.00 to < 0.15	353	0.0%	10	45.0%	3	38	10.7%	-	-
0.15 to < 0.25	7	0.2%	1	55.4%	1	3	44.1%	-	-
0.25 to < 0.50	4	0.3%	1	48.0%	2	2	55.0%	-	-
0.50 to < 0.75	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.75 to < 2.50	-	0.0%	-	0.0%	-	-	0.0%	-	-
2.50 to < 10.00	-	0.0%	-	0.0%	-	-	0.0%	-	-
10.00 to < 100.00	-	0.0%	-	0.0%	-	-	-	-	-
100.00 (Default)	-	0.0%	-	0.0%	-	-	-	-	-
Total	364	0.0%	12	45.2%	3	43	11.8%	-	-

The RWA density associated with advances IRB exposures to central governments and central banks increased 32.3% to 44.1% due to immaterial RWA variance in DG 2 and all the counterparties in other DG bands moving from AIRB to STD. EAD Post CRM has decreased €0.4bn to €7mn primarily driven by several counterparties moving from AIRB to STD method due to removal of Temporary Tolerance check and partly due to trading activity.

Analysis of counterparty credit risk

Table 59: CCR4 Counterparty credit risk exposures by portfolio and PD range for institutions

	EAD post CRM	Average PD	Number of obligors	Average LGD	Average Maturity	RWA	RWA Density	Expected Loss	Value Adjustment and Provisions
	€m	%		%		€m	%	€m	€m
As at 31 December 2020									
0.00 to < 0.15	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.15 to < 0.25	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.25 to < 0.50	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.50 to < 0.75	-	0.0%	-	0.0%	-	-	0.0%	-	-
0.75 to < 2.50	-	0.0%	-	0.0%	-	-	0.0%	-	-
2.50 to < 10.00	-	0.0%	-	0.0%	-	-	0.0%	-	-
10.00 to < 100.00	-	0.0%	-	0.0%	-	-	0.0%	-	-
100.00 (Default)	-	0.0%	-	0.0%	-	-	0.0%	-	-
Total	-	0.0%	-	0.0%	-	-	0.0%	-	-
As at 31 December 2019									
0.00 to < 0.15	1,620	0.1%	66	46.0%	3	605	37.3%	1	-
0.15 to < 0.25	8	0.2%	8	45.0%	2	5	61.1%	-	-
0.25 to < 0.50	2	0.4%	4	57.1%	2	2	81.1%	-	-
0.50 to < 0.75	1	0.7%	2	45.5%	1	1	99.4%	-	-
0.75 to < 2.50	-	0.9%	4	45.0%	1	-	37.7%	-	-
2.50 to < 10.00	11	2.6%	4	45.0%	2	15	136.8%	-	-
10.00 to < 100.00	-	0.0%	-	0.0%	-	-	0.0%	-	-
100.00 (Default)	-	0.0%	-	0.0%	-	-	0.0%	-	-
Total	1,642	0.1%	88	46.0%	3	628	38.2%	1	-

There were no counterparty credit risk exposures associated with institutions as at 31 December 2020 primarily due to removal of Temporary Tolerance which lead to several counterparties moving from AIRB method to standardised and the migration in trading activity.

Analysis of counterparty credit risk

Table 60: CCR4 Counterparty credit risk exposures by portfolio and PD range for corporates

	EAD post CRM	Average PD	Number of obligors	Average LGD	Average Maturity	RWA	RWA Density	Expected Loss	Adjustment and Provisions	Value
	€m	%		%		€m	%	€m		€m
As at 31 December 2020										
0.00 to < 0.15	1,716	0.1%	477	45.0%	1	207	12.1%	1		-
0.15 to < 0.25	39	0.2%	47	45.0%	1	14	35.3%	-		-
0.25 to < 0.50	89	0.3%	37	45.0%	1	35	39.2%	-		-
0.50 to < 0.75	12	0.6%	5	45.0%	1	9	73.7%	-		-
0.75 to < 2.50	65	1.7%	6	45.0%	-	47	73.0%	-		-
2.50 to < 10.00	-	0.0%	-	0.0%	-	-	0.0%	-		-
10.00 to < 100.00	-	0.0%	-	0.0%	-	-	0.0%	-		-
100.00 (Default)	-	0.0%	-	0.0%	-	-	0.0%	-		-
Total	1,921	0.1%	572	45.0%	1	312	16.3%	1		-
As at 31 December 2019										
0.00 to < 0.15	1,679	0.1%	398	45.7%	2	354	21.0%	1		-
0.15 to < 0.25	298	0.2%	87	49.7%	2	133	44.5%	-		-
0.25 to < 0.50	33	0.3%	21	49.0%	1	17	52.4%	-		-
0.50 to < 0.75	3	0.6%	10	45.9%	1	2	65.5%	-		-
0.75 to < 2.50	18	1.0%	5	51.2%	2	16	92.9%	-		-
2.50 to < 10.00	1	6.7%	4	45.5%	2	1	138.7%	-		-
10.00 to < 100.00	-	0.0%	-	0.0%	-	-	0.0%	-		-
100.00 (Default)	-	0.0%	-	0.0%	-	-	0.0%	-		-
Total	2,032	0.1%	525	46.4%	2	523	25.7%	1		-

The RWA density associated with advances IRB exposures to corporates decreased 9.4% to 16.3% primarily due to portfolio level trading moves and partly due to migration of counterparties from AIRB to standardised approach.

Table 61: CCR5-A - Impact of netting and collateral held on exposure values

This table shows the impact on exposure from netting and collateral held for derivatives and SFTs

	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
	€m	€m	€m	€m	€m
As at 31 December 2020					
1 Derivatives	64,858	49,155	15,703	20,463	2,315
2 SFTs	75,025	74,258	767	-	767
3 Cross-product netting	-	-	-	-	-
4 Total	139,883	123,413	16,470	20,463	3,082
As at 31 December 2019					
1 Derivatives	31,564	25,319	6,245	8,780	1,418
2 SFTs	10,079	10,015	64	-	64
3 Cross-product netting	-	-	-	-	-
4 Total	41,643	35,334	6,309	8,780	1,482

Net carrying amount increased €98.2bn to €139.9bn primarily due to increase in trading activity.

Further details relating to collateral can be found in Table 62.

Analysis of counterparty credit risk

Table 62: CCR5-B - 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.

	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received €m	Fair value of posted collateral €m
	Segregated €m	Unsegregated €m	Segregated €m	Unsegregated €m		
As at 31 December 2020						
1 Cash	-	16,705	-	15,571	-	739
2 Debt	1,536	1,815	69	1,390	-	-
3 Equity	-	407	-	-	-	-
4 Others	-	-	-	-	-	-
5 Total	1,536	18,927	69	16,961	-	739
As at 31 December 2019						
1 Cash	-	6,428	-	5,179	-	64
2 Debt	1,058	846	52	720	-	-
3 Equity	-	447	-	-	-	-
4 Others	-	-	-	-	-	-
5 Total	1,058	7,721	52	5,899	-	64

Derivatives collateral received increased €11.7bn to €20.5bn and posted collateral increased €11.1bn to €17.0bn primarily driven by increase in trading activity.

Analysis of counterparty credit risk

Credit derivative notionals

The following tables show the notional of the credit derivative transactions outstanding as at 31 December 2020.

This first table splits the notional values of credit derivatives, credit default swaps (CDS) and total return swaps (TRS), by two categories: own credit portfolio and intermediation activities.

Own credit portfolio consists of trades used for hedging and credit management. Intermediation activities cover all other credit derivatives.

Credit derivatives booked arising from clearing activities performed on behalf of external counterparties are not reported in this table as BBI does not have any long/short exposures to underlying reference obligations.

Own credit for the purposes of this note is different from own credit used for accounting disclosures purposes, which represents the change in fair value due to BBI's own credit standing.

Notional exposure from intermediation activities mainly comprises derivatives executed by clients and associated hedges.

Table 63: Notional exposure associated with credit derivative contracts

Outstanding amount of exposure held:					
Credit derivative product type	Own credit portfolio		Intermediation activities		
	As protection purchaser	As protection seller	As protection purchaser	As protection seller	
As at 31 December 2020	€m	€m	€m	€m	€m
Credit default swaps	148	-	15,197	15,170	
Total return swaps	-	-	177	122	
Total	148	-	15,374	15,292	
As at 31 December 2019					
Credit default swaps	25	-	25,676	20,667	
Total return swaps	-	-	321	267	
Total	25	-	25,997	20,935	

Notional exposures from intermediation activities, which mainly comprises derivatives used to manage the trading book, decreased €16.3bn to €30.7bn primarily driven by decrease in volumes of CDS Index trades partially offset by increase in other trading activity.

Table 64: CCR6 - Credit derivatives exposures

This table provides a breakdown of the BBI's exposures to credit derivatives products.

	Credit derivative hedges		Other credit derivatives
	Protection bought	Protection sold	
	€m	€m	€m
As at 31 December 2020			
Notionals			
Single-name credit default swaps	143	-	22,045
Index credit default swaps	-	-	8,327
Total return swaps	-	-	299
Credit options	-	-	5,889
Other credit derivatives	-	-	-
Total notionals	143	-	36,560
Fair values	(9)	-	5
Positive fair value (asset)	-	-	462
Negative fair value (liability)	(9)	-	(457)
As at 31 December 2019			
Notionals			
Single-name credit default swaps	25	-	14,662
Index credit default swaps	-	-	31,682
Total return swaps	-	-	588
Credit options	-	-	5,159
Other credit derivatives	-	-	-
Total notionals	25	-	52,091
Fair values	(3)	-	(105)
Positive fair value (asset)	-	-	733
Negative fair value (liability)	(3)	-	(838)

Credit derivatives notionals decreased €15.5bn to €36.6bn primarily driven by decrease in volumes of CDS Index trades partially offset by increase in other trading activity.

Analysis of counterparty credit risk

Table 65: CCR8 Exposures to CCPs

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

	As at 31 December 2020		As at 31 December 2019	
	EAD post CRM	RWAs	EAD post CRM	RWAs
	€m	€m	€m	€m
1 Exposures to QCCPs (total)		138		57
2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which				
3 (i) OTC derivatives	31	1	377	8
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	498	10	-	-
9 Prefunded default fund contributions	179	128	87	49
10 Alternative calculation of own funds requirements for exposures		-		-
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	-	-	-	-

Overall movement in QCCPs driven primarily by portfolio changes across Derivatives and SFTs.

- OTC Derivatives decreased €0.3bn to €31 mn due to decrease in volumes of CDS Index trades moving back to IMM.
- Prefunded default fund contributions increased €0.1 bn to €0.2bn due to increase in Default fund contribution.
- Segregated initial margin increased €0.5bn due to increase in initial margin posted.

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 66: CCR2 Credit valuation adjustment (CVA) capital charge

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 current one-year period and b) the same measure for a stressed period. The sum of the two VaR measures is scaled by the VaR multiplier (3.4 at year end) to yield the capital charge.

Credit valuation adjustment (CVA) capital charge		Exposure value	RWA
		€m	€m
As at 31 December 2020			
1	Total portfolios subject to the Advanced Method	1,747	342
2	(i) VaR component (including the 3x multiplier)		70
3	(ii) Stressed VaR component (including 3x multiplier)		272
4	All portfolios subject to the Standardised Method	-	-
EU4	Based on original exposure method		
5	Total subject to the CVA capital charge	1,747	342
As at 31 December 2019			
1	Total portfolios subject to the Advanced Method	1,374	322
2	(i) VaR component (including the 3x multiplier)		61
3	(ii) Stressed VaR component (including 3x multiplier)		261
4	All portfolios subject to the Standardised Method	-	-
EU4	Based on original exposure method		
5	Total subject to the CVA capital charge	1,374	322

CRV RWA increased by €20mn to €342mn primarily due to the net increase in OTC counterparties exposures (both in count and EAD).

Analysis of market risk

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

Key Metrics

2020 Risk weighted assets for market risk

€1.9bn

2019: €0.8 billion

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

Risk and capital position review

Analysis of market risk

Balance sheet view of trading and banking books

As defined by regulatory rules, a trading book consists of positions held for trading intent or to hedge elements of the trading book. Trading intent must be evidenced in the basis of the strategies, policies and procedures set up by the firm to manage the position or portfolio. The table below provides an overview of BBI, where assets and liabilities on the BBI's balance sheet are managed within regulatory traded and non-traded books.

Table 67: Balance sheet split by trading and banking books

As at 31 December 2020	Banking book ^a €m	Trading book €m	Total €m
Cash and balances at central banks	20,066	-	20,066
Cash collateral and settlement balances	15,480	3,581	19,061
Loans and advances at amortised cost	13,049	-	13,049
Reverse repurchase agreements and other similar secured lending	3,174	-	3,174
Trading portfolio assets	-	7,379	7,379
Financial assets at fair value through the income statement	374	14,375	14,749
Derivative financial instruments	326	56,516	56,842
Financial assets at fair value through other comprehensive income	-	-	-
Investments in associates and joint ventures	-	-	-
Goodwill and intangible assets	50	-	50
Property, plant and equipment	106	-	106
Current tax assets	6	-	6
Deferred tax assets	188	-	188
Retirement benefit assets	-	-	-
Prepayments, accrued income and other assets	267	-	267
Total assets	53,086	81,851	134,937
Deposits at amortised cost	23,108	-	23,108
Cash collateral and settlement balances	15,835	3,597	19,432
Repurchase agreements and other similar secured borrowing	3,583	-	3,583
Debt securities in issue	2,297	-	2,297
Subordinated liabilities	1,061	-	1,061
Trading portfolio liabilities	-	7,771	7,771
Financial liabilities designated at fair value	1,010	13,861	14,871
Derivative financial instruments	386	57,347	57,733
Current tax liabilities	7	-	7
Deferred tax liabilities	-	-	-
Retirement benefit liabilities	28	-	28
Other liabilities	416	-	416
Provisions	72	-	72
Total liabilities	47,803	82,576	130,379

Note

a The primary risk factors for banking book assets and liabilities are interest rates and to a lesser extent, foreign exchange rates. Credit spreads and equity prices will also be factor where BBI holds debt and equity securities respectively, either as financial assets designated at fair value or as available for sale.

Assets and liabilities which are included in the market risk regulatory measures are included within the trading book.

Risk and capital position review

Analysis of market risk

Traded market risk review

Review of management measures

The following disclosures provide details on management measures of market risk. See the risk management section on page 132 for more detail on management measures and the differences when compared to regulatory measures.

The table below shows the total Management VaR on a diversified basis by risk factor. Total Management VaR includes all trading positions in BBI.

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

Management VaR (95%)	As at 31 December 2020			As at 31 December 2019		
	Average	High ^a	Low ^a	Average	High ^a	Low ^a
	€m	€m	€m	€m	€m	€m
Credit risk	0.49	1.02	0.17	0.11	0.22	-
Interest rate risk	0.29	1.36	0.04	0.10	0.19	0.03
Equity risk	0.14	0.32	-	0.01	0.11	-
Basis risk	0.20	0.37	0.08	0.12	0.24	0.01
Spread risk	0.32	1.55	0.01	0.01	0.08	-
Foreign exchange risk	0.07	0.50	0.01	0.04	0.23	-
Commodity risk	-	-	-	-	-	-
Inflation risk	0.01	0.03	-	-	0.03	-
Diversification effect ^a	(0.79)	-	-	(0.18)	-	-
Total management VaR	0.72	1.71	0.22	0.23	0.38	0.03

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. Historic 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 to €0.72m initially from increased market volatility in late Q1 and Q2 during the initial phase of the covid-19 pandemic. Subsequently in the latter part of H1 and in H2 a number of trading desks migrated to BBI in preparation for Brexit and trading activity increased.

Risk and capital position review

Analysis of market risk

Review of regulatory measures

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

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

- the market risk of trading book positions booked to legal entities are measured under an internal models approach subject to temporary approval ("Temporary Tolerance") from the CBI, including Regulatory VaR, Stressed Value at Risk (SVaR), Incremental Risk Charge (IRC) and Comprehensive Risk Measure 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 69: MR3 - Analysis of Regulatory VaR, SVaR, IRC and CRM

Analysis of Regulatory VaR, SVaR, IRC and Comprehensive Risk Measure				
	Year-end €m	Avg. €m	Max €m	Min €m
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	-	-	-	-
As at 31 December 2019				
Regulatory VaR (1-day)	0.81	0.57	1.07	0.05
Regulatory VaR (10-day) ^a	2.56	1.82	3.37	0.17
SVaR (1-day)	2.15	1.65	3.54	0.46
SVaR (10-day) ^a	6.81	5.20	11.20	1.44
IRC	29.85	7.92	37.79	-
CRM	-	-	-	-

Notes:

^a The 10 day VaR is based on scaling of 1 day VaR model output since VaR is currently not modelled for a 10 day holding period.

Table 70: Breakdown of the major regulatory risk measures by portfolio

	Macro €m	Equities €m	Credit €m	Banking €m	Group Treasury €m	Cross Markets €m	Fixed Income Financing €m
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	-	-	-	-	-	-	-
As at 31 December 2019							
Regulatory VaR (1-day)	0.09	0.01	0.23	-	0.01	0.88	-
Regulatory VaR (10-day)	0.28	0.05	0.72	-	0.02	2.78	-
SVaR (1-day)	0.23	0.05	0.55	-	0.01	1.85	-
SVaR (10-day)	0.72	0.14	1.73	-	0.04	5.86	-
IRC	-	-	30.29	-	-	2.58	-
CRM	-	-	-	-	-	-	-

The table above shows the primary portfolios which are driving the trading businesses' modelled capital requirement as at in 2020 year-end. The standalone portfolio results diversify at the total level and are not additive.

Risk and capital position review

Analysis of market risk

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 69, 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 71: Market risk own funds requirements

	RWA		Capital requirements	
	As at 31 December 2020 €m	As at 31 December 2019 €m	As at 31 December 2020 €m	As at 31 December 2019 €m
1 Internal models approach	1,859	766	149	61
2 VaR	341	107	27	9
3 SVaR	600	282	48	22
4 Incremental risk charge	505	375	41	30
5 Comprehensive risk measure	-	-	-	-
6 Risks not in VaR	413	2	33	-
7 Standardised approach	6	-	-	-
8 Interest rate risk (general and specific)	-	-	-	-
9 Equity risk (specific risk)	6	-	-	-
10 Foreign exchange risk	-	-	-	-
11 Commodity risk	-	-	-	-
12 Specific interest rate risk of securitisation position	-	-	-	-
13 Total	1,865	766	149	61

Market risk own funds RWAs increased €1.1 bn to €1.9bn primarily due to migrations and new stress Risks not in VaR.

Risk and capital position review

Analysis of market risk

Table 72: 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		Capital requirements	
	As at 31 December 2020		As at 31 December 2020	
		€m		€m
Outright products				
1 Interest rate risk (general and specific)		-		-
2 Equity risk (general and specific)		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		6		-

RWA related to standardised market risk increased by €6mn to €6mn due to increase in reportable Equity holdings mainly from Counterparty Risk Trading.

Table 73: 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 2020	As at 31 December 2019	As at 31 December 2020	As at 31 December 2019
	€m	€m	€m	€m
1 VaR (higher of values a and b)	341	107	27	9
(a) Previous day's VaR (Article 365(1) (VaRt-1))	146	38	12	3
(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)	341	107	27	9
2 SVaR (higher of values a and b)	600	282	48	22
(a) Latest SVaR (Article 365(2) (sVaRt-1))	245	150	20	12
(b) Average of the SVaR (Article 365(2) during the preceding sixty business days (sVaRavg) x multiplication factor (ms) (Article 366)	600	182	48	22
3 Incremental risk charge -IRC (higher of values a and b)	505	375	41	30
(a) Most recent IRC value (incremental default and migration risks section 3 calculated in accordance with Section 3 articles 370/371)	505	375	40	30
(b) Average of the IRC number over the preceding 12 weeks	371	315	30	25
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	413	2	33	-
6 Total	1,859	766	149	61

Market risk own funds RWAs increased €1.1 bn to €1.9bn primarily due to migrations and new stress Risks not in VaR.

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 2020

Key Metrics

58% of BBI's 2020 net reportable operational risk events by number had a loss value of €55,655 (£50,000^a) or less

63% of 2020 Operational Risk events by number are aligned to Execution, Delivery and Process Management

91% of 2020 losses are from events aligned to Execution, Delivery and Process Management

2020 Risk Weighted Assets for operational risk

€2.2bn

2019: €2.2billion

Summary of performance in the period

Total reportable Operational Risk losses during 2020 were €3.26m^b

Risk and capital position review

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 74: Risk weighted assets for operational risk

	As at 31 December 2020 €m	As at 31 December 2019 €m
Operational Risk		
Basic Indicator Approach	-	-
Standardised Approach	2,235	2,235
Advanced Measurement Approach	-	-
Total operational risk RWAs	2,235	2,235

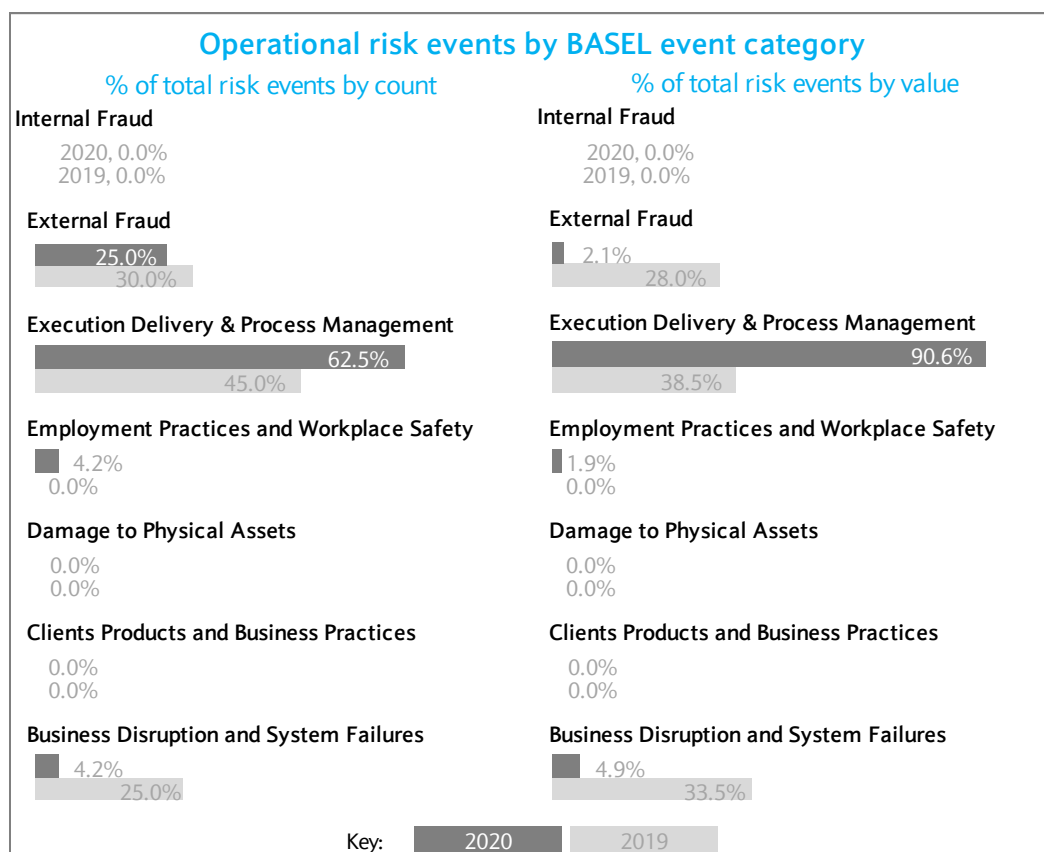
Operational risk RWAs are assessed using the standardised approach (amended TSA). The Bank uses its Medium Term Plan (MTP) income projections where it does not have sufficient historical incomes to calculate some Business Indicators. For 2020, the value of the three-year average MTP incomes remained consistent with prior years, therefore there was no material movement in overall RWAs for Operational Risk.

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 BBI. During 2020, 58% (2019: 70%) of BBI's reportable operational risk events by volume had a value of less than €55,655 (£50,000^a), although this type of event accounted for only 7% (2019: 38%) of BBI's total net operational risk losses.

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



Notes:

- a Losses are recorded in GBP and converted for reporting here in EUR at an FX rate 1.1131.
 b 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.

- Execution, Delivery and Process Management impacts for 2020 amounted to €2.95m (2019: €0.47m) and accounted for 91% (2019: 39%) of overall operational risk losses. Volume of events increased slightly to account for 63% of total events (2019: 45%). 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.

Analysis of operational risk

- External Fraud events accounted for 25% of risk event volume in 2020 (2019: 30%) but only 2% of overall losses (2019: 28%). In this category, high volume, low value events are driven by transactional fraud often related to debit and credit card usage.
- Business Disruption and System Failures impacts in 2020 reduced to €0.16m (2019: €0.41m) and accounted for a reduced share of 5% (2019: 34%) of total operational risk losses.

BBI's operational risk profile is informed by bottom-up risk assessments undertaken by each area within the firm and top-down qualitative review by the Operational Risk specialists for each risk type. Fraud, Transaction Operations and Technology continue to be highlighted as key operational risk exposures. The operational risk profile is also informed by a number of risk themes: Cyber, Data, Execution and Resilience. These represent threats to BBI but have scope that extend across multiple risk types, and therefore require an integrated risk management approach.

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 and to minimise any disruption to genuine transactions. Fraud remains an industry wide threat and BBI continues to work closely with external partners on various prevention initiatives. Technology, resilience and cyber security risks evolve rapidly so BBI maintains continued focus and investment in our control environment to manage these risks, and actively partners with peers and relevant organisations to understand and disrupt threats originating outside BBI.

Operational Resilience is and has been a key area of focus for BBI. The COVID-19 Pandemic was a Tail Risk Event and is the most severe global health emergency the World Health Organization (WHO) has ever declared. While overall BBI proved to be resilient, the COVID-19 pandemic has caused disruption to the Group's customers, suppliers, and staff globally. The COVID-19 pandemic has reinforced our continued focus on resilience risk.

At the beginning of the COVID-19 pandemic, BBI experienced some minor operational disruption whilst its operations service providers transitioned to a Work from Home position at the same time as dealing with the increased trading activity which occurred due to the significant amount of market volatility. Further, the prolonged nature of the event identified the need to enhance our resilience planning program to improve our response to similar events with an extreme and prolonged impact. Despite these issues, the early activation of our Crisis Leadership Team facilitated swift and decisive actions to limit and manage the impacts which resulted in normal risk exposures as reported above. For additional information on the risk exposure due to the COVID-19 Pandemic, see the operational risk management section.

Likewise, operational risk associated with cyber-security 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. Multiple 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 cyber-security events were managed within its risk tolerances and there were limited to no loss events associated with cyber-security recorded within the event categories above. For additional information on the Bank's cyber-security risk exposure, see the operational risk management section.

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 pages 98 to 99)
- 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 100 to 102
- A discussion of how our risk management strategy is designed to foster a strong risk culture is contained on pages 103 to 104
- Pages 104 to 108 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.

BBI's approach to managing risks

Risk management strategy, governance and risk culture

The Bank's risk management strategy

Introduction

The activities of the Bank entail risk taking, every day, throughout its business. BBI earns returns by taking risks, and a significant component of risk management is to ensure that pricing/returns are proportionate to the risks assumed. This section introduces these risks, and outlines arrangements for identifying and managing them. These include roles and responsibilities, frameworks, policies and standards, assurance and lessons learned processes. The Bank's approach to fostering a strong risk culture is also described.

Enterprise Risk Management Framework (ERMF)

The ERMF sets the strategic direction for risk management by defining standards, objectives and responsibilities for all areas of the Bank. It supports senior management in effective risk management and in developing a strong risk culture. The Bank's ERMF is adapted from and consistent with the Barclays Group ERMF as approved by the Barclays plc Board on the recommendation of the Barclays Chief Risk Officer. This is then reviewed and formally adopted by the Bank's Board with modifications where needed at local legal entity level.

The ERMF sets out:

- Segregation of duties: The ERMF defines a "Three Lines of Defence" model.
- Principal risks faced by the Bank. This list guides the organisation of the risk management function, and the identification, management and reporting of risks.
- Risk appetite requirements: This helps define the level of risk we are willing to undertake in our business.
- Roles and responsibilities for risk management: The ERMF sets out the accountabilities of the Bank's CEO and other senior managers, as well as the Bank's committees.

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 and other core requirements for the activities of the firm. Policies describe "what" must be done.
- Standards set out the key control objectives that describe how the requirements set out in the Policy are met, and who needs to carry them out. Standards describe "how" controls should be undertaken.

Segregation of duties - the "Three 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 of Defence comprises all employees engaged in the revenue generating and client facing areas of the Bank and all associated support functions, including Finance, Treasury, Human Resources and the Chief Operating Office (COO) function. Employees in the First Line are responsible for:

- identifying the risks in their activities and developing appropriate policies, standards and controls
- operating within any and all limits which the Risk and Compliance functions establish over the exposures and activities of the first line; and
- escalating risk events to senior managers in Risk and Compliance.

Second Line of Defence

The Second Line of Defence comprises employees of Risk and Compliance. The role of the Second Line is to establish the limits, rules and constraints 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. Note that the First Line may also set limits for a number of their activities related to operational risk. These will remain subject to supervision by the Second Line.

Third Line of Defence

The Third Line of Defence comprises employees of Internal Audit. They provide independent assurance to the Bank's Board and Executive Management over the effectiveness of governance, risk management and control.

The Legal function does not sit in any of the three lines, but supports them all. The Legal function is, however, subject to oversight from Risk and Compliance, with respect to operational and conduct risks.

BBI's approach to managing risks

Risk management strategy, governance and risk culture

Principal risks

The ERMF identifies eight Principal Risks and sets out associated responsibilities and risk management standards.

Each of the principal risks is overseen by an accountable executive within the Bank who is responsible for the framework, policies and standards that detail the related requirements. Risk reports to executive and Board committees are clearly organised by principal risk.

Accountable executives, their delegates and teams frequently collaborate to address issues and drive initiatives that span more than one principal risk.

Risk appetite for the principal risks

Risk appetite refers to the maximum loss under stress that the Bank is willing to incur by assuming principal risks. The Board sets the risk appetite for the Bank.

The Bank's risk appetite must also be within any limits set by its ultimate parent, Barclays plc.

Mandate & Scale Exposure Controls are a portfolio risk management approach that reviews and controls business activities, checking they are within Barclays mandate (i.e. aligned with expectations), and are of an appropriate scale (relative to the risk and reward of the underlying activities) reflecting the Bank's approved Risk Appetite.

The BBI CRO proposes the allocation of Risk Appetite and associated limits to control Risk Appetite to the Group CRO.

BBI's assessment of its Total Risk Appetite capacity is calculated as the difference between its target capital rate for that year and its own minimum hurdle rate. Group Risk Appetite constraints are not considered at the BBI level when making its demand for Risk Appetite allocation from Group. This total capacity is the level at which maximum Risk Appetite limits are set during the annual approval cycle, though sub-limits can also be set and adjusted periodically, if necessary. The Group CRO recommends the allocation of Risk Appetite and associated limits to control Risk Appetite to the Group Board Risk Committee (BRC) for approval. Once the Group Board Risk Committee approves the allocation of Total Risk Appetite for BBI, the BBI CRO presents the Total Risk Appetite and individual Risk Appetite limits to the BBI Board for its approval.

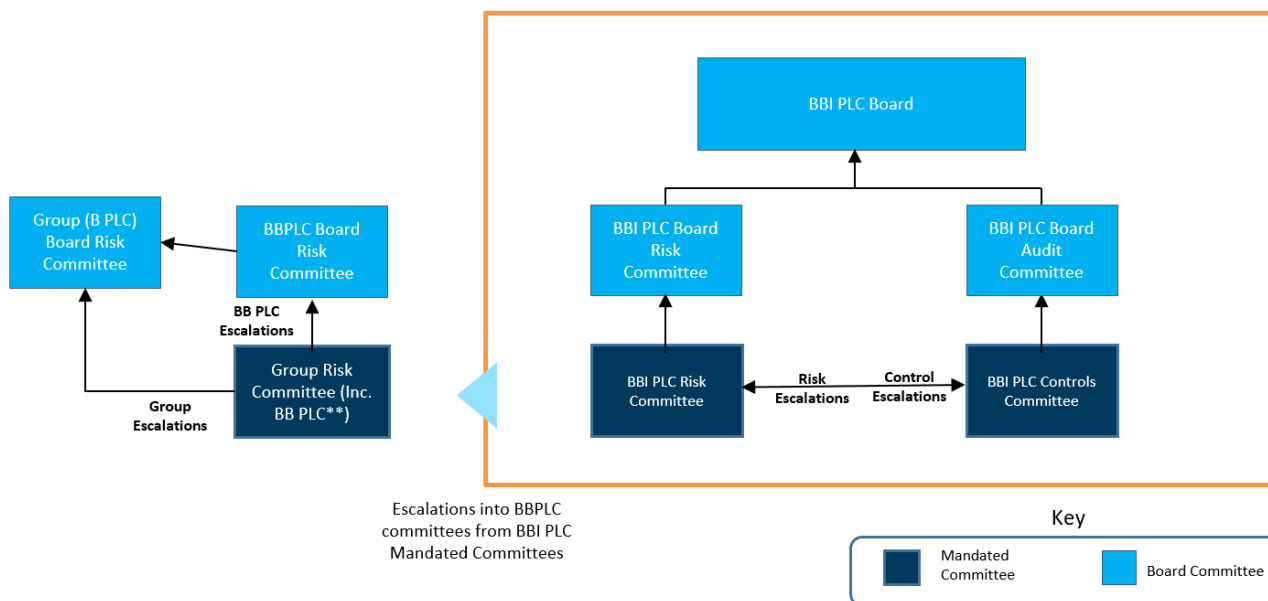
BBI's approach to managing risks

Risk management strategy, governance and risk culture

Roles and responsibilities in the management of risk

Risk committees

The Bank's Product/Risk Type Committees consider risk matters relevant to their business, and escalate as required to the Bank's Board Committees and the Bank's Board.



The 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.

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 in line with Group Policies. Finally,

- 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 Chair of the BRC provides a verbal update at Barclays Bank Ireland PLC Board meetings.

All members are independent non-executive Directors. The Chair of the BRC also sits on the BAC.

- 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). It also receives a half-yearly review of the adequacy of impairment allowances, which it reviews relative to the risk inherent in the portfolios, the business environment and the Bank's policies and methodologies. The Chair of the BAC also sits on the BRC.
- The Barclays Bank Ireland PLC Board Remuneration Committee (RemCo): The RemCo receives a detailed report on risk management performance and risk profile, and proposals on ex-ante and ex-post risk adjustments to variable remuneration. These inputs are considered in the setting of performance incentives.

A small number of risk management committees, supported by reporting processes, include representation from Barclays Group risk management executives, as well as from the operating entities (including Barclays Bank Ireland plc) as appropriate. This is typically to consider matters that are relevant to the risk profile of the Barclays Group, and/or where it is appropriate to make decisions that apply uniformly across the Barclays Group (for instance, the Barclays Group Impairment Committee approves impairment results).

BBI's approach to managing risks

Risk management strategy, governance and risk culture

Role of Barclays Group Risk Management Processes and Committees in Barclays Bank Ireland PLC

The Barclays Group Risk teams and Board Committees conduct risk management activity, and oversight, in respect of Barclays Bank Ireland PLC:

- Barclays Group Board allocates a portion of the overall risk appetite to Barclays Bank Ireland PLC;
- Certain Barclays Group Committees and executives review, and take decisions on, matters, events or transactions originating in Barclays Bank Ireland plc that are relevant to the risk profile of the Barclays Group
- Barclays Group-wide risk policies are owned by the Barclays Group Risk Function teams, and adopted by Barclays Group. Entity-specific requirements are agreed with the Barclays Group where local regulations would otherwise preclude adoption, or to clarify or emphasise particular aspects and outlined with respective appendices.

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 Goal, Purpose and Values 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:

- preparing and recommending the legal entity Risk Appetite to the Board Risk Committee
- 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.

BBI's approach to managing risks

Risk management strategy, governance and risk culture

Barclays Bank Ireland PLC Chief Compliance Officer

The Barclays Bank Ireland PLC Chief Compliance Officer is accountable to the Barclays Bank Ireland PLC CEO for the strategic and function leadership of the Compliance Function. Oversight specific accountabilities include:

- managing the Bank's conduct and reputation risks and escalating to the Board where appropriate
- setting minimum standards through compliance policies applicable globally and monitoring breaches, especially for Conduct and Reputation Risks and Financial Crime
- inputting into compensation structures, objectives and performance management of employees who can expose the Bank to significant risk
- implementing a robust and effectively managed whistleblowing process on an entity-wide basis
- using mandate to access any part of the legal entity and any information, bringing to the attention of line and senior management or the 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.

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; and
- 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; and
- Standards set out the key controls that must be followed for the objectives set out in the Policy to be met, and who needs to carry them out. Standards describe "how" controls should be undertaken.

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 each of the Financial Principal Risks, Operational Risk and Model Risk. The BBI CRO is responsible for embedding the frameworks, policies and associated standards within BBI. These frameworks, policies and associated standards are adapted to ensure they comply with any bespoke requirements of the jurisdictions where the Bank operates and the local regulatory frameworks which the Bank must adhere to. These must be subject to limits, monitored, reported on and escalated as required.

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 review by the Bank's principle risk accountable executives at least annually. 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 and to independently assess the ERMF, to provide confidence to the Board in the risk and control framework. The Controls Assurance Standard defines the requirements for Controls Assurance and Controls Testing.

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.

BBI's approach to managing risks

Risk management strategy, governance and risk culture

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 98), 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.

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-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 and values which govern our Barclays Way of working across our business globally. It constitutes a reference point covering the aspects of colleagues' working relationships, with other Barclays Group's employees, customers and clients, governments and regulators, business partners, suppliers, competitors and the broader community.

Embedding of a values-based, conduct culture

Conduct, culture and values remain a priority of the Bank and Barclays Group Executive Committees who receive regular, detailed information from the business lines, and clearly communicate their intentions and the Barclays Group's progress to all colleagues. The effectiveness of the risk and control environment, for which all colleagues are responsible, depends on the continued embedment of strong values. Colleagues must be willing to meet their risk management responsibilities and escalate issues on a timely basis.

Induction programmes support new colleagues in understanding how risk management culture and practices support how Barclays Group does business and the link to Barclays Group's values. The Leadership Curriculum covers the building, sustaining and supporting of a trustworthy organisation and is offered to colleagues globally.

BBI's approach to managing risks

Risk management strategy, governance and risk culture

Other risk culture drivers

In addition to values and conduct, we consider the following determinants of risk culture:

- Management and governance: This means a consistent tone from the top and clear responsibilities to enable risk identification and challenge
- Motivation and incentives: The right behaviours are rewarded and modelled
- Competence and effectiveness: This means that colleagues are enabled to identify, escalate and resolve risk and control matters
- Integrity: Colleagues are willing to meet their risk management responsibilities, and escalate issues on a timely basis.

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 refers to the maximum loss under stress that the Bank is willing to incur by assuming principal risks. The Board sets the risk appetite for the Bank.

Risk Appetite sets the 'tone from the top' and 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. Risk appetite sets an outer limit of the aggregate level and types of risk that the Bank is willing to assume to achieve its strategic objectives.

- For CET1 ratio: the CET1 ratio under stress shall not fall below the internal stress hurdle set at:
 - the Pillar 1 minimum plus;
 - the Pillar 2 requirement plus;
 - the Bank's specific buffer requirements including the capital conservation buffer, the countercyclical buffer, and the OSII buffer plus;
 - an internal buffer, and
- For liquidity: the Bank shall hold sufficient liquid assets to meet its obligations as they fall due under both normal and stressed conditions, and in normal funding conditions to meet requirements under regulatory and internal liquidity scenarios i.e. the liquidity coverage ratio and liquidity risk appetite.

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.

Stress testing

Stress loss limits are derived from the results of the adverse stress test scenario. 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 utilization 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

BBI's approach to managing risks

Risk management strategy, governance and risk culture

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 mandate and scale framework is used to:

- limit concentration risk
- keep business activities within the Bank and individual business mandate
- maintain activities at an appropriate scale relative to the underlying risk and reward
- confirm that risk-taking is supported by appropriate expertise and capabilities and take corrective actions otherwise.

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.

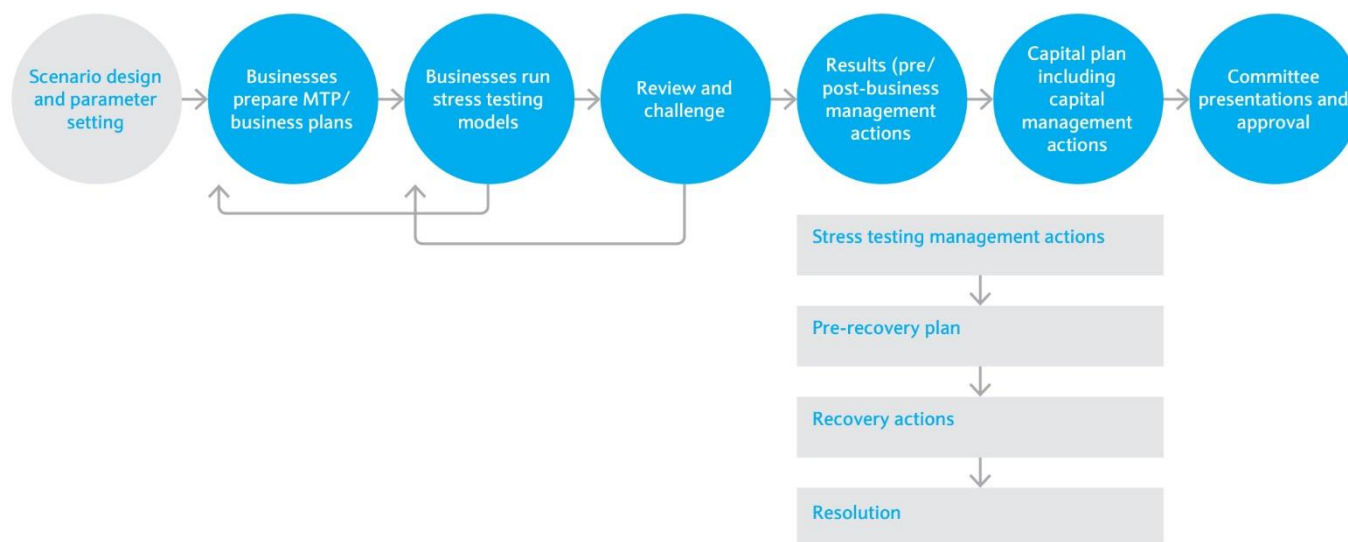
Limits reflect the nature of the risk being managed and controlled and are measured by total financing limits, LGD, stress loss or other metrics as appropriate. There is explicit identification of the exposures that are captured by limits and any material exclusion must be agreed. Limits are reviewed 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).

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 page 106. 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.

BBI's approach to managing risks

Risk management strategy, governance and risk culture

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	<p>Credit risk impairment: For retail portfolios businesses use statistical models to establish a relationship between IFRS9 impairment loss levels and key macroeconomic parameters such as GDP, inflation and unemployment, incorporating credit quality migration analysis to estimate stressed levels. 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 (PDs, LGDs and EADs) are primarily calibrated using historical and expected relationships with key macro-economic parameters.</p> <p>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.</p> <p>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.</p>
Market risk	<p>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.</p>
Treasury and Capital Risk	<p>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:</p> <ul style="list-style-type: none"> 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. <p>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.</p> <p>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.</p> <p>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.</p>

BBI's approach to managing risks

Risk management strategy, governance and risk culture

Principal Risk	Stress testing approach
	<p>Liquidity Risk:</p> <p>Liquidity risk is assessed by the internal liquidity risk metric (LRA) and Liquidity Coverage Ratio (LCR). The Bank analyses specific liquidity risk drivers such as wholesale funding and contingent funding needs based on the below scenarios:</p> <ul style="list-style-type: none"> • Barclays idiosyncratic liquidity scenario: Barclays faces a loss of market confidence while the market overall is not impacted • Market wide liquidity stress scenario: All financial institutions are impacted by a market wide loss of confidence • Combined liquidity stress scenario: A simultaneous Barclays idiosyncratic and market liquidity stress scenario • Long term liquidity stress 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.
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	IVU reviews the models and assumptions used in the MTP and stress test and may request the application of overlays to address model deficiencies
Conduct risk	Stress projections of future losses for conduct risk matters are estimated by exercising expert judgment in accordance with the methodology provided by regulatory bodies (EBA, ECB, and PRA).
Reputation risk	Reputation risk is not quantified or stressed
Legal risk	Legal risk is not quantified or stressed

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, or will run, regulatory stress tests. As a "significant institution" the Bank will be 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 Medium Term Plan (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 MTP risk review process includes a review of the proposed risk appetite by the business, including assessment 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.

BBI's approach to managing risks

Risk management strategy, governance and risk culture

- 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.
- Risk review meetings are held with the accountable executives of each business, where they present their business plans to the CRO and the CFO. The findings from the risk reviews are discussed, including the risk appetite proposals and stress testing results. Businesses may be required to change their business plans as a result of these meetings.
- 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 MTP Risk Review further reviews the Risk Register outlining the risk profile of businesses to confirm the completeness of risk appetite, capital adequacy assessments and the Bank's internal stress test.

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 maintain the Bank stays 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 110 to 119 cover the aspects of BBI's risk management framework specific to credit risk, including committees and reporting structure
Pages 120 to 127 detail how we approach the internal ratings models, and how the framework supports risk differentiation and management

BBI's approach to managing risks

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.

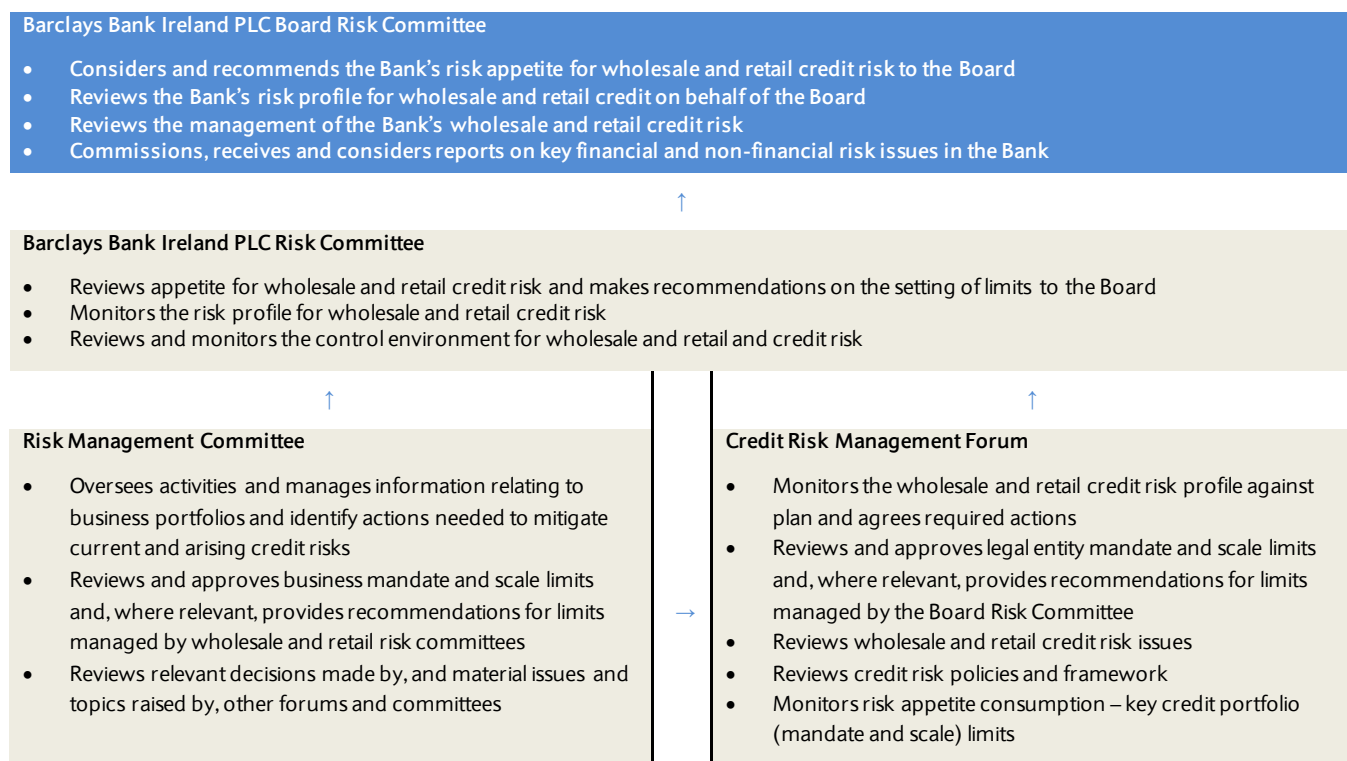
Credit risk management objectives are to:

- 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 in aggregated segments.

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



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 Barclays International 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.

BBI's approach to managing risks

Management of credit risk and the internal ratings-based approach

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 principle 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.

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 BBI 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 49 to 58.

As at 31 December 2020

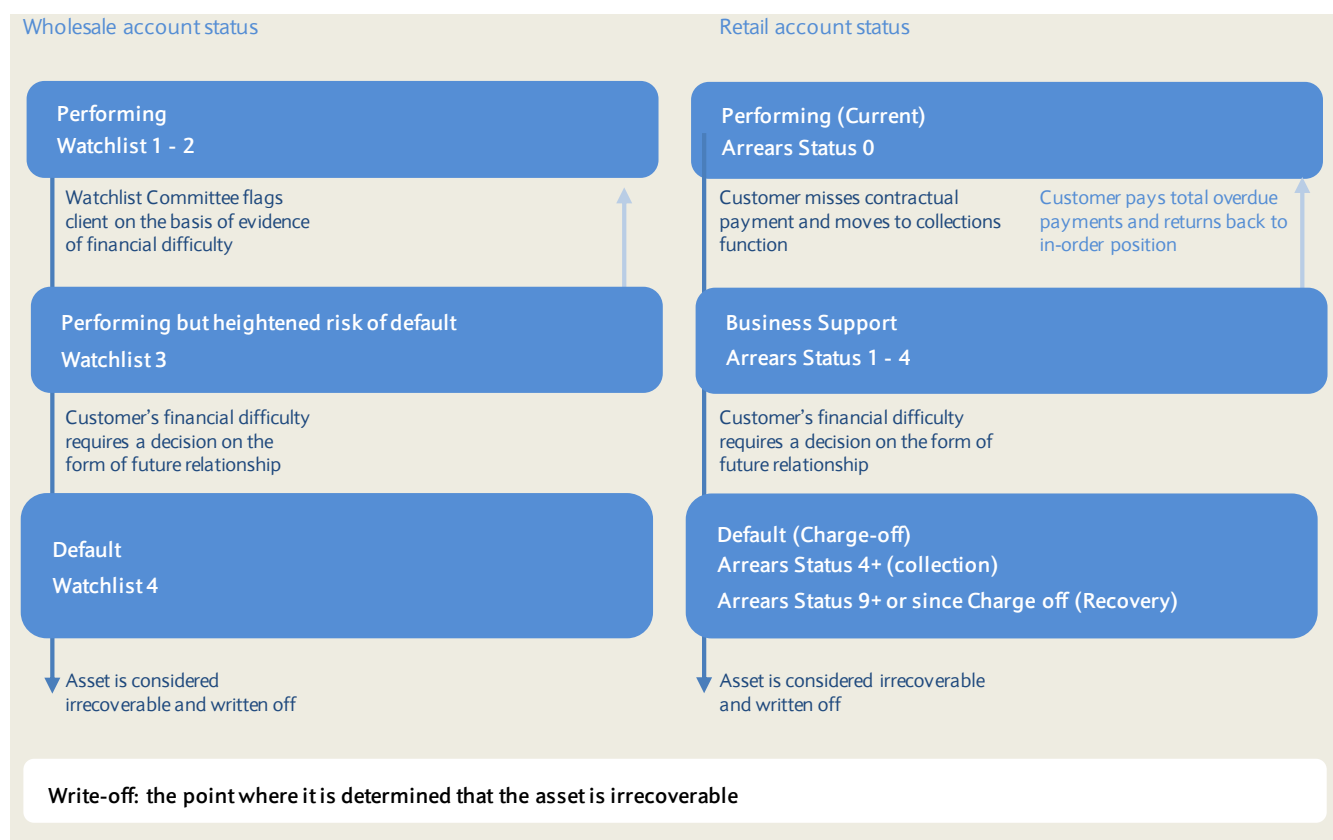
		Retail mortgages		Credit card & unsecured lending		Wholesale Credit	
		Weighted	Downside	Weighted	Downside	Weighted	Downside
Stage 1							
Model Exposure	€m	4,830	4,787	4,669	5,289	7,530	6,297
Model ECL	€m	5	6	27	34	15	18
Coverage	%	0.1	0.1	0.6	0.6	0.2	0.3
Stage 2							
Model Exposure	€m	589	632	1,039	1,393	1,562	2,795
Model ECL	€m	36	43	150	268	72	162
Coverage	%	6.1	6.8	14.4	19.2	4.6	5.8
Stage 3							
Model Exposure	€m	217	217	153	153	4	4
Model ECL	€m	32	41	102	105	-	-
Coverage	%	14.7	18.9	66.7	68.6	-	-
Model ECL – All Stages	€m	73	90	279	407	87	180

BBI's approach to managing risks

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 portfolios²

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;

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

BBI's approach to managing risks

Management of credit risk and the internal ratings-based approach

- 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, normally six, 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. This will typically occur after an account has been treated by a collections function. However, in certain cases, an account may be charged off directly from a performing status, such as in the case of insolvency or death.

The timings of the charge-off points are established based on the type of loan. For the majority of products, the standard period for charging off accounts is six cycles (180 days past due date of contractual obligation). Early charge-off points are prescribed for unsecured assets. For example, in cases of customer bankruptcy or insolvency, associated accounts are charged off within 60 days of notification.

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 (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.

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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. For the majority of products, the standard period for charging off accounts is six missed contractual payments (180 days past due date of contractual obligation) 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.

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

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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.

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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 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 Management Accounts 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. Each PMA above an absolute and relative threshold is approved by the IVU for a set time period (usually a maximum of six months) together with a plan for remediation.

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.

BBI's approach to managing risks

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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 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.

BBI's approach to managing risks

Management of credit risk and the internal ratings-based approach

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

Non-Performing debtors are defined as:

- More than 90 days past due.
- 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 are less than 30 days past due 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. Before any permanent programme of forbearance is granted, an affordability assessment is undertaken to confirm suitability of the offer. Short-term solutions focus on temporary reductions to contractual payments and may change from capital and interest payments to interest only. For loan customers with longer-term financial difficulties, term extensions may be offered, which may include interest rate concessions. For credit card customers with longer-term financial difficulties, a switch to a fully amortising plan may be offered, which may 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 new IFRS9 methodology adopted in January 2018. Forborne exposures are classified as stage 3 (credit impaired) assets under IFRS9, 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 our disclosures on forbearance on page 87 of our Annual Report.

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

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- 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 mainstream credit risk issue and Barclays Group has a dedicated Environmental Risk Management team, as part of the Group Credit Risk Management function. Environmental issues are considered in credit risk assessment, and environmental risk standards are included in the Wholesale Credit Risk Control Framework. 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 if deemed by the regulator to be contaminated, including for pre-existing conditions. 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 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. 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.

The growing importance of climate change as a source of indirect risk is increasingly being recognized in credit policy discussions. Climate risk can arise as physical risk, where changing weather patterns may adversely impact a client's operations, their access to critical resources, their supply chains or their distribution networks. It can also be a transition risk if movement to a lower carbon economy increases the costs or reduces the demand for their products or services. Climate risks are assessed at a relationship level or on a transactional level, such as assessing a client's perspective on the potential impacts of the climate change agenda on their operations, and the extent to which such impacts are reflected in their business planning assumptions.

Barclays is a member of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), and signed the Statement of Support for the TCFD Recommendations, which were published in June 2017. The TCFD recommendations aim to improve the disclosure of information to allow investors, regulators and other stakeholders to better assess and manage the risks and opportunities resulting from climate change; we rely on appropriate disclosures from clients to inform our own climate-related sector risk management. Clear understanding and analysis of potential financial risks and opportunities in short, medium and longer term horizons is still at an early stage. We anticipate that disclosures will continue to develop over time, supported by improved analytical tools, data and market practice. This will support Barclays as a user of climate disclosures across industry sectors and subsequently inform our own disclosures as a preparer.

BBI's approach to managing risks

Management of credit risk and the internal ratings-based approach

Internal ratings based (IRB) approach

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 and some retail mortgage portfolios, 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 34 on page 54.
- risk-reward and pricing: PD, LGD and CF estimates are 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 104
- impairment calculation: under IFRS9, ECL outputs are produced based on PD, EAD and CF IRB feeder models, with scenario and weighting. See page 114
- collections and recoveries: model outputs are used to identify segments of the portfolio where collection and recovery efforts should be prioritised
- economic capital calculation: most economic capital calculations use similar inputs as the regulatory capital (RC) process
- 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.

BBI's approach to managing risks

Management of credit risk and the internal ratings-based approach

Ratings processes and models for credit exposures

Wholesale credit

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 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

The 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.

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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 153.

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.

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. In practice, since financial crises have been infrequent, IVU would expect the model PD used in calculating regulatory capital to exceed the long run observed default rate.

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.

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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, following regulatory guidance of at least 9%. 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.

Table 75 for credit risk model characteristics shows modelled variables to calculate RWAs (PD, LGD, and EAD) at portfolio level, with number of models and their significance in terms of RWAs, model method or approach, numbers of years of data used, Basel asset class of the customer or client, and regulatory thresholds applied.

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Selected features of material models

The table below contains selected features of the BBI AIRB credit risk models which are used to calculate RWAs. Please note that the RWAs reported in this table are based on the models in production as of November 2020.

- PD models listed in the table account for €4.25bn of total AIRB approach RWAs
- LGD models listed in the table account for €4.25bn of total AIRB approach RWAs

Table 75: IRB credit risk models' selected features

Component modelled	Model Name	Size of associated portfolio (RWAs)	Model description and methodology	Number of years loss data	Basel asset classes measured	Applicable industry-wide regulatory thresholds
PD	Fund Grading	310	The Fund Grading model estimates probabilities of default (PDs) and thereby ratings (DGs) for regulated and unregulated funds.	> 10 Years	Corporate, Financial Institutions and Sovereigns	PD floor of 0.03% for corporate and institutions
PD	Italy Mortgage and Macquarie Mortgage Capital PD Model	2,325	Statistical scorecards estimated using regression techniques.	> 10 Years	Secured By Real Estate	PD floor of 0.03%
PD	Germany Basel PD	1,610	Statistical scorecards estimated using regression techniques, segmented along arrears status.	6 - 10 Years	Qualifying Revolving Retail (QRRE)	PD floor of 0.03%
LGD	Group Corporate and FI LGD Model	310	Model based on a statistical regression that outputs a long run average LGD by estimating the expected value of recovery. Inputs include industry, seniority, instrument, collateral and country.	> 10 Years	Corporate, Financial Institutions	LGD floor of 45% based on low default portfolio criteria
LGD	Italy Mortgage and Macquarie Mortgage Capital LGD Model	2,325	Model is based on statistical regression methodology.	> 10 Years	Secured By Real Estate	LGD floor of 10%
LGD	Germany LGD Model	1,610	Model is based on a function estimated using actual recoveries experience.	6 - 10 Years	Qualifying Revolving Retail (QRRE)	

Credit Risk IRB models performance back testing - estimated versus actual

The following tables compare the PDs and LGDs estimated by the BBI'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 154.

PD measures

- 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 from Nov'15. However, for the Wholesale book, "Average historical annual default" is calculated based on two years of data only. This reflects the establishment of BBI's Wholesale portfolio with its current structure.

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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'19 to Nov'20).
- 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.

Table 76: Analysis of expected performance versus actual results

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.

Asset Class

Asset Class	EBA PD Range (%)	External Ratings Equivalent		Weighted Average PD (%)	Arithmetic Average PD by obligors (%)	Number of obligors		Defaulted obligors in the year (#)	of which: new defaulted in the year (#)	Average historical annual default (%)
		Moody's	S&P			As at Nov'19	As at Nov'20			
Wholesale	0.00 to <0.15	Aaa,Aa1,Aa2,Aa3,A1,A2,A3,Baa1	AAA, AA+,AA,AA-,A+,A,A-,BBB+	0.03%	0.04%	311	420	0	0	0.00%
	0.15 to <0.25	Baa2	BBB	0.19%	0.18%	51	72	0	0	0.00%
	0.25 to <0.50	Baa3,Ba1	BBB-, BB+	0.35%	0.35%	1	5	0	0	0.00%
	0.50 to <0.75	Ba1,Ba2	BB	0.00%	0.00%	0	0	0	0	0.00%
Financial Institutions	0.75 to <2.50	Ba2,Ba3,B1	BB-,B+	0.00%	0.00%	0	4	0	0	0.00%
	2.50 to <10.00	B1,B2,B3,Caa1,Caa2	B+,B,B-,CCC+	0.00%	0.00%	0	0	0	0	0.00%
	10.00 to <100.00	Caa2,Caa3,Caa,C	CCC,CCC+,CCC-,CC+,CC,C	0.00%	0.00%	0	0	0	0	0.00%
	100.00 (default)	D	D	0.00%	0.00%	0	0	0	0	0.00%

BBI's approach to managing risks

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Asset Class

Retail	EBA PD Range (%)	External Ratings Equivalent		Weighted Average PD	Arithmetic Average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted in the year ^a	Average historical annual default
		Moody's	S&P			As at Nov'19	As at Nov'20			
				%	%	#	#	#	#	%
Secured by Real Estate	0.00 to <0.15	Aaa,Aa1,Aa2,Aa3,A1,A2,A3,Baa1	AAA, AA+,AA,A-,A+,A-,BBB+	0.11%	0.11%	53,239	47,380	133	-	0.12%
	0.15 to <0.25	Baa2	BBB	0.19%	0.19%	15,161	14,503	49	-	0.18%
	0.25 to <0.50	Baa3,Ba1	BBB-,BB+	0.28%	0.28%	3,728	3,984	35	-	0.48%
	0.50 to <0.75	Ba1,Ba2	BB	0.63%	0.63%	1,402	1,489	22	-	0.81%
	0.75 to <2.50	Ba2,Ba3,B1	BB-,B+	1.11%	1.13%	2,470	2,455	69	-	1.83%
	2.50 to <10.00	B1,B2,B3,Caa1,Caa2	B+,B,B-,CCC+	5.33%	5.41%	560	599	89	-	8.69%
	10.00 to <100.00	Caa2,Caa3,Ca,C	CCC,CCC+,CCC-,CC+,CC,C	36.43%	36.11%	1,108	1,154	388	-	24.94%
	100.00 (default)	D	D	100.00%	100.00%	960	1,404	-	-	-
Qualifying Revolving Retail	0.00 to <0.15	Aaa,Aa1,Aa2,Aa3,A1,A2,A3,Baa1	AAA, AA+,AA,A-,A+,A-,BBB+	0.07%	0.07%	817,890	873,137	173	41	0.03%
	0.15 to <0.25	Baa2	BBB	0.19%	0.19%	73,377	54,654	65	3	0.12%
	0.25 to <0.50	Baa3,Ba1	BBB-,BB+	0.36%	0.35%	74,918	60,773	159	7	0.23%
	0.50 to <0.75	Ba1,Ba2	BB	0.62%	0.62%	38,098	33,664	123	0	0.41%
	0.75 to <2.50	Ba2,Ba3,B1	BB-,B+	1.37%	1.38%	153,846	156,763	1097	38	1.02%
	2.50 to <10.00	B1,B2,B3,Caa1,Caa2	B+,B,B-,CCC+	4.96%	5.06%	51,701	37,781	1770	4	4.03%
	10.00 to <100.00	Caa2,Caa3,Ca,C	CCC,CCC+,CCC-,CC+,CC,C	36.73%	35.75%	18,525	9,414	5947	1	32.78%
	100.00 (default)	D	D	100.00%	100.00%	25,519	21,823	-	-	-

^a The category "of which new defaulted in 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.

BBI's approach to managing risks

Management of credit risk and the internal ratings-based approach

Asset Class

Asset Class	Number of resolved cases over last one year (Dec'19 to Nov'20)	Predicted LGD (Simple Average)	Actual LGD (Simple Average)
	#	%	%
Wholesale			
Investment Bank	0	0%	0%
Retail			
Secured by Real Estate	52	16%	29%
Qualifying Revolving Retail	12,458	84%	71%

2020 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.
- For the LGD models, there are no resolved cases for the reporting period.
- The new Eagle PD and LGD models will be submitted for the material wholesale portfolios as per the EBA IRB Repair roll out plan.

Secured by Real Estate

- For Italy Mortgages, the PiT PD model under-estimates the default rate for Barclays portfolio (0.61% expected vs. 0.96% actual) and over-estimates for Macquarie portfolio (3.58% expected vs. 2.27% actual). The PiT LGD models under-estimate for both the portfolios.
- The new set of models will be submitted for Italy Mortgages portfolio as per the EBA IRB Repair roll out plan. Interim Post Model Adjustments (PMAs) are in place to address existing models' deficiencies.

Qualifying Revolving Retail

- For Germany Cards, the PiT PD model over-estimates (1.03% estimated vs. 0.76% actual) at an overall level. The over-estimation in the PiT LGD model (83.7% estimated vs. 71.4% actual) is primarily driven by debt sale at a better price.
- The new set of models will be submitted for Germany Cards portfolio as per the EBA IRB Repair roll out plan. 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 130 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 75 to 87.
- 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 129.

BBI's approach to managing risks

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.

BBI's approach to managing risks

Management of counterparty credit risk and credit risk mitigation techniques

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.

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 129 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.

BBI's approach to managing risks

Management of counterparty credit risk and credit risk mitigation techniques

'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 or 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 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 133 we provide an overview of the market risks we incur across BBI
- The governance structure specific to market risks is discussed on page 133.
- The rest of the section consists of traded and other risks:
- Market risk, the risk of BBI being impacted by changes in the level or volatility of positions in the trading book, is covered on pages 134 to 140. Measurement techniques such as VaR, are discussed, as well as techniques applied when statistical techniques are not appropriate

BBI's approach to managing risks

Management of market risk

Market Risk

The risk of loss arising from potential adverse changes in the value of the firm'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 Europe 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 Europe 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 Treasury, Capital and Market Risks and attendees include business aligned market risk managers and the heads of the Markets business.

BBI's approach to managing risks

Management of market risk

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 107 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 page 103 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 management 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:

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 or scenarios.
Business scenario stresses	Multi-asset scenario analysis of extreme, 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 is what BBI deems as material market risk exposures which may have a detrimental impact on the performance of the trading business. The scope used in Regulatory VaR is narrower as it applies only to trading book positions approved by the ECB and banking book FX and Commodity positions.

Stress testing and scenario analysis are also an important part of the risk management framework, to capture potential risk 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, confidence level and horizon

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 two-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:

BBI's approach to managing risks

Management of market risk

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.

In some instances, historical data is not available for particular market risk factors for the entire look-back period, for example, complete historical data would not be available for an equity security following an initial public offering. In these cases, market risk managers will proxy the unavailable market risk factor data with available data for a related market risk factor.

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 two years 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.

See page 134 for a review of Management VaR in 2020.

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.

BBI's approach to managing risks

Management of market risk

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 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. 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.

Climate change is an emerging risk. The requirements for assessing and managing the impacts on market risk are evolving. Market risk arising from climate change is measured by applying a range of stress scenarios. Stress losses arising from these scenarios measure and aggregate climate related risks.

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 IV') 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 adheres to, 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 IV 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

BBI's approach to managing risks

Management of market risk

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.

Page 125 of the annual report sets out the valuation control framework for accounting valuations and the related responsibilities of the Finance-product control valuations function and the Valuation Committee. This function and committee are also responsible for the oversight of the PVA and maintaining compliance with article 105 of the CRR.

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):

Measure	Definition
Regulatory Value at Risk (VaR)	An estimate of the potential loss arising from unfavourable market movements calibrated to 99% confidence interval and 10-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 10-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	2 years	2 years
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 to similar to Management VaR (see page 134), 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 ('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 ordinarily reviewed on a monthly basis or when required by material changes in market

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Management of market risk

conditions or the trading portfolio. In recognition of the exceptional market environment caused by the Covid-19 global outbreak, in April 2020, the EBA issued guidance that allowed firms to delay the review of the SVaR period until December 2020. In line with this guidance, BBI postponed its monthly review process during the remainder of 2020 and resumed it in January 2021.

SVaR cannot be meaningfully backtested as it is not sensitive to current market conditions. Many market risk factors with complete historical data over a two-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 91 for a review of regulatory measures in 2020.

Table 77: Market risk model selected features

Component modelled	Number of significant models and size of associated portfolio (RWAs)	Model description and methodology	Applicable regulatory thresholds
Regulatory VaR	1 model; €341m	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; €600m	Same methodology as used for VaR model, but using a different time series	Regulatory SVaR is computed with one-year holding period and 99% confidence level
IRC	1 model; €505m	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; €413m	N/A	Commensurate with stress testing liquidity horizons

Regulatory back testing

Back testing 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 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, the results shown in the table and graph below. Regulatory back testing compares Regulatory VaR at 99% confidence level (one-day holding period equivalent) to actual and hypothetical³ changes in portfolio value as defined in CRR Article 366.

Previously the BBI backtesting exception count and status was maintained in line with Barclays Group. However, from the first quarter of 2020 this was replaced with BBI's own backtesting exceptions. The backtesting count represents the number of days when a loss exceeds the corresponding VaR estimate, measured at the 99% regulatory confidence level.

In the first half of 2020, banks that have regulatory permission to calculate model-based market risk RWAs, including Barclays, experienced a number of VaR backtesting exceptions driven by the high level of market volatility during the Covid-19 global outbreak. In recognition of the

³ 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

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exceptional market environment, on 27 June, a package of measures published by the European Commission to amend certain parts of the CRR became effective. These measures include a provision for competent authorities to exclude backtesting exceptions that were not due to deficiencies in the VaR model from the exception count used for capital requirements. Under this approach, in October 2020 the ECB granted BBI approval to exclude one backtesting exception driven by the high level of market volatility to take effect on 31 December 2020.

During 2020, BBI's regulatory VaR model experienced six backtesting exceptions against actual P&L, most of which were clustered around the period of extreme market volatility. Five of the exceptions were driven by market movements in credit spreads and interest rates larger than predicted from the historical data used in the VaR model while the remaining exception was driven by a risk not captured in the VaR model that was capitalised as an RNIV. As of 31 December 2020, BBI's regulatory DVaR model status was amber.

The table below shows the Bank's VaR back testing exceptions as at 31 December 2020.

Portfolios	Actual P&L		Hypo P&L	
	Total Exceptions	Status ^a	Total Exceptions	Status ^a
BBI	5	A	4	C

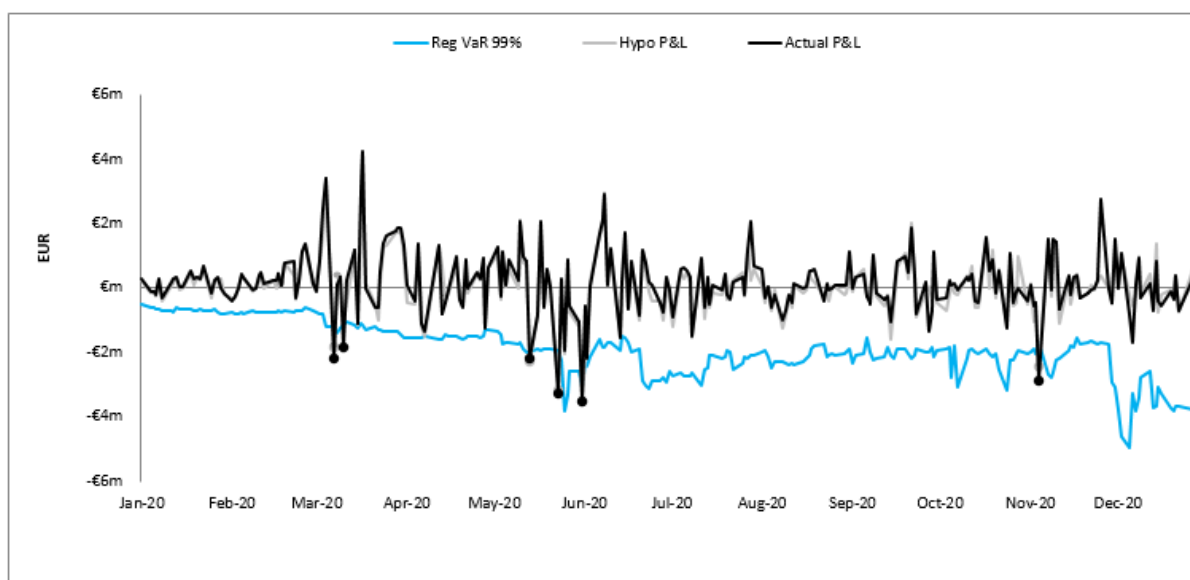
Note
a Status is accurate as of year-end.

MR4 - Comparison of VaR estimates with gains/losses

The chart below shows VaR for BBI. The dark blue and grey points on the chart indicate losses on the small number of days on which actual and hypo 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 VaR (RNIVs).

Exceptions are reported to internal management and regulators on a regular basis and investigated to evaluate the model performs as expected. Overall backtesting for BBI was in the red zone for the first half of the year and only moving to amber later in the third quarter. The back testing count at the end of the year was 5. The number of back testing exceptions is not considered as indicating any concerns with the VaR model.



Management of risks not fully captured in models, including Risks not in VaR (RNIVs)

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. RNIVs refer to those core risks that are not captured, or not adequately captured, in VaR and SVaR. RNIVs 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

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- 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 2020 'Fair value of assets and liabilities' for more details on fair value adjustments.

The treatment of RNIVs 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 RNIVs: 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 RNIV and a SVaR RNIV, 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 RNIVs: 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 RNIVs 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 BRC and are set at the BBI level for total management VaR and primary stress. These are then cascaded down by risk managers in order to meet the BBI risk appetite and primary stress. Mandate and Scale limits are then cascaded down to the businesses in order to support compliance with the overall risk appetite constraint of the entity.

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 2020, 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 highly quality liquid assets are adequate at all times including under stress, is discussed on pages 142 to 144.
- Capital risk, including how the risk of insufficient capital and leverage ratios and pension risk are managed, is discussed on pages 144 to 145.
- The management of Interest rate risk in the banking book is discussed on pages 145 to 147.

BBI's approach to managing risks

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 or stressed conditions (both actual and as defined for internal planning or regulatory testing purposes). This 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



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 that is adequate to meet 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. Together, these meet internal and regulatory requirements.

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's approach to managing risks

Management of treasury and capital risk

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.

Ongoing business management	Early signs/mild stress	Severe stress	Recovery
<ul style="list-style-type: none"> stress testing and planning liquidity limits early warning indicators 	<ul style="list-style-type: none"> monitoring and review management actions requiring minimal business rationalisation 	<ul style="list-style-type: none"> monitoring and review management actions with limited impact on franchise 	<ul style="list-style-type: none"> 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 stress tests. It is measured with reference to the liquidity pool compared to anticipated net stressed outflows for each of four stress scenarios. Barclays Bank Ireland has defined an internal short term LRA stress test metric.

In addition, Barclays Bank Ireland have implemented a 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 Liquidity Risk Appetite: For 2020, 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 side stress
- LCR 30 days minimum ratio 110%

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		
Change in composition of deposits	Deterioration in stress test surplus	Rising fund costs
Widening CDS spreads	Stress in financial markets	

BBI's approach to managing risks

Management of treasury and capital risk

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

A control framework is in place 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 risk stress test model and external regulatory requirements namely the Liquidity Coverage Ratio (LCR). The Liquidity Risk Appetite is represented as the level of risk the Bank chooses to take 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 strategy, outlined in Barclays Bank Ireland 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. The Treasury and Capital Risk function provides oversight of capital risk and is an independent risk function that reports to the CRO. Production of the Bank's ICAAP is the responsibility of BBI Finance.

In 2020, 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

BBI's approach to managing risks

Management of treasury and capital risk

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 Internal Capital Adequacy Assessment Process (ICAAP) and is used to inform the Bank's capital requirements.

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 defence 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 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

BBI's approach to managing risks

Management of treasury and capital risk

Hamburg was transferred to a multi-employer scheme during 2020, while another small plan in Portugal is closed to new 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.
- Provide independent oversight of the pension risk profiles from Barclays Bank Ireland's perspective.
- Coordinates 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

Overview

Banking book operations generate non-traded market risk, primarily through the mismatch between the duration of assets and liabilities and where interest rates on products reset at different dates. As per the Bank's policy to remain within the defined risk appetite, interest rate and FX risks residing in the banking books of the businesses are transferred to Treasury where they are centrally managed. Currently these risks are transferred to Treasury via funding arrangements and interest rate or FX swaps. However, the businesses remain susceptible to non-traded market risk from key sources:

- **Interest rate and repricing 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:** 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 Barclays. This risk is often referred to by industry regulators as 'embedded option risk'.

Roles and responsibilities

The Barclays Bank Ireland ALCO is responsible for monitoring and managing IRRBB risk in line with Barclays Bank Ireland's management objectives and risk frameworks. The Barclays Bank Ireland Risk Committee monitors and reviews the IRRBB risk profile and control environment, providing Second Line oversight of the management of IRRBB risk. The Barclays Bank Ireland PLC Board Risk Committee reviews the interest rate risk profile, including annual review of the risk appetite and the impact of stress scenarios on the interest rate risk of Barclays Bank Ireland.

Management of IRRBB

BBI seeks to minimise interest rate risk in the banking book and maintain it is within the agreed risk appetite. Therefore, the primary control for IRRBB is calculating the risk measures described below and monitoring risk exposure vs. defined limits. Limits are set at an aggregate business level and then cascaded down.

BBI's approach to managing risks

Management of treasury and capital risk

Barclays uses a range of complementary technical approaches to measure IRRBB as described below. The risk is measured and controlled using both an income based metric (EaR) and value based metrics (EVE and VaR).

Summary of measures for non-traded market risk

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 predefined time horizon.
Economic value of equity (EVE)	A measure of the potential change in value of expected future cash flows due to adverse interest rate movement, based on the existing balance sheet run-off profile.
Value at risk (VaR)	A measure of the potential loss of value arising from unfavourable market movements at a specific confidence level, if current positions were to be held unchanged for the predefined holding period.
Stress Loss	A measure to assess risk exposures under severely adverse market scenarios.

Annual Earnings at Risk (AEaR)

AEaR measures the sensitivity of net interest income over a one-year period. 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, more closely matching the expected product life-cycle.

AEaR sensitivity is calculated for the entire banking book. The metric provides a measure of how interest rate risk may impact the Bank's earnings, providing a simple comparison between risk and returns. The main disadvantage of the metric is its short-term focus, as it only measures the impact on a position in the first 12 months. In order to counter this, the Bank has implemented additional economic value risk metrics.

Economic Value of Equity (EVE)

EVE calculates the change in the present value of BBI's expected cash-flows from a parallel upward or downward interest rate (100bps) shock. Note that the EVE calculation measures sensitivity in terms of present value, while AEaR measures income sensitivity, and as such are complimentary.

The EVE measure is applied to the entire banking book, that is, the same coverage as AEaR, and covers 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.

Value at Risk (VaR)

VaR is an estimate of the potential loss arising from unfavourable market movements if the current position were to be held unchanged for a set period. For internal market risk management purposes, a historical simulation methodology is used with a ten-year equally weighted historical period, at a 99% confidence level, assuming a one year holding period.

Weekly VaR is used to measure residual interest risks within banking book portfolios. The calculation generates one week returns over the past ten years and then converts from weekly to annual using a constant factor. This number then defines the Economic Capital for the gap risk.

Stress Loss

All non-traded market risk positions are subject to the Bank's annual stress testing exercise, where scenarios based on adverse economic parameters are used to determine the potential impact of the positions on results and the balance sheet.

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 150.

Governance, management and measurement techniques are covered on pages 149 to 152.

BBI's approach to managing risks

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

<p>Barclays Bank Ireland PLC Board Risk Committee</p> <ul style="list-style-type: none"> - 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 	<p>Barclays Bank Ireland PLC Board Audit Committee</p> <ul style="list-style-type: none"> - 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
<p>Barclays Bank Ireland PLC Risk Committee</p> <ul style="list-style-type: none"> - 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 	<p>Barclays Bank Ireland PLC Controls Committee</p> <ul style="list-style-type: none"> - 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
<p>Barclays Bank Ireland PLC Business Risk & Control Fora</p> <ul style="list-style-type: none"> - 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's approach to managing risks

Management of operational risk

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 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.

BBI's approach to managing risks

Management of operational risk

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 Riskdata 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.

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).

BBI's approach to managing risks

Management of operational risk

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).

Insurance

As part of its risk management approach, Barclays Group also uses insurance to mitigate the impact of some operational risks.

Management of model risk

The types of model risk, and how they are managed, are detailed in this section.

- Model risk is the risk of the potential adverse consequences from financial assessments or decisions based on incorrect or misused model outputs and reports.
 -

BBI's approach to managing risks

Management of model risk

Model risk

The risk of the potential adverse consequences from financial assessments or 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 errors affecting the accuracy of their output. Model errors 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. Errors and misuse are the primary sources of model risk.

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

Strategically, BBI uses the same models as are used for the Barclays Group generally. Where possible, it is intended to maintain this approach to ensure consistency of Barclays capital assessment, risk management processes and risk measurement.

BBI is fully aligned to the Group for the purposes of managing model risk under the umbrella of Model Risk Management. It has adopted the frameworks, policies and procedures as well as leveraging Group models and model development capability. The models used by BBI are subject to IVU (Independent Validation Unit) review and validation processes against internal standards, regulatory requirements as well as internal model documentation and governance processes.

Accountability for risk models lies within BBI Risk function with a Head of Model Management reporting directly to the CRO. The Head of Model Management is accountable for ensuring that BBI Risk Models remain appropriate for the BBI portfolio, as well as complying with all aspects of Barclays model risk governance. The Head of Model Management is supported by a board designated Committee, the Model Management Committee (MMC).

BBI 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 and Controls (MGC), responsible for regulatory, audit, policy, standards, conformance and controls; (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 accurately measure and quantify model risk.

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, implementation, 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. MGC undertakes regular conformance reviews on 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 implemented 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.

BBI's approach to managing risks

Management of conduct risk

Conduct risk

The risk of detriment to customers, clients, market integrity, effective competition or Barclays from the inappropriate supply of financial services, including instances of wilful or negligent misconduct.

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. This includes taking appropriate steps to ensure that:

- (i) the Group's culture and strategy are appropriately aligned to these goals;
- (ii) its products and services are reasonably designed and delivered to meet the needs of customers and clients;
- (iii) the fair and orderly operation of the markets in which the Group does business is promoted; and
- (iv) the Group does not commit or facilitate money laundering, terrorist financing, bribery and corruption or breaches of economic sanctions.

Conduct risk incorporates risks associated with the maintenance of market integrity, customer protection, and product and services lifecycle governance and the prevention of financial crime.

Organisation and structure

The Bank fulfills the governance of conduct through management committees operated by the first and second lines of defence with clear escalation and reporting lines to the Board.

The Conduct and Reputational Risk Committee, a subcommittee of the Bank's Executive Committee, is dedicated to providing executive oversight of conduct risk and reputation risk within BBI.

The committee manages decisions by consensus with a majority of members agreeing on a proposed course of action. In the event that a consensus decision cannot be reached, the Chair may make the final decisions or recommendation.

The Conduct and Reputational Risk Committee escalates issues to the Bank's Executive Committee. The committee oversees the provision of a quarterly report to the Executive Committee and the Board Risk Committee, including insights from conduct risk data and metrics, to ensure sufficient visibility on the part of the Board and the Executive Committee into conduct risk and reputational risk matters.

Conduct risk is also discussed at the BBI Controls Committee which reports to the BBI Risk Committee as well as the Barclays Group Controls Committee.

Roles and responsibilities

The Conduct Risk Management Framework (CRMF) outlines how Barclays Bank Ireland 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 governance of conduct risk within the Group is fulfilled through management committees and forums operated by the first and second lines of defence with clear escalation and reporting lines to the Board.

The Group and the Barclays UK Risk Committees are the primary second line governance committees for the oversight of the Conduct Risk Profile and implementation of the CRMF. The risk committees' responsibilities include the identification and discussion of any emerging conduct risks exposures in their respective entities.

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.

BBI's approach to managing risks

Management of reputation risk

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.

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 Barclays is fulfilled through management committees, clear escalation and reporting lines to the Board level committees.

The Barclays Group Board is the most senior governance body responsible for reviewing and monitoring the effectiveness of Barclays Group's management of reputation risk. Within Barclays Bank Ireland Plc the Conduct and Reputational Risk Committee, a subcommittee of the BBI Executive Committee, is dedicated to providing executive oversight of conduct and reputation risk within BBI.

The committee manages decisions by consensus with a majority of members agreeing on a proposed course of action. In the event that a consensus decision cannot be reached, the Chair may make the final decisions or recommendation.

The Conduct and Reputational Risk Committee escalates issues to BBI's ExCo. The committee oversees the provision of a quarterly report to the Executive Committee and the Board Risk Committee including insights from conduct risk data and metrics, to ensure sufficient visibility on the part of the Board and the Executive Committee into conduct and reputational risk matters.

Roles and responsibilities

Barclays' reputation is its most precious asset, fundamental to business success and long term sustainability. The effective identification and management of Reputation Risk in conducting our business and in our decision making is therefore an imperative for all employees. Reputation Risk considerations must be an integral part of our strategic and financial planning, new business and product approval, risk assessments and other key decision making processes. Reputation Risk is not static and consideration of Reputation Risk must be continuous and dynamic.

The BBI Chief Compliance Officer is responsible for providing effective oversight, management and escalation of Reputation Risk in line with the Reputational Risk Management Framework. The BBI Chief Compliance Officer is responsible for;

- Ensuring the Bank's Reputation Risks are effectively managed and escalated to the Board where appropriate.
- Setting minimum standards for Reputation Risk through policies applicable globally and monitor compliance with these minimum standards.
- Using their mandate to access any part of the organisation and any information, to bring to the attention of line and senior management or the Board, as appropriate, any situation that is of concern from a Reputation Risk management perspective or that could materially violate approved Risk Tolerance guidelines.

Business and Function management are responsible for ensuring adherence to the Reputation Risk Management Framework and related Policies and Standards as well as the Barclays Control Framework as it relates to the Reputation Risk Horizontal.

Business and Function management are also responsible for escalating and reporting any risks, issues or dispensations, waivers or breaches (DWBs) and are required to present their Reputation Risk profile subject to review and challenge by Compliance, and updates on any Critical and Major Risk Events and Issues to the Conduct and Reputational Risk Committee on at least a quarterly basis.

Where a transaction sponsored by BBPLC has a potential impact on the Bank's reputation, the Bank's CEO has a casting vote on the BBPLC Transaction Review Committee responsible for approving the transaction. The Bank is also represented on that approval committee by the Bank's compliance function.

Internal Audit as the third line of defence provides independent assurance on the effectiveness of Reputation Risk management to the Board and senior management.

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.

BBI's approach to managing risks

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 Group-wide legal risk management framework, including the implementation of 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 maintaining a Barclays Group-wide legal risk management framework. This includes defining the relevant legal risk policies 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 Board Risk Committee is the most senior 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 BBPLC Board Risk Committee.

Appendices

Appendix A – PD, LGD, RWA and Exposures by country

The following tables show IRB data for countries in which Barclays is active where the IRB RWA amount is more than 1% of the Group total for any asset class. The countries are shown in descending order of aggregated total RWAs for all asset classes.

Table 78: PD, LGD, RWA and exposure values by country for IRB - all asset classes

Country	PD %	LGD %	RWA €m	Exposure €m	Country	PD %	LGD %	RWA €m	Exposure €m
Italy	3.13%	22.3%	2299	6081	Finland	0.05%	44.4%	-	1
Germany	2.77%	72.8%	1705	5065	Turkey	0.52%	23.4%	-	1
Luxembourg	0.17%	45.0%	127	733	Belgium	22.06%	22.4%	-	-
Ireland	0.07%	25.8%	101	173	Thailand	0.62%	24.4%	-	-
Sweden	0.05%	45.0%	27	157	Tunisia	0.44%	17.8%	-	-
France	0.06%	44.7%	16	112	United Arab Emirates	0.16%	20.5%	-	-
United Kingdom	0.99%	43.8%	14	152	Kenya	0.07%	37.3%	-	-
Netherlands	0.28%	44.4%	14	26	China	0.27%	28.9%	-	-
Malta	0.05%	44.9%	4	25	Brazil	0.23%	17.7%	-	-
Portugal	0.22%	55.3%	3	8	Czech Republic	0.12%	30.6%	-	-
Switzerland	9.82%	21.6%	2	9	San Marino	22.13%	18.6%	-	-
Canada	0.08%	44.1%	1	6	Hungary	0.10%	26.4%	-	-
Spain	0.10%	41.5%	1	5	Japan	0.34%	19.0%	-	-
Cayman Islands	0.12%	45.0%	1	3	Singapore	0.19%	12.8%	-	-
United States	1.20%	25.8%	1	4	Monaco	0.08%	21.1%	-	-
Austria	0.07%	44.6%	1	2	Saudi Arabia	0.12%	14.9%	-	-
Australia	0.09%	43.9%	-	3	New Zealand	0.09%	24.8%	-	-
Denmark	0.13%	40.9%	-	1	Slovakia	0.09%	22.4%	-	-

Table 78a: PD, LGD, RWA and exposure values by country for IRB - central governments and central banks

Country	PD %	LGD %	RWA €m	Exposure €m	Country	PD %	LGD %	RWA €m	Exposure €m
Portugal	0.22%	55.4%	3	7	United States	-	-	-	-
Ireland	-	-	-	-	Sweden	-	-	-	-
Italy	-	-	-	-	Australia	-	-	-	-
Germany	-	-	-	-	Denmark	-	-	-	-
Luxembourg	-	-	-	-	Singapore	-	-	-	-
France	-	-	-	-	Norway	-	-	-	-
Spain	-	-	-	-	Belgium	-	-	-	-
Hungary	-	-	-	-	Hong Kong	-	-	-	-
Netherlands	-	-	-	-	China	-	-	-	-
United Kingdom	-	-	-	-	Austria	-	-	-	-
Canada	-	-	-	-	Brazil	-	-	-	-
Switzerland	-	-	-	-	Turkey	-	-	-	-
Japan	-	-	-	-	Finland	-	-	-	-
South Africa	-	-	-	-	Greece	-	-	-	-
Kuwait	-	-	-	-	Saudi Arabia	-	-	-	-
Thailand	-	-	-	-	Qatar	-	-	-	-
Liechtenstein	-	-	-	-	Malta	-	-	-	-
Jersey	-	-	-	-	Gibraltar	-	-	-	-

Appendices

Appendix A – PD, LGD, RWA and Exposures by country

Table 78b: PD, LGD, RWA and exposure values by country for IRB – institution

Country	PD %	LGD %	RWA €m	Exposure €m	Country	PD %	LGD %	RWA €m	Exposure €m
United Kingdom	-	-	-	-	Denmark	-	-	-	-
France	-	-	-	-	Sweden	-	-	-	-
Germany	-	-	-	-	Netherlands	-	-	-	-
Ireland	-	-	-	-	Liechtenstein	-	-	-	-
Spain	-	-	-	-	Australia	-	-	-	-
Greece	-	-	-	-	Qatar	-	-	-	-
Austria	-	-	-	-	Canada	-	-	-	-
United States	-	-	-	-	Singapore	-	-	-	-
Luxembourg	-	-	-	-	Japan	-	-	-	-
Belgium	-	-	-	-	Switzerland	-	-	-	-
Turkey	-	-	-	-	Malta	-	-	-	-
Saudi Arabia	-	-	-	-	Jersey	-	-	-	-
Portugal	-	-	-	-	China	-	-	-	-
Hong Kong	-	-	-	-	Brazil	-	-	-	-
Norway	-	-	-	-	Hungary	-	-	-	-
South Africa	-	-	-	-	Kuwait	-	-	-	-
Finland	-	-	-	-	Thailand	-	-	-	-
Italy	-	-	-	-	Gibraltar	-	-	-	-

Table 78c: PD, LGD, RWA and exposure values by country for IRB – corporates

Country	PD %	LGD %	RWA €m	Exposure €m	Country	PD %	LGD %	RWA €m	Exposure €m
Luxembourg	0.15%	45.0%	127	732	Norway	0.07%	45.0%	-	-
Ireland	0.07%	25.8%	101	173	Belgium	0.04%	45.0%	-	-
Germany	0.07%	45.0%	98	675	Switzerland	-	-	-	-
Sweden	0.05%	45.0%	27	157	Virgin Islands, British	-	-	-	-
France	0.06%	45.0%	15	110	United Arab Emirates	-	-	-	-
Netherlands	0.29%	45.0%	14	25	Japan	-	-	-	-
United Kingdom	0.40%	45.0%	12	143	Guernsey	-	-	-	-
Italy	0.22%	45.0%	7	16	Bermuda	-	-	-	-
Malta	0.05%	45.0%	4	25	Mauritius	-	-	-	-
Canada	0.07%	45.0%	1	5	Russian Federation	-	-	-	-
Cayman Islands	0.12%	45.0%	1	3	Hong Kong	-	-	-	-
Spain	0.09%	45.0%	1	5	Isle of Man	-	-	-	-
Austria	0.07%	45.0%	-	2	Brazil	-	-	-	-
Australia	0.09%	45.0%	-	3	Singapore	-	-	-	-
Denmark	0.13%	45.0%	-	1	China	-	-	-	-
Finland	0.04%	45.0%	-	1	Egypt	-	-	-	-
Kenya	0.06%	45.0%	-	-	Israel	-	-	-	-
United States	0.06%	45.0%	-	-	Botswana	-	-	-	-

Appendices

Appendix A – PD, LGD, RWA and Exposures by country

Table 78d: PD, LGD, RWA and exposure values by country for IRB - SME retail

Country	PD %	LGD %	RWA €m	Exposure €m	Country	PD %	LGD %	RWA €m	Exposure €m
Ireland	-	-	-	-	Spain	-	-	-	-
United Kingdom	-	-	-	-	Sweden	-	-	-	-
United States	-	-	-	-	Australia	-	-	-	-
Germany	-	-	-	-	Denmark	-	-	-	-
Italy	-	-	-	-	Singapore	-	-	-	-
Japan	-	-	-	-	Norway	-	-	-	-
South Africa	-	-	-	-	Belgium	-	-	-	-
France	-	-	-	-	Hong Kong	-	-	-	-
Netherlands	-	-	-	-	China	-	-	-	-
Canada	-	-	-	-	Austria	-	-	-	-
Switzerland	-	-	-	-	Brazil	-	-	-	-
Luxembourg	-	-	-	-	Turkey	-	-	-	-
Portugal	-	-	-	-	Finland	-	-	-	-
Greece	-	-	-	-	Hungary	-	-	-	-
Saudi Arabia	-	-	-	-	Kuwait	-	-	-	-
Qatar	-	-	-	-	Thailand	-	-	-	-
Malta	-	-	-	-	Liechtenstein	-	-	-	-
Jersey	-	-	-	-	Gibraltar	-	-	-	-

Table 78e: PD, LGD, RWA and exposure values by country for IRB - secured retail

Country	PD %	LGD %	RWA €m	Exposure €m	Country	PD %	LGD %	RWA €m	Exposure €m
Italy	3.14%	22.3%	2,292	6,065	Ireland	0.37%	20.2%	-	-
Switzerland	9.82%	21.6%	2	9	Denmark	0.12%	23.6%	-	-
United Kingdom	10.84%	23.8%	2	9	Czech Republic	0.12%	30.6%	-	-
United States	1.27%	24.7%	1	4	San Marino	22.13%	18.6%	-	-
Germany	0.17%	25.2%	-	3	Hungary	0.10%	26.4%	-	-
France	0.22%	19.3%	-	1	Japan	0.34%	19.0%	-	-
Luxembourg	27.24%	23.6%	-	1	Singapore	0.19%	12.8%	-	-
Turkey	0.52%	23.4%	-	1	Monaco	0.08%	21.1%	-	-
Belgium	22.08%	22.4%	-	-	Australia	0.11%	21.7%	-	-
Spain	0.13%	20.5%	-	1	Sweden	0.10%	18.5%	-	-
Netherlands	0.15%	20.6%	-	1	Kenya	0.09%	21.8%	-	-
Thailand	0.62%	24.4%	-	-	Finland	0.62%	19.7%	-	-
Tunisia	0.44%	17.8%	-	-	Saudi Arabia	0.12%	14.9%	-	-
Canada	0.34%	20.5%	-	-	New Zealand	0.09%	24.8%	-	-
United Arab Emirates	0.16%	20.5%	-	-	Slovakia	0.09%	22.4%	-	-
China	0.27%	28.9%	-	-	Norway	0.09%	19.9%	-	-
Brazil	0.23%	17.7%	-	-	Azerbaijan	0.08%	15.8%	-	-
Malta	0.62%	23.6%	-	-	Namibia	0.11%	13.2%	-	-

Appendices

Appendix A – PD, LGD, RWA and Exposures by country

Table 78f: PD, LGD, RWA and Exposure values by country for IRB - revolving retail

Country	PD %	LGD %	RWA €m	Exposure €m	Country	PD %	LGD %	RWA €m	Exposure €m
Germany	3.19%	77.1%	1,607	4,387	Spain	-	-	-	-
Ireland	-	-	-	-	Sweden	-	-	-	-
United States	-	-	-	-	Australia	-	-	-	-
United Kingdom	-	-	-	-	Denmark	-	-	-	-
Italy	-	-	-	-	Singapore	-	-	-	-
Japan	-	-	-	-	Norway	-	-	-	-
South Africa	-	-	-	-	Belgium	-	-	-	-
France	-	-	-	-	Hong Kong	-	-	-	-
Netherlands	-	-	-	-	China	-	-	-	-
Canada	-	-	-	-	Austria	-	-	-	-
Switzerland	-	-	-	-	Brazil	-	-	-	-
Luxembourg	-	-	-	-	Turkey	-	-	-	-
Portugal	-	-	-	-	Finland	-	-	-	-
Greece	-	-	-	-	Hungary	-	-	-	-
Saudi Arabia	-	-	-	-	Kuwait	-	-	-	-
Qatar	-	-	-	-	Thailand	-	-	-	-
Malta	-	-	-	-	Liechtenstein	-	-	-	-
Jersey	-	-	-	-	Gibraltar	-	-	-	-

Table 78g: PD, LGD, RWA and exposure values by country for IRB - other retail exposures

Country	PD %	LGD %	RWA €m	Exposure €m	Country	PD %	LGD %	RWA €m	Exposure €m
Ireland	-	-	-	-	Spain	-	-	-	-
United Kingdom	-	-	-	-	Sweden	-	-	-	-
United States	-	-	-	-	Australia	-	-	-	-
Germany	-	-	-	-	Denmark	-	-	-	-
Italy	-	-	-	-	Singapore	-	-	-	-
Japan	-	-	-	-	Norway	-	-	-	-
South Africa	-	-	-	-	Belgium	-	-	-	-
France	-	-	-	-	Hong Kong	-	-	-	-
Netherlands	-	-	-	-	China	-	-	-	-
Canada	-	-	-	-	Austria	-	-	-	-
Switzerland	-	-	-	-	Brazil	-	-	-	-
Luxembourg	-	-	-	-	Turkey	-	-	-	-
Portugal	-	-	-	-	Finland	-	-	-	-
Greece	-	-	-	-	Hungary	-	-	-	-
Saudi Arabia	-	-	-	-	Kuwait	-	-	-	-
Qatar	-	-	-	-	Thailand	-	-	-	-
Malta	-	-	-	-	Liechtenstein	-	-	-	-
Jersey	-	-	-	-	Gibraltar	-	-	-	-

Appendices

Appendix B – Analysis of impairment

IFRS Impairment

See pages 114 for background on impairment.

Table 79: Analysis of impaired and past due exposures and allowance for impairment by exposure type

This table shows total gross loans and advances analysed by balances past due and not past due. It also shows gross exposure assessed for impairment in accordance with IFRS9 and the resulting allowance for impairment.

	Not past due	Past due	Total	Gross exposure assessed for impairment	Allowance for Impairment
	€m	€m	€m	€m	€m
As at 31 December 2020					
Traded loans	119	-	119	-	-
Financial assets designated at fair value through the income statement	713	31	744	-	-
Financial assets designated at fair value through other comprehensive income	-	-	-	-	-
Cash collateral and settlement balances	19,061	-	19,061	19,061	-
Gross loans and advances at amortised cost:	-	-	-	-	-
Home Loans	5,472	186	5,658	5,658	98
Credit cards, unsecured and other retail lending	3,738	300	4,038	4,038	390
Corporate loans	3,642	303	3,945	3,945	105
Total Gross loans and advances at amortised cost	12,852	789	13,641	13,641	593
Total	32,745	820	33,565	32,702	593

Table 80: Geographic analysis of impaired and past due exposures and allowance for impairment

This table shows total gross loans and advances analysed by balances past due and not past due, and gross exposures assessed for impairment in accordance with IFRS9 and the resulting impairment allowance, split by geographic location of the counterparty.

	Not past due	Past due	Total	Gross exposure assessed for impairment	Allowance for Impairment
	€m	€m	€m	€m	€m
As at 31 December 2020					
UK	3,489	98	3,587	3,508	3
Europe	28,782	720	29,502	28,717	589
Americas	344	2	346	346	-
Africa and Middle East	69	-	69	69	-
Asia	63	-	63	63	-
Total	32,747	820	33,567	32,703	592

Appendices

Appendix C – Countercyclical Capital Buffer

Table 81: Countercyclical capital 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.

Breakdown by Country	General Credit Exposures		Trading book exposures		Securitisation exposures		Own Funds requirements			Total	Own Funds Requirements weights	Counter-cyclical capital buffer rate
	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	Exposure Value for SA	Exposure Value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures			
	€m	€m	€m	€m	€m	€m	€m	€m	€m	€m	%	%
BULGARIA (BG)	-	-	-	-	-	-	-	-	-	-	-	0.50%
CZECH REPUBLIC (CZ)	7	-	-	-	-	-	1	-	-	1	0.07%	0.50%
HONG KONG (HK)	-	-	-	-	-	-	-	-	-	-	-	1.00%
LUXEMBOURG (LU)	693	471	-	-	-	-	58	-	-	58	4.17%	0.25%
NORWAY (NO)	747	-	-	-	-	-	46	-	-	46	3.33%	1.00%
SLOVAKIA (SK)	-	-	-	-	-	-	-	-	-	-	-	1.00%
Total (countries with existing CCyB rate)	1,447	471	-	-	-	-	105	-	-	105	7.55%	
FINLAND (FI)	308	11	-	-	-	-	25	-	-	25	1.80%	n/a
FRANCE (FR)	3,167	142	-	-	-	-	187	-	-	187	13.45%	n/a
GERMANY (DE)	3,427	5,203	-	-	-	-	360	-	-	360	25.90%	n/a
IRELAND (IE)	1,142	168	-	-	-	-	99	-	-	99	7.12%	n/a
ITALY (IT)	1,190	6,083	-	-	-	-	269	-	-	270	19.42%	n/a
NETHERLANDS (NL)	1,524	22	1	-	-	-	120	-	-	120	8.63%	n/a
SPAIN (ES)	1,352	5	5	-	-	-	107	-	-	107	7.70%	n/a
UNITED KINGDOM (GB)	555	177	-	-	-	-	46	-	-	46	3.31%	n/a
UNITED STATES (US)	278	76	-	-	-	-	21	-	-	21	1.51%	n/a
Total (countries with own funds requirements weights 1% or above)	12,943	11,887	6	-	-	-	1,234	-	-	1,235	88.85%	
Total (rest of the world less than 1% requirement)	650	203	-	-	-	-	50	-	-	50	3.61%	n/a
Total	15,040	12,561	6	-	-	-	1,389	-	-	1,390	100.00%	

Amount of institution-specific countercyclical capital buffer

Total risk exposure amount	€23,717m
Institution specific countercyclical buffer rate	0.04%
Institution specific countercyclical buffer requirement	€10m

Appendices

Appendix D – 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 in securitisations. BBI monitors the mix of secured and unsecured funding sources within the BBI's 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 March 2020 to 31 December 2020.

Template A - Assets				
	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of non-encumbered assets	Fair value of non-encumbered assets
	010	040	060	090
	€m	€m	€m	€m
010 Assets of the institution	14,310	-	83,047	-
030 Equity instruments	-	-	-	-
040 Debt securities	1,386	1,386	435	435
120 Other assets	13,244	-	82,714	-

Template B - Collateral received				
		Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance	
		010	040	
		€m	€m	
130 Collateral received by the institution		15,104	2,604	
150 Equity instruments		418	384	
160 Debt securities		14,648	2,367	
230 Other collateral received		-	-	
240 Own debt securities issued other than own covered bonds or ABSs		-	-	

Template C - Encumbered assets/collateral received and associated liabilities				
		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered	
		010	030	
		€m	€m	
010 Carrying amount of selected financial liabilities		21,243	25,827	

Appendices

Appendix E – Disclosures on remuneration

Barclays Bank Ireland PLC remuneration

The following disclosures are made in accordance with Article 450 of the Capital Requirements Regulation, the Basel Committee on Banking Supervision ('BCBS') Pillar 3 disclosure requirements standard (December 2018) and the EBA Guidelines on sound remuneration policies.

Remuneration Governance

The mandate of the Barclays Bank Ireland PLC Board Remuneration Committee (the 'Committee') is included in the Directors' Report in the 2020 BBI Annual Report. Willis Towers Watson provided the Committee in 2020 with market data on compensation when considering incentive levels and remuneration packages.

The Committee held five meetings during 2020 and all members were present at each meeting:

Member	Meetings attended
Eoin O'Driscoll (Chair)	5/5
Jennifer Allerton (Committee member from 29 January 2020)	4/4
Tom Huertas	5/5
Helen Keelan	5/5

The Committee has adopted the over-arching principles and parameters of the remuneration policy set by the Barclays PLC Remuneration Committee, as disclosed in the Barclays PLC Remuneration Report.

Performance and remuneration

Barclays' remuneration philosophy, below, has been adopted by the Committee and links remuneration to achieving sustained high performance and creating long-term value. The remuneration philosophy applies to all employees (including those individuals identified as material risk takers ('MRTs')) within BBI 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.

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 as well as '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.

Barclays' remuneration philosophy

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 contribution to stakeholders, in both the short and longer term, playing a valuable role in society
Support Barclays' Values and culture	Results must be achieved in a manner consistent with our Values. Our Values and culture 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

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Appendix E – Disclosures on remuneration

Risk adjustment

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 Co-Presidents 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 processes 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 which 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, by virtue of seniority, could be deemed indirectly responsible, including staff who drive BBI’s culture and set its strategy.

Actions which 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	Deferred unvested 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 which 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 are 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: <ul style="list-style-type: none"> (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, in each case taking account of the individual’s proximity to and responsibility for that incident.

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.

Remuneration structure

Employees receive salary, pension and other benefits and are eligible to be considered for an annual bonus. 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.

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Appendix E – Disclosures on remuneration

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.

The ability to recognise performance through variable remuneration enables the Group, Barclays Bank PLC and BBI 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. 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:

For MRTs:		For de minimis MRTs/non-MRTs	
Incentive award	Amount deferred	Incentive award	Amount deferred
< £500,000	40% of total award	Up to £65,000	0%
£500,000 to £1,000,000	60% of total award	> £65,000	Graduated level of deferral
> £1,000,000	60% up to £1,000,000 100% above £1,000,000		

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, 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.

Share plans

Alignment of MRTs with shareholders is achieved through deferral of incentive pay. Additional shareholding is encouraged through the all-employee share plans.

Total Remuneration

Total Remuneration for the financial year

	All Employees
Number of individuals	1,787
Fixed remuneration (€m)	195
Variable remuneration (€m)	68
Total remuneration (€m)	263

MRTs

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 BBI Board and BBI's employees whose professional activities could have a material impact on BBI's risk profile. A total of 130 individuals were MRTs in 2020 (2019: 101). 'Senior management', as referred to in the tables below, means members of the BBI Board (Executive Directors and Non-Executive Directors) and members of the BBI Executive Committee in accordance with Article 3(9) of CRDIV.

BBI's major business areas are Corporate and Investment Bank ("CIB") and Consumer, Cards and Payments ("CCP"). 'BBI Other' includes internal control functions and corporate functions. Except for those in Senior Management, CCP did not have any other individuals who were MRTs in 2020.

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Appendix E – Disclosures on remuneration

The following set of tables set out the remuneration disclosures for individuals identified as MRTs for BBI.

Remuneration for the financial year			
	Senior management ^a	Other MRTs	
		CIB	BBI Other
Fixed remuneration^b			
Number of individuals	22	66	42
Total fixed remuneration (€m)	8.2	25.6	8.5
Fixed cash remuneration (€m) ^c	8.2	25.6	8.5
Fixed remuneration in shares (€m)	-	-	-
of which subject to holding period (€m)	-	-	-
Variable remuneration^b			
Number of individuals	12	64	39
Total variable remuneration (€m)	4.7	24.5	1.6
Total cash bonus (€m)	2.2	11.3	1.1
of which deferred (€m)	1.1	5.2	0.1
Total share bonus (€m)	2.5	13.2	0.5
of which deferred or subject to holding period	2.5	13.2	0.5
(€m)			
Total remuneration (€m)	12.9	50.1	10.1

Notes:

- a As senior management is comprised of members of the Barclays Bank Ireland PLC Board and members of the Barclays Bank Ireland PLC Executive Committee, it is not appropriate to separate by business area.
- b Fixed remuneration takes the form of cash and/or shares and pensions and benefits in line with policy. Variable remuneration takes the form of cash and/or shares and there are no other forms of variable remuneration.
- c Fixed cash remuneration includes an estimate for pensions and benefits during the year. Fixed cash remuneration is not subject to holding periods.

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Appendix E – Disclosures on remuneration

Deferred remuneration - Senior management			
All figures in €m	Total	Cash	Shares
Balance as at 1 January 2020	8.3	3.7	4.6
Awarded in year	4.8	1.7	3.1
Adjusted through	-	-	-
ex post explicit adjustments ^a	-	-	-
ex post implicit adjustments ^b	(0.3)	-	(0.3)
Forfeited	(0.4)	(0.2)	(0.2)
Paid in year	(3.9)	(1.8)	(2.1)
Balance as at 31 December 2020 ^c	8.5	3.4	5.1
of which vested	1.2	-	1.2
of which unvested	7.3	3.4	3.9

Deferred Remuneration - Other MRTs			
All figures in €m	Total	Cash	Shares
Balance as at 1 January 2020	22.1	8.6	13.5
Awarded in year	14.4	4.9	9.5
Adjusted through	-	-	-
ex post explicit adjustments ^a	-	-	-
ex post implicit adjustments ^b	(0.7)	-	(0.7)
Forfeited	-	-	-
Paid in year	(10.2)	(4.2)	(6.0)
Balance as at 31 December 2020 ^c	25.6	9.3	16.3
of which vested	3.2	-	3.2
of which unvested	22.4	9.3	13.1

Deferred Remuneration - Other MRTs			
All figures in €m	Total	Cash	Shares
Balance as at 1 January 2020	0.7	0.3	0.4
Awarded in year	0.7	0.2	0.5
Adjusted through	-	-	-
ex post explicit adjustments ^a	-	-	-
ex post implicit adjustments ^b	-	-	-
Forfeited	-	-	-
Paid in year	(0.5)	(0.2)	(0.3)
Balance as at 31 December 2020 ^c	0.9	0.3	0.6
of which vested	0.2	-	0.2
of which unvested	0.7	0.3	0.4

Notes:

- a Total reduction due to direct adjustments such as malus and clawback.
b Total change in remuneration due to movements in share price or exchange rate during the year.
c All outstanding awards are exposed to ex post explicit and/or implicit adjustment.

Appendices

Appendix E – Disclosures on remuneration

Joining and Severance Payments			
	Senior management	Other MRTs	
		CIB	BBI Other
Sign-on awards			
Number of beneficiaries	-	-	-
Made during the year (€m)	-	-	-
Buy-out awards			
Number of beneficiaries	-	2	-
Made during the year (€m)	-	0.3	-
Severance awards ^a			
Number of beneficiaries	-	-	-
Made during the year (€m)	-	-	-
of which paid during the year (€m)	-	-	-
of which deferred (€m)	-	-	-
Highest individual award (€m)	-	-	-

Note:

a Any severance awards that fall outside of paragraph 154 (a) – (c) of the EBA Guidelines are counted for the purposes of the 2:1 pay ratio for the year in which they are paid.

Number of MRTs by band ^a	
	2020
Remuneration band	Number of MRTs
€1,000,001 to €1,500,000	18
€1,500,001 to €2,000,000	4
€2,000,001 to €2,500,000	2
€2,500,001 to €3,000,000	1

Note:

a The table is prepared in Euros in accordance with Article 450 of the Capital Requirements Regulation. Non-Euro 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.

Appendices

Appendix F – CRD IV reference

Table 82: CRD IV reference

CRR ref.	High-level summary	Compliance reference
<i>Scope of disclosure requirements</i>		
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 148 to 152 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)	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.
<i>Non-material, proprietary or confidential information</i>		
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.
432 (4)	Use of 432 (1) or (2) is without prejudice to scope of liability for failure to disclose material information	
<i>Frequency of disclosure</i>		
433	Disclosures must be published once a year at a minimum, and more frequently if necessary.	Compliance with this provision is covered by BBI's framework. See under "Basis of preparation" (page 6).
<i>Means of disclosures</i>		
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)	Disclosures made under other requirements (e.g. accounting) can be used to satisfy Pillar 3 if appropriate.	Any cross-references to accounting or other disclosures are clearly signposted in this document.
<i>Risk management objectives and policies</i>		
435 (1) (a)	Disclose information on strategies and processes; organisational structure, reporting systems and risk mitigation/hedging.	Risk management strategy: page 97 Credit Risk: page 109 Market Risk: page 132 Operational Risk: page 148 Counterparty Credit Risk: page 128 Other Principal Risks: Treasury and Capital – Capital: page 141 Treasury and Capital – Liquidity: page 141
435 (1) (b)		Conduct Risk: page 155
435 (1) (c)		Reputation Risk: page 157
435 (1) (d)		
435 (1) (e)	Inclusion of a declaration approved by the Board on adequacy of risk management arrangements.	See page 100. This statement covers all Principal Risks.
435 (1) (f)	Inclusion of a concise risk statement approved by the Board.	Please see page 105. This statement covers all Principal Risks.
435 (2)	Information on governance arrangements, including information on Board composition and recruitment, and risk committees.	See page 100 for a description of the risk committees. Page 7 of the 2019 Annual Report contains information on Board composition, experience and recruitment.
435 (2) (a)	Number of directorships held by directors.	Please see Page 7 of the 2020 Annual Report.
435 (2) (b)	Recruitment policy of Board members, their experience and expertise.	Please see Page 9 of the 2020 Annual Report.

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Appendix F – CRD IV reference

Table 82: CRD IV reference (Continued)

CRR ref.	High-level summary	Compliance reference
435 (2) (c)	Policy on diversity of Board membership and results against targets.	Please see Page 9 of the 2020 Annual Report
435 (2) (d)	Disclosure of whether a dedicated risk committee is in place, and number of meetings in the year.	Please see Page 8 of the 2020 Annual Report. The Board Risk Committee met seven times during 2020
435 (2) (e)	Description of information flow on risk to Board.	Figure on page 100 in the risk management strategy section illustrates the reporting structure to Board committees.
<i>Scope of application</i>		
436 (a)	Name of institution	See under “Foreword” page 3.
436 (b)	Difference in basis of consolidation for accounting and prudential purposes, naming entities that are:	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.
436 (b) (i)	Fully consolidated;	
436 (b) (ii)	Proportionally consolidated;	
436 (b) (iii)	Deducted from own funds;	
436 (b) (iv)	Neither consolidated nor deducted.	
436 (c)	Impediments to transfer of funds between parent and subsidiaries	
436 (d)	Capital shortfalls in any subsidiaries outside of scope of consolidation	
436 (e)	Making use of articles on derogations from a) prudential requirements or b) liquidity requirements for individual subsidiaries/entities	
<i>Own funds</i>		
437 (1)	Requirements regarding capital resources table	Page 22/ Table 9: Composition of regulatory capital Standalone document: Summary of terms and conditions of own funds and eligible liabilities
437 (1) (a)		
437 (1) (b)		
437 (1) (c)		
437 (1) (d) (i)		
437 (1) (d) (ii)		
437 (1) (d) (iii)		
437 (1) (e)		
437 (1) (f)		
437 (2)	EBA to publish implementation standards for points above.	BBI follows the implementation standards.
<i>Capital requirements</i>		
438 (a)	Summary of institution’s approach to assessing adequacy of capital levels.	Discussions of capital calculations are contained in each risk type management section (credit, market and operational).
438 (b)	Result of ICAAP on demand from authorities.	BBI has not received this request from its regulator.
438 (c)	Capital requirement amounts for credit risk for each Standardised Approach exposure class.	Page 37/ Table 22: Detailed view of credit risk RWAs and Capital Requirement Various other tables contain capital requirements throughout the report.
438 (d)	Capital requirements amounts for credit risk for each Internal Ratings Based Approach exposure class.	Page 37/ Table 22: Detailed view of credit risk RWAs and Capital Requirement BBI has no equity investments, therefore a nil return for 2020
438 (d) (i)		
438 (d) (ii)		
438 (d) (iii)		
438 (d) (iv)		
438 (e)	Capital requirements amounts for market risk or settlement risk, or large exposures where they exceed limits	Capital requirements for market risk are disclosed on Page 92/ Table 71: Market risk own funds requirements
438 (f)	Capital requirement amounts for operational risk, separately for the basic indicator approach, the standardised approach, and the advanced measurement approaches as applicable.	Page 95/ Table 74: Risk weighted assets for operational risk

Appendices

Appendix F – CRD IV reference

Table 82: CRD IV reference (Continued)

CRR ref.	High-level summary	Compliance reference
438 (endnote)	Requirement to disclose specialised lending exposures and equity exposures in the banking book falling under the simple risk weight approach.	Specialised lending exposures: Page 59/Table 39: Corporate exposures subject to the slotting approach.
<i>Exposure to counterparty credit risk (CCR)</i>		
439 (a)	Description of process to assign internal capital and credit limits to CCR exposures.	Page 129 to 131
439 (b)	Discussion of process to secure collateral and establishing reserves.	Page 129 to 131
439 (c)	Discussion of management of wrong-way exposures.	Pages 131
439 (d)	Disclosure of collateral to be provided (outflows) in the event of a ratings downgrade.	Pages 141 to 145
439 (e)	Derivation of net derivative credit exposure.	Page 76/ Table 55: Detailed view of counterparty credit risk RWAs and Capital Requirement
439 (f)	Exposure values for mark-to-market, original exposure, standardised and internal model methods.	Page 83 / Table 61: CCR5-A - Impact of netting and collateral held on exposure values
439 (g)	Notional value of credit derivative hedges and current credit exposure by type of exposure.	Page 85/Table 63: Notional exposure associated with credit derivative contracts
439 (h)	Notional amounts of credit derivative transactions for own credit, intermediation, bought and sold, by product type.	Page 85/Table 63: Notional exposure associated with credit derivative contracts
439 (i)	Estimate of alpha, if applicable.	The alpha used by BBI is 1.4. See page 9.
<i>Capital buffers</i>		
440 (1) (a)	Geographical distribution of relevant credit exposures.	BBI's countercyclical buffer is currently set at 0.23%. See page 165 / Table 80: Geographic analysis of impaired and past due exposures and allowance for impairment
440 (1) (b)	Amount of the institution specific countercyclical capital buffer.	
440 (2)	EBA will issue technical implementation standards related to 440 (1)	BBI will comply with the standards once applicable.
<i>Indicators of global systemic importance</i>		
441 (1)	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.
441 (2)	EBA will issue technical implementation standards related to 441 (1)	BBI will comply with the standards once applicable.
<i>Credit risk adjustments</i>		
442 (a)	Disclosure of bank's definitions of past due and impaired.	Pages 110 to 116 provide a complete description of credit quality measures.
442 (b)	Approaches for calculating credit risk adjustments.	Pages 109 to 127
442 (c)	Disclosure of pre-CRM EAD by exposure class.	See points 442 (d), (e), and (f) below which break down this total.
442 (d)	Disclosures of pre-CRM EAD by geography and exposure class.	Page 38/ Table 23: CRB-C Geographic analysis of credit exposure
442 (e)	Disclosures of pre-CRM EAD by industry and exposure class.	Page 40/Table 24: CRB -D - Concentration of exposures by industry
442 (f)	Disclosures of pre-CRM EAD by residual maturity and exposure class.	Page 42/Table 25: CRB-E - Residual maturity analysis credit exposures
442 (g)	Breakdown of impaired, past due, specific and general credit adjustments, and impairment charges for the period, by exposure class or counterparty type.	Page 165/ Table 79: Analysis of impaired and past due exposures and allowance for impairment by exposure type
442 (g) (i)		
442 (g) (ii)		
442 (g) (iii)		
442 (h)	Impaired, past due exposures, by geographical area, and amounts of specific and general impairment for each geography.	Page 165/ Table 80: Geographic analysis of impaired and past due exposures and allowance for impairment

Appendices

Appendix F – CRD IV reference

Table 82: CRD IV reference (Continued)

CRR ref.	High-level summary	Compliance reference
442 (i)	Reconciliation of changes in specific and general credit risk adjustments.	Page 73/ Table 52: CR2-A – Changes in the stock of general and specific credit risk adjustments: Page 73/ Table 53: Regulatory adjustments to statutory Impairment
442 (i) (i)		
442 (i) (ii)		
442 (i) (iii)		
442 (i) (iv)		
442 (i) (v)		
442 endnote	Specific credit risk adjustments recorded to income statement are disclosed separately.	Page 73 / Table 52: CR2-A – Changes in the stock of general and specific credit risk adjustments
<i>Unencumbered assets</i>		
443	Disclosures on unencumbered assets	See page 167: Disclosures on asset encumbrance
<i>Use of ECAIs</i>		
444 (a)	Names of the ECAIs used in the calculation of Standardised Approach RWAs, and reasons for any changes	Page 48
444 (b)	Exposure classes associated with each ECAI	Page 48
444 (c)	Explanation of the process for translating external ratings into credit quality steps	Page 48
444 (d)	Mapping of external rating to credit quality steps	Page 48/ Table 30: Relationship of long-term external credit ratings to credit quality steps under the Standardised approach Page 49/ Table 31: Credit quality steps and risk weights under the standardised approach
444 (e)	Exposure value pre- and post-credit risk mitigation, by credit quality step.	Pages 50/ Table 32: CR5-A Analysis of exposures by asset classes and risk weight pre-CCF and CRM under the standardised Page 52 / Table 33: CR5-B Analysis of exposures by asset classes and risk weight post-CCF and CRM under the standardised approach
<i>Exposure to market risk</i>		
445	Disclosure of position risk, large exposures exceeding limits, FX, settlement and commodities risk.	Page 92/ Table 71: Market risk own funds requirements
<i>Operational risk</i>		
446	Disclosure of the scope of approaches used to calculate operational risk, discussion of advanced methodology and external factors considered.	Page 92/ Table 73: MR2-A - Market risk under internal models approach
<i>Exposure in equities not included in the trading book</i>		
447 (a)	Differentiation of exposures based on objectives	Any and all equity exposures held by the Bank are included in the trading book
447 (b)	Recorded and fair value, and actual prices of exchange traded equity where it differs from fair value.	
447 (c)	Types, nature and amounts of the relevant classes of equity exposures.	
447 (d)	Realised cumulative gains and losses on sales over the period.	
447 (e)	Total unrealised gains/losses, latent revaluation gains/losses, and amounts included within Tier 1 capital.	
<i>Exposure to interest rate risk on positions not included in the trading book</i>		
448 (a)	Nature of risk and key assumptions in measurement models.	Model assumptions on page 147
448 (b)	Variation in earnings or economic value, or other measures used by the bank from upward and downward shocks to interest rates, by currency.	Not provided
<i>Exposure to securitisation positions</i>		
449	Exposure to securitisations positions.	BBI does not have exposure to securitisation positions
449 (a)	Objectives in relation to securitisation activity.	

Appendices

Appendix F – CRD IV reference

Table 82: CRD IV reference (Continued)

CRR ref.	High-level summary	Compliance reference
449 (b)	Nature of other risks in securitised assets, including liquidity.	
449 (c)	Risks in re-securitisation activity stemming from seniority of underlying securitisations and ultimate underlying assets.	
449 (d)	The roles played by institutions in the securitisation process.	
449 (e)	Indication of the extent of involvement in these roles.	
449 (f)	Processes in place to monitor changes in credit and market risks of securitisation exposures, and how the processes differ for re-securitisation exposures.	
449 (g)	Description of the institution's policies with respect to hedging and unfunded protection, and identification of material hedge counterparties.	
449 (h)	Approaches to calculation of RWA for securitisations mapped to types of exposures.	
449 (i)	Types of SSPEs used to securitise third-party exposures, and list of SSPEs.	
449 (j)	Summary of accounting policies for securitisations:	
449 (j) (i)	Treatment of sales or financings;	
449 (j) (ii)	Recognition of gains on sales;	
449 (j) (iii)	Approach to valuing securitisation positions;	
449 (j) (iv)	Treatment of synthetic securitisations;	
449 (j) (v)	Valuation of assets awaiting securitisations;	
449 (j) (vi)	Recognition of arrangements that could require the bank to provide support to securitised assets.	
449 (k)	Names of ECAs used for securitisations.	
449 (l)	Full description of Internal Assessment Approach.	
449 (m)	Explanation of changes in quantitative disclosures.	
449 (n)	Banking and trading book securitisation exposures:	
449 (n) (i)	Amount of outstanding exposures securitised;	
449 (n) (ii)	On balance sheet securitisation retained or purchased, and off-balance sheet exposures;	
449 (n) (iii)	Amount of assets awaiting securitisation;	
449 (n) (iv)	Early amortisation treatment; aggregate drawn exposures, capital requirements;	
449 (n) (v)	Deducted or 1250%-weighted securitisation positions;	
449 (n) (vi)	Amount of exposures securitised and recognised gains or losses on sales.	
449 (o)	Banking and trading book securitisations by risk band:	
449 (o) (i)	Retained and purchased exposure and associated capital requirements, broken down by risk-weight bands;	
449 (o) (ii)	Retained and purchased re-securitisation exposures before and after hedging and insurance; exposure to financial guarantors broken down by guarantor credit worthiness.	

Appendices

Appendix F – CRD IV reference

Table 82: CRD IV reference (Continued)

CRR ref.	High-level summary	Compliance reference
449 (p)	Impaired assets and recognised losses related to banking book securitisations, by exposure type	
449 (q)	Exposure and capital requirements for trading book securitisations, separately into traditional	
449 (r)	Whether the institution has provided financial support to securitisation vehicles	
<i>Remuneration disclosures</i>		
450	Remuneration	Appendix E contains the remuneration awards made to the Bank's Material Risk Takers. See the 2019 Annual Report for other remuneration disclosures.
<i>Leverage</i>		
451 (1) (a)	Leverage ratio, and breakdown of total exposure measure, including reconciliation to financial statements, and derecognised fiduciary items	Page 28/Table 16: LR2 - Leverage ratio common disclosure
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 141, management of capital risk.
451 (1) (e)		
451 (2)	EBA to publish implementation standards for points above.	BBI will comply with the standards once applicable.
<i>Use of the IRB approach to credit risk</i>		
452 (a)	Permission for use of the IRB approach from authority	Pages 12/ Tables 1-2
452 (b)	Explanation of:	
452 (b) (i)	Internal rating scales, mapped to external ratings;	Page 54/ Table 34: Internal default grade probabilities and mapping to external ratings
452 (b) (ii)	Use of internal ratings for purposes other than capital requirement calculations;	Page 120 "Applications of internal ratings"
452 (b) (iii)	Management and recognition of credit risk mitigation;	Pages 129 to 131
452 (b) (iv)	Controls around ratings systems.	Page 153. "Management of model risk within BBI – the control mechanisms for the rating system"
452 (c)	Description of ratings processes for each IRB asset class, provided separately	Pages 121 to 123. Separate descriptions apply to retail and wholesale classes collectively; hence this is not repeated for each separate class.
452 (c) (i)		
452 (c) (ii)		
452 (c) (iii)		
452 (c) (iv)		
452 (c) (v)		
452 (d)	Exposure values by IRB exposure class, separately for Advanced and Foundation IRB.	This is shown throughout the report.
452 (e)	For wholesale exposure classes, disclosed separately by obligor grade:	
452 (e) (i)	Total exposure, separating loans and undrawn exposures where applicable;	Pages 55/Table 35 IRB wholesale obligor grade disclosure for central governments & central banks
452 (e) (ii)	Exposure-weighted average risk weight;	Pages 56 /Table 36 IRB wholesale obligor grade disclosure for institutions
452 (e) (iii)	Undrawn commitments and average exposure values by asset class.	Pages 57/Table 37: IRB wholesale obligor grade disclosure for corporates
452 (f)	For retail exposure classes, same disclosures as under 452 (e), by risk grade or EL grade.	Pages 58/ Table 37:IRB retail obligor grade disclosure for SME
		Pages60 /Table 38 IRB retail obligor grade disclosure for secured retail
		Pages 61 /Table 41 IRB retail obligor grade disclosure for revolving retail
452 (g)	Actual specific risk adjustments for the period and explanation of changes.	Page 74 / Table 54: Analysis of expected loss versus actual losses for IRB exposures
452 (h)	Commentary on drivers of losses in preceding period.	

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Appendix F – CRD IV reference

Table 82: CRD IV reference (Continued)

CRR ref.	High-level summary	Compliance reference
452 (i)	Disclosure of predicted against actual losses for sufficient period, and historical analysis to help assess the performance of the rating system over a sufficient period.	Page 74 / Table 54: Analysis of expected loss versus actual losses for IRB exposures Pages 125-126 / Table 76: Analysis of expected performance versus actual results
452 (j)	For all IRB exposure classes:	
452 (j) (i)	Where applicable, PD and LGD by each country	Appendix A, Pages 161-164/ Table 78 PD, LGD, RWA and exposure values by country for IRB - all asset
452 (j) (ii)	where the bank operates	
<i>Use of credit risk mitigation techniques</i>		
453 (a)	Use of on- and off-balance sheet netting	Page 129
453 (b)	How collateral valuation is managed	Pages 129 to 131
453 (c)	Description of types of collateral used by BBI	Pages 129 to 131
453 (d)	Types of guarantor and credit derivative counterparty, and their creditworthiness	Pages 129 to 131
453 (e)	Disclosure of market or credit risk concentrations within risk mitigation exposures	Pages 129 to 131
453 (f)	For exposures under either the Standardised or Foundation IRB approach, disclose the exposure value covered by eligible collateral	Page 34/ Table 26: Collateral and guarantees for IRB approach
453 (g)	Exposures covered by guarantees or credit derivatives	Page 44 / Table 26: Exposures covered by guarantees and credit derivatives
<i>Use of the Advanced Measurement Approaches to operational risk</i>		
454	Description of the use of insurance or other risk transfer mechanisms to mitigate operational risk	Pages 129 to 131
<i>Use of internal market risk models</i>		
455 (a) (i)	Disclosure of the characteristics of the market risk models.	Page 138/ Table 75: Market risk model selected features
455 (a) (ii)	Disclosure of the methodology and description of all-price risk measure and incremental risk charge.	Page 138
455 (a) (iii)	Descriptions of stress tests applied to the portfolios.	Page 135
455 (a) (iv)	Methodology for back-testing and validating the models.	Pages 138
455 (b)	Scope of permission for use of the models.	Page 12/ Table 2 Summary of the scope of application of regulatory methodologies for CVA, market and operational risk
455 (c)	Policies and processes to determine which exposures are to be included in the trading book, and to comply with prudential valuation requirements.	Page 135 to 137
455 (d)	High/Low/Mean values over the year of VaR, sVaR, all-price risk measure and incremental risk charge.	Page 91/ Table 69: MR3 - Analysis of Regulatory VaR, sVaR, IRC and CRM
455 (d) (i)		Page 90/ Table 68: The daily average, maximum and minimum values of management VaR
455 (d) (ii)		
455 (d) (iii)		
455 (e)	The elements of the own fund calculation.	Page 92/ Table 71: Market risk own funds requirements
455 (f)	Weighted average liquidity horizons of portfolios covered by models.	Not provided.
455 (g)	Comparison of end-of-day VaR measures compared with one-day changes in portfolio's value.	Page 138

Reference to CRR amended by CRR II applicable as at the reporting date

Disclosure of own funds and eligible liabilities

437a		
437a (a)	Composition of own funds and eligible liabilities ranking in the creditor hierarchy main features	BBI does not have an MREL requirement, hence no disclosures have been made in this regard.
437a (b)		
437a (c)		
437a (d)		

Disclosure of key metrics

447 (h)	Disclosure of key metrics for own funds and eligible liabilities	TLAC requirements do not apply to BBI
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Appendix G - EBA and BCBS reference

EBA Pillar 3 compliance reference

Table no	Page	High-level summary	Compliance reference
Table 3	13	Present an outline of the difference in the basis of consolidation for accounting and prudential purposes	Template 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(b) in the CRR
Table 4	14	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(c) in the CRR
Table 5	17	Provide an overview of a bank's prudential regulatory metrics	Template KM1: Key metrics Present an overview of prudential regulatory metrics as per the BCBS Pillar 3 disclosure requirements – consolidated and enhanced framework
Table 6	18	Shows the components of regulatory capital	Template CC1 Provides details of the composition of regulatory capital and includes information on the linkages with the reconciliation disclosures in Template CC2.
Table 7	19	Reconciliation between the scope of a bank's accounting consolidation and the scope of its regulatory consolidation	Template CC2 Provides a reconciliation between the scope of a bank's accounting consolidation and the scope of its regulatory consolidation and includes the linkage with composition of regulatory capital in Template CC1
Table 8	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
Table 10	22	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(c) to (f) in the CRR
Table 12	23	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 of the CRR and the corresponding capital requirement as specified in Article 92(3)(a).
Table 13	24	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 Part Three, Title II, Chapter 6 of the CRR.
Table 14	24	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 (as specified in Article 92(4)(b)) determined under Part Three, Title IV, Chapter 5 of the CRR (IMA).
Table 15	27	Summary reconciliation of accounting assets and leverage ratio exposures	Template LRSum Reconciliation of the total leverage exposure and comprises of total IFRS assets used for statutory purposes, regulatory consolidation and other leverage

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Appendix G - EBA and BCBS reference

Table no	Page	High-level summary	Compliance reference
			adjustments (as per Commission implementing regulation-EU 2016/200)
Table 16	28	Leverage ratio common disclosure	Template LRCom Leverage ratio calculation and includes additional breakdowns for the leverage exposure measure (as per Commission implementing regulation-EU 2016/200).
Table 17	29	Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	Template LRSpl Breakdown of the on-balance sheet exposures excluding derivatives, SFTs and exempted exposures, by asset class as per row 1 on LRCom (as per Commission implementing regulation-EU 2016/200)
Table 18	30	Present the breakdown of a bank's cash outflows and cash inflows, as well as its available high-quality liquid assets (HQLA)	Template LIQ1 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 the LCR standard (BCBS Pillar 3 disclosure requirements – consolidated and enhanced framework)
Table 19	32	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 a breakdown of the constituent elements of the bank's PVA according to the requirements of BCBS Pillar 3 disclosure requirements – consolidated and enhanced framework
Table 21	36	Total and average net amount of exposures	Template EU CRB-B Provide the total and the average amount of net exposures over the period by exposure class in accordance with Article 442(c)
Table 23	38	Geographical breakdown of exposures Purpose: Provide a breakdown of exposures by geographical areas and	Template EU CRB-C Provide a breakdown of exposures by geographical areas and exposure classes in accordance with Article 442(d)
Table 24	40	Concentration of exposures by industry or counterparty types	Template EU CRB-D Provide a breakdown of exposures by industry or counterparty types and exposure classes in accordance with Article 442(e)
Table 25	42	Maturity of exposures	Template EU CRB-E Provide a breakdown of net exposures by residual maturity and exposure classes in accordance with Article 442(f)
Table 27	45	Disclose the extent of the use of CRM techniques	Template EU CR3 Present information on exposure value covered by financial collateral, other collateral, guarantees and credit derivatives and the outstanding secured exposures and the secured amount within those exposures in accordance with Article 453(f) and (g),
Table 28	46	Credit risk exposure and CRM effects	Template EU CR4 Paragraph 99 of the guidelines requires institutions to show the effect of all CRM techniques applied in accordance with Part Three, Title II, Chapter 4 of the CRR, including the financial collateral simple method and the financial collateral comprehensive method in the application of Article 221 and Article 22 of the same regulation on standardised approach capital requirements' calculations.
Table 29	47	This table provides the effect on the RWAs of credit derivatives used as CRM techniques	Template EU CR7

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Appendix G - EBA and BCBS reference

Table no	Page	High-level summary	Compliance reference
			The template applies to all institutions using one of the approaches included in the template in accordance with Article 153(5) or Article 155(2)
Table 32	50	Analysis of credit risk exposures by asset classes and risk weight before the application of CCF and CRM under the standardised approach	Template EU CR5A Regulatory exposure values broken down by risk weights. Institutions should disclose exposures pre conversion factor and pre risk mitigation techniques. The risk weight used for the breakdown corresponds to the different credit quality steps applicable in accordance with Article 113 to Article 134 in Part Three, Title II, Chapter 2 of the CRR
Table 33	52	Analysis of credit risk exposures by asset classes and risk weight after the application of CCF and CRM under the standardised approach	Template EU CR5B 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 Article 113 to Article 134 in Part Three, Title II, Chapter 2 of the CRR
Table 35-38 & 40-41	55 to 58 & 60 - 61	Analysis of credit risk exposures by exposure classes and PD grades	Template EU CR6 In the application of Article 452(e) and (g), this template applies to institutions included in paragraph 7 of these guidelines using either the FIRB approach or the AIRB approach for some or all of their exposures in accordance with Part Three, Title II, Chapter 3 of the CRR
Table 39	59	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 Article 153(5) or Article 155(2)
Table 42	62	This table provides Credit quality of exposures by exposure class and instrument	Template EU CR1 -A The effect of credit derivatives on the IRB approach capital requirements' calculations. The pre-credit derivative RWAs before taking account of the credit derivatives mitigation effect has been selected to assess the impact of credit derivatives on RWAs in accordance Article 453(g)
Table 43	64	This table present credit quality of exposures by industry or counterparty types	Template EU CR1 -B Provide a comprehensive picture of the credit quality of an institution's on-balance-sheet and off-balance sheet exposures by industry in accordance with Article 442(g)
Table 44	65	Credit quality of exposures by geography	Template EU CR1 -C Provide a comprehensive picture of the credit quality of an institution's on-balance-sheet and off-balance sheet exposures by geography in accordance with Article 442(h)
Table 45	66	Analysis of credit quality of forborne exposures	Provide an overview of the quality of forborne exposures as per Commission Implementing Regulation (EU) No 680/2014
Table 46	67	Analysis of credit quality of performing and non-performing exposures by past due days	Provide an overview of credit quality of non-performing exposures, as per Commission Implementing Regulation (EU)No 680/2014
Table 47	69	Analysis of Performing and non-performing exposures and related provisions	Provide an overview of the credit quality of non-performing exposures and related impairments, provisions and valuation adjustments by portfolio and exposure class per EBA guideline EBA/GL/2018/10

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Appendix G - EBA and BCBS reference

Table no	Page	High-level summary	Compliance reference
Table 48	71	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 49	72	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 50	72	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
Table 51	73	Table present changes in the stock of defaulted and impaired loans and debt securities	Template EU CR2-B This table present the changes in an institution's stock of defaulted loans and debt securities in accordance to Article 442(i) of the CRR
Table 52	73	Table present changes in the stock of general and specific credit risk adjustments	Template EU CR2-A This table present the changes in an institution's stock of defaulted loans and debt securities in accordance to Article 442(i) of the CRR
Table 56	78	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 Article 439(e), (f) and (i) of the CRR
Table 57	79	Analysis of counterparty credit risk exposures by regulatory portfolio and risk weight under standardised approach	Template EU CCR3 This applies to institution using the credit risk standardised approach to compute RWAs for CCR exposures in accordance with Article 107 in the CRR, irrespective of the approach used to determine EAD in accordance with Part Three, Title II, Chapter 6 of the same regulation.
Table 58-60	81 - 83	Analysis of counterparty credit risk exposures by exposure classes and PD grades	Template EU CCR4 RWAs and parameters used in RWA calculations for exposures subject to the CCR framework (excluding CVA charges or exposures cleared through a CCP) and where the credit risk approach used (in accordance with Article 107 in the CRR) to compute RWAs is an IRB approach
Table 61	83	This table shows the impact of netting and collateral held on exposure values	Template EU CCR5A Provide an overview of the impact of netting and collateral held on exposures for which the exposure value is measured in accordance with in accordance with Article 439 (e)
Table 62	84	This table shows the composition of collateral for exposures to CCR	Template EU CCR5B Provide a breakdown of all types of collateral (cash, sovereign debt, corporate bonds, etc.) posted or received by banks to support or reduce CCR exposures related to derivative transactions or to SFTs, including transactions cleared through a CCP.
Table 64	85	This table shows credit derivatives exposures	Template EU CCR6 Provide a breakdown extent of an institution's exposures to credit derivative transactions broken

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Appendix G - EBA and BCBS reference

Table no	Page	High-level summary	Compliance reference
			down between derivatives bought or sold in accordance with Article 439(g) and (h)
Table 65	86	This table shows the EAD and RWAs corresponding to exposures to central counterparties	Template EU CCR8 Provide a comprehensive picture of the institution's exposures to CCPs in the scope of Part Three, Title II, Chapter 6, Section 9 of the CRR
Table 66	87	This table provide CVA regulatory calculations (with a breakdown by standardised and advanced approaches).	Template EU CCR2 The template applies to all institutions with exposures subject to CVA capital charges in accordance with Part Three, Title VI, Article 382 in the CRR.
NA	139	Present a comparison of the results of estimates from the regulatory VaR model	Template EU MR4 Present a comparison of the results of estimates from 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 backtesting exceptions, and to give an analysis of the main outliers in backtested results
Table 69	91	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 of the 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 71	92	Market risk Own funds requirements	Template MR1-A Capital requirements and RWAs (as specified in Article 92(4)(b) in the CRR)
Table 72	93	Market risk under standardised approach	Template MR1-B Capital requirements and RWAs (as specified in Article 92(4) (b) in the CRR).
Table 73	93	Market risk under internal models approach	Template MR2-A Capital requirements and RWAs (as specified in Article 92(4) (b) of the CRR).
Table 75	124	This table provides backtesting data to validate the reliability of PD calculations	Template EU CR9 The 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.
Table 81	166	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 CCyB in accordance with Article 140(4) of the CRD and Article 440 of CRR

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Note

1 Pages 154 to 156 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.

Appendices

Abbreviations used

AEaR	Annual Earnings at Risk
ALCO	Asset & Liability Committee
AQR	Asset Quality Review
AIRB	Advanced internal ratings based
AT1	Additional tier 1
BAC	Board Audit Committee
BB PLC	Barclays Bank PLC
B PLC	Barclays PLC
BBI	Barclays Bank Ireland PLC
BCBS	Basel Committee on Banking Supervision
BCSL	Barclays Capital Securities Limited
BoE	Bank of England
bps	Basis points
BRC	Board Risk Committee
Brexit	UK's withdrawal from the EU
BRRD	Bank Recovery and Resolution Directive
CAPD	Capital deduction approach
CBI	Central Bank of Ireland
CCB	Capital conservation buffer
CCF	Credit conversion factor
CCR	Counterparty credit risk
CCyB	Countercyclical capital buffer
CDS	Credit default swap
CEO	Chief Executive Officer
CET1	Common Equity Tier 1
CF	Conversion Factor
CFO	Chief Financial Officer
CIU	Collective investment undertaking
CLT	Crisis Leadership Team
CRD	Capital Requirements Directive
CRM	Credit risk mitigation

CRMF	Conduct Risk Management Framework
CRO	Chief Risk Officer
CRR	Capital Requirements Regulation
CSA	Credit Support Annex
CVA	Credit Valuation Adjustment
DBO	Defined benefit Obligation
DC	Defined contribution
DCF	Discounted Cash Flow
DDoS	Distributed denial of service
DGS	Deposit Guarantee Scheme
DIRT	Deposit Interest Retention Tax
DSVP	Deferred Share Value Plan
DTA	Deferred tax asset
DVaR	Daily Value at Risk
EAD	Exposure at Default
EaR	Earnings at Risk
EBA	European Banking Authority
EC	European Commission
ECAIs	External Credit Assessment Institutions
ECB	European Central Bank
ECL	Expected credit losses
EEA	European Economic Area
EFPE	Effective expected positive exposure
EIR	Effective interest rate
EL	Regulatory expected loss
ELBE	Expected loss best estimate
EMIR	European Market Infrastructure Regulation
EONIA	Euro Overnight Index Average
ERMF	Enterprise Risk Management Framework
EU	European Union
Euribor	Euro Inter Bank Offered Rate

Appendices

Abbreviations used

EVE	Economic Value of Equity
EWI	Early warning indicator
FCA	Financial Conduct Authority
FCCM	Financial Collateral Comprehensive Method
FCRA	Financial Crime Risk Assessment
FDIC	Federal Deposit Insurance Corporation
FFVA	Funding Fair Value Adjustment
FIRB	Foundation IRB
FLI	Forward looking information
FPC	Financial Policy Committee
FPC	Financial Policy Committee
FRB	Federal Reserve Board
FRTB	Fundamental Review of the Trading Book
FSB	Financial Stability Board
FTR	Funds Transfer Regulation
FVTPL	Fair Value Through Profit or Loss
FX	Foreign Exchange
F&P	Fitness and Probity
GDP	Gross domestic product
GDPR	General Data Protection Regulation
GHG	Global greenhouse gas emissions
GMD	Group Models Database
GMRP	Group Model Risk Policy
G-SIB	Global systemically important banks
HPI	House Price Index
HQLA	High quality liquid assets
IAA	Internal assessment approach
IAS	International Accounting Standards
IASB	International Accounting Standards Board
IBOR	Interbank Offered Rates
ICA	Investor Compensation Act

ICAAP	Internal Capital Adequacy Assessment Process
ICS	Investor Compensation Scheme
IFRIC	International Financial Reporting Interpretations Committee
IFRS	International Financial Reporting Standard
ILAAP	Internal Liquidity Adequacy Assessment Process
IMM	Internal Model Method
IOSCO	International Organisation of Securities Commissions
IPU	Intermediate parent undertaking
IRB	Internal ratings based
IRC	Incremental Risk Charge
IRRBB	Interest Rate Risk in the Banking Book
ISDA	International Swaps and Derivative Association
JRAD	Joint Risk and Assessment Decision
KIRB	Look through approach
KMP	Key management personnel
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
LIBOR	London Inter Bank Offered Rate
LRA	Liquidity Risk Appetite
LTV	Loan to Value
MAR	Market Abuse Regulation
MiFID	Markets in Financial Instruments Directive in Europe
MREL	Minimum Requirement for own Funds and Eligible Liabilities
MRT	Material Risk Taker
MSR	Mortgage Servicing Right(s)
MTM	Mark to Market
NII	Net interest income
NSFR	Net Stable Funding Ratio
O-SII	Other systemically important institution
OEIRB	Own-Estimates IRB

Appendices

Abbreviations used

OTC	Over the Counter
PD	Probability of Default
PFE	Potential future exposure
POCI	Purchased or originated credit-impaired financial asset
PRA	Prudential Regulation Authority
PSD2	Payments Services Directive
PVA	Prudent Valuation Adjustment
P2G	Pillar 2 guidance
P2R	Pillar 2 requirement
QCCP	Qualifying central counterparty
RCSA	Risk and Control Self-Assessment
RoI	Republic of Ireland
RoW	Rest of World
RP	Recovery plan
RPI	Retail Price Index
RFR	Risk free rate
RoU	Right of Use
RWAs	Risk weighted assets
SCA	Strong Customer Authentication
SFA	Supervisory formula approach
SFT	Securities Financing Transaction
SICR	Significant Increase in Credit Risk

SME	Small or Medium Enterprise
SOFR	Secured Overnight Funding Rate
SONIA	Sterling Overnight Index Average
SPPI	Solely payments of principal and interest
SRA	Strategic risk assessment
SRB	Single Resolution Board
SREP	Supervisory Review & Evaluation Process
SRF	Single Resolution Fund
SRMR	Single Resolution Mechanism Regulations
SSM	Single Supervisory Mechanism
SVaR	Stressed Value at Risk
SVP	Share Value Plan
S&P	Standard and Poor's
TCFD	Financial Stability Board's Task Force on Climate-related Financial Disclosures
TLAC	Total Loss Absorbing Capacity
TSA	The Standardised Approach
T1	Tier 1 capital
T2	Tier 2 capital
UK	United Kingdom
US	United States
VaR	Value at Risk