

Pillar 3 Disclosures **2019**

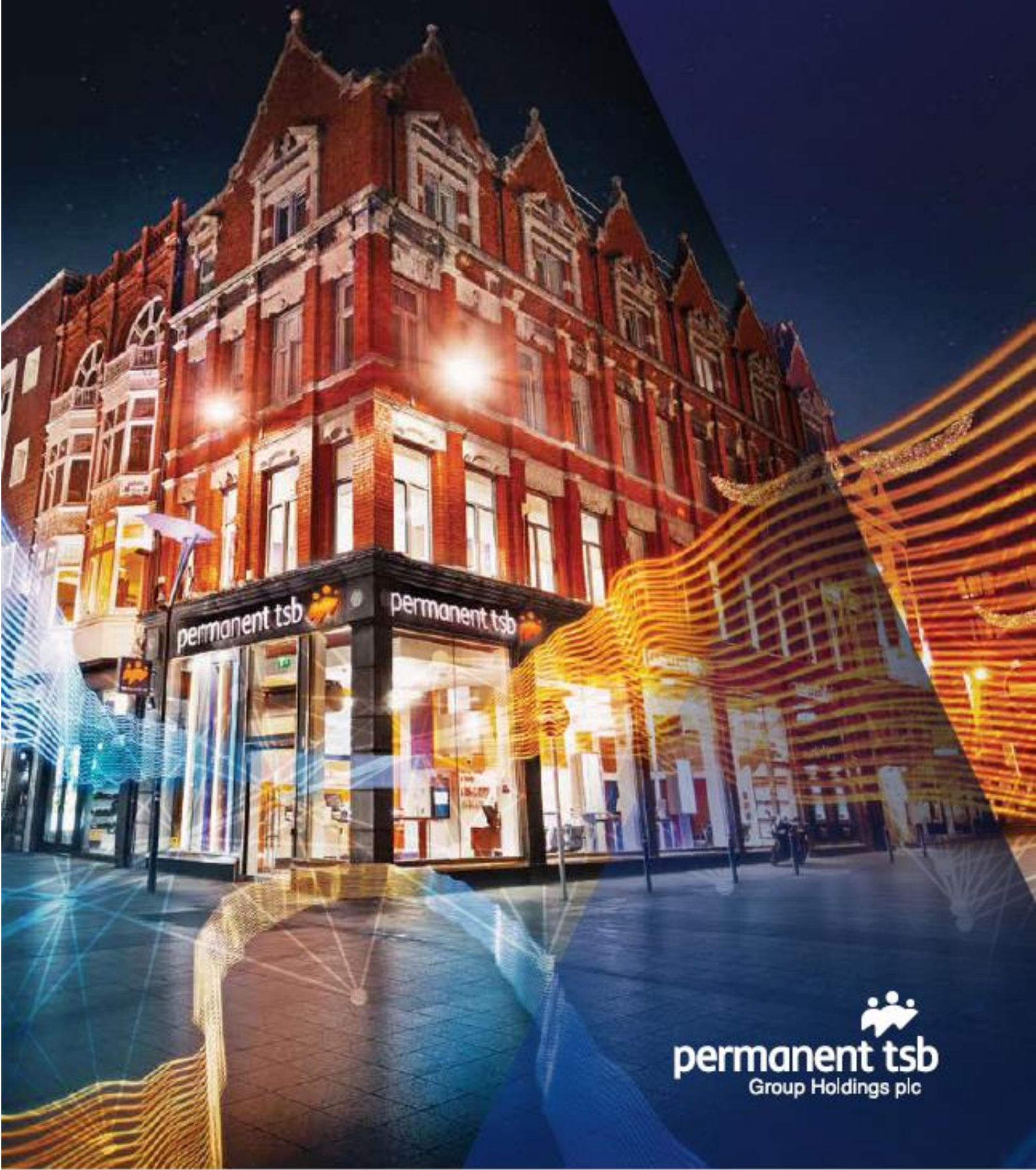


Table of Contents

TABLE OF CONTENTS	2
INTRODUCTION	5
CURRENT REGULATORY FRAMEWORK.....	5
CHANGE OF STATUS OF THE GROUP DURING THE YEAR.....	6
CRR DISCLOSURE REQUIREMENTS.....	7
LIST OF TABLES	10
RISK MANAGEMENT OBJECTIVES AND POLICIES (ART 435).....	13
OVERVIEW	13
RISK MANAGEMENT OBJECTIVES (ART 435.1.A).....	14
RISK MANAGEMENT PRINCIPLES (ART 435.1.A, 435.1.C)	14
ORGANISATION OF RISK MANAGEMENT (ART 435.1.B).....	15
RISK CATEGORIES (ART 435.1.D).....	16
DECLARATION BY MANAGEMENT BODY ON THE ADEQUACY OF RISK MANAGEMENT (ART 435.1.E).....	16
RISK PROFILE (ART 435.1.F)	17
GOVERNANCE ARRANGEMENTS (ART 435.2).....	20
SCOPE OF APPLICATION (ART 436)	24
REGULATORY REQUIREMENTS (ART 436.A).....	24
EXPLANATIONS OF DIFFERENCES BETWEEN ACCOUNTING AND REGULATORY EXPOSURE AMOUNTS (EU LIA) (ART 436.B)	24
IMPEDIMENTS TO THE TRANSFER OF FINANCIAL FUNDS (ART 436.C)	29
SHORTFALL OF OWN FUNDS FOR SUBSIDIARIES NOT INCLUDED IN CONSOLIDATION (ART 436.D).....	29
USE OF ARTICLE 9 FOR INDIVIDUAL REPORTING (ART 436.E)	29
OWN FUNDS (ART 437)	30
CAPITAL REQUIREMENTS (ART 438).....	36
GROUP'S APPROACH TO ASSESSING THE ADEQUACY OF ITS INTERNAL CAPITAL TO SUPPORT CURRENT AND FUTURE ACTIVITIES (ART 438.A)	36
ICAAP GOVERNANCE.....	39
COUNTERPARTY CREDIT RISK (ART 439).....	44
INTERNAL CAPITAL ALLOCATION AND CREDIT LIMITS FOR COUNTERPARTY CREDIT EXPOSURES (ART 439.A)	44
SECURING OF COLLATERAL AND ESTABLISHING OF RESERVES (ART 439.B)	44
LIMITATION ON WRONG-WAY EXPOSURES (ART 439.C).....	45
IMPACT OF COLLATERALISATION OF A RATING DOWNGRADE (ART 439.D)	45
CAPITAL BUFFERS (ART 440)	47
INDICATORS OF GLOBAL SYSTEMIC IMPORTANCE (ART 441).....	50
CREDIT RISK ADJUSTMENTS (ART 442).....	51
DEFINITION OF PAST DUE AND IMPAIRED (ART 442.A)	51
APPROACHES TO DETERMINING SPECIFIC CREDIT RISK ADJUSTMENTS (ART 442.B).....	51

UNENCUMBERED ASSETS (ART 443)	74
USE OF ECAI'S (ART 444)	78
MARKET RISK (ART 445)	79
OPERATIONAL RISK (ART 446)	80
EXPOSURES TO EQUITIES NOT INCLUDED IN THE TRADING BOOK (ART 447 (A), (B), (C), (D) AND (E))	81
EXPOSURE TO INTEREST RATE RISK ON POSITIONS NOT INCLUDED IN THE TRADING BOOK (ART 448)	82
INTEREST RATE RISK (ART 448.A).....	82
QUANTITATIVE DISCLOSURE FOR VARIATION IN EARNINGS/OTHER RELEVANT MEASURE FOR SHOCKS USED BROKEN DOWN BY CURRENCY (ART 448.B)	86
EXPOSURE TO SECURITISATION POSITIONS (ART 449)	88
KEY OBJECTIVES OF SECURITISATION ACTIVITY (ART 449.A)	88
SECURITISATION RISKS (ART 449.B)	88
DIFFERENT ROLES IN THE SECURITISATION PROCESS (ART 449.D)	89
SUMMARY OF THE BANK'S SECURITISATION ACTIVITIES AT 31 DECEMBER 2019 (ART 449.E, 449.P)	89
EXPOSURE MONITORING PROCESSES (ART 449.F)	89
SUMMARY OF HEDGING POLICY (ART 449.G)	90
RISK-WEIGHTED EXPOSURE AMOUNTS (ART 449.H).....	90
SUMMARY OF ACCOUNTING POLICIES (ART 449.J)	90
DETAILS OF SECURITISATION EXPOSURES (ART 449.M, 449.N).....	90
CAPITAL REQUIREMENTS (ART 449.O)	90
REMUNERATION (ART 450)	91
DECISION MAKING PROCESS AND GOVERNANCE (ART 450.1.A)	91
REMUNERATION POLICY (ART 450.1.B,C,D,E,F).....	92
IDENTIFICATION OF MATERIAL RISK TAKERS	95
QUANTITATIVE REMUNERATION DISCLOSURES (ART 450.1.G,H,I AND ART 450.2)	96
OTHER DISCLOSURES ON REMUNERATION 2019 (ART 450.1.H,I)	98
LEVERAGE RATIO (ART 451.1.A)	100
USE OF THE IRB APPROACH TO CREDIT RISK (ART 452)	103
COMPETENT AUTHORITY'S PERMISSION OF THE APPROACH OR APPROVED TRANSITION (ART 452.A)	103
INTERNAL RATINGS PROCESS (ART 452.C)	103
STRUCTURE OF THE GROUP'S INTERNAL RATING SYSTEM (ART 452.B)	107
USE OF CREDIT RISK MITIGATION TECHNIQUES (ART 453)	125
POLICIES AND PROCESSES FOR NETTING (ART 453.A).....	125
COLLATERAL VALUATION AND MANAGEMENT (ART 453.B & C)	125
THE COLLATERAL TAKEN BY THE GROUP TO MITIGATE RISK IS INFLUENCED BY THE EXPOSURE TYPE AND PRIMARILY CONSISTS OF CASH AND REAL ESTATE (FOR MORTGAGE LENDING ONLY).	126
RISK CONCENTRATIONS WITHIN CREDIT RISK MITIGATION (ART 453.E).....	126
QUANTITATIVE DISCLOSURE ON CREDIT RISK MITIGATION (ART 453.F).....	126
USE OF THE ADVANCED MEASUREMENT APPROACHES TO OPERATIONAL RISK (ART 454)	129

USE OF INTERNAL MARKET RISK MODEL (ART 455)	130
IFRS 9 TRANSITIONAL ARRANGEMENTS (ART 473A)	131

Introduction

This Pillar 3 disclosure report has been published to meet the disclosure requirements of Part Eight of the Capital Requirements Regulation (EU) No 575/2013 (hereafter the CRR) including EBA Guidelines (2016/11) on the disclosure requirements under Part Eight of CRR which is expected to be followed in its entirety by all Less Significant Institutions (LSIs) supervised by the Central Bank of Ireland (CBI). Comparative information has been updated to reflect these new guidelines where applicable.

The disclosures relate to Permanent TSB Group Holdings plc (hereafter 'Permanent TSB', 'PTSB', 'the Group' or 'the Bank'). They provide comprehensive information on the risk profile and risk management of the Group.

The Group has a formal policy for its Pillar 3 disclosures as required under Article 431 (3) of the CRR. No disclosures are omitted on the basis of proprietary or confidential information. Where appropriate, some disclosure requirements have been met by reference to the relevant disclosure in the Group's Annual Report or on its website. The information in this report is published annually. Certain information on own funds, capital requirements and other items prone to rapid change (e.g. LCR) will be published in the half year financial report of the Group.

The Pillar 3 disclosure report is available on the Group's website at the following location: <https://www.permanenttsbgroup.ie/investors/reports-and-presentations/other-documents>

Current regulatory framework

This report is part of the Basel III Framework which has been in effect in all EU member states since 1 January 2014 through EU Regulation No 575/2013 and EU Directive No 2013/36, as transposed into Irish law through S.I. No. 158 of 2014. These are collectively known as CRD IV.

On 7 June 2019 amendments to the Capital Requirements Directive (CRD V) and the Capital Requirements Regulation (CRR 2) were published in the EU's Official Journal. Whilst some of the amendments are effective in 2019, those amendments relating to disclosure requirements are not expected to impact the Group until June 2021 at the earliest.

The Group closely monitors these changes as they relate to disclosures as well as any updated guidance from supervisors to ensure compliance with all requirements when applicable.

The Basel capital framework is founded upon three Pillars:

Pillar 1 refers to the minimum amount of capital required to protect the Group against losses for credit, market and operational risk over a one year time-frame and it is used to calculate the capital adequacy ratios.

Under **Pillar 2** of the Basel Framework, the Group is required to have in place sound, effective and comprehensive strategies and processes to assess and measure the amount of internal capital requirements it considers adequate to cover the nature and level of the risks to which the

Group is exposed. The Group arrives at an appropriate estimation of its capital requirements for all risks through the use of a Pillar 1 Plus approach.

The Group is subject to regular reviews of its internal capital adequacy assessment process (ICAAP) through the Supervisory Review and Evaluation Process (SREP) and is subject to minimum capital requirements which exceed those set by the CRR (see Note 36 in the Group's 2019 Annual Report).

The Group's minimum capital requirement according to the last SREP exercise conducted by the CBI in 2019 is 14.95%. This is comprised of a Pillar 1 requirement of 8%, a Pillar 2 requirement of 3.45%, a Capital conservation buffer (CCB) of 2.50% and a Countercyclical buffer (CCyB) of 1.00%.

Pillar 3 refers to market discipline and how the Group reports publicly and in a transparent manner information relating to the assessment and management of risks by the Group. This includes disclosing information on the scope of application, capital, risk exposures, risk assessment and management processes, and hence the capital adequacy of the Group.

Change of status of the Group during the year

As the Group has not met any of the criteria to be categorised as a Significant Institution for the last 3 years, the ECB decided that the Group would revert to being under the direct supervision of the CBI as an LSI with effect from 1 January 2019.

Please note the figures in this report are in millions of euro and may contain rounding differences as they are compiled using information reported to supervisors in units of euro.

CRR Disclosure Requirements

The Group has an approved policy to comply with CRR Articles 431 to 434, which relate to the overall Pillar 3 disclosure requirements. The following table summarises the applicability of specific disclosure requirements contained in the CRR.

CRR Article Description	CRR Article No.	Applicable / Not applicable to Permanent TSB Group
Article 435 – Risk Management Objectives and Policies	435 (1) (a)	Applicable
	435 (1) (b)	Applicable
	435 (1) (c)	Applicable
	435 (1) (d)	Applicable
	435 (1) (e)	Applicable
	435 (1) (f)	Applicable
	435 (2) (a)	Applicable
	435 (2) (b)	Applicable
	435 (2) (c)	Applicable
	435 (2) (d)	Applicable
	435 (2) (e)	Applicable
Article 436 – Scope of Application	436 (a)	Applicable
	436 (b) (i) to (iv)	Applicable
	436 (c)	Applicable
	436 (d)	Applicable
	436 (e)	Applicable
Article 437- Own Funds	437 (1) (a)	Applicable
	437 (1) (b)	Applicable
	437 (1) (c)	Applicable
	437 (1) (d) (i) to (iii)	Applicable
	437 (1) (e)	Applicable
	437 (1) (f)	Not applicable
Article 438 - Capital Requirements	438 (a)	Applicable
	438 (b)	Not applicable
	438 (c)	Applicable
	438 (d) (i) to (iv)	Applicable
	438 (e)	Applicable
	438 (f)	Applicable
Article 439 – Exposure to Counterparty Credit Risk	439 (a)	Applicable
	439 (b)	Applicable
	439 (c)	Applicable
	439 (d)	Applicable
	439 (e)	Applicable
	439 (f)	Applicable
	439 (g)	Not applicable
	439 (h)	Not applicable
	439 (i)	Not applicable

CRR Article Description	CRR Article No.	Applicable / Not applicable to Permanent TSB Group
Article 440 - Capital buffers	440 (1) (a)	Applicable
	440 (1) (b)	Applicable
Article 441 – Indicators of global systemic importance	441	Not applicable
Article 442 -Credit risk adjustments	442 (a)	Applicable
	442 (b)	Applicable
	442 (c)	Applicable
	442 (d)	Applicable
	442 (e)	Applicable
	442 (f)	Applicable
	442 (g) (i) to (iii)	Applicable
	442 (h)	Applicable
	442 (i) (i) to (v)	Applicable
Article 443 – Unencumbered Assets	443	Applicable
Article 444 – Use of ECAIs	444 (a)	Not applicable
	444 (b)	Not applicable
	444 (c)	Not applicable
	444 (d)	Not applicable
	444 (e)	Not applicable
Article 445 – Market Risk	445	Not applicable
Article 446 – Operational Risk	446	Applicable
Article 447 – Exposure to equities not included in the trading book	447 (a)	Applicable
	447 (b)	Applicable
	447 (c)	Applicable
	447 (d)	Applicable
	447 (e)	Applicable
Article 448 – Exposure to interest rate risk on positions not included in the trading book	448 (a)	Applicable
	448 (b)	Applicable
Article 449 – Exposure to securitisation positions	449 (a)	Applicable
	449 (b)	Applicable
	449 (c)	Not applicable
	449 (d)	Applicable
	449 (e)	Applicable
	449 (f)	Applicable
	449 (g)	Applicable
	449 (h)	Applicable
	449 (i)	Not applicable
	449 (j)	Applicable
	449 (k)	Not applicable
	449 (l)	Not applicable
	449 (m)	Applicable
	449 (n) (i) to (vi)	Applicable
	449 (o) (i) to (ii)	Applicable

CRR Article Description	CRR Article No.	Applicable / Not applicable to Permanent TSB Group
	449 (p)	Applicable
	449 (q)	Not applicable
	449 (r)	Not applicable
Article 450 – Remuneration	450 (1) (a)	Applicable
	450 (1) (b)	Applicable
	450 (1) (c)	Applicable
	450 (1) (d)	Applicable
	450 (1) (e)	Applicable
	450 (1) (f)	Applicable
	450 (1) (g)	Applicable
	450 (1) (h) (i) to (vi)	Applicable
	450 (1) (i)	Applicable
	450 (1) (j)	Not applicable
	450 (2)	Applicable
Article 451 – Leverage Ratio	451 (1) (a)	Applicable
	451 (1) (b)	Applicable
	451 (1) (c)	Not applicable
	451 (1) (d)	Applicable
	451 (1) (e)	Applicable
Article 452 – Use of the IRB Approach to Credit Risk	452 (a)	Applicable
	452 (b) (i) to (iv)	Applicable
	452 (c) (i) to (v)	Applicable
	452 (d)	Applicable
	452 (e) (i) to (iii)	Applicable
	452 (f)	Applicable
	452 (g)	Applicable
	452 (h)	Applicable
	452 (i)	Applicable
	452 (j) (i) to (ii)	Applicable
Article 453 – Use of Credit Mitigation	453 (a)	Applicable
	453 (b)	Applicable
	453 (c)	Applicable
	453 (d)	Not applicable
	453 (e)	Applicable
	453 (f)	Applicable
	453 (g)	Not applicable
Article 454 - Use of the Advanced Measurement Approaches to Operational Risk	454	Not applicable
Article 455 - Use of Internal Market Risk Model	455 (a) (i) to (iv)	Not applicable
	455 (b)	Not applicable
	455 (c)	Not applicable
	455 (d) (i) to (iii)	Not applicable
	455 (e)	Not applicable
	455 (f)	Not applicable

CRR Article Description	CRR Article No.	Applicable / Not applicable to Permanent TSB Group
	455 (g)	Not applicable
Article 473a – Introduction of IFRS 9	473a	Applicable

List of tables

Applicable table / template ref.	Pillar 3 page / section ref.
EBA Guidelines - EBA/GL/2016/11	
Table EU OVA - Institution risk management approach	Contained within section: Risk Management Objectives and Policies pg. 13 - 19
Table EU CRA - General qualitative information about credit risk	Contained within section: Risk Management Objectives and Policies pg. 13 - 19
Table EU CCRA - Qualitative disclosure requirements related to CCR	Contained within section: Counterparty credit risk pg. 44 - 46
Table EU LIA - Explanations of differences between accounting and regulatory exposure amounts	Contained within section: Explanations of differences between accounting and regulatory exposure amounts pg. 24
Table EU CRB-A - Additional disclosure related to the credit quality of assets	Contained within section: Credit Risk Adjustments pg. 51 - 52
Table EU CRC - Qualitative disclosure requirements related to CRM techniques	Contained within section: Use of Credit Risk Mitigation Techniques pg. 125 - 126
Table EU CRE - Qualitative disclosure requirements related to IRB models	Contained within section: Use of the IRB Approach to Credit Risk pg. 103 -109
Template EU LI1 - Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories	pg. 25
Template EU LI2 - Main sources of differences between regulatory exposure amounts and carrying values in financial statements	pg. 27
Template EU LI3 - Outline of the differences in the scopes of consolidation (entity by entity)	pg. 28
Template EU OV1 - Overview of RWAs	pg. 41
Template EU CR10 - IRB (specialised lending and equities)	pg. 43
Template EU CRB-B - Total and average net amount of exposures	pg. 53
Template EU CRB-C - Geographical breakdown of exposures	pg. 54
Template EU CRB-D - Concentration of exposures by industry or counterparty types	pg. 56
Template EU CRB-E - Maturity of exposures	pg. 58

Applicable table / template ref.	Pillar 3 page / section ref.
Template EU CR1-A - Credit quality of exposures by exposure class and instrument	pg. 60
Template EU CR1-B - Credit quality of exposures by industry or counterparty types	pg. 63
Template EU CR1-C - Credit quality of exposures by geography	pg. 64
Template EU CR2-A - Changes in the stock of general and specific credit risk adjustments	pg. 72
Template EU CR2-B - Changes in the stock of defaulted and impaired loans and debt securities	pg. 73
Template EU CR3 - CRM techniques – Overview	pg. 126
Template EU CR4 - Standardised approach – Credit risk exposure and CRM effects	pg. 127
Template EU CR6 - IRB approach – Credit risk exposures by exposure class and PD range	pg. 110
Template EU CR8 - RWA flow statements of credit risk exposures under the IRB approach	pg. 42
Template EU CR9 - IRB approach – Backtesting of PD per exposure class	pg. 117
Template EU CCR1 - Analysis of CCR exposure by approach	pg. 45
Template EU CCR2 - CVA capital charge	pg. 46
Template EU CCR4 - IRB approach – CCR exposures by portfolio and PD scale	pg. 116
EBA Guidelines - EBA/GL/2017/01	
Table EU LIQA on liquidity risk management	Contained within Section: Risk Management Objectives and Policies pg. 13 - 19
Template EU LIQ1: LCR disclosure template and the template on qualitative information on the LCR	pg. 18
Commission Implementing Regulation (EU) No 1423/2013	
Capital instruments' main features template (Annex II)	pg. 31
Own funds disclosure template (Annex IV)	pg. 33
Commission Implementing Regulation (EU) 2015/1555	
Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer	pg. 48
Amount of institution-specific countercyclical capital buffer	pg. 47
EBA Guidelines - EBA/GL/2018/10	
Credit quality of forborne exposures	pg. 65
Credit quality of performing and non-performing exposures by past due days	pg. 67
Performing and non-performing exposures and related provisions	pg. 69
Collateral obtained by taking possession and execution processes	pg. 71
Commission Delegated Regulation (EU) 2017/2295	
Template A: Encumbered and unencumbered assets	pg. 74

Applicable table / template ref.	Pillar 3 page / section ref.
Template B: Collateral received	pg. 765
Template C: Sources of encumbrance	pg. 76
Template D: Accompanying narrative information	pg. 76
Commission Implementing Regulation (EU) 2016/200	
Table LRSum: Summary reconciliation of accounting assets and leverage ratio exposures	pg. 100
Table LRCom: Leverage ratio common disclosure	pg. 101
Table LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)	pg. 102
Table LRQua: Disclosure on qualitative items	pg. 102
EBA Guidelines - EBA/GL/2018/01	
Template IFRS 9-FL	pg. 131

Risk Management Objectives and Policies (Art 435)

Overview

Within the boundaries of the Board-approved Risk Appetite, Permanent TSB follows an integrated approach to Risk Management, to ensure that all risks faced by the Group are appropriately identified and managed. This approach ensures that appropriate mechanisms are in place to protect and direct the Group in recognising the economic substance of its risk exposure.

The Group implements a Risk Management Process, which consists of four key steps:

- (i) Risk Identification;
- (ii) Risk Assessment;
- (iii) Risk Mitigation; and
- (iv) Risk Monitoring and Reporting.



The design of the Group's Risk Management Process is underpinned by Risk Management Objectives and Principles, which are detailed in the sections below.

The risks to which the Group is, or may be, exposed are grouped into Risk Categories, within which sub-risk categories are defined at a more granular level. Risks must be identified, assessed, measured, monitored and reported in line with First or Second Line responsibilities consistent with the Three Lines of Defence Model employed by the Group.

A suite of supporting documentation (Frameworks and Policies) is maintained for relevant key Risk Categories, and reviewed at least annually. This supporting documentation describes the activities and tools required to support the ongoing Risk Management Process, and to promote a comprehensive and consistent approach to Risk Management across the Group.

Risk Management Objectives (Art 435.1.a)

The broad objectives of the Risk Management Process are to:

- i. Ensure that risks (including emerging risks), to which the Group is exposed, are identified appropriately and in a timely manner;
- ii. Ensure that a robust risk assessment is undertaken for all risks identified by the Group, using qualitative and quantitative assessment tools, as applicable;
- iii. Ensure that effective risk mitigation strategies are adopted by the Group;
- iv. Ensure that the Group's Risk Profile is monitored and reported on both an individual and aggregate basis; and
- v. Ensure that a dynamic Risk Management environment is promoted in the Group.

These objectives are fulfilled by:

- i. Documenting the activities required to fulfil the Group's Risk Management Process;
- ii. Reviewing the design and adequacy of the Group's Risk Management Process and supporting tools periodically;
- iii. Establishing independent testing of the Risk Management Process, to review for operating effectiveness across the Group; and
- iv. Provide input to ongoing prudential assessments (such as assessments under the Bank Recovery and Resolution Directive), annual stress-testing assessments and the Integrated Planning Process ('IPP').

Risk Management Principles (Art 435.1.a, 435.1.c)

The principles for effective Risk Management are as follows:

Principle 1	The Group must classify material risks according to a standard comprehensive list of risks to which the Group is exposed (risk and sub-risk categories). These are reviewed and updated at least on an annual basis.
Principle 2	The Group strives to adopt a consistent approach across all risk categories regarding its Risk Management Processes, including risk identification, assessment, mitigation, monitoring and reporting.
Principle 3	The Group must implement and embed comprehensive, fit for purpose Frameworks and Policies with detailed standards to cover key risks and key Risk Management Processes.
Principle 4	The Group must have a Risk Management Process for identifying the material risks to which the Group is exposed and for assessing those material risks on a qualitative and quantitative basis in the form of top-down and bottom-up assessments.
Principle 5	The Group must have a definition of materiality against which key risks are evaluated. This definition and criteria is reviewed and approved annually.*
Principle 6	The Group must use a common system across risk categories to monitor and escalate risks and exceptions (incidents) promptly by assessing the risk impact and likelihood of events occurring through the use of the Group-wide Risk scoring matrix.
Principle 7	The Group aims to adopt appropriate risk mitigation (risk treatment) approaches including risk reduction (by ensuring there are controls designed and operational),

	risk avoidance, risk transfer, risk optimisation or risk acceptance (if within Board approved Risk Appetite).
Principle 8	The Group must use MI and risk data to prepare risk information (including qualitative information and quantitative metrics) to report on the holistic risk profile of the Group including any changes in risk profile and emerging / horizon risks. The Risk Monitoring and Reporting Process should enable the reporting of the effectiveness of Risk Mitigation strategies including the effectiveness of controls.
Principle 9	The Group facilitates the promotion of a risk awareness culture, which in turn bolsters effective risk management and ensures that risk-taking activities are identified, assessed, mitigated, monitored and reported in a timely manner.
Principle 10	The Group strives to operate in line with the Board-approved Risk Appetite at all times and the Group's control environment seeks to reinforce this.

* Defining and embedding materiality across all risk categories continues to be developed by the Group.

The key details on the scope and nature of risk reporting are set out on pages 47-70 within the Risk Management section of the Group's 2019 Annual Report. Qualitative disclosure requirements related to the Bank's approach to CCR are discussed in the Counterparty credit risk (Article 439) section beginning on page 44.

Organisation of Risk Management (Art 435.1.b)

A 'Three Lines of Defence' model has been adopted by the Group for the effective oversight and management of risks across the Group. Functions and teams in the First Line undertake frontline commercial and operational activities. In their day-to-day activities, these teams take risks which are managed through the effective design and operation of mitigating controls. Each Head of First Line Function is responsible for ensuring that activities undertaken are within the Board-approved Risk Appetite.

The Group Risk Function is an independent risk management function, under the direction of the Chief Risk Officer (CRO), and is the key component of the Group's Second Line of Defence. Group Risk is responsible for the on-going identification, assessment, monitoring and reporting of risk-taking activities across the Group.

For emerging risks, the Group Risk Function is responsible for ensuring that the risks to which the Group is exposed are identified appropriately and in a timely manner. Given the developments in the UK, the risk of Brexit was raised from an emerging risk to a top risk by the Group given that the Group's business is directly correlated to the performance of the Irish Economy – see pages 53-54 within the Risk Management section of the Group's 2019 Annual Report.

Group Internal Audit comprises the Third Line of Defence. It plays a critical role by providing independent assurance to the Group Board over the adequacy, effectiveness and sustainability of the Group's internal control, risk management and governance systems and processes, thereby supporting both the Board and Senior Management in promoting effective and sound risk management and governance across the Group.

The key responsibilities of each Line of Defence are set out on page 52-53 within the Risk Management section of the Group's 2019 Annual Report.

Risk Categories (Art 435.1.d)

The following key risk categories have been identified through the Group's risk assessment process:

- Capital Adequacy Risk
- Sustainability
- Credit Risk
- Market Risk
- Model Risk
- Liquidity and Funding Risk
- Operational and IT Risk
- Regulatory Compliance and Conduct Risk

In order to minimise the risks to which the Group is exposed, the Group has implemented risk management strategies for key risks. While the Group devotes significant effort to its risk management strategies, there is a risk that in some circumstances these management strategies may fail to adequately mitigate the risks, especially where particular risks were not identified or foreseen.

Further information about these risk categories including how the risks are identified, managed, measured and mitigated is provided within pages 53-70 of the Group's 2019 Annual Report.

Declaration by management body on the adequacy of risk management (Art 435.1.e)

Information on the adequacy of risk management is contained in the Group's 2019 Annual Report within the Corporate Governance Statement (page 79 and page 98). Specific information on the adequacy of the Group's liquidity risk management is contained in the Group's 2019 Annual Report within section 3.2 Funding & Liquidity Risk (page 67). Further information on Risk Management is included on pages 47 to 70 of the Group's 2019 Annual Report.

Risk management responsibilities are outlined in the Group Risk Management Architecture (GRMA), which includes the categories of risk to which the Group is, or potentially is, exposed. The GRMA creates clear ownership and accountability; ensures the Group's most significant risk exposures are understood and managed in accordance with agreed risk appetite and risk tolerances; and ensures regular risk reporting.

The embedding of the GRMA, that governs all risk management arrangements in the Group, is monitored by executive and Board committees. The Group Risk Management Framework (GRMF) and its component key risk and sub-risk categories are subject to review to identify issues to be mitigated.

Risk Profile (Art 435.1.f)

As noted above, Permanent TSB has adopted an integrated approach to identifying, assessing, mitigating and monitoring and reporting risks. The core aspects of the Group's Risk Management Framework are set out on pages 47 to 70 of the Group's 2019 Annual Report.

The Group's Risk Appetite Statement (RAS) is the first component of the Group's Integrated Planning Process and expresses the level and nature of risk the Group is willing to accept in achieving its strategic objectives. Expressed in both quantitative and qualitative terms, the Risk Appetite informs Group strategy and, as part of the overall framework for risk governance, is a boundary condition that guides the Group in its risk-taking and related business activities.

The Group has defined measures to track its risk profile against the most significant risks it assumes. A mix of quantitative and qualitative, backward and forward looking Risk Metrics are defined to monitor the actual Risk Position against RAS by Risk Category. Each of these measures has a defined risk tolerance and risk appetite threshold. A limited number of measures have defined risk capacity thresholds, based on their potential to singularly threaten the viability of the Group. Actual performance is tracked against these thresholds and reported to the Group Board.

Table 1: Key Ratios associated with the risk profile of the Group include the following:

	31 December 2019	31 December 2018
Capital – Transitional*		
Common Equity Tier 1 Ratio	17.6%	14.7%
Tier 1 Ratio	18.5%	15.5%
Total Capital Ratio	19.1%	16.0%
Leverage Ratio – Transitional	9.1%	8.4%
Liquidity		
Liquidity Coverage Ratio (LCR)	170%	160%
Net Stable Funding Ratio (NSFR)	138%	121%
Loan to Deposit Ratio	91%	93%
NPLs as % of gross loans	6%	10%
NPAs as % of gross loans	7%	11%

*Capital ratios include year end profits which are subject to CBI approval.

Liquidity disclosures

The following information is disclosed in accordance with the EBA Guidelines on LCR Disclosures (EBA/GL/2017/01).

Table 2: EU LIQ1: LCR disclosure template (Art 435.1.a, 435.1.b, 435.1.d, 435.1.f)

Quarter Ending 2019	Total unweighted value (average)				Total weighted value (average)			
	Mar-19 €m	Jun-19 €m	Sep-19 €m	Dec-19 €m	Mar-19 €m	Jun-19 €m	Sep-19 €m	Dec-19 €m
Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
High-quality liquid assets								
1 Total high-quality liquid assets (HQLA)					3,265	3,286	3,301	3,303
Cash-outflows								
2 Retail deposits and deposits from small business customers, of which;	10,391	10,517	10,636	10,778	650	657	663	671
3 Stable deposits	8,526	8,641	8,742	8,861	426	432	437	443
4 Less stable deposits	1,866	1,876	1,894	1,917	224	225	226	228
5 Unsecured wholesale funding	2,113	1,987	1,911	1,838	929	840	785	726
6 Operational deposits (all counterparties) and deposits in networks of cooperative banks	-	-	-	-	-	-	-	-
7 Non-operational deposits (all counterparties)	2,084	1,984	1,910	1,837	900	837	784	725
8 Unsecured debt	28	3	1	1	28	3	1	1
9 Secured wholesale funding					83	83	83	50
10 Additional requirements	139	112	83	63	139	112	83	63
11 Outflows related to derivative exposures and other collateral requirements	139	112	83	63	139	112	83	63
12 Outflows related to loss of funding on debt products	-	-	-	-	-	-	-	-
13 Credit and liquidity facilities	-	-	-	-	-	-	-	-
14 Other contractual funding obligations	50	51	53	50	20	21	21	21
15 Other contingent funding obligations	877	898	905	915	483	499	503	506
16 Total cash outflows					2,304	2,212	2,138	2,038
Cash-inflows								
17 Secured lending (e.g. reverse repos)	0	0	0	0	0	0	0	0
18 Inflows from fully performing exposures	150	151	173	174	135	134	156	155
19 Other cash inflows	164	138	106	28	164	138	106	28
(Difference between total weighted inflows and total weighted outflows arising from								
EU-19a transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)					-	-	-	-
(Excess inflows from a related specialised credit institution)								
EU-19b					-	-	-	-
20 Total cash inflows	314	288	279	202	299	272	261	183
EU-20a Fully exempt inflows	-	-	-	-	-	-	-	-
EU-20b Inflows Subject to 90% Cap	-	-	-	-	-	-	-	-
EU-20c Inflows Subject to 75% Cap	314	288	279	202	299	272	261	183
21 Liquidity buffer					3,265	3,286	3,301	3,303
22 Total net cash outflows					2,005	1,940	1,877	1,854
23 Liquidity coverage ratio (%)					164%	171%	177%	179%

The Group's funding profile consists of Customer Accounts, Debt securities in issue and Deposits by banks. Customer Accounts made up 95% of funding as at 31 December 2019. During 2019 the Group issued €300m of MREL eligible debt. Additional MREL is due to be issued during 2020.

The Group has no bilateral netting agreements approved by the competent authority. Treatment of derivative cash flows is reflected on a gross basis. Collateral is callable based on mark to market movements.

The Group's base currency is euro and the Group does not hold any significant currency which exceeds 5% of total liabilities.

Governance Arrangements (Art 435.2)

The risk governance arrangements, including the role and responsibilities of the Board of Directors in relation to risk management, are set out in the Risk Governance section from page 48 of the 2019 Annual Report.

Directorships held by Board Members (Art 435.2.a)

The number of directorships held by members of the Board as at 31 December 2019 is listed in the below table 3. In addition, there have been no additional directorships approved by the competent authorities in respect of the Directors during the reporting period. The Board of Directors section on pages 82 to 86 of the 2019 Annual Report also contains information relating to directorships held by members of the Board of Directors.

Table 3: Number of directorships held by members of the Board

Director	Total Number of Directorships	CRD IV Directorships as counted under Article 91 (3) and (4) of Directive 2013/36/EU ¹
Robert Elliott	7	3
Jeremy Masding	6	1
Eamonn Crowley	10	1
Julie O'Neill	7	4
Ronan O'Neill	3	2
Ken Slattery	8	3
Andrew Power	4	2
Donal Courtney	5	3
Ruth Wanderhofer	5	4
Mike Frawley	2	1
Marian Corcoran	4	2

Criteria for the selection of Members of the Board (Art 435.2.b)

The responsibilities of the Nomination, Culture and Ethics Committee include reviewing and assessing Board composition on behalf of the Board and recommending the appointment of Directors, and reviewing the size, structure, composition, diversity, and skills of the Board and its Committees. In addition, the Nomination, Culture and Ethics Committee will consider tenure of existing directors when reviewing the Board's Succession Plans. A key focus for the Nomination, Culture and Ethics Committee in 2020 will be succession planning and analysis of director skills for anticipated changes to the Board in 2020. Julie O'Neill will retire from the Board on the 6 May 2020 at the conclusion of the Company's AGM having completed her term of office. The Board also has received written notification from the Minister for Finance under the provisions of the Relationship Framework to appoint two directors to the Board. Marian Corcoran joined the Board on the 24 September 2019 and it is expected that a further nominee of the Minister for Finance will join the Board in 2020 subject to the required regulatory approval.

¹ Excludes non-commercial entities

The Nomination, Culture and Ethics Committee are also responsible for evaluating the individual and collective on-going suitability of members of the Board. Further details of recruitment and selection of members of the Board are set out on pages 112 to 113 of the 2019 Annual Report, and details of Directors' key strengths, skills and experience are set out on pages 82 to 85 of the 2019 Annual Report.

The Board of Directors are required to have the right mix of skills and core competencies necessary to meet the Bank's evolving needs and objectives. A Board-approved Policy for the Assessment of the Suitability of Members of the Board is in place and outlines the board appointments process. The Policy was updated during 2019 in accordance with the joint European Banking Authority and European Securities and Markets Authority Guidelines on the Assessment of the Suitability of members of management bodies and key function holders.

Board Diversity Policy ([Art 435.2.c](#))

The Board recognises the benefits of having a diverse Board, which enhances the quality of decision-making by reducing the risk of group think and ensuring that the Board includes different perspectives (diversity of thought) in order to provide effective oversight to guide the business to achieve its strategic aims. The Directors view increasing diversity at Board level as an important element in maintaining a competitive advantage. A diverse Board includes and makes good use of differences in the skills (in particular those set out in the Board Skills Matrix), regional and industry experience, background, nationality, gender, age and other qualities of directors. These differences are considered in determining the optimum composition of the Board and when possible should be balanced appropriately.

The Nomination, Culture and Ethics Committee discuss and agree annually all measurable objectives for achieving diversity on the Board and recommend them to the Board for adoption.

The Board has set a target to achieve 30% female membership. The Bank is committed to having a diverse board, to achieving the target set in this regard and to ensuring an open and fair recruitment process. The Board has an objective that approximately 50% of Non-Executive Directors, including the Board Chair together with the Chairs of the Board Audit and Risk and Compliance Committees should have relevant banking and/or financial experience and this will also be taken into account when recommending appointments.

The selection process for Board candidates will continue to be conducted, and nominations/appointments made, with due regard to the benefits of diversity on the Board. All Board appointments are made on merit, in the context of the skills and experience that the Board as a whole requires to be effective.

The Board Diversity Report on pages 100 to 102 of the 2019 Annual Report sets out further details on the Board Diversity Policy, its objectives, and relevant targets set out in that policy, and the extent to which these objectives and targets have been achieved.

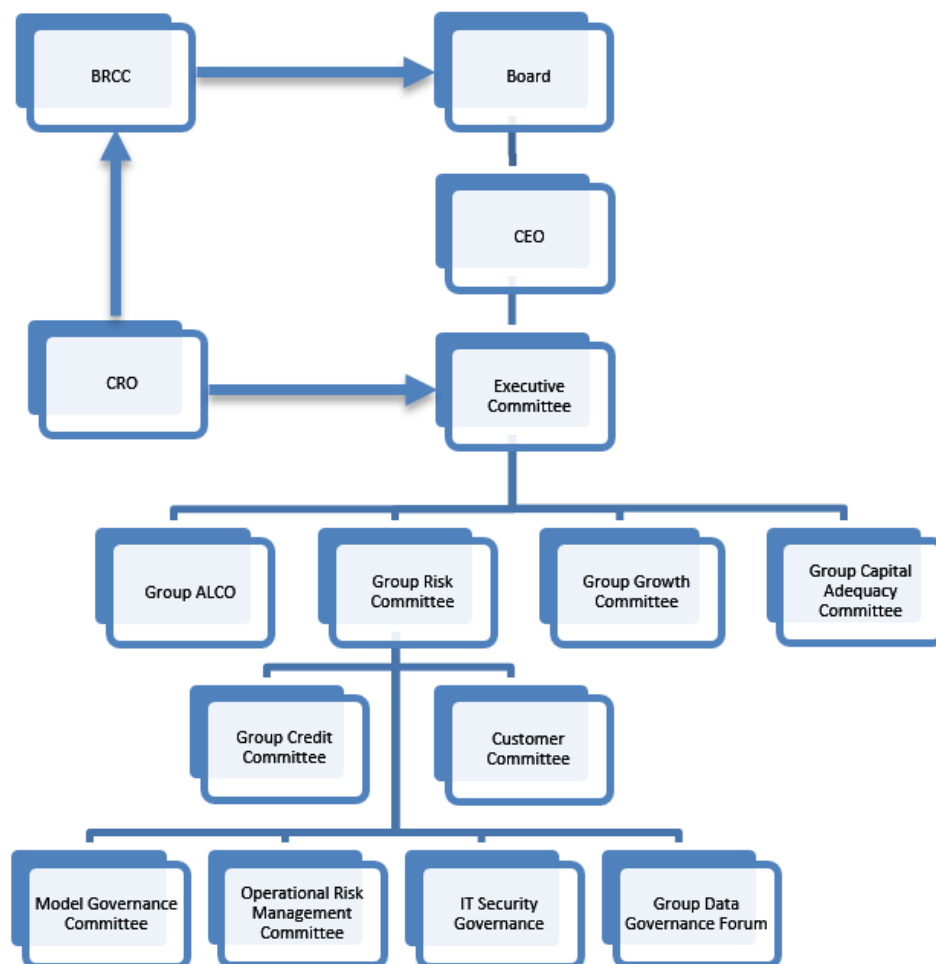
Board Risk and Compliance Committee ([Art 435.2.d](#))

The Board has established a Board Risk and Compliance Committee with responsibility for oversight and for providing advice to the Board in relation to the consolidated Group and its subsidiaries on

risk governance, current and future risk exposures, risk tolerance/appetite and strategy, taking into account all other relevant risks, and for overseeing the implementation of that Strategy by Senior Management. This includes strategy for capital and liquidity management, the setting of risk and compliance policies and principles, and the embedding and maintenance throughout the organisation of a supportive culture in relation to management or risk and compliance. Further details in respect of the Board Risk and Compliance Committee, including committee composition and matters considered by the Committee during the year, and the number of times the Committee met during the year are set out on pages 108 to 110 of the 2019 Annual Report.

Information flow to Management body (Art 435.2.e)

The following diagram illustrates the high-level Risk Governance Structure of the Group demonstrating the information flow on risk throughout the Group including to the Board of Directors:



- The **Board** has overall governance responsibility for the Bank. It approves the Bank's Risk Appetite, Strategic Direction, Financial MTP and Budget as part of the Integrated Planning Process. The Board reserves authority to resolve risk/reward decisions which may be subject to appeal.

- **BRCC** is a Board Sub-Committee with responsibility for overseeing and providing advice to the Board on Risk Governance and the current and future risk exposures of the Bank. It supports the Board in carrying out its responsibilities of ensuring that risks are properly identified, reported, assessed and controlled, and that the Bank's strategy is consistent with its approved Risk Appetite.
- The Board delegates executive responsibility to the **CEO** for the Bank's operations, compliance and performance. The CEO is the principal executive accountable to the Board for the day-to-day management of the Bank.
- The **ExCo**, which is chaired by the CEO, is accountable to the Board for delivery of the Bank's MTP and Financial Plans.
- ExCo has a Risk Sub-Committee consisting of all ExCo members which is chaired by the CRO and which has delegated accountability for Bank-wide Risk Management Issues and implementation of the Bank's Risk Appetite Statement.
- The ExCo has additional Risk related Sub-Committees (ALCO, CAC) which are chaired by ExCo members and which are accountable to ExCo for their respective Risk Management obligations as delegated by ExCo. Relevant decisions/matters arising from the ExCo Risk Sub-Committees are reported to the BRCC (via the CRO) for independent oversight and to ExCo (via the relevant ExCo member/Sub-Committee Chair) for information/noting, or, to raise the attention of ExCo where appropriate.
- The ExCo may not override or modify the decision of its Risk Sub-Committees but may appeal decisions to the Board (or relevant Board Committee).
- The CRO can refer any decision of ExCo or the ExCo Sub-Committees to the Board Risk and Compliance Committee (or Board) for review.
- The CRO maintains a right of **independent access** to both the Board and BRCC to facilitate the independent communication of significant or material risk matters impacting the Bank.

Scope of Application (Art 436)

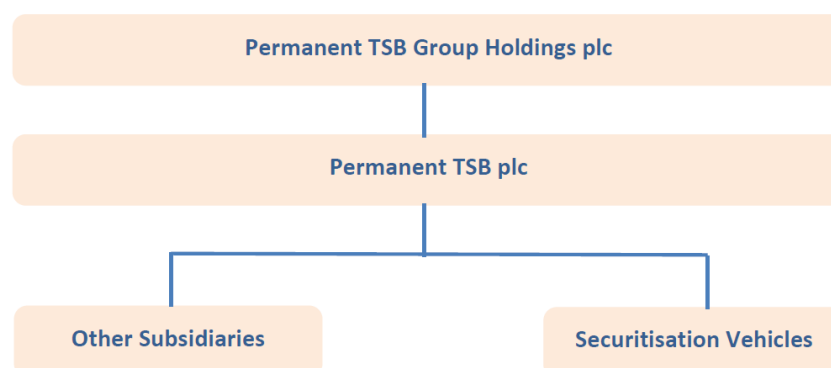
Regulatory Requirements (Art 436.a)

These disclosures apply to Permanent TSB Group Holdings plc which is the highest level of consolidation for prudential reporting purposes. The Group's regulatory requirements, in respect of these disclosures, are contained within the CRD IV package, which is made up of the CRR regulation which is directly applicable in all EU countries and a directive which is transposed into Irish law through S.I. No. 158 of 2014, as well as EBA technical standards and guidelines. Under these requirements, the Group's total capital for Pillar 1 must be adequate to cover its risk for credit, market and operational risks, including capital buffers. The Group must also hold sufficient capital to cover the additional risks identified under the Pillar 2 process including any add-on's imposed on the Group as part of the supervisory SREP assessment.

The Group fulfils all of its capital requirements set out above as at 31 December 2019.

Explanations of differences between accounting and regulatory exposure amounts (EU LIA) (Art 436.b)

The scope of consolidation for the Group is the same for accounting and prudential purposes. The Group previously had a captive insurance company which is now in liquidation and is therefore neither consolidated for accounting or prudential purposes.



The main differences between accounting exposures and regulatory exposures (see table LI2 below) result from adding back IRB impairment provisions and the inclusion of off-balance sheet amounts adjusted for credit conversion factors.

Currently, no assets or liabilities are subject to capital requirements for more than one risk framework listed in Part Three of the CRR (see table 4: EU LI1 below).

The Group has no trading book and only a small portion of its balance sheet is carried at fair value. See Note 1 in the Group's 2019 Annual Report for more details on accounting policies.

Table 4: EU LI1: Difference between accounting and regulatory scope of consolidation (Art 436.b)

2019	Carrying values as reported in published financial statements	Difference in the basis of consolidation for accounting and prudential purposes	Carrying values under scope of regulatory consolidation	Carrying values of items				Not subject to capital requirements or subject to deduction from capital
				Subject to the credit risk framework	Subject to the CCR framework	Subject to the securitisation framework	Subject to the market risk framework	
Balance sheet category	€m	€m	€m	€m	€m	€m	€m	€m
Assets								
Cash at bank	63	-	63	63	-	-	-	-
Items in the course of collection	15	-	15	15	-	-	-	-
Debt securities	2,005	-	2,005	1,963	-	42	-	-
Equity securities	15	-	15	15	-	-	-	-
Derivative assets	1	-	1	-	1	-	-	-
Loans and advances to banks	1,556	-	1,556	1,556	-	-	-	-
Loans and advances to customers	15,644	-	15,644	15,644	-	-	-	-
Property and equipment	201	-	201	201	-	-	-	-
Intangible assets	66	-	66	-	-	-	-	66
Deferred taxation	345	-	345	175	-	-	-	170
Other assets	259	-	259	259	-	-	-	-
Prepayments and accrued income	49	-	49	49	-	-	-	-
Assets classified as held for sale	59	-	59	59	-	-	-	-
Total assets	20,278	-	20,278	19,999	1	42	-	236
Liabilities								
Deposits by banks (including central banks)	-	-	-	-	-	-	-	-
Customer accounts	17,190	-	17,190	-	-	-	-	17,190
Debt securities in issue	923	-	923	-	-	-	-	923
Derivative liabilities	2	-	2	-	-	-	-	2
Accruals	5	-	5	-	-	-	-	5
Current tax liability	2	-	2	-	-	-	-	2
Other liabilities	118	-	118	-	-	-	-	118
Provisions	41	-	41	-	-	-	-	41
Total liabilities	18,281	-	18,281	-	-	-	-	18,281
Equity								
Share capital	227	-	227	-	-	-	-	227
Share premium	333	-	333	-	-	-	-	333
Other reserves	(795)	-	(795)	-	-	-	-	(795)
Retained earnings	2,110	-	2,110	-	-	-	-	2,110
Shareholders' equity	1,875	-	1,875	-	-	-	-	1,875
Other equity instruments	122	-	122	-	-	-	-	122
Total equity	1,997	-	1,997	-	-	-	-	1,997
Total liabilities and equity	20,278	-	20,278	-	-	-	-	20,278

2018

Balance sheet category	Carrying values of items							Not subject to capital requirements or subject to deduction from capital
	Carrying values as reported in published financial statements €m	Difference in the basis of consolidation for accounting and prudential purposes €m	Carrying values under scope of regulatory consolidation €m	Subject to the credit risk framework €m	Subject to the CCR framework €m	Subject to the securitisation framework €m	Subject to the market risk framework €m	
Assets								
Cash at bank	65	-	65	65	-	-	-	-
Items in the course of collection	17	-	17	17	-	-	-	-
Debt securities	2,647	-	2,647	2,603	-	44	-	-
Equity securities	13	-	13	13	-	-	-	-
Derivative assets	1	-	1	-	1	-	-	-
Loans and advances to banks	1,159	5	1,154	1,154	-	-	-	-
Loans and advances to customers	15,888	-	15,888	15,888	-	-	-	-
Property and equipment	154	-	154	154	-	-	-	-
Intangible assets	41	-	41	-	-	-	-	41
Deferred taxation	355	-	355	211	-	-	-	144
Other assets	1,227	-	1,227	1,227	-	-	-	-
Prepayments and accrued income	93	-	93	93	-	-	-	-
Assets classified as held for sale	150	-	150	150	-	-	-	-
Investments in subsidiary undertakings	0	(10)	10	10	-	-	-	-
Total assets	21,810	(5)	21,815	21,587	1	44	-	185
Liabilities								
Deposits by banks (including central banks)	1,552	-	1,552	-	-	-	-	1,552
Customer accounts	17,020	(14)	17,034	-	-	-	-	17,034
Debt securities in issue	1,095	-	1,095	-	-	-	-	1,095
Derivative liabilities	14	-	14	-	-	-	-	14
Accruals	5	-	5	-	-	-	-	5
Current tax liability	1	-	1	-	-	-	-	1
Other liabilities	69	-	69	-	-	-	-	69
Provisions	74	-	74	-	-	-	-	74
Subordinated liabilities	0	-	0	-	-	-	-	0
Total liabilities	19,830	(14)	19,844	-	-	-	-	19,844
Equity								
Share capital	227	-	227	-	-	-	-	227
Share premium	333	-	333	-	-	-	-	333
Other reserves	(793)	-	(793)	-	-	-	-	(793)
Retained earnings	2,091	9	2,082	-	-	-	-	2,082
Shareholders' equity	1,858	9	1,850	-	-	-	-	1,850
Other equity instruments	122	-	122	-	-	-	-	122
Total equity	1,980	9	1,971	-	-	-	-	1,971
Total liabilities and equity	21,810	(5)	21,815	-	-	-	-	21,815

Table 5: EU LI2: Reconciliation between regulatory exposure amounts and carrying value in financial statements (Art 436.b)

	Items subject to					Items subject to			
	Total	Credit risk	CCR framework	Securitisation		Total	Credit risk	CCR framework	Securitisation
2019	€m	framework €m	€m	framework €m	2018	€m	framework €m	€m	framework €m
Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	20,042	19,999	1	42	21,632	21,587	1	44	
Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	-	-	-	-	-	-	-	-	-
Total net amount under the regulatory scope of consolidation	20,042	19,999	1	42	21,632	21,587	1	44	
Off-balance sheet amounts	1,020	1,020	-	-	982	982	-	-	
Differences due to consideration of provisions	818	818	-	-	1,082	1,082	-	-	
Net potential future exposures	1	-	1	-	1	-	1	-	
Other	(7)	(8)	-	1	355	(42)	397	-	
Exposure amounts considered for regulatory purposes	21,874	21,829	2	43	24,052	23,609	399	44	

Table 6: EU LI3: Outline of the differences in the scopes of consolidation (entity by entity) (Art 436.b)

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of the entity
		Full consolidation	Proportional consolidation	Neither consolidated nor deducted	Deducted	
Permanent TSB Group Holdings plc	Full consolidation	X				Credit institution holding company
Permanent TSB plc	Full consolidation	X				Credit institution
PBI Ltd	Full consolidation	X				Financial corporation other than credit institution
Permanent TSB Finance Ltd	Full consolidation	X				Financial corporation other than credit institution
Springboard Mortgages Ltd	Full consolidation	X				Financial corporation other than credit institution
Joint Mortgage Holdings No1 Ltd	Full consolidation	X				Financial corporation other than credit institution
Springboard Funding No.1 Ltd	Full consolidation	X				Financial corporation other than credit institution
Securitisation Vehicles						
Fastnet Securities 5 DAC	Full consolidation	X				Securitisation vehicle
Fastnet Securities 6 DAC	Full consolidation	X				Securitisation vehicle
Fastnet Securities 10 DAC	Full consolidation	X				Securitisation vehicle
Fastnet Securities 11 DAC	Full consolidation	X				Securitisation vehicle
Fastnet Securities 12 DAC	Full consolidation	X				Securitisation vehicle
Fastnet Securities 13 DAC	Full consolidation	X				Securitisation vehicle
Fastnet Securities 14 DAC	Full consolidation	X				Securitisation vehicle
Fastnet Securities 15 DAC	Full consolidation	X				Securitisation vehicle

Impediments to the transfer of financial funds (Art 436.c)

The Group is subject to regular reviews of its internal capital adequacy assessment process (ICAAP) through the Supervisory Review and Evaluation Process (SREP). Per the outcome of the latest SREP report which is applicable for 2020, there is a restriction imposed on Permanent TSB plc from paying dividends to Permanent TSB Group Holdings plc. SREP requirements are reviewed on an annual basis.

There are no entities within the Group other than Permanent TSB plc subject to minimum capital requirements.

Shortfall of own funds for subsidiaries not included in consolidation (Art 436.d)

There is no shortfall of own funds for subsidiaries not included in consolidation.

Use of Article 9 for individual reporting (Art 436.e)

The Group has availed of the discretion in Article 9 (1) of the CRR to meet its individual reporting for Permanent TSB plc on an 'amended solo' basis. This discretion treats subsidiaries of a group as if they were branches rather than separate legal entities.

The risk profile of the Group does not differ in any material way from that of Permanent TSB plc and therefore all disclosures have been provided at Group level only.

Own Funds (Art 437)

The disclosure requirement for Own funds is laid down in Regulation (EU) No 1423/2013. This Regulation specifies uniform templates for the purposes of disclosure pursuant to points (a), (b), (d) and (e) of paragraph 1 of Article 437 and pursuant to paragraph 3 of Article 492 of Regulation (EU) No 575/2013.

Table 7: Reconciliation of shareholders' equity in Group Balance Sheet to own funds (Art 437.1.a)

All figures in €m	31-Dec 2019	31-Dec 2018
Shareholders' equity according to the Group's balance sheet	1,997	1,980
Deconsolidation of entity not in prudential scope	-	(9)
Deferred tax assets	(337)	(344)
Intangible assets	(66)	(41)
Additional Tier 1 instrument	(122)	(122)
Other adjustments	293	303
<i>of which: add back for deferred tax asset transitional adjustment</i>	<i>167</i>	<i>200</i>
<i>of which: adjustments due to IFRS 9 transitional arrangements</i>	<i>134</i>	<i>111</i>
Common Equity Tier 1 capital	1,765	1,768
Additional Tier 1 instrument included in consolidated own funds	85	87
Total Tier 1 capital	1,850	1,855
Tier 2 instrument	10	12
Net provisions for reported IRB credit exposures	51	54
Other adjustments	-	-
Total Tier 2 capital	61	66
Total capital base	1,911	1,921

Table 8: Description of the main features of the Common Equity Tier 1 and Additional Tier 1 instruments issued by the Group (Art 437.1.b)

Capital instruments' main features template*			
1	Issuer	Permanent TSB Group Holdings plc	Permanent TSB plc
2	Unique identifier	IE00BWB8X525	XS1227057814
3	Governing law(s) of the instrument	Irish	English/Irish
Regulatory treatment			
4	Transitional CRR rules	Common Equity Tier 1	Additional Tier 1
5	Post-transitional CRR rules	Common Equity Tier 1	Additional Tier 1
6	Eligible at solo / consolidated	Consolidated	Solo & (partially) Consolidated
7	Instrument type	Ordinary Shares	Additional Tier 1 as published in Regulation (EU) No 575/2013 article 52
8	Amount recognised in regulatory capital (€m)	227	85
9	Nominal amount of instrument	EUR 0.50	EUR 125,000,000
9a	Issue price (of latest issue)	EUR4.50	100.029 per cent
9b	Redemption price	N/A	100 per cent of principal amount
10	Accounting classification	Shareholders' Equity	Shareholders' Equity
11	Original date of issuance	05-May-15	29-Apr-15
12	Perpetual or dated	Perpetual	Perpetual
13	Original maturity date	No maturity	No maturity
14	Issuer call subject to prior supervisory approval	No	Yes
15	Optional call date, contingent call dates, and redemption amount	N/A	1 April 2021 and 1 April annually thereafter. 100 per cent of principal amount In addition Tax/Regulatory call.
16	Subsequent call dates, if applicable	N/A	1 April annually from 2022
Coupons / dividends			
17	Fixed or floating dividend/coupon	N/A	Fixed
18	Coupon rate and any related index	N/A	8.625%
19	Existence of a dividend stopper	N/A	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	N/A	Fully discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	N/A	Fully discretionary
21	Existence of step up or other incentive to redeem	N/A	No
22	Non-cumulative or cumulative	N/A	Non-cumulative
23	Convertible or non-convertible	N/A	Convertible
24	If convertible, conversion trigger(s)	N/A	CET 1 Capital Ratio of the Issuer or the CET 1 Capital Ratio of the Issuer Group falls below 7.00 per cent.
25	If convertible, fully or partially	N/A	Fully
26	If convertible, conversion rate	N/A	EUR 3.00

Capital instruments' main features template*			
27	If convertible, mandatory or optional conversion	N/A	Mandatory
28	If convertible, specify instrument type convertible into	N/A	Ordinary shares
29	If convertible, specify issuer of instrument it converts into	N/A	Parent (Permanent TSB Group Holdings plc)
30	Write-down features	N/A	No
31	If write-down, write-down trigger(s)	N/A	N/A
32	If write-down, full or partial	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Additional Tier 1	Senior debt
36	Non-compliant transitioned features	No	No
37	If yes, specify non-compliant features	N/A	N/A

*N/A' inserted if the question is not applicable

Full terms and conditions of all Common Equity Tier 1 and Additional Tier 1 instruments

(Art 437.1.c)

Details of the full terms and conditions of all of the above instruments can be found at the following location on the Group's website:

- For Common Equity Tier 1 instruments please refer to the Articles of Association found at the following link: <http://www.permanenttsbgroup.ie/investors/shareholder-services.aspx>
- For Additional Tier 1 instruments: <http://www.permanenttsbgroup.ie/investors/debt-investors/debt-issuance-programmes.aspx>

Table 9: Own funds disclosure template (Art 437.1.d & 437.1.e)

Own funds disclosure template ⁽¹⁾ All figures in €m		31-Dec-19	31-Dec-18	REGULATION (EU) No 575/2013 ARTICLE REFERENCE	31-Dec-19	31-Dec-18
		Fully loaded basis			Transitional basis ⁽²⁾	
Common Equity Tier 1 capital: instruments and reserves						
1	Capital instruments and the related share premium accounts	561	561	26 (1), 27, 28, 29	561	561
	of which: ordinary shares	227	227	EBA list 26 (3)	227	227
	of which: deferred shares	0	0	EBA list 26 (3)	0	0
	of which: share premium	333	333	EBA list 26 (3)	333	333
2	Retained earnings	2,078	2,085	26 (1) (c)	2,212	2,196
3	Accumulated other comprehensive income (and other reserves)	(795)	(791)	26 (1)	(795)	(791)
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	32	0	26 (2)	32	0
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	1,875	1,855	Sum of rows 1 to 5a	2,010	1,965
Common Equity Tier 1 (CET1) capital: regulatory adjustments						
7	Additional value adjustments (negative amount)	(0)	(1)	34, 105	(0)	(1)
8	Intangible assets (net of related tax liability) (negative amount)	(66)	(41)	36 (1) (b), 37	(66)	(41)
10	Deferred tax assets that rely on future profitability excluding those arising from temporary difference (net of related tax liability where the conditions in Article 38 (3) are met) (negative amount)	(337)	(344)	36 (1) (c), 38	(170)	(143)
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	(8)	(8)	36 (1) (f), 42	(8)	(8)
25a	Losses for the current financial year (negative amount)	0	(5)	36 (1) (a)	0	(5)
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(412)	(398)	Sum of rows 7 to 20a, 21, 22 and 25a to 27	(245)	(198)
29	Common Equity Tier 1 (CET1) capital	1,464	1,456	Row 6 minus row 28	1,765	1,768
Additional Tier 1 (AT1) capital: instruments						

Own funds disclosure template ⁽¹⁾ All figures in €m		31-Dec-19	31-Dec-18	REGULATION (EU) No 575/2013 ARTICLE REFERENCE	31-Dec-19	31-Dec-18
		Fully loaded basis			Transitional basis ⁽²⁾	
30	Capital instruments and the related share premium accounts	0	0	51, 52	0	0
31	of which: classified as equity under applicable accounting standards	0	0		0	0
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interest not included in row 5) issued by subsidiaries and held by third parties	104	94	85, 86	85	87
36	Additional Tier 1 (AT1) capital before regulatory adjustments	104	94	<i>Sum of rows 30, 33 and 34</i>	85	87
Additional Tier 1 (AT1) capital: regulatory adjustments						
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital	0	0	<i>Sum of rows 37 to 42</i>	0	0
44	Additional Tier 1 (AT1) capital	104	94	<i>Row 36 minus row 43</i>	85	87
45	Tier 1 capital (T1 = CET1 + AT1)	1,567	1,551	<i>Sum of row 29 and row 44</i>	1,850	1,855
Tier 2 (T2) capital: instruments and provisions						
46	Capital instruments and the related share premium accounts	0	0	62, 63	0	0
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interest and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third party	9	12	87, 88	10	12
50	Credit risk adjustments	51	54	62 (c) & (d)	51	54
51	Tier 2 (T2) capital before regulatory adjustment	60	66		61	66
Tier 2 (T2) capital: regulatory adjustments						
57	Total regulatory adjustments to Tier 2 (T2) capital	0	0	<i>Sum of rows 52 to 56</i>	0	0
58	Tier 2 (T2) capital	60	66	<i>Row 51 minus row 57</i>	61	66
59	Total capital (TC = T1 + T2)	1,628	1,617	<i>Sum of 45 and row 58</i>	1,911	1,921
60	Total risk-weighted assets	9,996	11,966		10,012	11,990
Capital ratios⁽³⁾ and buffers						

Own funds disclosure template ⁽¹⁾ All figures in €m		31-Dec-19	31-Dec-18	REGULATION (EU) No 575/2013 ARTICLE REFERENCE	31-Dec-19	31-Dec-18
		Fully loaded basis			Transitional basis ⁽²⁾	
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	14.6%	12.2%	92 (2) (a)	17.6%	14.7%
62	Tier 1 (as a percentage of total risk exposure amount)	15.7%	13.0%	92 (2) (b)	18.5%	15.5%
63	Total capital (as a percentage of total risk exposure amount)	16.3%	13.5%	92 (2) (c)	19.1%	16.0%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements plus systemic risk buffer, plus systemically important institution buffer expressed as a percentage of total risk exposure amount)	3.5%	2.5%	CRD 128, 129, 130, 131, 133	3.5%	1.9%
65	of which: capital conservation buffer requirement	2.5%	2.5%		2.5%	1.9%
66	of which: countercyclical buffer requirement	1.0%	0.0%		1.0%	0.0%
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount) ⁽⁴⁾	8.3%	5.5%	CRD 128	11.1%	8.0%
Amounts below the thresholds for deduction (before risk-weighting)						
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	15	13	36 (1) (h), 46, 45, 56 (c), 59, 60, 66 (c), 69, 70	15	13
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	2	10	36 (1) (i), 45, 48	2	10
75	Deferred tax assets arising from temporary differences (amount below 10 % threshold, net of related tax liability where the conditions in Article 38 (3) are met)	1	2	36 (1) (c), 38, 48	7	12
Applicable caps on the inclusion of provisions in Tier 2						
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	51	54	62	51	54

(1) Template prescribed in Regulation EU 1423/2013 (Annex IV). Row is not shown if the question is not applicable, however in line with EBA guidance the numbering of each row is unchanged.

(2) Transitional basis reflects IFRS 9 transitional arrangements and the transitional impact of the 10 year phase-in of the Deferred Tax Asset deduction.

(3) The Group calculates its capital ratios in accordance with EU Regulation 575/2013. Year end profits included are subject to CBI approval.

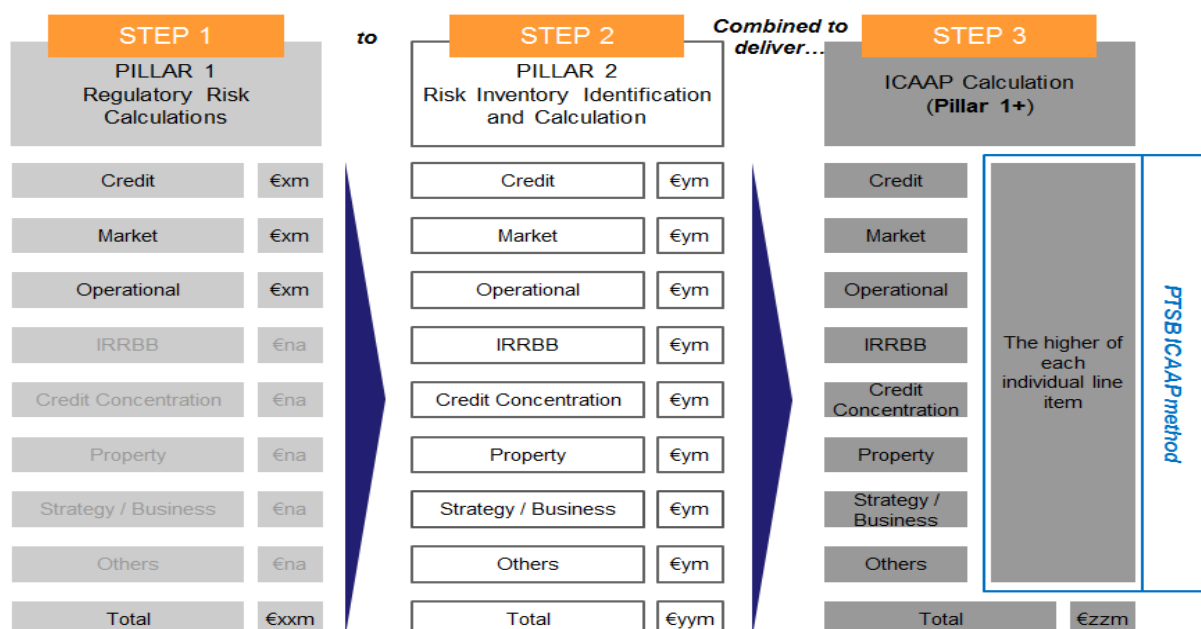
(4) The CET1 available to meet buffers is calculated as the difference between the Group's CET1 ratio and the Pillar 1 CET1 minimum requirement plus the amount of CET1 used to cover any shortfall of AT1/T2.

Capital Requirements (Art 438)

Group's approach to assessing the adequacy of its internal capital to support current and future activities

(Art 438.a)

The Group has adopted a 'Pillar 1 Plus' approach to calculate its internal capital requirements. This approach is based on the aggregation of individually calculated internal capital requirements (a comparison to the Pillar 1 Risk capital calculations where relevant and taking the higher of those) for each material risk where capital is deemed an appropriate risk mitigant and it provides the total capital requirements for the Group at a specified point in time for a 1 year horizon.



For the purposes of ICAAP the definition of what constitutes a material risk, and for which of these risks capital should be assessed and set aside, is based on the Group material risk decision framework.

The following table summarises the current Pillar 2 risks for which the Group has assessed internal capital requirements. The underlying approach calculates the economic loss over a one year horizon at a 99.9% confidence level.

Table 10: Pillar 2 Capital Consuming Risks



The methodology used for each material risk calculation for ICAAP under Pillar 2 is summarised below:

Table 11: Capital Quantification Methodology for Capital-Consuming Risks

Risk Category	Capital Quantification/methodology
Credit Risk	<p>Credit</p> <p>Pillar 1 Calculation of Credit Risk Regulatory Pillar 1 Capital is for most of the portfolio based upon the advanced or, for the Treasury book, foundation IRB approaches. A small Standardised portfolio also exists.</p> <p>Pillar 2 Similar to Pillar 1, the Economic Capital Credit Risk model determines 1 in 1000 year losses (99.9% confidence interval) over a one year time horizon based upon current performing Basel / CRD IV IRB exposures / probabilities of default and long run average recovery rates. The model works by calculating portfolio level unexpected losses (1 standard deviation), applying conservative Basel / CRD IV asset correlations in a standard 'variance-covariance' approach to account for diversification, and then extrapolating out to the tail of the potential loss distribution using a wide tailed beta distribution.</p> <p>Add-ons linked to Pillar 1 approaches are applied for Defaulted Assets and Standardised portfolios.</p>
	<p>Credit Concentration</p> <p>The Group researched available industry methodologies to estimate Credit Concentration Risk. The methodology proposed by the UK's Prudential Regulation Authority (PRA) has been adopted for Sectoral and Geographical (International) Concentration.</p> <p>The level of concentration of each of the components is measured using the widely adopted Herfindahl Hirschman Index (HHI). The index score for each risk type is mapped to a concentration risk capital add-on range published by the PRA.</p> <p>The Gordy approach has been used for 'Single Name Concentration' while the Variance-Covariance approach has been applied to 'Within Country Region' and 'Product Sector Concentrations'.</p>
Market Risk	<p>Market Risk under Pillar 1 is limited to foreign exchange risk. However as the Group's net foreign exchange position at the end of 2018 and 2019 is immaterial (less than 2% of total own funds) no capital is required to be held against this risk under Pillar 1. Traditional position market risk is therefore not considered material for assessment under Pillar 2.</p>

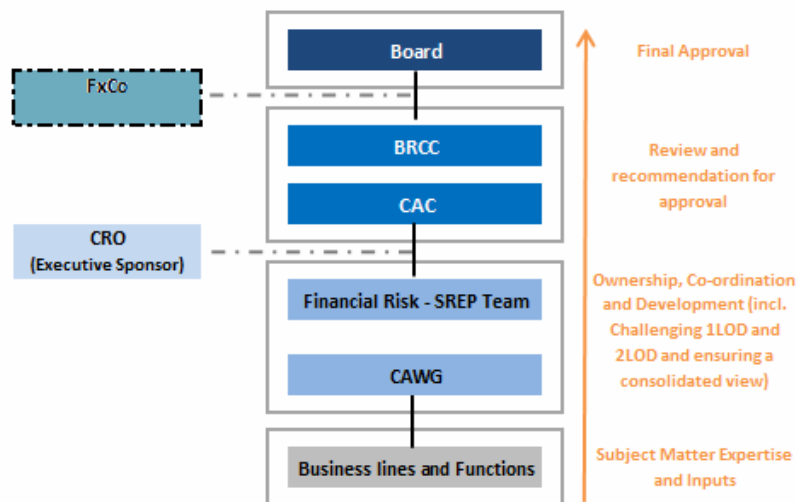
<p>Interest Rate Risk in the Banking Book (IRRBB) incl. Basis Risk</p>	<p>In line with the regulatory and industry standards the Bank's interest rate risk exposure is derived from both an earnings (accrual) perspective and from an economic value perspective.</p> <p>Assets and liabilities are bucketed according to maturity (contractual or behavioural) or re-pricing type (i.e. variable and fixed), with the interest rate shocks applied using the following methods:</p> <ol style="list-style-type: none"> 1. Earnings at Risk (EAR); 2. Economic Value including Equity (EV); and 3. Economic Value excluding Equity (EVE). <p>In relation to flooring the Bank applies the EBA prescribed floor of -1% and an ECB Base Rate floor of -0.25% within the models.</p> <p>The Bank runs 13 core stress scenarios through the calculation models. The stress scenarios are either prescribed through regulation (Revised Basel Standards and EBA Guidelines) or standard market practice. The suite of scenarios constitute both the normative and economic perspectives.</p> <p>To avoid duplication the higher of the EaR, EV or EVE calculations across the 13 key is taken to represent the Bank's IRRBB risk level.</p> <p>A general limitation of IRRBB models is the assumption that assets and liabilities within a time bucket re-price simultaneously and in the same direction and magnitude. This may not be the case and represents Basis risk which is the risk that two separate interest rate indices which appear to be correlated over time either cease to be correlated at all or the relationship breaks down temporarily. Consequently a matching of assets and liabilities that had appeared "hedged" breaks down and generates P&L volatility.</p> <p>PTSB separately calculates the contractual Basis Risk exposure through an internal model which applies an ECB Base to Euribor spread shock. In calibrating the severity of the spread widening shock Treasury have used a historical data set ranging from September 1999 to present to ensure it is long enough to capture full interest rate cycles.</p> <p>The risk position is added to the most severe of Economic Value or Earnings risk levels in order to ensure all material sources of Interest Rate Risk are capitalised for. The above measures are further supplemented by NII sensitivity analysis, PV01 sensitivity and duration mismatch.</p>
<p>Property Risk</p>	<p>Property Risk is assessed for potential capital impact by shocking the value of the Group's own property (branch and office) network by an appropriate level in line with the Group's target confidence level of 99.9%.</p> <p>The appropriate size of the property shock is a function of the volatility of the property markets to which the group is exposed and aligned to the selected confidence level in the credit risk assessment methodology used for Group loans and advances. Tangible assets that are capitalised for credit risk under Pillar 1 are netted from the result to avoid double-counting.</p> <p>In addition, the Group uses a benchmarking approach of applying the worst CRE price shock in recorded history, to the property exposure on the balance sheet.</p>

Credit Spread Risk (CSR)	<p>The daily market value of the Hold to Collect and Sell (HTCS) portfolio is determined by their current yields where changes in the observed yield reflect, amongst other factors, current market perceptions of the credit quality of a bond. To define potential future volatility, the Bank has calibrated historical observed credit spread movements as a reference point for potential future sources of risk in the portfolio.</p> <p>Given that the Group's HTCS bond portfolio consists of Irish sovereigns and the going forward target HTCS portfolio duration of 3 years, the approved CSR methodology takes the German 3 year bond price as the risk free rate and measures the spread against the equivalent 3 Year Irish bond over an 8 year historic period. Daily observations of the 1 month change in spread are used to determine the adverse shock factor using a 99% Confidence Interval. A one month observation is used as it reflects the period of time it would take the Group to exit its bond position.</p>
Operational & IT Risk	<p>Pillar 1 CRD IV Standardised Approach is followed by the Group to calculate the Operational Risk Capital for Pillar 1. Based on this approach, operational risk capital is a direct multiple of gross income and uses a 'beta factor' (prescribed by regulation) differentiated by business line to determine capital requirements from gross income.</p> <p>Pillar 2 For Pillar 2 Scenario analysis is used to assess and quantify the potential impact of the most material non-financial risks to which the Group is, or may be, exposed. Scenario analysis involves performing a 'deep-dive' into low frequency, high impact risk events with appropriate members of the business to drive-out estimates of impact and likelihood.</p> <p>Estimates of the expected frequency of a given scenario event, together with severity estimates, provide inputs to a statistical model which calculates an assessment of the Operational Risk Pillar 2 capital charge at a confidence level of 99.9%.</p>
Business / Strategic Risk	<p>The Group's Business Risk analysis captures the 99.9% worst case value change over a 1 year time horizon due to fluctuations in volume, margins, and expenses depending on the variable and fixed cost composition.</p> <p>Business Risk is measured by shocking the one year base case forecast income levels by an appropriate degree, in line with the chosen confidence level. The Group also applied a challenger approach, utilising the outputs of the ICAAP stress testing profitability focussed scenario.</p> <p>Strategic Risk is not considered to be appropriately mitigated by capitalisation.</p>

ICAAP Governance

The ICAAP is integral to the effective oversight and challenge of capital planning and, accordingly, the Group takes a disciplined approach to ICAAP governance.

Table 12: Overview of the 2019 ICAAP Governance Structure



ICAAP Frequency

The Group is required to produce a full ICAAP report on an annual basis, or more frequently, if required.

Design, Execution and Documentation

The Group's Supervisory Review and Evaluation Process (SREP) Team is responsible for the co-ordination and oversight of the ICAAP. This is done in close collaboration with a range of relevant first and second-line business units. The Capital Adequacy Committee (CAC) is an ExCo sub-committee and provides the oversight and challenge to the ICAAP. The BRCC are responsible for reviewing and for recommending approval of the full ICAAP Report to the Board.

Stress Testing Oversight

The CAC is responsible for maintaining an appropriate level of oversight and management of the on-going execution of solvency stress testing exercises, including those performed external to the ICAAP. Whilst the Board maintains overall responsibility for the stress testing programme, detailed execution responsibilities are delegated via ExCo to the CAC, which is responsible for scrutinising the practical aspects including methodologies and the translation of macroeconomic variables into internal risk factors.

Capital Adequacy Review and Conclusions

The CAC is also responsible for reviewing capital adequacy on an ongoing basis and, at a minimum, receives monthly reporting on the Group's actual and forecast capital position. As part of the review, the CAC evaluates trends in Pillar 1 and Pillar 2 capital requirements and assesses appropriate mitigants to any escalating risks.

Table 13: EU OV1: Overview of RWA (Art 438.c, 438.d, 438.e, 438.f, 449.o)

	2019		2018	
	RWA €m	Minimum capital requirements €m	RWA €m	Minimum capital requirements €m
Credit Risk (excluding CCR)	9,203	736	10,532	843
<i>the Standardised approach</i>	666	53	1,519	120
<i>the foundation IRB (FIRB) approach</i>	335	27	469	39
<i>the advanced IRB (AIRB) approach</i>	8,146	652	8,495	680
<i>equity IRB under the simple risk-weighted approach or the IMA</i>	56	4	49	4
CCR	1	0	189	15
<i>mark to market</i>	1	0	1	0
<i>original exposure</i>	-	-	-	-
<i>the Standardised approach</i>	-	-	-	-
<i>internal model method (IMM)</i>	-	-	-	-
<i>risk exposure amount for contributions to the default fund of CCP</i>	-	-	-	-
<i>CVA</i>	0	0	99	8
Settlement risk	-	-	-	-
Securitisation exposures in the banking book (after the cap)	90	7	556	44
<i>IRB approach</i>	90	7	556	44
<i>IRB supervisory formula approach (SFA)</i>	-	-	-	-
<i>internal assessment approach (IAA)</i>	-	-	-	-
<i>standardised approach</i>	-	-	-	-
Market risk	-	-	-	-
<i>the standardised approach</i>	-	-	-	-
<i>IMA</i>	-	-	-	-
Large exposures	-	-	-	-
Operational Risk	695	56	659	53
<i>basic indicator approach</i>	-	-	-	-
<i>standardised approach</i>	695	56	659	53
<i>advanced measurement approach</i>	-	-	-	-
Amounts below the thresholds for deduction (subject to 250% risk weight)	24	2	54	4
Floor adjustment	-	-	-	-
Total	10,012	801	11,990	959

The decrease in capital requirements since the previous year is primarily due to the sale of non performing loan portfolios by the Group and approval to use the supervisory formula method following SRT recognition for the Glenbeigh securitisation.

Table 14: EU CR8: RWA flow statements of credit risk exposures under the IRB approach (Art 438.d)

	RWA amounts €m	Capital requirements €m
RWA as at 31 December 2018	9,013	721
Asset size	(124)	(10)
Asset quality	-	-
Model updates	-	-
Methodology and policy	(77)	(6)
Acquisitions and disposals	(295)	(24)
Foreign exchange movements	-	-
Other	20	1
RWA as at 31 December 2019	8,537	683
	RWA amounts €m	Capital requirements €m
RWA as at 31 December 2017	9,309	745
Asset size	215	17
Asset quality	-	-
Model updates	1,637	131
Methodology and policy	-	-
Acquisitions and disposals	(2,146)	(172)
Foreign exchange movements	-	-
Other	(2)	(0)
RWA as at 31 December 2018	9,013	721

The 'model updates' flow in 2018 is due to the implementation of the ECB's Targeted Review of Internal Models (TRIM). In both years, the 'acquisitions and disposals' flow is due to the sale of non performing loan portfolios to reduce the Group's NPL ratio. The 'methodology and policy' flow in 2019 resulted from the Group receiving permission under a PPU to apply the standardised approach to its euro denominated EU Sovereign exposures.

Table 15: EU CR10: IRB (specialised lending and equities) (Art 438)

Equities under the simple risk-weighted approach as at 31 December 2019						
Categories	On-balance-sheet amount	Off-balance-sheet amount	Risk weight	Exposure amount	RWAs	Capital requirements
Private equity exposures	-	-	190%	-	-	-
Exchange-traded equity exposures	-	-	290%	-	-	-
Other equity exposures	15	-	370%	15	56	4
Total	15	-		15	56	4

Equities under the simple risk-weighted approach as at 31 December 2018

Categories	On-balance-sheet amount	Off-balance-sheet amount	Risk weight	Exposure amount	RWAs	Capital requirements
Private equity exposures	-	-	190%	-	-	-
Exchange-traded equity exposures	-	-	290%	-	-	-
Other equity exposures	13	-	370%	13	49	4
Total	13	-		13	49	4

Counterparty credit risk (Art 439)

Internal capital allocation and credit limits for counterparty credit exposures (Art 439.a)

The Group is exposed to counterparty credit risk² through its portfolio of derivatives contracts, comprising mostly of interest rate and forward currency agreements. Derivative instruments are used by the Group to hedge against interest rate risk and foreign currency risk exposures.

Credit exposure arises on derivative transactions as there is a risk that the counterparty to the contract defaults prior to its maturity. If, at that time, the Group incurs a loss in order to replace the contract, this gives rise to a claim on the counterparty.

In line with Board approved policy, counterparty credit limits are approved at individual customer level by the Asset and Liability Committee (ALCO) and are based primarily on the counterparty's credit rating, internal credit review and business requirements. The Group allocates these limits using the internal ratings based (IRB) approach. The IRB grade is determined using the mid-rating for the three main rating agencies and other internal adjustments.

The capital calculation uses Probability of Default (PDs) assigned to counterparties based on their IRB ratings and the PDs are then used to calculate Risk Weighted Assets and Expected Loss.

Securing of collateral and establishing of reserves (Art 439.b)

It is Group practice, where possible and appropriate, that Master Agreements are put in place to cover derivatives business on a counterparty specific basis. It is also Group practice in relation to wholesale market counterparties to supplement International Swaps and Derivatives Association (ISDA) documentation with a Credit Support Annex (CSA) to accommodate the reduction of net exposure on an agreed basis, and in line with market practice, by way of transferring a margin amount. As of 31 December 2019, all outstanding derivative transactions are covered by master agreements.

Acceptable collateral is predominantly cash-based (EUR, USD, GBP) although the documentation in general allows for securities to be used as collateral. In line with market practice, the underlying transactions and the associated collateral are subject to daily/weekly mark to market calculation, with any required transfer of collateral being made in line with contractual requirements. Accordingly, as at 31 December 2019, no specific credit reserves are maintained for exposures of this type.

² Exposure to counterparty credit risk as referred to in Part Three, Title II, Chapter 6 of the CRR

Limitation on wrong-way exposures (Art 439.c)

The Group's measurement of credit risk exposure takes into account the requirement to ensure that related risks are correctly measured e.g. where a counterparty provides collateral for margining. The Group does not accept collateral which could be considered to be highly correlated with their own credit risk. This is further mitigated by managing all margining using only cash as collateral.

Impact of collateralisation of a rating downgrade (Art 439.d)

Certain counterparties require an 'independent amount', which is in addition to the minimum threshold amount, to be deposited due to the Group's credit rating. This obligation is detailed in the CSA agreements the Group entered into. While no counterparty rating triggers have been exercised at the end of 2019, any rating downgrade of the Group would not necessitate the posting of a significant amount of additional collateral due to the limited size of the derivative book.

Table 16: EU CCR1: Analysis of CCR exposure by approach (Art 439.e, 439.f, 439.i)

2019	Notional €m	Replacement cost/current market value €m	Potential future credit exposure €m	EEPE €m	Multiplier €m	EAD post CRM €m	RWA €m
Mark to Market		0.4	1.1			1.5	0.7
Original exposure	-					-	-
Standardised approach		-			-	-	-
IMM (for derivatives and SFTs)				-	-	-	-
<i>of which securities financing transactions</i>				-	-	-	-
<i>of which derivatives and long settlement transactions</i>				-	-	-	-
<i>of which from contractual cross-product netting</i>				-	-	-	-
Financial collateral simple method (for SFTs)						-	-
Financial collateral comprehensive method (for SFTs)						-	-
VaR for SFTs						-	-
Total						1.5	0.7

There were no repo transactions outstanding as at 31 December 2019.

2018	Notional €m	Replacement cost/current market value €m	Potential future credit exposure €m	EEPE €m	Multiplier €m	EAD post CRM €m	RWA €m
Mark to Market		1.1	1.3			2.4	1.3
Original exposure	-					-	-
Standardised approach		-			-	-	-
IMM (for derivatives and SFTs)				-	-	-	-
of which securities financing transactions				-	-	-	-
of which derivatives and long settlement transactions				-	-	-	-
of which from contractual cross-product netting				-	-	-	-
Financial collateral simple method (for SFTs)						-	-
Financial collateral comprehensive method (for SFTs)						396	89
VaR for SFTs						-	-
Total						399	90

Table 17: EU CCR2: CVA capital charge (Art 439.e, 439.f)

2019	Exposure value €m	RWA €m	2018	Exposure value €m	RWA €m
Total portfolios subject to the advanced method	-	-		-	-
(i) VaR component (including the 3x multiplier)		-			-
(ii) SVaR component (including the 3x multiplier)		-			-
All portfolios subject to the standardised method	1.5	0.4		389	99
Based on the original exposure method					
Total subject to the CVA capital charge	1.5	0.4		389	99

The CVA capital charge is calculated on the Group's derivative and repo transactions. At the end of 2019 there were no outstanding repo transactions resulting in a decrease in the capital charge for CVA year on year.

Capital buffers (Art 440)

The following disclosures are made in accordance with Commission Delegated Regulation (EU) 2015/1555.

Table 18: Amount of institution-specific countercyclical capital buffer³ (figures in €'m)

		2019	2018
		010	010
010	Total risk exposure amount	10,012	11,990
020	Institution specific countercyclical buffer rate	1.00%	0.00%
030	Institution specific countercyclical buffer requirement	100	0

³ As less than 2% of Group's relevant exposures are outside of Ireland, the Irish countercyclical buffer rate of 1% is applied to all of the Group's RWA in 2019.

Table 19: Geographical distribution of credit exposures relevant⁴ for the calculation of the countercyclical capital buffer**December 2019**

€'m Country 2019	General credit exposures		Trading book exposure		Securitisation exposure		Own funds requirements				Own funds requirements weights	Countercyclical capital buffer rate
	Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book	Value of trading book exposure 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	Total		
	10	20	30	40	50	60	70	80	90	100	110	120
Ireland	891	17,230	0	0	0	43	713	0	7	720	0.98	1.00%
United Kingdom	0	128	0	0	0	0	11	0	0	11	0.01	1.00%
United States of America	0	26	0	0	0	0	1	0	0	1	0.00	0.00%
Australia	0	12	0	0	0	0	0	0	0	0	0.00	0.00%
Germany	0	4	0	0	0	0	0	0	0	0	0.00	0.00%
United Arab Emirates	0	3	0	0	0	0	0	0	0	0	0.00	0.00%
France	0	2	0	0	0	0	0	0	0	0	0.00	0.25%
Spain	0	2	0	0	0	0	0	0	0	0	0.00	0.00%
Italy	0	2	0	0	0	0	0	0	0	0	0.00	0.00%
Other countries (<€2m each)	0	13	0	0	0	0	1	0	0	1	0.00	N/A
Total	891	17,422	0	0	0	43	727	0	7	734	1.00	1.00%

⁴ Relevant credit exposures exclude exposures, for example, to governments, public sector entities and institutions

December 2018

€'m Country	General credit exposures		Trading book exposure		Securitisation exposure		Own funds requirements				Own funds requirements weights	Countercyclical capital buffer rate
	Exposure value for SA	Exposure value for IRB	Sum of long and short positions of trading book	Value of trading book exposure 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	Total		
	10	20	30	40	50	60	70	80	90	100	110	120
Ireland	1,954	17,705	0	0	0	44	811	0	44	856	0.98	0.00%
United Kingdom	0	142	0	0	0	0	11	0	0	11	0.01	1.00%
United States of America	0	27	0	0	0	0	2	0	0	2	0.00	0.00%
Australia	0	13	0	0	0	0	1	0	0	1	0.00	0.00%
Germany	0	5	0	0	0	0	0	0	0	0	0.00	0.00%
United Arab Emirates	0	4	0	0	0	0	0	0	0	0	0.00	0.00%
Spain	0	2	0	0	0	0	0	0	0	0	0.00	0.00%
France	0	2	0	0	0	0	0	0	0	0	0.00	0.00%
Italy	0	2	0	0	0	0	0	0	0	0	0.00	0.00%
Netherlands	0	2	0	0	0	0	0	0	0	0	0.00	0.00%
Hong Kong	0	0	0	0	0	0	0	0	0	0	0.00	1.88%
Lithuania	0	0	0	0	0	0	0	0	0	0	0.00	0.50%
Sweden	0	0	0	0	0	0	0	0	0	0	0.00	2.00%
Slovakia	0	0	0	0	0	0	0	0	0	0	0.00	1.25%
Iceland	0	0	0	0	0	0	0	0	0	0	0.00	1.25%
Norway	0	0	0	0	0	0	0	0	0	0	0.00	2.00%
Czech Republic	0	0	0	0	0	0	0	0	0	0	0.00	1.00%
Other countries (<€2m each)	0	13	0	0	0	0	1	0	0	1	0.00	N/A
Total	1,954	17,916	0	0	0	44	826	0	44	870	1.00	0.01%

Indicators of global systemic importance [\(Art 441\)](#)

The Group has not been identified as a bank of global systemic importance and therefore no additional disclosures are required to be made under this article. A full list of the global systemically important institutions (G-SIIs) in the EU is available on the EBA's website.

Credit risk adjustments (Art 442)

Definition of past due and impaired (Art 442.a)

An account is classified as **past due** where the customer is 1 day or more past due on any material credit obligation (where a material amount of principal or interest remains outstanding at the reporting date the counting of days past due commences from the first date that a payment, or part thereof met materiality thresholds and became overdue).

As part of the implementation of International Financial Reporting Standard Number 9 (IFRS 9) on 1 January 2018, defaulted exposures are assessed as Stage 3, **credit impaired**. While the standard does not define default, it does require institutions to use the definition of default that is used internally for credit risk management purposes, noting a rebuttable presumption that exposures greater than 90 days past due will be considered as defaulted.

The Group has aligned its definition of default for IFRS 9 and capital calculation purposes and has not chosen to rebut the 90 day presumption. Under the Group's definition of default an exposure is considered defaulted and is classified as Stage 3 **credit-impaired** where an account is greater than 90 days past due on any material credit obligation or is otherwise assessed as unlikely to pay. Key indicators of unlikely to pay include:

- Accounts that have, as a result of financial distress, received a concession from the Group with respect to terms or conditions. Such exposures will remain in Stage 3 until certain exit conditions are met and for a minimum probationary period of 12 months before moving to a performing classification;
- Accounts that have, as a result of financial distress, received a concession from the Group with respect to terms or conditions which result in a significant terminal payment. Such exposures must fulfil additional conditions in relation to that terminal payment before moving to a performing classification; and
- Accounts where the customer is assessed as otherwise unlikely to pay, including bankruptcy, personal insolvency, assisted voluntary sale, disposal etc.

Approaches to determining specific credit risk adjustments (Art 442.b)

As required under IFRS 9, Expected Credit Loss (ECL) impairment requirements apply to all financial assets classified at amortised cost, other financial assets at fair value through other comprehensive income, certain off balance sheet loan commitments and financial guarantee contracts.

ECL Impairment Model

Under IFRS 9, the Group applies a 12-month ECL to all financial instruments where there has been no significant increase in credit risk since initial recognition (Stage 1) and a lifetime ECL applies when a significant increase in credit risk has been identified (Stage 2 and Stage 3).

The Group uses a three stage impairment model to calculate ECL as follows:

- **Stage 1** - includes financial instruments that have not had a significant increase in credit risk since initial recognition.

A 12-month ECL is recognised for Stage 1 assets. 12-month ECL is the expected credit loss that results from default events that are possible within 12 months of the reporting date. It is not the expected cash shortfalls over the 12-month period but the entire credit loss on an asset weighted by the probability that the default will occur in the next 12 months.

- **Stage 2** - includes financial instruments that have had a significant increase in credit risk since initial recognition but that does not have objective evidence of impairment.

A lifetime ECL is recognised for Stage 2 assets, being the expected credit losses that result from all possible default events over the expected life of the financial instrument.

- **Stage 3** - includes financial assets that have objective evidence of impairment at the reporting date, i.e. are credit-impaired.

A lifetime ECL is recognised for Stage 3 assets.

Note 1 to the Group Consolidated Financial Statements for the year ended 31 December 2019, 'corporate information, basis of preparation and significant accounting policies' provides further detail on the Group impairment methodology.

Write-off policy

The Group writes off an impaired financial asset (and the related impairment allowance), either partially or in full, when there is no realistic prospect of recovery or on foot of a negotiated settlement. In circumstances where the net realisable value of any collateral has been determined and there is no reasonable expectation of further recovery, write-off may be earlier than collateral realisation.

In subsequent periods, any recoveries of amounts previously written off are credited to the provision for credit losses in the income statement.

The tables on the following pages provide details of the types of credit exposures the Group is exposed to, based on exposure at default, and any credit impairments thereon.

Table 20: EU CRB-B: Total and average net amount of exposures (Art 442.c)

Exposure Class	2019		2018	
	Net value of exposures at the end of the period €m	Average net value of exposures over the period €m	Net value of exposures at the end of the period €m	Average net value of exposures over the period €m
Central governments or central banks	-	210	212	166
Institutions	516	700	976	1,141
Corporates	142	139	132	148
Of which: Specialised lending	-	-	-	-
Of which: SMEs	-	-	-	-
Retail	16,288	16,233	16,410	18,081
Secured by real estate property	15,576	15,607	15,741	17,419
SMEs	-	-	-	-
Non-SMEs	15,576	15,607	15,741	17,419
Qualifying revolving	460	387	456	464
Other Retail	253	239	214	199
SMEs	-	-	-	-
Non-SMEs	253	239	214	199
Equity	17	21	23	23
Total IRB approach	16,964	17,303	17,754	19,705
Central governments or central banks	3,002	2,893	2,950	3,350
Regional governments or local authorities	-	-	-	-
Public sector entities	-	-	-	-
Multilateral development banks	-	-	-	-
International organisations	-	-	-	-
Institutions	-	-	-	-
Corporates	-	-	-	-
Of which: SMEs	-	-	-	-
Retail	2	2	2	2
Of which: SMEs	-	-	-	-
Secured by mortgages on immovable property	-	-	-	-
Of which: SMEs	-	-	-	-
Exposures in default	2	3	4	5
Items associated with particularly high risk	-	-	-	-
Covered bonds	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-
Collective investment undertakings	-	-	-	-
Equity exposures	-	-	-	-
Other exposures	887	794	1,947	1,042
Total standardised approach	3,893	3,691	4,903	4,328
Total	20,857	20,994	22,657	24,033

The reduction in net value at the end of 2019 is due to the sale of non performing loan portfolios and a reduction in secured funding from other banks through repurchase agreements.

Table 21: EU CRB-C: Geographical breakdown of exposures (Art 442.d)

2019 Net value	Europe €m	of which: Ireland €m	of which: Rest of Europe €m	Other geographical areas €m	Total €m
Central governments or central banks	-	-	-	-	-
Institutions	172	38	134	344	516
Corporates	142	139	3	-	142
Retail	16,253	16,140	113	35	16,288
Equity	17	2	15	-	17
Total IRB approach	16,585	16,319	266	379	16,964
Central governments or central banks	3,002	2,476	526	-	3,002
Regional governments or local authorities	-	-	-	-	-
Public sector entities	-	-	-	-	-
Multilateral development banks	-	-	-	-	-
International organisations	-	-	-	-	-
Institutions	-	-	-	-	-
Corporates	-	-	-	-	-
Retail	2	2	-	-	2
Secured by mortgages on immovable property	-	-	-	-	-
Exposures in default	2	2	-	-	2
Items associated with particularly high risk	-	-	-	-	-
Covered bonds	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-
Equity exposures	-	-	-	-	-
Other exposures	887	887	-	-	887
Total standardised approach	3,893	3,366	526	-	3,893
Total	20,478	19,686	792	379	20,857

The reduction in Irish exposures at the end of 2019 is due to the sale of non performing loan portfolios.

2018 Net value	Europe €m	<i>of which: Ireland €m</i>	<i>of which: Rest of Europe €m</i>	Other geographical areas €m	Total €m
Central governments or central banks	212	-	212	-	212
Institutions	497	37	460	480	976
Corporates	132	128	4	-	132
Retail	16,371	16,243	128	39	16,410
Equity	23	10	13	-	23
Total IRB approach	17,235	16,418	817	519	17,754
Central governments or central banks	2,950	2,950	-	-	2,950
Regional governments or local authorities	-	-	-	-	-
Public sector entities	-	-	-	-	-
Multilateral development banks	-	-	-	-	-
International organisations	-	-	-	-	-
Institutions	-	-	-	-	-
Corporates	-	-	-	-	-
Retail	2	2	-	-	2
Secured by mortgages on immovable property	-	-	-	-	-
Exposures in default	4	4	-	-	4
Items associated with particularly high risk	-	-	-	-	-
Covered bonds	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-
Equity exposures	-	-	-	-	-
Other exposures	1,947	1,947	-	-	1,947
Total standardised approach	4,903	4,903	-	-	4,903
Total	22,138	21,321	817	519	22,657

Table 22: EU CRB-D: Concentration of exposures by industry or counterparty types (Art 442.e)

2019 Net value	Other ⁵ €m	Central government €m	ROI Residential mortgages €m	ROI Consumer lending €m	Financial and Insurance activities €m	Total €m
Central governments or central banks	-	-	-	-	-	-
Institutions	-	-	-	-	516	516
Corporates	82	-	-	61	-	142
Retail	93	-	15,509	687	0	16,288
Equity	-	-	-	-	17	17
Total IRB approach	175	-	15,509	747	534	16,964
Central governments or central banks	-	3,002	-	-	-	3,002
Regional governments or local authorities	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-
International organisations	-	-	-	-	-	-
Institutions	-	-	-	-	-	-
Corporates	-	-	-	-	-	-
Retail	-	-	-	-	2	2
Secured by mortgages on immovable property	-	-	-	-	-	-
Exposures in default	-	-	-	2	-	2
Items associated with particularly high risk	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-
Other exposures	-	-	-	-	887	887
Total standardised approach	-	3,002	-	2	888	3,893
Total	175	3,002	15,509	749	1,422	20,857

The reduction in 'Financial and Insurance activities' in 2019 is due the completion of the sale of a non performing loan portfolio during the year.

⁵ Immaterial industry sectors are aggregated under column 'other'. An industry sector is considered immaterial if its total exposure is <1% of all industry sector total exposures.

	Other ⁵	Central government	ROI Residential mortgages	ROI Consumer lending	Financial and Insurance activities	Total
2018						
Net value	€m	€m	€m	€m	€m	€m
Central governments or central banks	-	212	-	-	-	212
Institutions	-	-	-	-	976	976
Corporates	69	-	-	63	-	132
Retail	95	-	15,667	648	0	16,410
Equity	-	-	-	-	23	23
Total IRB approach	164	212	15,667	711	1,000	17,754
Central governments or central banks	-	2,950	-	-	-	2,950
Regional governments or local authorities	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-
International organisations	-	-	-	-	-	-
Institutions	-	-	-	-	-	-
Corporates	-	-	-	-	-	-
Retail	-	-	-	-	2	2
Secured by mortgages on immovable property	-	-	-	-	-	-
Exposures in default	-	-	-	4	-	4
Items associated with particularly high risk	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-
Other exposures	-	-	-	-	1,947	1,947
Total standardised approach	-	2,950	-	4	1,949	4,903
Total	164	3,162	15,667	715	2,949	22,657

Table 23: EU CRB-E: Maturity of exposures (Art 442.f)

2019						
Net value	On demand	<=1 year	>1 year <= 5 years	>5 years	No stated maturity	Total
Central governments or central banks	-	-	-	-	-	-
Institutions	-	516	0	-	-	516
Corporates	1	2	16	123	-	142
Retail	492	380	662	14,754	-	16,288
Equity	-	-	-	-	17	17
Total IRB approach	493	898	678	14,877	17	16,964
Central governments or central banks	1,039	425	1,217	321	-	3,002
Regional governments or local authorities	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-
International organisations	-	-	-	-	-	-
Institutions	-	-	-	-	-	-
Corporates	-	-	-	-	-	-
Retail	-	-	-	-	2	2
Secured by mortgages on immovable property	-	-	-	-	-	-
Exposures in default	-	-	-	-	2	2
Items associated with particularly high risk	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-
Other exposures	-	-	-	-	887	887
Total standardised approach	1,039	425	1,217	321	891	3,893
Total	1,532	1,323	1,895	15,198	908	20,857

The reduction in 'No stated maturity' in 2019 is due the completion of the sale of a non performing loan portfolio during the year. Reductions in '< 1 year' is due to a reduction in secured funding from other banks through repurchase agreements.

2018

Net value	On demand	<=1 year	>1 year <= 5 years	>5 years	No stated maturity	Total
Central governments or central banks	-	0	212	-	-	212
Institutions	-	975	1	0	-	976
Corporates	5	0	9	118	-	132
Retail	493	331	666	14,920	-	16,410
Equity	-	-	-	-	23	23
Total IRB approach	498	1,307	888	15,038	23	17,754
Central governments or central banks	558	917	1,274	201	-	2,950
Regional governments or local authorities	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-
International organisations	-	-	-	-	-	-
Institutions	-	-	-	-	-	-
Corporates	-	-	-	-	-	-
Retail	-	-	-	-	2	2
Secured by mortgages on immovable property	-	-	-	-	-	-
Exposures in default	-	-	-	-	4	4
Items associated with particularly high risk	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-
Other exposures	-	-	-	-	1,947	1,947
Total standardised approach	558	917	1,274	201	1,953	4,903
Total	1,056	2,224	2,162	15,239	1,977	22,657

Table 24: EU CR1-A: Credit quality of exposures by exposure class and instrument (Art 442.g, 442.h)

2019	Gross carrying value of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges in the period	Net values
	Defaulted exposures	Non-defaulted exposures					
	€m	€m	€m	€m	€m	€m	€m
Central governments or central banks	-	-	-	-	-	-	-
Institutions	-	516	0	-	-	0	516
Corporates	67	134	58	-	6	5	142
Of which: Specialised lending	-	-	-	-	-	-	-
Of which: SMEs	-	-	-	-	-	-	-
Retail	984	16,061	757	-	42	21	16,288
Secured by real estate property	961	15,342	728	-	33	21	15,576
SMEs	-	-	-	-	-	-	-
Non-SMEs	961	15,342	728	-	33	21	15,576
Qualifying revolving	9	463	12	-	8	0	460
Other Retail	14	257	18	-	2	(1)	253
SMEs	-	-	-	-	-	-	-
Non-SMEs	14	257	18	-	2	(1)	253
Equity	-	17	-	-	-	-	17
Total IRB approach	1,052	16,728	816	-	49	26	16,964
Central governments or central banks	-	3,002	0	-	-	0	3,002
Regional governments or local authorities	-	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-	-
International organisations	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	-
Corporates	0	-	-	-	-	-	-
Of which: SMEs	-	-	-	-	-	-	-
Retail	2	2	-	-	-	-	2
Of which: SMEs	-	-	-	-	-	-	-
Secured by mortgages on immovable property	-	-	-	-	-	-	-
Of which: SMEs	-	-	-	-	-	-	-
Exposures in default	2	-	-	-	-	-	2
Items associated with particularly high risk	-	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-	-
Other exposures	-	887	-	-	-	-	887
Total standardised approach	2	3,891	0	-	-	0	3,893
Total	1,054	20,619	818	-	49	26	20,857
of which: Loans	1,053	15,415	814	-	49	26	15,656
of which: Debt securities	-	1,963	0	-	-	0	1,963
of which: Off-balance sheet exposures	1	780	4	-	-	-	777

	Gross carrying value of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges in the period	Net values
	Defaulted exposures	Non-defaulted exposures					
	€m	€m	€m	€m	€m	€m	€m
2018							
Central governments or central banks	-	212	0	-	-	0	212
Institutions	-	976	0	-	-	0	976
Corporates	66	127	61	-	11	(1)	132
<i>Of which: Specialised lending</i>	-	-	-	-	-	-	-
<i>Of which: SMEs</i>	-	-	-	-	-	-	-
Retail	1,627	15,804	1,020	-	30	84	16,410
<i>Secured by real estate property</i>	1,599	15,129	987	-	24	86	15,741
<i>SMEs</i>	-	-	-	-	-	-	-
<i>Non-SMEs</i>	1,599	15,129	987	-	24	86	15,741
<i>Qualifying revolving</i>	13	459	16	-	3	(1)	456
<i>Other Retail</i>	15	216	18	-	2	(1)	214
<i>SMEs</i>	-	-	-	-	-	-	-
<i>Non-SMEs</i>	15	216	18	-	2	(1)	214
Equity	-	23	-	-	-	-	23
Total IRB approach	1,692	17,143	1,081	-	41	83	17,754
Central governments or central banks	-	2,950	0	-	-	0	2,950
Regional governments or local authorities	-	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-	-
International organisations	-	-	-	-	-	-	-
Institutions	-	-	-	-	-	-	-
Corporates	0	-	-	-	-	-	-
<i>Of which: SMEs</i>	-	-	-	-	-	-	-
Retail	4	2	-	-	-	-	2
<i>Of which: SMEs</i>	-	-	-	-	-	-	-
Secured by mortgages on immovable property	-	-	-	-	-	-	-
<i>Of which: SMEs</i>	-	-	-	-	-	-	-
Exposures in default	4	-	-	-	-	-	4
Items associated with particularly high risk	-	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-	-
Other exposures	-	1,947	-	-	-	-	1,947
Total standardised approach	4	4,899	0	-	-	0	4,903
Total	1,696	22,042	1,082	-	41	83	22,657
<i>of which: Loans</i>	1,696	15,220	1,077	-	41	83	15,839
<i>of which: Debt securities</i>	-	2,604	1	-	-	1	2,604
<i>of which: Off-balance sheet exposures</i>	1	710	4	-	-	-	707

The reduction in defaulted exposures during the year is due to a sale of a non performing loan portfolio by the Group in 2019.

Table 25: EU CR1-B: Credit quality of exposures by industry or counterparty types⁶ (Art 442.g, 442.h)

	Gross carrying value of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures					
2019	€m	€m	€m	€m	€m	€m	€m
Other	40	169	36	-	4	4	175
Central Government	-	3,002	0	-	-	0	3,002
ROI Residential mortgages	947	15,279	717	-	32	27	15,509
ROI Consumer lending	67	749	64	-	13	(5)	751
Financial and Insurance activities	-	1,420	0	-	-	0	1,420
Total	1,054	20,619	818	-	49	26	20,857

The reduction in 'Financial and Insurance activities' in 2019 is due the completion of the sale of a non performing loan portfolio during the year.

	Gross carrying value of		Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures					
2018	€m	€m	€m	€m	€m	€m	€m
Other	55	150	42	-	10	5	164
Central Government	-	3,162	1	-	-	0	3,162
ROI Residential mortgages	1,574	15,063	970	-	24	77	15,667
ROI Consumer lending	67	717	69	-	7	0	715
Financial and Insurance activities	-	2,949	0	-	-	0	2,949
Total	1,696	22,042	1,082	-	41	83	22,657

⁶ List of industry categories is consistent with table EU CRB-D

Table 26: EU CR1-C: Credit quality of exposures by geography (Art 442.g, 442.h)

	Gross carrying value of					Credit risk adjustment charges in the period	Net values
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write- offs		
2019	€m	€m	€m	€m	€m	€m	€m
Europe	1,052	20,239	815	-	49	25	20,478
<i>of which: Ireland</i>	1,043	19,442	800	-	48	26	19,686
<i>of which: Rest of Europe</i>	9	798	15	-	0	(0)	792
Other geographical area	2	380	3	-	0	0	379
Total	1,054	20,619	818	-	49	26	20,857

The reduction in defaulted exposures during the year is due to a sale of a non performing loan portfolio by the Group in 2019.

	Gross carrying value of					Credit risk adjustment charges in the period	Net values
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs		
2018	€m	€m	€m	€m	€m	€m	€m
Europe	1,694	21,523	1,079	-	41	84	22,138
<i>of which: Ireland</i>	1,673	20,706	1,058	-	42	87	21,321
<i>of which: Rest of Europe</i>	21	817	21	-	(0)	(4)	817
Other geographical area	3	519	3	-	0	(1)	519
Total	1,696	22,042	1,082	-	41	83	22,657

Table 27: Credit quality of forborne exposures (EBA/GL/2018/10) (Art 442.g, 442.h)

	Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
	Performing forborne	Non-performing forborne			On performing forborne exposures	On non-performing forborne exposures		Of which collateral and financial guarantees received on non-performing exposures with forbearance measures
			Of which defaulted	Of which impaired				
2019								
Loans and advances	484	563	563	563	24	170	961	492
Central Banks	-	-	-	-	-	-	-	-
General Governments	-	-	-	-	-	-	-	-
Credit Institutions	-	-	-	-	-	-	-	-
Other financial corporations	-	-	-	-	-	-	-	-
Non-financial corporations	4	21	21	21	1	9	18	15
Households	480	541	541	541	23	161	944	478
Debt securities	-	-	-	-	-	-	-	-
Loan commitments given	0	0	0	0	-	-	-	-
Total	484	563	563	563	24	170	961	492

2018

Loans and advances	907	1,236	1,236	1,236	72	490	1,889	1,029
Central Banks	-	-	-	-	-	-	-	-
General Governments	-	-	-	-	-	-	-	-
Credit Institutions	-	-	-	-	-	-	-	-
Other financial corporations	-	-	-	-	-	-	-	-
Non-financial corporations	5	35	35	35	0	18	28	24
Households	902	1,202	1,202	1,202	72	472	1,860	1,005
Debt securities	-	-	-	-	-	-	-	-
Loan commitments given	0	-	-	-	-	-	-	-
Total	907	1,236	1,236	1,236	72	490	1,889	1,029

Table 28: Credit quality of performing and non-performing exposures by past due days (EBA/GL/2018/10) (Art 442.g, 442.h)

	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 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	Of which defaulted
2019												
Loans and advances	16,968	16,952	17	1,049	744	31	35	56	0	183	0	1,049
<i>Central Banks</i>	1,039	1,039	-	-	-	-	-	-	-	-	-	-
<i>General Governments</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Credit Institutions</i>	517	517	0	-	-	-	-	-	-	-	-	-
<i>Other financial corporations</i>	1	1	0	1	0	-	0	0	0	-	-	1
<i>Non-financial corporations</i>	138	138	0	40	25	0	0	5	(0)	10	0	40
<i>Of which SMEs</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Households</i>	15,273	15,257	17	1,009	718	30	35	52	(0)	173	0	1,009
Debt securities	2,005	2,006	1	-	-	-	-	-	-	-	-	-
<i>Central Banks</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>General Governments</i>	1,963	1,963	-	-	-	-	-	-	-	-	-	-
<i>Credit Institutions</i>	-	-	-	-	-	-	-	-	-	-	-	-
<i>Other financial corporations</i>	42	42	-	-	-	-	-	-	-	-	-	-
<i>Non-financial corporations</i>	-	1	1	-	-	-	-	-	-	-	-	-
Off-balance-sheet exposures	780			1								0
<i>Central Banks</i>	-			-								-
<i>General Governments</i>	-			-								-
<i>Credit Institutions</i>	1			-								-
<i>Other financial corporations</i>	0			-								-
<i>Non-financial corporations</i>	23			0								0
<i>Households</i>	757			1								0
Total	19,753	18,958	18	1,050	744	31	35	56	0	183	0	1,049

The reduction in defaulted exposures during the year is due to a sale of a non performing loan portfolio by the Group in 2019.

	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 years ≤ 5 years	Past due > 5 years ≤ 7 years	Past due > 7 years	Of which defaulted
2018												
Loans and advances	16,430	16,416	15	1,703	1,022	41	63	129	(0)	448	(0)	1,703
Central Banks	562	562	-	-	-	-	-	-	-	-	-	-
General Governments	-	-	-	-	-	-	-	-	-	-	-	-
Credit Institutions	592	592	0	0	0	-	-	-	-	-	-	0
Other financial corporations	0	0	0	1	1	-	0	0	0	-	-	1
Non-financial corporations	129	129	1	55	28	0	1	17	(0)	11	(0)	55
Of which SMEs	-	-	-	-	-	-	-	-	-	-	-	-
Households	15,147	15,133	14	1,647	994	41	62	112	0	438	0	1,647
Debt securities	2,647	2,648	1	-	-	-	-	-	-	-	-	-
Central Banks	-	-	-	-	-	-	-	-	-	-	-	-
General Governments	2,647	2,647	-	-	-	-	-	-	-	-	-	-
Credit Institutions	-	-	-	-	-	-	-	-	-	-	-	-
Other financial corporations	-	-	-	-	-	-	-	-	-	-	-	-
Non-financial corporations	-	1	1	-	-	-	-	-	-	-	-	-
Off-balance-sheet exposures	710			1								(0)
Central Banks	-			-								-
General Governments	-			-								-
Credit Institutions	1			-								-
Other financial corporations	0			-								-
Non-financial corporations	21			0								0
Households	688			1								(0)
Total	19,788	19,064	16	1,704	1,022	41	63	129	(0)	448	(0)	1,703

Table 29: Performing and non-performing exposures and related provisions (EBA/GL/2018/10) (Art 442.g, 442.h)

2019	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Accumulat- ed partial write-off	Collateral and financial guarantees received	
	Performing exposures			Non-performing exposures			Performing exposures – accumulated impairment and provisions			Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				On performing exposures	On non- performing exposures
		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3			
Loans and advances	16,968	12,628	4,340	1,049	-	1,049	483	44	439	335	-	335	-	14,731	887
Central Banks	1,039	1,039	-	-	-	-	-	-	-	-	-	-	-	-	-
General Governments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Credit Institutions	517	517	-	-	-	-	-	-	-	-	-	-	-	-	-
Other financial corporations	1	0	0	1	-	1	0	0	0	0	-	0	-	-	0
Non-financial corporations	138	48	90	40	-	40	15	2	14	19	-	19	-	101	27
Of which SME	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Households	15,273	11,023	4,250	1,009	-	1,009	468	42	426	315	-	315	-	14,630	859
Debt securities	2,005	2,005	-	-	-	-	0	0	-	-	-	-	-	-	-
Central Banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General Governments	1,963	1,963	-	-	-	-	0	0	-	-	-	-	-	-	-
Credit Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other financial corporations	42	42	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Off-balance-sheet exposures	782	722	61	1	-	1	(0)	0	(0)	-	-	-		-	-
Central Banks	-	-	-	-	-	-	-	-	-	-	-	-		-	-
General Governments	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Credit Institutions	1	-	1	-	-	-	-	-	-	-	-	-		-	-
Other financial corporations	0	0	0	-	-	-	0	0	0	-	-	-		-	-
Non-financial corporations	23	6	17	0	-	0	0	0	0	-	-	-		-	-
Households	759	716	43	1	-	1	(0)	0	(0)	-	-	-		-	-
Total	19,754	15,354	4,400	1,050	-	1,050	483	45	439	335	-	335	-	14,731	887

The reduction in defaulted exposures during the year is due to a sale of a non performing loan portfolio by the Group in 2019.

	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Accumulat- ed partial write-off	Collateral and financial guarantees received	
	Performing exposures			Non-performing exposures			Performing exposures – accumulated impairment and provisions			Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				On performing exposures	On non- performing exposures
2018		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3			
Loans and advances	16,430	11,729	4,701	1,703	-	1,703	442	33	409	636	-	636	-	14,596	1,404
Central Banks	562	562	-	-	-	-	-	-	-	-	-	-	-	-	-
General Governments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Credit Institutions	592	592	-	0	-	0	-	-	-	-	-	-	-	-	-
Other financial corporations	0	0	0	1	-	1	0	0	0	1	-	1	-	-	0
Non-financial corporations	129	47	82	55	-	55	10	2	8	31	-	31	-	93	38
Of which SME	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Households	15,147	10,527	4,619	1,647	-	1,647	432	32	401	604	-	604	-	14,503	1,366
Debt securities	2,647	2,647	-	-	-	-	0	0	-	-	-	-	-	-	-
Central Banks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General Governments	2,647	2,647	-	-	-	-	0	0	-	-	-	-	-	-	-
Credit Institutions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-financial corporations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Off-balance-sheet exposures	712	661	52	1	-	1	(4)	(2)	(2)	-	-	-		-	-
Central Banks	-	-	-	-	-	-	-	-	-	-	-	-		-	-
General Governments	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Credit Institutions	1	0	1	-	-	-	0	0	0	-	-	-		-	-
Other financial corporations	0	0	0	-	-	-	0	0	0	-	-	-		-	-
Non-financial corporations	21	11	11	0	-	0	(1)	0	(1)	-	-	-		-	-
Households	690	649	40	1	-	1	(3)	(1)	(1)	-	-	-		-	-
Total	19,789	15,036	4,753	1,704	-	1,704	438	32	406	636	-	636	-	14,596	1,404

Table 30: Collateral obtained by taking possession and execution processes (EBA/GL/2018/10) (Art 442.g, 442.h)

	Collateral obtained by taking possession	
	Value at initial recognition	Accumulated negative changes
2019		
Property, plant and equipment (PP&E)	-	-
Other than PP&E	55	0
<i>Residential immovable property</i>	55	0
<i>Commercial Immovable property</i>	0	0
<i>Movable property (auto, shipping, etc.)</i>	-	-
Equity and debt instruments	-	-
Other	0	(0)
Total	55	(0)
	Collateral obtained by taking possession	
	Value at initial recognition	Accumulated negative changes
2018		
Property, plant and equipment (PP&E)	-	-
Other than PP&E	148	(14)
<i>Residential immovable property</i>	146	(14)
<i>Commercial Immovable property</i>	2	(0)
<i>Movable property (auto, shipping, etc.)</i>	-	-
Equity and debt instruments	-	-
Other	(0)	(0)
Total	148	(14)

The reduction is due to sales of properties in possession during the year.

Table 31: EU CR2-A: Changes in the stock of general and specific credit risk adjustments (Art 442.i)

	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
2019	€m	€m
Opening balance	1,082	-
Increases/(decreases) due to amounts set aside for estimated loan losses during the period ⁷	12	-
Decreases due to amounts taken against accumulated credit risk adjustments	(42)	-
Transfers between credit risk adjustments	-	-
Impact of exchange rate differences	-	-
Business combinations, including acquisitions and disposals of subsidiaries	(232)	-
Other adjustments	(3)	-
Closing balance	818	-
Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	-	-
Specific credit risk adjustments directly recorded to the statement of profit or loss	-	-

The reduction in the stock of specific risk adjustments during the year is due to a sale of a non performing loan portfolio by the Group in 2019.

	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
2018	€m	€m
Opening balance	2,323	-
Increases/(decreases) due to amounts set aside for estimated loan losses during the period ⁷	54	-
Decreases due to amounts taken against accumulated credit risk adjustments	(78)	-
Transfers between credit risk adjustments	-	-
Impact of exchange rate differences	-	-
Business combinations, including acquisitions and disposals of subsidiaries	(1,208)	-
Other adjustments	(9)	-
Closing balance	1,082	-
Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	-	-
Specific credit risk adjustments directly recorded to the statement of profit or loss	-	-

⁷ Rows 'Increases due to amounts set aside for estimated loan losses during the period' and 'Decreases due to amounts reversed for estimated loan losses during the period' have been amalgamated as separate disclosure does not provide meaningful information.

Table 32: EU CR2-B: Changes in the stock of defaulted and impaired loans and debt securities (Art 442.i)

Gross carrying value defaulted exposures ⁸	<u>2019</u> €m	<u>2018</u> €m
Opening balance	1,696	5,253
Loans and debt securities that have defaulted or impaired since the last reporting period	270	507
Returned to non-defaulted status	(892)	(4,040)
Amounts written off	(21)	(24)
Other changes	-	-
Closing balance	1,054	1,696

The reduction in the stock of defaulted and impaired loans during the year is due to a sale of a non performing loan portfolio by the Group in 2019.

⁸ The Group has no defaulted debt securities

Unencumbered Assets (Art 443)

An asset is classed as encumbered when a third party that is not the owner has a claim over the asset. The Group aligns its definition of encumbrance to the regulatory reporting framework of partial encumbrance meaning that an asset is only considered encumbered when it is pledged to a third party. Encumbrance impacts the transferability of the asset by restricting its free use until the claim is lifted. This disclosure has been formed in line with Regulation (EU) No 2017/2295.⁹

Table 33: Template A: Encumbered and unencumbered assets *

All figures in €m		Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
		010	040	060	090
Median values 2019					
10	Assets of the reporting institution	1,461		18,997	
30	Equity instruments	-		16	
40	Debt securities	16	16	2,222	2,265
50	of which: covered bonds	-	-	-	-
60	of which: asset-backed securities	-	-	43	44
70	of which: issued by general governments	16	16	2,179	2,220
80	of which: issued by financial corporations	-	-	-	-
90	of which: issued by non-financial corporations	-	-	-	-
120	Other assets	1,445		16,806	
121	of which: Loans on demand	105		1,093	
121	of which: Loans and advances other than loans on demand	1,346		14,829	
Median values 2018					
10	Assets of the reporting institution	5,771		16,918	
30	Equity instruments	-		13	
40	Debt securities	19	19	2,595	2,638
50	of which: covered bonds	-	-	-	-
60	of which: asset-backed securities	-	-	-	-
70	of which: issued by general governments	-	-	2,595	2,638
80	of which: issued by financial corporations	-	-	-	-
90	of which: issued by non-financial corporations	-	-	-	-
120	Other assets	5,752		14,286	
121	of which: Loans on demand	36		688	
121	of which: Loans and advances other than loans on demand	5,717		11,596	

* Reporting of columns 030, 050, 080 and 100 are not applicable as the Bank's asset encumbrance level is below 15% and total assets are less than €30bn during 2019.

⁹ The Commission Delegated Regulation with regard to regulatory technical standards for disclosure of encumbered and unencumbered assets was published in the Official Journal on 13 December 2017 and came into force on 2 January 2018.

Table 34: Template B - Collateral Received*

All figures in €m		Fair value of encumbered collateral received or own debt securities issued	Unencumbered
			Fair value of collateral received or own debt securities issued available for encumbrance
		010	040
Median values 2019			
130	Collateral received by the reporting institution	0	13
140	Loans on demand	-	-
150	Equity instruments	-	-
160	Debt securities	-	13
170	of which: covered bonds	-	-
180	of which: asset-backed securities	-	-
190	of which: issued by general governments	-	13
200	of which: issued by financial corporations	-	-
210	of which: issued by non-financial corporations	-	-
220	Loans and advances other than loans on demand	-	-
230	Other collateral received	0	-
240	Own debt securities issued other than own covered bonds or asset-backed securities	-	-
241	Own covered bonds and asset-backed securities issued and not yet pledged		4,408
250	Total assets, collateral received and own debt securities issued	1,462	
Median values 2018			
130	Collateral received by the reporting institution	1	-
140	Loans on demand	-	-
150	Equity instruments	-	-
160	Debt securities	-	-
170	of which: covered bonds	-	-
180	of which: asset-backed securities	-	-
190	of which: issued by general governments	-	-
200	of which: issued by financial corporations	-	-
210	of which: issued by non-financial corporations	-	-
220	Loans and advances other than loans on demand	-	-
230	Other collateral received	1	-
240	Own debt securities issued other than own covered bonds or asset-backed securities	-	-
241	Own covered bonds and asset-backed securities issued and not yet pledged		3,156
250	Total assets, collateral received and own debt securities issued	5,773	

* Reporting of columns 030 and 060 are not applicable as the Bank's asset encumbrance level is below 15% and total assets are less than €30bn during 2019.

Table 35: Template C – Sources of encumbrance

All figures in €m		Matching liabilities, contingent liabilities or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
		010	030
Median values 2019			
10	Carrying amount of selected financial liabilities	822	900
11	of which: Repurchase agreements	116	157
11	of which: Debt securities issued	695	732
	Encumbered assets without an associated liability	-	562
Median values 2018			
10	Carrying amount of selected financial liabilities	3,301	5,208
11	of which: Repurchase agreements	2,075	3,603
11	of which: Debt securities issued	1,161	1,546
	Encumbered assets without an associated liability	-	520

*Template D – Accompanying narrative Information***Encumbered Assets**

As a retail bank encumbering assets through the use of secured funding facilities represents a standard funding channel for the Group.

The Group's encumbrance level is primarily driven by mortgage assets which are included in securitisation special purpose entities and become encumbered when the associated notes are purchased by external investors or pledged as collateral through market Repurchase Agreements or Central Bank funding facilities. There is no legal obligation to supply additional collateral to these securitisation structures. The Group does not have a covered bond programme and, as such does not have a requirement for over collateralisation.

Other sources of encumbrance include the use of sovereign bond debt securities and cash in repurchase arrangements. Sovereign bond debt securities are encumbered through repurchase arrangements primarily with third party market counterparties. Maturity dates are typically short term ranging from 1 week to 3 months. Cash encumbrance relates both to cash within securitisation structures and collateral paid under derivative and repo contracts.

A portion of unencumbered assets would not be deemed available for encumbrance by the Group. These include intangible assets for example deferred tax and property, plant and equipment as well as derivative assets and held for sale assets.

The Group's business model does not lead to significant currency or intragroup encumbrance.

A key objective of the Group Treasury funding strategy is to monitor the encumbrance level of the Group. A number of viable options including deleveraging, unsecured debt issuance and collateral efficiency in the securitisation programme have been identified as effective means with which to pro-actively manage encumbrance. The Group has significantly reduced its encumbrance level over the course of 2019. The Asset Encumbrance ratio has reduced from 21% as at 31 December 2018 to 6% as at 31 December 2019. The key driver behind this reduction was the repayment of all

outstanding retained securitisation backed repurchase agreements. As at 31 December 2019 the Group was 95% funded through unsecured customer deposits with the rest of the Balance Sheet funded through wholesale funding, being either MREL unsecured senior debt or market issued securitisations. The underlying mortgage collateral and trapped cash within the securitisation vehicles are the primary driver of the 6% encumbrance ratio.

There is no difference between the regulatory consolidation scope used for the purpose of the disclosures on asset encumbrance and the scope retained for the application of the liquidity requirements on a consolidated basis as defined in Part Two, Chapter 2 of Regulation (EU) No 575/2013.

There is no difference between pledged and transferred assets in accordance with the applicable accounting frameworks and encumbered assets as reported by the Group.

The median is derived based on the four quarter end exposure values of the previous 12 month period. Interpolated median and median are equal in this scenario. The exposure values are in line with Annex XVI to Commission Implementing Regulation (EU) No 680/2014 unless otherwise specifically defined in Commission Delegated Regulation (EU) 2017/2295.

Use of ECAI's (Art 444)

The Central Bank of Ireland granted an exemption to the Group from the IRB approach for all exposures to EU central governments and central banks. This exemption allows the Group to treat all exposures to EU Sovereigns under the Standardised Approach and apply a 0% risk weighting assuming the exposure is denominated and funded in the currency of that central government. Consequently, ECAI ratings are not used in the calculation of risk weights for credit exposures to EU Sovereigns.

Credit exposures to EU Sovereigns and the Central Bank of Ireland were €3.0bn as of 31 December 2019 (no credit risk mitigation (CRM) applied).

Market Risk (Art 445)

The Group does not hold any capital against market risk as at 31 December 2019 or 31 December 2018 in accordance with points (b) and (c) of Article 92 (3) of the CRR.

The Group does not have a trading book and is therefore not subject to the risks associated with trading book positions. The foreign exchange position of the Group at the end of 2019 and 2018 did not exceed the 2% of total own funds threshold as laid down in Article 351 of the CRR and, therefore, the Group has no requirement to hold Pillar 1 capital against this risk.

Operational Risk (Art 446)

The Group applies the Standardised Approach to calculate Own Funds Requirements for Operational Risk. Per Article 312 (1) certain criteria must be met to qualify for use of the Standardised Approach. The specific criteria referred to in Article 312 (1) are outlined in Article 320; the Groups rationale for meeting the criteria set-out in Article 320 are outlined in the 3 points below:

- The Group has in place Operational and IT Risk Management Frameworks which encompass the measurement and monitoring of Operational and IT Risk.
- The Group-wide approach to Risk Management includes Risk Identification, Risk Assessment, Risk Mitigation as well as Risk monitoring and reporting. The management of Operational and IT risks is aligned to that approach.
- The Group monitors and reports on its Operational and IT Risk profile on a continuous basis using qualitative information and quantitative metrics. In addition to reviewing RCSAs, this involves the measurement and monitoring of the Group's Operational and IT Risk events (both Internal & External) and through the testing of internal controls.

Capital Requirements for Operational Risk

As per Article 317 (1), the Group calculates Own Funds Requirement by dividing activities into the 8 standardised business lines; the Group's principal business line is 'Retail Banking'. Fixed Beta coefficients are also outlined in Article 317 for each specific business line, this is to attribute higher Own funds requirements to business lines with perceived greater Operational Risk. The beta coefficients applied to Retail Banking is 12%.

Additionally, as outlined in Article 317 (2), Own Funds Requirements are derived from the 3 year average Gross Income (the 'risk weighted relevant indicator') for each business line multiplied by the respective beta coefficient. Therefore movements in Own Funds requirements are essentially driven by the Group's underlying income over a 3 year period.

The above approach to Own Funds Requirements resulted in an Operational Risk Requirement of €56m at 31 December 2019 (€53m at 31 December 2018).

Exposures to equities not included in the trading book (Art 447 (a), (b), (c), (d) and (e))

The Group holds an equity investment in Visa Incorporated in the form of preferred shares as a result of the sale of its shares in Visa Europe Limited. The preferred stock in Visa Incorporated was fair valued at €15m at 31 December 2019 and is recognised as an asset on the Group's balance sheet. PTSB does not have a trading book and the equity investment in Visa Incorporated is the only equity investment held in entities outside the Group. The valuation method used by the Group for this investment is described in more detail in Note 16 and Note 34 of the Group's 2019 Annual Report.

The table below summarises the value of these investments at the end of the year as well as the amount included within the Group's Common Equity Tier 1 capital.

The Group calculates its capital requirements for equity exposures in the banking book under the IRB approach using the simple risk weight method.

Table 36: Fair value of equities not included in the trading book and amount included in CET capital

€m	Book value	Fair Value	Included in CET1	Realised Gains & Losses in the period
As at 31 December 2019				
Visa Incorporated preferred shares	15	15	15	0
As at 31 December 2018				
Visa Incorporated preferred shares	13	13	13	0

Exposure to interest rate risk on positions not included in the trading book (Art 448)

Interest Rate Risk (Art 448.a)

Interest rate risk arises from structural and duration mismatches between assets and liabilities in the balance sheet which generate a risk to earnings or capital caused by the movement in the absolute level of interest rates, the spread between two rates, the shape of the yield curve or any other interest rate relationship. The Bank is primarily exposed to re-price, yield curve and basis risk. In line with regulatory standards, the approved Interest Rate Risk in the Banking Book (IRRBB) framework determined that the Bank's interest rate risk exposure must be derived from both an earnings (accrual) and economic value perspective.

Interest rate gap analysis is used to capture re-price risk and lays the foundation for the Economic Value (EV), Economic Value of Equity (EVE) and Earnings at Risk calculations which measure yield curve risk. PTSB also applies a specific model to calculate the contractual basis risk exposure using a historic look back approach to determine the severity of the applied shock.

These measures are further supplemented by NII sensitivity analysis, PV01 sensitivity, duration mismatch and comprehensive stress testing. These measures capture all material interest rate risk associated with Permanent TSB's assets, liabilities and off Balance-Sheet (OBS) positions in the banking book. To note the Bank does not run a trading book.

Gap Analysis

Gap analysis splits the current Balance Sheet position into re-pricing time bands, highlighting possible interest rate risk concentrations. Principal balances, derivative positions and interest cashflows based on the next reprice date are sourced for the re-pricing schedules from the Bank's core systems. Governance and controls are fully integrated into the Bank's daily risk management practices.

The controls include a limit scheme consisting of individual notional exposures limits for each time band. The limits are based on duration estimated from the current interest rates, recognising convexity by applying separate limits for downward and upward shocks and taking account of the applicable rate floor.

Balances are included within the re-pricing schedules at a product level sufficient to identify any sources of significant mismatches and allocated into the Basel/EBA prescribed time bands as outlined in table 37 below:

Table 37: IRRBB Modelled Time bands

Overnight	18 months to 2 years	8 to 9 years
1 day to 1 month	2 to 3 years	9 to 10 years
1 to 2 months	3 to 4 years	10 to 15 years
3 to 6 months	4 to 5 years	15 to 20 years
6 to 9 months	5 to 6 years	Greater than 20 years
9 to 12 months	6 to 7 years	
1 year to 18 months	7 to 8 years	

Table 38: IRRBB Modelled Product Types

Product Groups	Assets	Liabilities
Customer	Mortgages by type: Tracker / SVR / MVR / Fixed Commercial loans Consumer lending Credit Cards / Overdrafts Non-Interest Bearing (NPLs)	Retail deposits by type: Current / Demand & Notice / Term Corporate deposits by type: Call / Notice / Term
Treasury	Gilts / Government Bonds Other securities Interbank assets	Market funding (MTNs, Securitisations) System funding Market repos Interbank liabilities
Other	Impairments (deducted) Assets held for sale	Equity
Derivatives	Receive leg notional by type: Interest rate / FX swaps	Pay leg notional by type: Interest rate / FX swaps

Assumptions

All balances are included at their contractual re-pricing profiles where applicable with behavioural assumptions applied to non-contractual balances as per the exceptions list detailed below.

1. Current Accounts (Core portion only, volatile at contractual maturity) and Equity are profiled evenly over 6 years in line with the maximum asset maturity (for NPL Recoveries). All other non-maturity deposits are assumed to re-price in month one reflecting the variable interest rate nature of the products.
2. NPLs: These are split into Cures, Recoveries and Write Offs according to percentages updated quarterly by Credit Risk. Cures are profiled as if they were performing, Recoveries are profiled evenly over 4 years and Write Offs, Warehoused Loans and Impairments are profiled evenly over 6 years.
3. Credit Cards and Overdrafts: These are profiled evenly over 1 year to reflect the relative price inelasticity.

4. Assets held for sale: These are profiled either at their agreed sale date or evenly over 1 year (buy to let assets) or 3 years (home loan assets).

Prepayments on asset balances are applied based on the latest actual prepayment rates calculated quarterly and these can be varied during Stress Testing.

Term deposit early redemption assumptions calculated quarterly and fixed rate mortgage pipeline assumptions updated monthly are also applied.

EV/EVE

The Economic Value or Economic Value of Equity (EV/EVE) components of the IRRBB framework form a key part of the IRRBB measurement tools for the Bank.

The risk positions are calculated weekly and use the re-price profile generated within the Gap Analysis. Weighted risk factors are applied to each re-pricing time bucket to calculate the PV of the risk profile. The weighted factors for each bucket are based on a discount factor reflecting the specific stress scenario.

EVE is a specific calculation of EV where the Equity balances are removed from the re-price profile.

EAR

The EaR (Earnings at Risk) component is calculated daily and measures the net exposure (assets less liabilities) of the balance sheet with respect to several reference interest rates and time bands, and measures the respective risk to net interest income under shock interest rate scenarios.

Where products are re-priced using administered rates, the Bank maintains assumptions for how the product rates are likely to move in response to a shift in market yield curves when modelling EAR risk which in turn captures a form of Basis risk. These pass through assumptions are provided by the Commercial unit on at least an annual basis and take full consideration of customer fairness, political influence and the current market environment.

Stress Testing

The Bank stress tests IRRBB on both an EV and EaR basis. For each stress scenario, the risk level is taken to be the most negative of the two measures or 0 if they are both positive.

The overall risk level of the bank is taken to be the most adverse risk position stemming from the 13 scenarios that the Bank runs (6 core, 7 ancillary) plus the result of the specific contractual Basis Risk calculation.

The stress scenarios are either prescribed through regulation (EBA Guidelines 2018/02), standard market or PTSB specific in terms of balance sheet composition.

Parallel Up (*): This shock consists of an upward shock in rates which varies by currency. The EUR shock is 200bps and the GBP shock is 250bps so this will generate a result similar to the Up200 shock given that the Bank's balance sheet is largely EUR.

Parallel Down (*): Like the relationship between Up200 and Dn200 shocks, this shock is the mirror image of the Parallel Up shock, subject to floors.

Steepener (*): Interest rates are shocked downwards at tenors of up to 5 years and shocked upwards for longer term rates. For this and the 3 scenarios that follow, the exact amount of the shock is determined by an exponential function that depends on the tenor of the time bucket midpoint and scalars supplied originally by the Basel Committee.

Flattener (*): Interest rates are initial shocked upwards and then downwards as the tenor lengthens, becoming a negative shock for 7 years and further out the curve.

Short Up (*): Interest rates are shocked upwards at the short end, with less of an impact out the curve, i.e. the maximum shock is for the overnight bucket.

Short Down (*): Interest rates are shocked downwards at the short end with less of an impact out the curve.

Up200: This shock is currently prescribed by the ECB for the quarterly Short Term Exercise (STE) and consists of all rates being shocked instantaneously upwards by 200bps.

Dn200: This shock is also currently prescribed by the ECB for the STE and is the opposite of the Up200, i.e. all rates are shocked 200 bps downwards, subject to applicable flooring.

Up100: This shock is often used as an indicative measure of the Bank's expected gain from a 100bps rise in rates. All rates are shocked upwards by 100bps.

Dn100: This shock demonstrates the effect of the downward pass through assumptions. All rates are shocked by 100 bps downwards, subject to applicable flooring.

Inverted: In this shock the slope of the yield curve is flipped so that the short term rates assume the values that the long term rates had and vice versa.

Flat: The current market interest rate curve is applied.

Financial Crisis: This shock applies the largest 12 month move in the ECB rate during the financial crisis immediately to all market rates.

The results of these scenarios are reported monthly to ALCO, EXCO and Board.

(*) represents an EBA prescribed core scenario

Basis Risk

Basis Risk is the risk that two separate interest rate indices which appear to be correlated over time either cease to be correlated at all or the relationship breaks down temporarily. Consequently a matching of assets and liabilities that had appeared "hedged" breaks down and generates P&L volatility.

PTSB separately assess Basis Risk against a specific RAS limit and combines it with the more severe of the EV and EAR calculations in order to generate an aggregated IRRBB risk level and ensure all material sources of Interest Rate Risk are capitalised for.

The approach is to apply an ECB to Euribor spread widening by shocking the underlying reference rate products in line with the observed historic directional spread shifts i.e. upward shock for Euribor and downward for ECB Base Rate.

In calibrating the severity of the spread widening shock Treasury have used a historical data set ranging from September 1999 to the most recent year-end to ensure it is long enough to capture full

interest rate cycles and also contain the volatile Financial Crisis period which observed a period of significant divergence.

A -1% floor is applied to Euribor positions while a -25bps floor applies for the ECB base rate. Should rate curves shift, Treasury will review the validity of the flooring approach.

Supplementary IRRBB Risk Measures

NII Sensitivity

In addition to the 12 month EAR NII calculation Treasury runs a dynamic and longer time horizon NII sensitivity analysis on a monthly basis to help better inform strategic decision making.

The approach takes the Medium Term Plan (MTP) model as the base case with Treasury running a specific interest rate and/or balance sheet scenario each month. By comparing the outcomes to the MTP base position the aim of the analysis is to identify opportunities or risk exposures where strategic action may be warranted.

PV01 and Duration:

These relatively straightforward measures augment the Banks's IRRBB monitoring capacity. PV01 measures the effect of a 1bp shift in rates upwards or downwards while Duration compares the weighted average maturity of assets against liabilities.

Quantitative disclosure for variation in earnings/other relevant measure for shocks used broken down by currency (Art 448.b)

The current and prior year risk levels for the EBA prescribed scenarios are shown in Table 39: IRRBB Risk Positions below.

Table 39: IRRBB Risk Positions

EUR	Δ EVE		Δ EV		Δ NII	
Period	2019	2018	2019	2018	2019	2018
Parallel Up	78	91	152	91	178	170
Parallel Down	-23	-20	-44	-38	-6	0
Steepener	6	-2	1	-5		
Flattener	15	39	36	39		
Short rate up	37	64	79	64		
Short rate down	-23	-17	-44	-34		
Maximum	23	-20	44	38	6	0
Period			2019		2018	
Basis Risk			21		3	
IRRBB Risk Level			65		41	

The numbers above are calculated including commercial margins, discounted by the appropriate curves. The numbers are on a run-off balance sheet basis for EV and a static balance sheet basis for EAR.

The Bank uses the industry standard Economic Value, Economic Value of Equity (EVE) and Earnings at Risk (EAR) methodologies to determine the level of interest rate risk to which the Bank is exposed. The higher of the EV, EVE and EAR calculations across the 13 key scenarios described earlier is assigned as the risk level.

The Bank applies the EBA prescribed maturity dependent floor starting at -1.00% in the Euro EV/EVE Model and for the Bank's Euribor positions under the EaR calculation. A floor of -0.25% is applied for ECB base rate positions under the EAR and Basis Risk calculations. The model floor parameters remain under continuous review and will be re-examined in response to significant curve shifts.

The EV calculation has increased year on year primarily due to the increase in current account balances. The introduction of the maturity dependent floor and the inclusion of interest cash flows were directionally opposite in impact and in effect offset each other. The most severe EV/EVE outcome is the €44m risk level stemming from the Parallel Down scenario and as such this forms part of the Bank's IRRBB Risk Level.

Basis Risk has increased from €3m to €21m due to the replacement of the zero bound floor with a dynamic floor of ECB Refinance Rate -0.25%.

The aggregate IRRBB risk position has increased from €41m (€38m EV and €3m Basis Risk) as at 31 December 2018 to €65m (€44m EV and €21m Basis Risk) as at 31 December 2019.

Exposure to securitisation positions

(Art 449)

Key objectives of securitisation activity (Art 449.a)

Securitisation involves the transfer of assets with an income stream to a special purpose entity (SPE) which in turn issues securities to fund the purchase of those assets. The interest and principal payments received are passed on to the purchasers of the securities.

The primary objective of the PTSB securitisation programme is funding either through external market issuances or structuring and retaining notes to increase counterbalancing capacity and support repo transactions.

In addition the Bank may issue non-performing securitisations with the primary goal of reducing the Bank's NPL ratio, raising funding or optimising the Bank's capital ratio.

As at 31 December 2019 the Bank has issued one such securitisation, Glenbeigh I which was issued in 2018. The Bank achieved de-recognition on this transaction from both an accounting and prudential perspective. The Bank meets its regulatory requirement to retain a 5% stake through a V-note equivalent to a vertical slice comprising 5% of the value of the issued notes both rated and unrated.

As at 31 December 2019, the Bank has not invested in third party issued securitisation notes.

Securitisation risks (Art 449.b)

There are a number of risks attached to securitisations, such as credit risk, liquidity risk, operational risk and non-trading interest rate risk. These risks are identified, managed and monitored in line with Bank policy.

When the Bank originates a new securitisation, the risks are minimised through the use of standard securitisation structures, high quality counterparties to perform the structuring and oversight and governance provided by appropriately qualified experienced external and internal parties.

Apart from the Glenbeigh loan portfolio, mortgage assets securitised by the Bank have not been derecognised for accounting or for Pillar 1 capital purposes and are classified within loans and receivables to customers, with the Bank retaining the exposure to the credit risk and interest rate risk on the underlying securitised loans.

The Bank has achieved Significant Risk Transfer (SRT) on the Glenbeigh transaction but must ensure ongoing adherence to the SRT requirements. Failure to do so poses a balance sheet risk.

Different roles in the securitisation process (Art 449.d)

Originator

The Bank originates securitisations which are backed by Irish residential mortgages. This involves selling pools of mortgages to special purpose entities (SPEs) which issue mortgage backed floating notes to fund the purchase of these mortgage pools.

Investor

The Bank has no investments in any third party issued securitisations.

Sponsor

The Bank does not currently act as a sponsor to securitisations.

Summary of the Bank's securitisation activities at 31 December 2019 (Art 449.e, 449.p)

The securitisations originated by the Bank as at the 31 December 2019 do not qualify for de-recognition under the CRR, with the exception of the privately issued Glenbeigh securitisation detailed below. As at 31 December 2019, originated securitisations support the Bank's funding activity in the following ways:

Publicly Issued Securitisations

In a public securitisation mortgages are packaged into a securitisation SPE and the securities issued are sold to investors. At 31 December 2019 the Bank has €0.54bn of funding arising from public securitisations issued through the Fastnet programme.

Retained securitisations

Retained transactions are similar in structure to public deals except that the entirety of the notes issued are retained by the originator to increase the quantum of the Banks liquidity buffer and can be used to support repo funding activity. At 31 December 2019 Permanent TSB has €3.9bn of contingent counterbalancing capacity from the retained securitisation notes.

Privately Issued Securitisations

In a private securitisation mortgages are packaged into a securitisation SPE with the securities sold to an investor or group of investors but the notes are not publicly traded on an exchange. The Bank did not issue any private securitisations in 2019.

Exposure monitoring processes (Art 449.f)

The Bank does not hold any investments in third party issued securitisation notes.

However in relation to Glenbeigh, the Bank has achieved Significant Risk Transfer (SRT) on the transaction but must ensure ongoing adherence to the SRT requirements. In response the Bank measures its on-going compliance with all relevant EBA and CRR SRT requirements quarterly, monitored by the Bank's ALCO committee.

Summary of hedging policy (Art 449.g)

The Bank did not hedge any of its securitisation positions as at 31 December 2019 but may at its discretion choose to hedge exposures arising from securitisation activity in accordance with its Treasury Hedging Policy.

Risk-weighted exposure amounts (Art 449.h)

The risk weighted exposures for the underlying mortgage loans which are not derecognised are calculated using the IRB approach to credit risk for Pillar 1 capital purposes.

At the end of 2019, the Bank applied a risk weight of 209% to the retained Glenbeigh V Note under the Supervisory Formula Approach (SFA).

Summary of accounting policies (Art 449.j)

The SPEs used to originate securitisations are generally included in the consolidated financial statements from the date that control commences until the date that control ceases. Although the Bank does not own more than half of the voting power of these SPEs, it has the power to control the relevant activities of the SPE including the ability to affect the variable returns of the investee and hence these SPEs are consolidated.

Financial assets are derecognised when the right to receive cash flows from the financial assets has expired or the Bank has transferred substantially all the risks and rewards of ownership. This treatment applies to the Glenbeigh transaction.

Details of securitisation exposures (Art 449.m, 449.n)

The Bank has an exposure to a tranche of a traditional securitisation through holding the V Note of the Glenbeigh securitisation.

The Bank currently has no assets awaiting securitisation.

Capital Requirements (Art 449.o)

As at 31 December 2019, the only securitisation exposure relates to the retained Glenbeigh V Note which has a risk weight of 209%.

Table 40: Own funds requirement per Part Three – Title II, Chapter 5 of the CRR

All figures in €m	Exposure	Risk weighted Amount	Capital requirement
Dec-19	43	90	7
Dec-18	44	556	44

Remuneration (Art 450)

These disclosures summarise information regarding the Remuneration Policy at PTSB as required by Article 450 of Regulation (EU) 575/2013. This includes an overview of the decision making process and governance of remuneration, an overview of the Remuneration Policy ('the Policy') including the link between pay and performance, the identification of Material Risk Takers ('MRTs') and aggregate quantitative information on pay.

These disclosures should be read in conjunction with the Corporate Governance Statement and Directors Report on Remuneration within the Annual Report for the year ended 31 December 2019 pages 78 to 120.

Decision making process and governance (Art 450.1.a)

Decision-making process used for determining the Remuneration Policy

While the Board retains ownership of, and responsibility for, the Remuneration Policy within PTSB, the Remuneration Committee (the 'RemCo') is delegated certain responsibilities with respect to remuneration.

The RemCo recommends the Policy to the Board for approval, and monitors and evaluates its application. The CEO is ultimately responsible for the implementation of this Policy, however the HR, Risk and Compliance functions play key roles in its development prior to the RemCo's consideration.

The Bank's HR function is responsible for the preparation of proposals on changes to the Policy, with input from other relevant functions. The Risk and Compliance function reviews specific proposals for consideration of remuneration-related risks and compliance with applicable regulations.

The Chief Risk Officer (CRO) and Risk Function have input into the Policy and its implementation. The CRO provides an update at least annually to RemCo on risk considerations relating to remuneration matters, including the alignment of remuneration policy and risk management and the regulatory risk attaching to remuneration, and an assessment of proposed pay-outs under the variable remuneration schemes in place. The Chief Financial Officer (CFO) provides an assessment on the impact of variable remuneration for capital and liquidity.

In line with regulatory requirements, the implementation of this Remuneration Policy is, at least annually, subject to central and independent internal review by Internal Audit for compliance with policies and procedures for remuneration adopted by the Board.

Number of meetings held by the Remuneration Committee during 2019, and the composition and the mandate of the Committee

The RemCo is currently comprised of five independent non-executive directors - Julie O'Neill (Chair), Robert Elliott, Ken Slattery, Andrew Power, Ruth Wandhofer. Marian Corcoran, whose appointment

to the Board is described in more detail on page 85 of the Annual Report 2019, is also a member of the Committee. During 2019 a total of eight meetings took place.

The Chairman of the Board (if not a member), the CEO, the HR Director, the Chief Risk Officer and any other individuals the RemCo wishes, may be invited to attend meetings of the RemCo at the request of the Chairman of the RemCo. Based on the items of business under consideration, the Chairman of the RemCo may ask these invited members to step out of the meeting for some or all items on the agenda.

The purpose, responsibilities and terms of membership of the RemCo are set out in its Terms of Reference which may be viewed on the Bank's website www.permanenttsbgroup.ie. The Committee reviews its Terms of Reference each year and recommends any changes considered necessary to the Board. The RemCo is exclusively responsible for establishing the selection criteria, selecting, appointing and setting the terms of reference for any remuneration consultants who advise the RemCo.

External consultant whose services have been used in relation to Remuneration Policy

The RemCo may ask independent advisors for advice on any matters in relation to the Remuneration Policy they determine is necessary.

In 2019, the RemCo was advised by Deloitte LLP, primarily in relation to executive director and senior management remuneration, variable pay, Remuneration Policy and trends in the external market, and for perspective on regulatory compliance.

The Committee also employed the services of Willis Towers Watson who provided market benchmarking data and remuneration trend analysis.

Other stakeholders in the development of the Remuneration Policy

The Policy has been designed to comply with the regulatory requirements and the specific agreements contained within the Framework Agreement between the Minister for Finance and the Bank.

Our customers are considered when reviewing the Policy. Customer and conduct are key performance underpins for the variable remuneration scheme for staff based in our Retail Banking Division.

Remuneration Policy (Art 450.1.b,c,d,e,f)

Information on the link between pay and performance

Permanent TSB's remuneration policies and practices are designed to provide fair and competitive remuneration while also attracting and retaining the right calibre of employees to drive the Bank's future growth and success. The Board and senior management team place great importance on the role of a strong performance management process to ensure that employees have a clear understanding of how their own individual objectives contribute to the delivery of the Bank's strategy. Objectives are cascaded from the CEO throughout the organisation. Performance related

pay is in place for all levels in the organisation. In reviewing performance, the Bank also ensures that there are adequate succession plans in place.

In light of the Framework Agreement between the Minister for Finance and the Bank, there have been a number of remuneration related constraints on PTSB in recent years, particularly in relation to variable pay. The Policy has been designed to ensure all employees are remunerated fairly and to encourage and reward our colleagues appropriately as we work together to build a valuable and sustainable business, operating within the Bank's Risk Appetite and underpinned by a strong culture which manifests itself in responsible and accountable behaviours in our day-to-day interactions and decision making with our customers and each other.

The components of the current Remuneration Policy are set out below split between fixed and variable components.

With the exception of certain enhancements agreed in respect of the Defined Contribution Pension arrangements for all staff including the Executive Directors (details of which are provided in the Directors Report on Remuneration, which forms part of the Bank's 2019 Annual Statements), no material changes were enacted following a review of the Remuneration Policy and supporting policies in 2019.

The Bank has no subsidiaries or overseas operations and the Remuneration Policy applies consistently across all staff, including Material Risk Takers.

Fixed remuneration

Fixed remuneration is paid to staff to perform their individual roles as set out in their contract of employment. The main components consist of salary, pension and benefits. The Bank utilises a policy of median base pay versus market peer groups. The RemCo is cognisant of the need to attract and retain skilled management and staff. If the Bank is unable to attract, retain and motivate key skilled and qualified people its business may be negatively impacted.

PTSB has undertaken a review of all elements of remuneration against the definition of fixed remuneration set out by the European Banking Authority. All elements that have been classified as fixed have been determined to meet all relevant criteria, including that they are non-discretionary, transparent, and permanent, do not provide incentives for risk assumption and do not depend on performance.

Variable remuneration

As a result of the Framework Agreement between the Minister for Finance and PTSB, the Bank no longer operates the majority of variable remuneration arrangements which had previously been in place. There are no share based variable remuneration schemes and the only remaining cash based variable remuneration scheme in place is for staff in the Retail Banking Division which has been agreed with the Department of Finance and is summarised below.

Branch Based Commission Scheme (BBCS)

In order to promote the development of personal banking relationships with our customers, the BBCS is designed to incentivise and reward performance in relation to (i) customer satisfaction, (ii)

individual conduct and (iii) activity. This is in line with the CBI's guidance which seeks to put the customer's needs first. We recognise the importance of conduct risk and fair treatment of customers for our business, and therefore if customer and conduct thresholds are not met, individuals will not receive a payment under the scheme.

Only Territory Sales Managers, Territory Sales Staff and Branch Staff are eligible to participate in this scheme. In addition, payments under the scheme are subject to individuals achieving a satisfactory level of individual performance and may also be subject to clawback where, in the relevant period, circumstances come to light which, if known by the Bank at the date of payment of the BBCS award in question, would reasonably have led to:

- (i) a downward adjustment to the BBCS recipient's performance rating for the year in question;
- (ii) a conclusion that the BBCS recipient had engaged, prior to the BBCS payment date, in misconduct warranting a disciplinary sanction, including but not limited to material breach of any law, regulation or applicable code of practice;
- (iii) a downward adjustment or elimination of the quantum of the BBCS payment in question by reason of any computational or accounting error.

Payments under the scheme may also only be made if they do not limit PTSB's ability to maintain, or restore, a sound capital base.

Payments are made in cash after the end of the relevant financial year. It is not considered necessary to deliver a proportion of the amount in shares, or other instruments, given that no MRTs participate in the scheme.

Guaranteed variable remuneration

Other than the potential for sign-on payments on recruitment, PTSB's Remuneration Policy does not allow for guaranteed variable remuneration (i.e. any variable pay which is not linked to performance) to be paid to any individual, as it is not consistent with sound risk management nor the pay-for-performance principle. In practice, PTSB does not provide sign-on payments. PTSB does not use retention bonuses, other than in exceptional circumstances. No MRTs received a retention bonus in 2019.

Further details on Remuneration Policy for independent control functions

Heads of Control Functions and their direct reports are identified as MRTs and as such their remuneration is overseen by the RemCo. Individuals in Control Functions are remunerated through fixed remuneration only and do not participate in variable pay schemes. Heads of Control Functions have direct access to the Chair of the relevant Board Sub-Committees.

Further details on Remuneration Policy for Material Risk Takers

While the Bank's Remuneration Policy has been designed to ensure all employees are remunerated fairly and to promote the long-term success of the business, it is also designed to promote sound and effective risk management. The operation of the policy is reviewed by the Chief Risk Officer in his Annual Report on Remuneration which, inter alia, looks at the alignment of Remuneration Policy with risk management and the regulatory risk attaching to remuneration.

There are no differences in Remuneration Policy for different categories of MRTs or any differences between different geographies.

Further details on remuneration are provided in the Directors' Report on Remuneration on pages 118 to 120 of the Annual Report 2019.

Payments on termination

Payments on termination of employment will be in accordance with the provisions of CRD IV and applicable Irish legislation. In line with regulatory requirements, any payments in relation to early termination will reflect performance achieved over time and will not reward failure or misconduct. The Bank applies this principle in respect of all staff.

As required under CRD IV, given that PTSB has received State support, any payments to members of the Board made on termination of employment which are classified as variable pay under the EBA Guidelines on sound remuneration policies, may only be paid where justified.

Leavers will receive any payments required under the terms of their contracts. Any payment in respect of the BBCS is non-contractual and will be dealt with in line with the leaver policy for that scheme. If the participant has served notice or ceased employment prior to the payment date, the default position is that the individual is not eligible for a payment.

The Bank's Voluntary Severance Scheme (VSS) applies to all permanent staff. A payment made to an MRT on termination of employment will be considered as to whether it should be subject to the variable pay cap and/or pay-out process rules. Redundancy payments in line with the Bank's Termination Framework and VSS should not, in the normal course, be subject to the variable pay cap and/or pay-out process rules.

Under CRD IV, there is a 1:1 cap on the ratio between the variable and fixed components of remuneration for MRTs. The Bank's ratio is 0:1 for 2019 (0:1 for 2018). Severance payments paid under our VSS scheme, in line with the specific exemptions in respect of certain severance payments outlined in the EBA Guidelines, have been deemed not subject to the variable pay cap.

Identification of Material Risk Takers

Staff who are deemed to have a material impact on the Bank's risk profile are identified as Material Risk Takers (MRTs) in accordance with Commission delegated Regulation (EU) No. 604/2014. The identification process for MRTs, including the definitions and interpretations to be applied by the Bank was approved by the Board Risk and Compliance Committee (the BRCC) and the RemCo.

In line with the approved definitions and interpretations, the Bank's MRT population typically comprises all members of the Board and Executive Committee, in addition to the Heads of Control Functions (i.e. Risk, Compliance and Internal Audit) and their direct reports, the members of relevant management committees and any other individuals whose professional activities have a material impact on the firm's risk profile.

HR is responsible for carrying out the self-assessment process in line with the approved definitions and interpretations. The Risk and Compliance functions, as well as relevant business support

functions are involved in the identification process. The Executive Committee and CRO undertake a review of the list of MRTs to ensure that all individuals whose professional activities have a material impact on an institution's risk profile are captured prior to BRCC review and subsequent RemCo approval.

During 2019, a total of 58 employees were identified as MRTs (2018: 66). The reduction has taken place against a background of changes to the composition of the Bank's management team, including an element of natural attrition.

Table 41: Number of Material Risk Takers - 2019

MRT Classification	Management Body Supervisory Function	Management Body Management Function	Retail Banking Function	Corporate Function	Independent Control Function	Total
Senior Management	0	3	1	5	0	9
Other MRTS	9	0	8	13	19	49
All MRTS	9	3	9	18	19	58

Table 41.a: Number of Material Risk Takers - 2018

MRT Classification	Management Body Supervisory Function	Management Body Management Function	Retail Banking Function	Corporate Function	Independent Control Function	Total
Senior Management	0	3	2	5	0	10
Other MRTS	9	0	7	16	24	56
All MRTS	9	3	9	21	24	66

Notes:

1. Senior Management is defined as members of the Executive Committee identified as MRTs in 2019.
2. For the purposes of Table 41 above, one MRT classified as Senior Management in the Independent Control Function was appointed as a member of the Management Body Management Function on the 29th October 2019. This individual has been included under Management Body Management Function in the table above.
3. Table 41.a excludes one former MRT to whom a severance payment was awarded during 2018, given the individual was not employed or identified as a MRT for either 2018 or 2017.

Quantitative remuneration disclosures (Art 450.1.g,h,i and Art 450.2)

Table 42: 2019 Aggregate Quantitative Remuneration of Material Risk Takers by Business Area (Art 450.1.g and Art 450.2)

MRT Classification	Management Body Supervisory Function	Management Body Management Function	Retail Banking Function	Corporate Function	Independent Control Function	Total
Amounts in €'m						
Senior Management	0.0	1.5	0.0	2.2	0.0	3.6
Other MRTS	0.8	0.0	1.4	2.4	3.6	8.3
All MRTS	0.8	1.5	1.4	4.6	3.6	12.0

Table 42.a: 2018 Aggregate Quantitative Remuneration of Material Risk Takers by Business Area (Art 450.1.g and Art 450.2)

MRT Classification	Management Body Supervisory Function	Management Body Management Function	Retail Banking Function	Corporate Function	Independent Control Function	Total
Amounts in €'m						
Senior Management	0.0	1.3	1.3	1.6	0.0	4.2
Other MRTS	0.7	0.0	1.3	2.8	4.0	8.8
All MRTS	0.7	1.3	2.6	4.4	4.0	13.0

Notes:

1. Senior Management is defined as members of the Executive Committee identified as MRTs in 2019.
2. For the purposes of Table 42 above, one MRT classified as Senior Management in the Independent Control Function was appointed as a member of the Management Body Management Function on 29 October 2019. This individual's total 2019 remuneration has been included under Management Body Management Function above. Further details of remuneration paid to the Bank's Executive Directors is provided in the Bank's 2019 Annual Report.
3. One MRT classified as Senior Management was identified in Retail Banking for 2019. This individual's remuneration has been included in Senior Management Corporate Function figures to ensure no possible identification of an individual's remuneration for the purposes of Table 42 above.
4. Table 42.a: Aggregate Remuneration for Senior Management categorised as Management Body in its Management Function excludes bona fide payment to a former director in settlement of proceedings for damages for breach of contract, awarded during 2018, totalling €200,000. The individual was not employed or identified as a MRT for either 2018 or 2017.
5. Quantitative disclosures are calculated in accordance with the EBA Guidelines on the Remuneration Benchmarking Exercise.

Table 43: 2019 Fixed and Variable Remuneration (Art 450.1.h.i and Art 450.2)

MRT Classification		Management Body Supervisory Function	Management Body Management Function	Retail Banking Function	Corporate Function	Independent Control Function	Total
Amounts in €'m							
Senior Management	Fixed	0.0	1.5	0.0	2.2	0.0	3.6
	Variable	0.0	0.0	0.0	0.0	0.0	0.0
	Total	0.0	1.5	0.0	2.2	0.0	3.6
	#MRTS	0.0	3.0	1.0	5.0	0.0	9.0
Other MRT	Fixed	0.8	0.0	1.4	2.4	3.5	8.2
	Variable	0.0	0.0	0.0	0.0	0.1	0.1
	Total	0.8	0.0	1.4	2.4	3.6	8.3
	#MRTS	9.0	0.0	8.0	13.0	19.0	49.0
All MRTS	Fixed	0.8	1.5	1.4	4.6	3.5	11.9
	Variable	0.0	0.0	0.0	0.0	0.1	0.1
	Total	0.8	1.5	1.4	4.6	3.6	12.0
	#MRTS	9.0	3.0	9.0	18.0	19.0	58.0
Other Staff	Fixed	0.0	0.0	48.6	65.4	15.5	129.6
	Variable	0.0	0.0	5.0	9.1	0.4	14.5
	Total	0.0	0.0	53.7	74.5	15.9	144.1
	#Staff	0.0	0.0	1,250.0	1,487.0	288.0	3,025

Notes:

1. Senior Management is defined as members of the Executive Committee identified as MRTs in 2019.
2. For the purposes of Table 43 above, one MRT classified as Senior Management in the Independent Control Function was appointed as a member of the Management Body Management Function on 29 October 2019. This individual's total 2019 remuneration has been included under Management Body Management Function above. Further details of remuneration paid to the Bank's Executive Directors is provided in the Bank's 2019 Annual Report.
3. One MRT classified as Senior Management was identified in Retail Banking for 2019. This individual's remuneration has been included under Senior Management Corporate Function to ensure no possible identification of an individual's remuneration for the purposes of Table 43 above.

4. Variable remuneration awarded to Other MRTs in 2019 comprises of one Voluntary Severance payment totalling €66,536.
5. Included under Variable remuneration awarded to Other Staff in the Retail Banking Function are amounts totalling €0.5m which relate to payments under the Branch Based Commission Scheme (BBCS) for the performance year 2019.
6. All remuneration is paid fully in cash which is not subject to deferral.
7. Quantitative disclosures are calculated in accordance with the EBA Guidelines on the Remuneration Benchmarking Exercise.

Table 43.a: 2018 Fixed and Variable Remuneration (Art 450.1.h.i and Art 450.2)

MRT Classification Amounts in €'m		Management Body Supervisory Function	Management Body Management Function	Retail Banking Function	Corporate Function	Independent Control Function	Total
Senior Management	Fixed	0	1.3	1	1.6	0	3.9
	Variable	0	0	0.3	0	0	0.3
	Total	0	1.3	1.3	1.6	0	4.2
	#MRTS	0	3	2	5	0	10
Other MRT	Fixed	0.7	0	1.3	2.8	3.9	8.7
	Variable	0	0	0	0.0	0.1	0.1
	Total	0.7	0	1.3	2.8	4	8.8
	#MRTS	9	0	7	16	24	56
All MRTS	Fixed	0.7	1.3	2.3	4.4	3.9	12.6
	Variable	0	0	0.3	0	0.1	0.4
	Total	0.7	1.3	2.6	4.4	4	13.0
	#MRTS	9	3	9	21	24	66
Other Staff	Fixed	0	0	50.1	62.4	15	127.5
	Variable	0	0	6.1	3.7	0.3	10.1
	Total	0	0	56.2	66.1	15.3	137.6
	#Staff	0	0	1,325	1,474	282	3,081

Notes:

1. Senior Management is defined as members of the Executive Committee identified as MRTs in 2018.
2. Variable remuneration for Senior Management categorised as Management Body in its Management Function excludes 1 bona fide payment to a former director in settlement of proceedings for damages for breach of contract, awarded during 2018, totalling €200,000. The individual was not employed or identified as a MRT for 2018, and as such has been excluded from the number of MRTs shown in the table above.
3. Other variable remuneration awarded to MRTs is made up of 4 Voluntary Severance payments totalling €369,186.
4. All remuneration is paid fully in cash which is not subject to deferral.
5. Quantitative disclosures are calculated in accordance with the EBA Guidelines on the Remuneration Benchmarking Exercise.

Other disclosures on remuneration 2019 (Art 450.1.h,i)

The amounts and forms of variable remuneration, split into cash, shares, share-linked instruments and other types (Art 450.1.h.ii)

- No variable remuneration was awarded to MRTs during 2019 other than severance payments under the Bank's voluntary severance scheme. As outlined above, the severance payments are deemed to be variable for regulatory purposes only but are not performance related payments.

The amounts of outstanding deferred remuneration split into vested and unvested portions (Art 450.1.h.iii)

- There is no outstanding deferred remuneration for MRTs.

The amounts of deferred remuneration awarded during the financial year, paid out and reduced through performance adjustments (Art 450.1.h.iv)

- There was no deferred remuneration awarded to MRTs in 2019, paid out and reduced through performance adjustments.

New sign-on payments made during the financial year, and the number of beneficiaries of such payments (Art 450.1.h.v)

- There were no sign-on payments made during 2019.

New severance payments made during the financial year, and the number of beneficiaries of such payments (Art 450.1.h.v)

- 177 severance payments (described in more detail below) were awarded during 2019.

Amounts of severance payments awarded during the financial year, number of beneficiaries and highest such award to a single person (Art 450.1.h.vi)

- A total of 177 severance payments were made to staff exiting in 2019, totalling €14,054,481, the highest of which was €197,633.92. Of the 177, 1 Voluntary Severance payment, totalling €66,536 was awarded in 2019 to an MRT. The majority of the severance payments resulted from a restructuring programme within the Bank.

The number of individuals being remunerated EUR 1 million or more per financial year, for remuneration between EUR 1 million and EUR 5 million broken down into pay bands of EUR 500,000 and for remuneration of EUR 5 million and above broken down into pay bands of EUR 1 million (Art 450.1.i)

- No individual was remunerated at this level in 2019.

Leverage Ratio (Art 451.1.a)

The leverage ratio was introduced by Article 429 of the CRR to act as a backstop to the capital ratios. It is a non-risk based measure expressed as a percentage of Tier 1 capital to exposures; exposures being similar to balance sheet assets with certain adjustments (see reconciliation below).

The ratio is currently in a non-binding observation period however a 3% minimum requirement will become binding in June 2021 following amendments published in CRR 2.

The leverage ratio of the Group at 31 December 2019 was 9.1% on a transitional basis was and 7.8% on a fully loaded basis (31 December 2018: 8.4% transitional and 7.1% fully loaded).

The following tables are provided in the format prescribed by Commission Implementing Regulation (EU) No 2016/200.

Table 44: Summary reconciliation of accounting assets and leverage ratio exposures (Art 451.1.b)

Table LRSum⁽¹⁾			
All figures in €m			
		Applicable Amounts	
		31-Dec-19	31-Dec-18
1	Total assets as per published financial statements	20,278	21,809
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	0	5
3	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio exposure measure in accordance with Article 429 (13) of Regulation (EU) No 575/2013 'CRR'	0	0
4	Adjustments for derivative financial instruments	1	1
5	Adjustments for securities financing transactions 'SFTs'	0	205
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	186	167
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	0	0
EU-6b	Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (14) of Regulation (EU) No 575/2013	0	0
7	Other adjustments	(76)	(185)
8	Total leverage ratio exposure	20,389	22,003

(1) Template prescribed in Regulation EU 2016/200.

Table 45: Leverage ratio common disclosure (Art 451.1.b)

Table LRCOM ⁽¹⁾ All figures in €m			
		CRR leverage ratio exposures	
		31-Dec-19	31-Dec-18
On-balance sheet exposures (excluding derivatives and SFTs)			
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	20,303	21,814
2	Asset amounts deducted in determining Tier 1 capital	(102)	(185)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	20,201	21,630
Derivative exposures			
4	Replacement cost associated with <i>all</i> derivatives transactions (i.e. net of eligible cash variation margin)	1	1
5	Add-on amounts for Potential Future Exposure (PFE) associated with <i>all</i> derivatives transactions (mark-to-market method)	1	1
11	Total derivative exposures (sum of lines 4 to 10)	2	2
Securities financing transaction exposures			
14	Counterparty credit risk exposure for SFT assets	0	205
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	0	205
Other off-balance sheet exposures			
17	Off-balance sheet exposures at gross notional amount	862	518
18	(Adjustments for conversion to credit equivalent amounts)	(676)	(350)
19	Other off-balance sheet exposures (sum of lines 17 to 18)	186	167
Capital and total exposures			
20	Tier 1 capital	1,850	1,855
21	Total leverage ratio exposures (sum of lines 3, 11, 16, 19)	20,389	22,004
Leverage ratio			
22	Leverage ratio	9.1%	8.4%
Choice on transitional arrangements and amount of derecognised fiduciary items			
EU-23	Choice on transitional arrangements for the definition of the capital measure	Transitional	Transitional

(1) Template prescribed in Regulation EU 2016/200. Rows are not shown if the question is not applicable, however in line with EBA guidance the numbering of each row is unchanged.

Table 46: Split-up of on balance sheet exposures (excluding derivatives and SFTs) (Art 451.1.b)

Table LRSpl⁽¹⁾			
All figures in €m			
		CRR leverage ratio exposures	
		31-Dec-19	31-Dec-18
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	20,303	21,814
EU-2	Trading book exposures	0	0
EU-3	Banking book exposures, of which:	20,303	21,814
EU-4	Covered bonds	0	0
EU-5	Exposures treated as sovereigns	3,002	3,162
EU-6	Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns	0	0
EU-7	Institutions	515	578
EU-8	Secured by mortgages of immovable properties	14,517	14,472
EU-9	Retail exposures	341	304
EU-10	Corporate	0	1
EU-11	Exposures in default	715	1,059
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	1,214	2,240

(1) Template prescribed in Regulation EU 2016/200.

Processes used to manage the risk of excessive leverage (Art 451.1.d)

The Group at all times manages the risk of excessive leverage through controls on the level of total assets and also the levels of CET1 and Tier 1 capital. In particular, the Group Risk Appetite Statement sets controls on the level of total assets and also the levels of capital held. The performance of the Group against these targets is measured and reported to the relevant risk committees. The Group through the committees has procedures in place to take remediating actions if any of the threshold metrics for total assets or capital levels are breached.

Factors impacting on the leverage ratio during the period (Art 451.1.e)

The Leverage Ratio on a transitional basis at 31 December 2019 is 9.1%, which is 0.7% higher than the position at 31 December 2018. The main factor for the increase in the ratio is a reduction in the overall balance sheet size as a result of the Group's NPL reduction strategy.

Use of the IRB Approach to Credit Risk (Art 452)

Competent authority's permission of the approach or approved transition (Art 452.a)

The Group is approved by the Central Bank of Ireland and European Central Bank to use the Internal Ratings Based Approach (IRB Approach) for its retail lending portfolios. The Group calculates own estimates of Probability of Default (PD), Loss Given Default (LGD) and Credit Conversion Factors (CCF) for these portfolios. The Group received approval from the ECB for material model changes (including default classification, PD and LGD) for its retail mortgage Homeloan and Buy-to-Let portfolios in 2018 following completion of a TRIM review on these models. The impact of the updated models is reflected in the RWAs for the Group from December 2018 onwards.

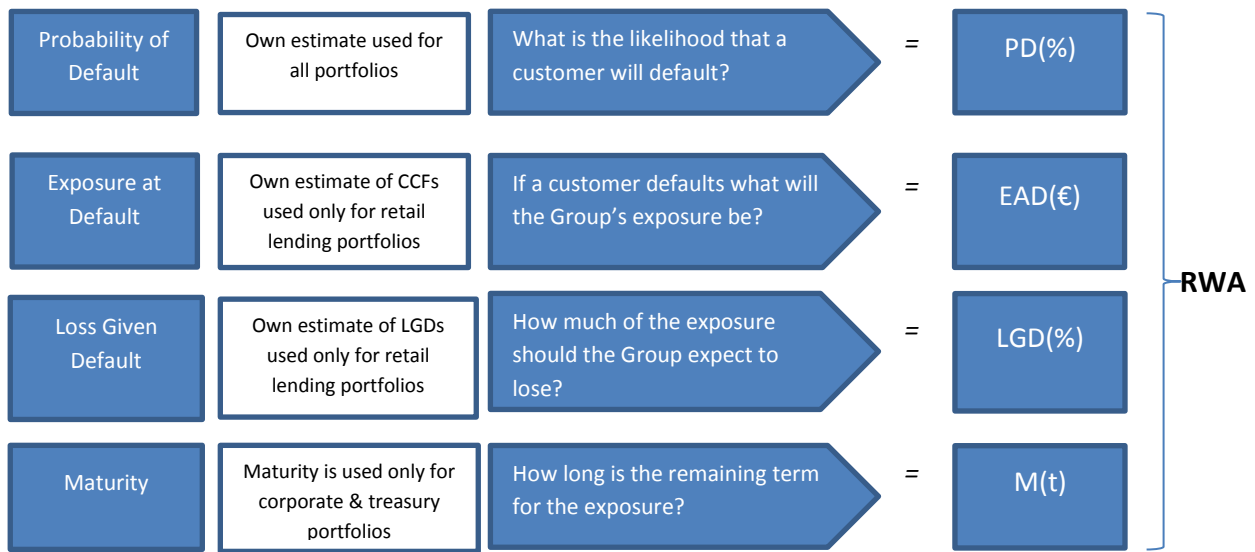
The Bank is a Foundation IRB accredited institution. IRB approaches are applied to 81% of the Bank's Exposure at Default and 19% under the Standardised approach.

The Group is also approved to use the IRB Approach for its corporate lending portfolio and Treasury exposures with the exception of EU Sovereign exposures where the Group has a PPU to use the standardised approach. The Group has received permission under a PPU to apply the standardised approach to its corporate lending portfolio. This will be implemented at the beginning of 2020.

Internal ratings process (Art 452.c)

The Bank is primarily a retail institution. All Retail IRB portfolios are made up of Probability of Default (PD) models, Exposure at Default (EAD) models and Loss Given Default (LGD) models. PD Models leverage scorecards that are generally constructed using regression analysis for all of the key portfolios. Typical scoring characteristics include financial details, bureau information, product behavioural and current account data. LGD is worked out based on the discounted realised recoveries and associated discounted costs for all observed defaults in the dataset. Having identified relevant drivers of loss, exposures are placed into 'pools' and realised LGD is estimated for each pool. For CCF, realised CCFs are calculated based on historic defaults. Within this process, drivers of realised CCF are identified (e.g. limit utilisation). These drivers are then used to create pools. Average realised CCFs are then applied to each pool.

The Group calculates its own estimates of certain key parameters for quantifying the credit risk on its lending portfolios. The results are combined in the Group's IRB models to produce Risk Weighted Assets (RWA) which are a key driver (denominator) of the Group's capital ratio. More detail on the calculation is illustrated on the diagram below:

Key parameters in the RWA calculation**Retail exposures**

The following descriptions for retail exposures is relevant to exposures secured by immovable property (i.e. mortgages), qualified revolving credit exposures and other unsecured exposures e.g. term loans.

Probability of Default (PD)

Internal ratings are assigned as part of the credit approval process for retail exposures. The consistency and transparency of the internal ratings are ensured by the use of rating models. A rating model is a set of specified and distinct rating criteria, which assigns a grade on the basis of a set of characteristics or attributes associated with an exposure. Credit scoring plays a central role in the ratings process.

Credit scoring combined with appropriate portfolio risk segmentation is the method used to assign grades, and in turn PDs, to individual exposures. PD models are developed at a portfolio level using available internal data at the time of development (usually over a 10+ year period covering at least a full economic cycle). With regard to portfolio segmentation – the Group's credit exposures have been segmented to appropriately reflect the characteristics, and risk profile, associated with different types of exposures.

Scorecards have been designed for each segment based on the drivers or characteristics of default associated with each segment. For instance, scorecards have been specifically developed for the Group's mortgage and unsecured business. Two broad types of scorecards are utilised by the Group, application scorecards & behavioural scorecards. The scorecards have been constructed using regression analysis for all of the key portfolios. Typical scoring characteristics include financial details, bureau information, product behavioural and current account data. For segments where there is not enough data to develop statistical models, expert judgement based models are used.

Scorecard output is used as part of a calibration process to determine a PD percentage for each exposure. In doing so, exposures have been calibrated to one-year default rates that are applicable for each segment based on the regulatory approved definition of default. The one-year default rates used in this calibration process have been calibrated to ensure they cater for the 'long-run' experience.

PD IRB models undergo an annual periodic validation cycle. Variances between PD and actual default rates are calculated through this periodic validation cycle and where necessary revisions to estimates are proposed and implemented

Loss Given Default (LGD)

The Banks LGD models are developed using available default data at the time of development. Downturn LGD is calculated based on the relevant regulations at the time of model development. Time in default is analysed as part of the model development process. During model validation these aspects are reviewed in terms of stability compared to the values at time of development.

As a means of meeting the CRR requirements with regard to LGD – the Group makes use of the “workout” approach to LGD estimation for all retail IRB portfolios. It is used for each of the Group’s key retail segments including mortgages, unsecured, revolving credit.

The process splits into two key areas: estimation of ‘realised’ LGD at pool level and the calibration of pools to meet the downturn requirements set out in the CRR (provided ‘downturn’ realised loss rates are worse than ‘long run’ conditions). Therefore, as part of the estimation process, realised LGD is worked out based on the discounted realised recoveries and associated discounted costs for all observed defaults in the dataset. Having identified relevant drivers of loss, exposures are placed into ‘pools’ and realised LGD is estimated for each pool. The second step sees the calibration of each pool to appropriate downturn conditions and assessed against the long run realised loss rates.

Credit Conversion Factor (CCF)

The Banks EAD models are used to calculate CCFs. These models are developed using available default data at the time of development and undergo the same periodic validation cycle as the Banks PD and LGD IRB models. The vast majority of retail exposures operating under the IRB approach do not have “undrawn” amounts. The retail portfolios for which IRB approval has been granted are mainly structured repayment facilities (mortgages and term loans) and as outlined, proportionately not many facilities have undrawn amounts.

The Group uses a two-step approach to CCF modelling. In step one, realised CCFs are calculated based on historic defaults. Within this process, drivers of realised CCF are identified (e.g. limit utilisation). These drivers are then used to create pools. Average realised CCFs are then applied to each pool.

In the second step, the pool CCFs from step one are adjusted for a downturn / long run scenario (as required).

Corporate exposures

Probability of Default (PD)

Internal ratings are assigned as part of the credit approval process for corporate exposures. The consistency and transparency of the internal ratings are ensured by the use of rating models. A rating model is a set of specified and distinct rating criteria, which assigns a grade on the basis of a set of characteristics or attributes associated with an exposure. Credit scoring plays a central role in the ratings process.

Credit scoring combined with appropriate portfolio risk segmentation is the method used to assign grades, and in turn PDs, to individual exposures. With regard to portfolio segmentation – the Group's credit exposures have been segmented to appropriately reflect the characteristics, and risk profile, associated with different types of exposures.

Scorecards have been designed for each segment based on the drivers or characteristics of default associated with each segment. Two broad types of scorecards are utilised by the Group, application scorecards & behavioural scorecards. The scorecards have been constructed using regression analysis for all of the key portfolios. Typical scoring characteristics include financial details, bureau information, product behavioural and current account data. For segments where there is not enough data to develop statistical models, expert judgement based models are used.

Scorecard output is used as part of a calibration process to determine a PD percentage for each exposure. In doing so, exposures have been calibrated to one-year default rates that are applicable for each segment based on the regulatory approved definition of default. The one-year default rates used in this calibration process have been adjusted to ensure they cater for the 'long-run'.

The Group has no exposures in the specialised lending or purchased corporate receivables category.

Loss Given Default (LGD)

For exposures to corporates, the Group uses the LGDs specified in article 161 of the CRR. As of 31 December 2019 all exposures were senior and therefore carried an LGD of 45%.

Credit Conversion Factor (CCF)

For exposure to corporates, the Group uses the CCFs specified in the CRR.

Institutional exposures

Probability of Default (PD)

For exposures to institutions, the internal rating process involves the selection of individual counterparty ratings from nominated ECAI's. The counterparty rating is then run through a notching process with a final IRB being determined by selecting the middle rating subject to additional criteria. The notched IRB is then mapped to a PD which is determined through the Group's calibration process.

Loss Given Default (LGD)

For exposures to other banks the Group uses the LGDs specified in article 161 of the CRR. As of 31 December 2019 all exposures were senior and therefore carried an LGD of 45%.

Credit Conversion Factor (CCF)

For exposures to other banks the Group uses the CCFs specified in the CRR.

Equity exposures

For exposures to equities in the banking book, the Group uses the simple risk weight approach.

Structure of the Group's internal rating system (Art 452.b)

All of the Group's exposures classified under the IRB approach are mapped to a 25 point rating scale. The twenty five point internal rating scale ranges from 1 to 25, where 1 represents the best risk grade or lowest PD and 25 represents the defaulted exposures or PD = 100%. The internal rating scale or masterscale is not a rating tool but is based on probability of default and is used to aggregate borrowers for comparison and reporting purposes after their rating by the underlying models as outlined earlier in the Internal Rating Process section. It should be noted that the models require recalibration at relevant intervals which can result in a change to the PD applicable to the rating grade and hence this can result in a change to the masterscale profile at a portfolio level.

The twenty five point rating scale has been summarised for presentation purposes into 5 blocks or segments as per the disclosures in the Group's financial statements, namely:

- Investment Grade – IRB ratings 1 to 7
- Excellent Risk profile – IRB ratings 8 to 16
- Satisfactory Risk profile - IRB ratings 17 to 21
- Fair Risk Profile - IRB ratings 22 to 24
- Defaulted Cases

Investment Grade categories represent strong exposures sovereigns or institutional investors.

Excellent risk profile grades would typically include performing residential mortgages.

The satisfactory risk profile grades typically include consumer finance exposures and larger mortgage exposures e.g. commercial investment property.

Fair risk profile contains the remainder of the Group's exposures which are not defaulted and includes certain cases which have not yet defaulted but are exhibiting underlying symptoms of potential default e.g. missed payments or partial payments.

The defaulted category is self-explanatory and contains those facilities which have defaulted, where default is defined as 90 days past due or where the Group considers that the customer is unlikely to pay the outstanding liability in full.

The table below shows the mapping from the internal rating scale to the Moody's rating scale, using summarised blocks from the Group's 25 point internal rating scale. As outlined earlier on the Group's masterscale, 1 is the best risk category & 25 the worst or defaulted category.

Indicative mapping of the Group's rating segments to Moody's

Internal Rating Category	Moody's Equivalent	IRB Grade
Investment	AAA - A3	1-7
Excellent	Baa1 - Ba1	8-16
Satisfactory	Ba2 - B1	17-21
Fair	B2 - C	22-24
Defaulted	D	25

The mapping of the internal ratings to the Moody's rating scale is shown for illustrative purposes and it is not intended to reflect that there is a fixed relationship between the Group's internal rating grades and the Moody's rating grades since the rating approaches differ.

Credit Risk Mitigation

The Group's principal exposure to credit risk is in respect of retail mortgage lending. The value of the collateral held is reflected in the LGD estimation process. The LGDs for the Group's retail portfolios are based on internal models and are divided into pools driven by appropriate drivers of loss. Compliance with the CRR minimum of 10% is maintained if necessary.

Please see the chapter on Credit Risk Mitigation on page 124 for more information.

Validation and review of internal ratings process

Permanent TSB has established an internal validation process in accordance with the CRR and regulatory requirements to ensure that the rating systems in place for Probability of Default (PD), Loss Given Default (LGD) and Credit Conversion factor (CCF) remain appropriate for the relevant IRB portfolios.

The Model Validation Team (MVT) is part of the Financial Risk and Risk Analytics team within Group Risk and forms part of the second line of defence function. The Head of Validation reports to the Head of Financial Risk and Analytics, who in turn reports to the Chief Risk Officer (CRO).

The principal activities carried out by Validation with respect to the Internal Ratings process include review of redevelopments and updates to existing rating systems (initial validation), formal on-going periodic validation of existing rating systems, as well as on-going monitoring of rating system performance (Trigger Reporting).

Each of the Group's internal rating systems is subjected to Initial Validation when first developed, as well as a cycle of formal periodic validation. This involves a comprehensive review of the rating system across a range of key headings including model performance, back testing and business use

of the models and data quality. The Initial Validation, carried out for all enhancements or new developments, provides independent assurance as to the suitability of the methodologies used to develop the rating systems, as well as assessing model performance and compliance with CRD and other regulatory requirements. No enhancement to any of the Group's internal rating systems is permitted to go live without a recommendation for approval from the Model Validation Team and is approved in accordance with the Group's IRB governance process. Any implementation of changes to rating systems are also subject to appropriate regulatory oversight in line with the materiality requirements detailed in EU 529/2014, and the Model Validation Team consider this materiality as part of the validation process.

The validation process provides an on-going independent review of models and incorporates both quantitative and qualitative measures. It assesses procedures and systems to ensure the accuracy of PD, LGD and CCF estimates. The tests employed in the validation process include statistical performance tests of the rating models' discriminatory power and accuracy, comparison of PD, LGD and EAD results against realised outcomes, and assessment of conservatism levels appropriate to the rating system. Validation processes are subject to on-going enhancement to reflect industry best practice and regulatory requirements and are subject to Permanent TSB's governance process.

The results of initial validation reviews and periodic validations carried out, as well as Trigger Reporting reviews and status of validation findings, are reported on a regular basis in line with the Group's Governance processes. Oversight is provided to the CRO and to Group Risk Committee (GRC) as appropriate to the level of materiality involved. All outcomes and the on-going status of findings from validations are reported to GRC as part of the CRO Reporting pack.

The activities of the Model Validation Team are subject to annual review by Group Internal Audit.

Table 47: EU CR6: IRB approach – Credit risk exposures by exposure class and PD range (Advanced IRB)¹⁰ (Art 452.d, 452.e, 452.f, 452.g)

2019 PD Scale	Original on- balance sheet gross exposures €m	Off-balance sheet exposures pre-CCF €m	Average CCF %	EAD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average maturity in years	RWA €m	RWA density %	EL €m	Value adjustments and provisions €m
Total AIRB												
0.00 to 0.15	3	64	106%	206	0.1%	375,041	61%	-	11	5%	0	
0.15 to <0.25	23	84	70%	124	0.2%	118,930	49%	-	11	9%	0	
0.25 to <0.50	44	63	72%	131	0.4%	119,746	54%	-	26	20%	0	
0.50 to <0.75	1,425	149	91%	1,577	0.6%	78,352	25%	-	369	23%	3	
0.75 to <2.50	10,827	363	91%	11,167	1.3%	211,390	23%	-	4,091	37%	36	
2.50 to <10.00	2,240	111	89%	2,356	6.2%	114,713	25%	-	2,059	87%	36	
10.00 to <100.00	654	12	97%	665	29.3%	21,719	26%	-	961	145%	48	
100.00 (Default)	980	4	98%	980	100.0%	10,478	38%	-	618	63%	302	
Total Advanced IRB	16,196	850	91%	17,206	8.6%	1,050,369	26%	-	8,146	47%	425	758
Retail - Secured by Real Estate												
0.00 to 0.15	-	-	-	-	-	-	-	-	-	-	-	
0.15 to <0.25	-	-	-	-	-	-	-	-	-	-	-	
0.25 to <0.50	-	-	-	-	-	-	-	-	-	-	-	
0.50 to <0.75	1,380	105	92%	1,471	0.6%	10,791	23%	-	334	23%	2	
0.75 to <2.50	10,688	287	91%	10,937	1.3%	82,152	23%	-	3,946	36%	34	
2.50 to <10.00	2,172	81	89%	2,237	6.3%	15,888	23%	-	1,945	87%	32	
10.00 to <100.00	628	3	98%	631	29.7%	3,559	25%	-	916	145%	44	
100.00 (Default)	958	3	100%	958	100.0%	5,558	37%	-	613	64%	281	
Total Retail - Secured by Real Estate	15,826	480	91%	16,234	8.9%	117,948	24%	-	7,754	48%	393	730

¹⁰ The average CCF's do not include the regulatory EAD which is applied to accounts without limits. This will disappear on approval of the new TRIM models. There is a shift of EADs between the first two PD bands for Qualifying Revolving which has been driven by a reduction in conservatism in the two years.

2019 PD Scale	Original on- balance sheet gross exposures €m	Off-balance sheet exposures pre-CCF €m	Average CCF %	EAD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average maturity in years	RWA €m	RWA density %	EL €m	Value adjustments and provisions €m
Retail Qualifying Revolving												
0.00 to 0.15	1	64	106%	204	0.1%	374,930	61%	-	10	5%	0	
0.15 to <0.25	16	73	70%	103	0.2%	111,594	48%	-	5	5%	0	
0.25 to <0.50	20	60	70%	97	0.4%	112,706	51%	-	9	9%	0	
0.50 to <0.75	17	43	66%	63	0.6%	56,815	45%	-	8	12%	0	
0.75 to <2.50	36	71	71%	118	1.4%	112,451	53%	-	32	27%	1	
2.50 to <10.00	20	24	81%	61	4.6%	89,142	61%	-	43	71%	2	
10.00 to <100.00	9	8	64%	17	18.7%	15,646	48%	-	20	121%	2	
100.00 (Default)	8	1	13%	8	100.0%	3,939	87%	-	4	43%	7	
Total Retail Qualifying Revolving	126	345	81%	670	2.5%	877,223	54%	-	131	20%	12	11
Other Retail												
0.00 to 0.15	2	0	61%	2	0.1%	111	67%	-	1	26%	0	
0.15 to <0.25	7	10	70%	21	0.2%	7,336	57%	-	6	28%	0	
0.25 to <0.50	25	3	75%	33	0.4%	7,040	63%	-	17	51%	0	
0.50 to <0.75	28	1	95%	43	0.6%	10,746	61%	-	27	63%	0	
0.75 to <2.50	103	5	97%	113	1.4%	16,787	66%	-	114	101%	1	
2.50 to <10.00	48	6	107%	58	4.6%	9,683	64%	-	70	121%	2	
10.00 to <100.00	16	0	86%	17	23.4%	2,514	57%	-	25	145%	3	
100.00 (Default)	14	0	0%	14	100.0%	981	85%	-	2	14%	13	
Total - Other Retail	244	26	89%	302	7.5%	55,198	64%	-	261	87%	20	17

2018	Original on-balance sheet gross exposures €m	Off-balance sheet exposures pre-CCF €m	Average CCF %	EAD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average maturity in years	RWA €m	RWA density %	EL €m	Value adjustments and provisions €m
PD Scale												
Total AIRB												
0.00 to 0.15	11	31	55%	32	0.1%	11,304	32%	-	1	5%	0	
0.15 to <0.25	16	114	88%	286	0.2%	451,310	59%	-	21	7%	0	
0.25 to <0.50	46	65	69%	133	0.4%	119,698	54%	-	26	20%	0	
0.50 to <0.75	1,396	116	89%	1,533	0.6%	80,024	25%	-	355	23%	2	
0.75 to <2.50	10,677	274	92%	11,003	1.4%	210,321	23%	-	3,939	36%	35	
2.50 to <10.00	2,190	97	91%	2,307	6.2%	112,722	25%	-	2,055	89%	35	
10.00 to <100.00	762	9	98%	774	29.4%	28,082	26%	-	1,113	144%	55	
100.00 (Default)	1,626	1	1%	1,626	100.0%	15,962	39%	-	985	61%	601	
Total Advanced IRB	16,724	706	84%	17,695	12.2%	1,029,423	26%	-	8,495	48%	730	1,021
Retail - Secured by Real Estate												
0.00 to 0.15	-	-	-	-	-	-	-	-	-	-	-	
0.15 to <0.25	-	-	-	-	-	-	-	-	-	-	-	
0.25 to <0.50	-	-	-	-	-	-	-	-	-	-	-	
0.50 to <0.75	1,351	72	91%	1,425	0.6%	10,655	23%	-	320	22%	2	
0.75 to <2.50	10,563	201	93%	10,798	1.4%	83,794	22%	-	3,819	35%	33	
2.50 to <10.00	2,132	67	91%	2,196	6.2%	15,303	24%	-	1,954	89%	32	
10.00 to <100.00	741	1	99%	744	29.9%	4,310	25%	-	1,073	144%	52	
100.00 (Default)	1,599	-	0%	1,599	100.0%	8,819	38%	-	977	61%	576	
Total Retail - Secured by Real Estate	16,386	341	84%	16,763	12.6%	122,881	24%	-	8,144	49%	695	989

2018	Original on-balance sheet gross exposures €m	Off-balance sheet exposures pre-CCF €m	Average CCF %	EAD post CRM and post CCF €m	Average PD %	Number of obligors	Average LGD %	Average maturity in years	RWA €m	RWA density %	EL €m	Value adjustments and provisions €m
PD Scale												
Retail Qualifying Revolving												
0.00 to 0.15	8	31	60%	29	0.1%	11,152	28%	-	1	2%	0	
0.15 to <0.25	9	104	90%	266	0.2%	444,164	59%	-	15	6%	0	
0.25 to <0.50	20	62	70%	100	0.4%	113,637	50%	-	9	9%	0	
0.50 to <0.75	18	43	67%	64	0.6%	57,824	45%	-	8	13%	0	
0.75 to <2.50	35	68	71%	116	1.4%	112,334	54%	-	32	27%	1	
2.50 to <10.00	20	23	79%	63	4.7%	89,791	61%	-	46	72%	2	
10.00 to <100.00	10	8	63%	18	17.9%	21,708	52%	-	24	129%	2	
100.00 (Default)	12	1	0%	12	100.0%	6,364	88%	-	5	40%	11	
Total Retail Qualifying Revolving	132	340	77%	669	3.1%	856,974	55%	-	139	21%	16	15
Other Retail												
0.00 to 0.15	3	-	0%	3	0.1%	152	67%	-	1	25%	0	
0.15 to <0.25	7	10	69%	20	0.2%	7,146	57%	-	6	29%	0	
0.25 to <0.50	26	3	66%	33	0.4%	6,061	63%	-	17	51%	0	
0.50 to <0.75	27	1	78%	43	0.6%	11,545	60%	-	27	61%	0	
0.75 to <2.50	79	5	106%	89	1.4%	14,193	65%	-	88	99%	1	
2.50 to <10.00	38	6	108%	48	4.7%	7,628	62%	-	55	116%	2	
10.00 to <100.00	11	0	80%	11	21.3%	2,064	57%	-	17	145%	2	
100.00 (Default)	15	0	76%	15	100.0%	779	85%	-	3	17%	14	
Total - Other Retail	206	25	90%	263	8.3%	49,568	64%	-	212	81%	19	17

Table 48: EU CR6: IRB approach – Credit risk exposures by exposure class and PD range (Foundation IRB)¹¹ (Art 452.d, 452.e, 452.f, 452.g)

2019	Original on-balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity in years	RWA	RWA density	EL	Value adjustments and provisions
PD Scale	€m	€m	%	€m	%		%		€m	%	€m	€m
Institutions												
0.00 to 0.15	515	-	-	515	0.0%	32	45%	0	140	27%	0	
0.15 to <0.25	-	-	-	-	-	-	-	-	-	-	-	
0.25 to <0.50	-	-	-	-	-	-	-	-	-	-	-	
0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	
0.75 to <2.50	-	-	-	-	-	-	-	-	-	-	-	
2.50 to <10.00	-	-	-	-	-	-	-	-	-	-	-	
10.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	
100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	
Total institutions	515	-	-	515	0.0%	32	45%	0	140	27%	0	0

¹¹ The Group received permission in 2019 under a PPU to apply the standardised approach to its euro denominated central government and corporate exposures going forward. As such, only 'Institutions' is disclosed under FIRB exposure classes.

2018	Original on- balance sheet gross exposures	Off-balance sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity in years	RWA	RWA density	EL	Value adjustments and provisions
PD Scale	€m	€m	%	€m	%		%		€m	%	€m	€m
Institutions												
0.00 to 0.15	491	-	-	491	0.0%	30	45%	0	135	27%	0	
0.15 to <0.25	87	-	-	87	0.2%	6	45%	0	52	60%	0	
0.25 to <0.50	-	-	-	-	-	-	-	-	-	-	-	
0.50 to <0.75	-	-	-	-	-	-	-	-	-	-	-	
0.75 to <2.50	-	-	-	-	-	-	-	-	-	-	-	
2.50 to <10.00	-	-	-	-	-	-	-	-	-	-	-	
10.00 to <100.00	-	-	-	-	-	-	-	-	-	-	-	
100.00 (Default)	-	-	-	-	-	-	-	-	-	-	-	
Total institutions	578	-	-	578	0.1%	36	45%	0	187	32%	0	0

Table 49: EU CCR4: IRB approach – CCR exposures by portfolio and PD scale (Art 452.e)

2019							
FIRB Exposure Class	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity in years	RWA	RWA density
PD Scale	€m	%		%		€m	%
Institutions							
0.00 to 0.15	1	0.0%	13	45%	0	1	41%
0.15 to <0.25	0	0.0%	2	45%	1	0	57%
0.25 to <0.50	-	-	-	-	-	-	-
0.50 to <0.75	-	-	-	-	-	-	-
0.75 to <2.50	-	-	-	-	-	-	-
2.50 to <10.00	-	-	-	-	-	-	-
10.00 to <100.00	-	-	-	-	-	-	-
100.00 (Default)	-	-	-	-	-	-	-
Total institutions	2	0.0%	15	45%	0	1	44%
2018							
FIRB Exposure Class	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity in years	RWA	RWA density
PD Scale	€m	%		%		€m	%
Institutions							
0.00 to 0.15	272	0.1%	19	45%	0	47	17%
0.15 to <0.25	127	0.2%	21	45%	0	44	35%
0.25 to <0.50	-	-	-	-	-	-	-
0.50 to <0.75	-	-	-	-	-	-	-
0.75 to <2.50	-	-	-	-	-	-	-
2.50 to <10.00	-	-	-	-	-	-	-
10.00 to <100.00	-	-	-	-	-	-	-
100.00 (Default)	-	-	-	-	-	-	-
Total institutions	399	0.1%	40	45%	0	90	23%

The year on year decrease is due to repo exposures which reduced to nil at the end of 2019.

Table 50: EU CR9: IRB approach – Backtesting of PD per exposure class (Art 452.i)

2019	Number of obligors							
AIRB Exposure Class PD range	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	of which new obligors	Average historical annual default rate
Retail - Secured by Real Estate								
0.00 to <0.15	N/A	0.0%	0.0%	-	-	-	-	0.1%
0.15 to <0.25	N/A	0.0%	0.0%	-	-	-	-	0.3%
0.25 to <0.50	N/A	0.0%	0.0%	-	-	-	-	0.8%
0.50 to <0.75	N/A	0.6%	0.6%	10,655	10,791	39	1	1.1%
0.75 to <2.50	N/A	1.3%	1.3%	83,794	82,152	397	4	1.7%
2.50 to <10.00	N/A	6.3%	6.2%	15,303	15,888	346	-	7.6%
10.00 to <100.00	N/A	29.7%	31.8%	4,310	3,559	637	2	23.3%
100.00 (Default)	N/A	100.0%	100.0%	8,819	5,558	-	-	0.0%
Subtotal				122,881	117,948	1,419	7	
Retail Qualifying Revolving								
0.00 to <0.15	N/A	0.1%	0.1%	11,152	374,930	13	1	0.1%
0.15 to <0.25	N/A	0.2%	0.2%	444,164	111,594	342	21	0.1%
0.25 to <0.50	N/A	0.4%	0.4%	113,637	112,706	232	22	0.2%
0.50 to <0.75	N/A	0.6%	0.6%	57,824	56,815	160	9	0.4%
0.75 to <2.50	N/A	1.4%	1.4%	112,334	112,451	702	64	0.8%
2.50 to <10.00	N/A	4.6%	4.8%	89,791	89,142	3,245	134	4.1%
10.00 to <100.00	N/A	18.7%	16.8%	21,708	15,646	3,740	59	14.3%
100.00 (Default)	N/A	100.00%	100.0%	6,364	3,939	-	-	0.0%
Subtotal				856,974	877,223	8,434	310	
Other Retail								
0.00 to <0.15	N/A	0.1%	0.1%	151	111	-	-	0.0%
0.15 to <0.25	N/A	0.2%	0.2%	7,146	7,336	5	-	0.1%
0.25 to <0.50	N/A	0.4%	0.4%	6,061	7,040	7	-	0.1%
0.50 to <0.75	N/A	0.6%	0.6%	11,545	10,746	11	1	0.2%
0.75 to <2.50	N/A	1.4%	1.4%	14,193	16,787	108	22	0.8%
2.50 to <10.00	N/A	4.6%	4.9%	7,628	9,683	277	71	3.0%
10.00 to <100.00	N/A	23.4%	22.3%	2,064	2,514	223	6	16.6%
100.00 (Default)	N/A	100.0%	100.00%	779	981	-	-	0.0%
Subtotal				49,567	55,198	631	100	

2019	External rating equivalent			Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which new obligors	Average historical annual default rate
FIRB Exposure Class ¹² PD range	Moody's	S&P	Fitch			End of previous year	End of the year			
Institutions										
0.00 to <0.15	Aaa to A3	AAA to A-	AAA to A-	0.0%	0.1%	49	45	-	-	-
0.15 to <0.25	Baa1	BBB+	BBB+	0.2%	0.2%	27	2	-	-	-
0.25 to <0.50	Baa2	BBB	BBB	-	-	-	-	-	-	-
0.50 to <0.75	Baa3	BBB-	BBB-	-	-	-	-	-	-	-
0.75 to <2.50	Ba1 to Ba2	BB+ to BB	BB+ to BB	-	-	-	-	-	-	-
2.50 to <10.00	Ba3 to B1	BB- to B+	BB- to B+	-	-	-	-	-	-	-
10.00 to <100.00	B2 to C	B to C	B to C	-	-	-	-	-	-	-
100.00 (Default)	D	D	D	-	-	-	-	-	-	-
Subtotal						76	47	-	-	-

¹² The Group received permission in 2019 under a PPU to apply the standardised approach to its euro denominated central government and corporate exposures going forward. As such, only 'Institutions' is disclosed under FIRB exposure class

2018

2018	Number of obligors							
AIRB Exposure Class PD range	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	of which new obligors	Average historical annual default rate
Retail - Secured by Real Estate								
0.00 to <0.15	N/A	0.0%	0.0%	1,340	-	3	-	0.0%
0.15 to <0.25	N/A	0.0%	0.0%	3,321	-	17	-	0.4%
0.25 to <0.50	N/A	0.0%	0.0%	22,426	-	351	3	0.9%
0.50 to <0.75	N/A	0.6%	0.6%	26,013	10,655	639	6	1.3%
0.75 to <2.50	N/A	1.4%	1.3%	59,269	83,794	2,062	28	2.3%
2.50 to <10.00	N/A	6.2%	6.2%	2,158	15,303	391	23	9.6%
10.00 to <100.00	N/A	29.9%	31.5%	3,194	4,310	1,102	4	27.5%
100.00 (Default)	N/A	100.0%	100.0%	7,850	8,819	-	-	0.0%
Subtotal				125,571	122,881	4,565	64	
Retail Qualifying Revolving								
0.00 to <0.15	N/A	0.1%	0.1%	10,099	11,152	15	-	0.1%
0.15 to <0.25	N/A	0.2%	0.2%	395,004	444,164	185	2	0.1%
0.25 to <0.50	N/A	0.4%	0.4%	124,594	113,637	177	8	0.2%
0.50 to <0.75	N/A	0.6%	0.6%	70,119	57,824	194	7	0.4%
0.75 to <2.50	N/A	1.4%	1.4%	114,266	112,334	644	57	0.8%
2.50 to <10.00	N/A	4.7%	4.9%	92,884	89,791	2,693	117	4.1%
10.00 to <100.00	N/A	17.9%	15.7%	26,863	21,708	3,626	76	14.4%
100.00 (Default)	N/A	100.0%	100.0%	5,722	6,364	-	-	0.0%
Subtotal				839,551	856,974	7,534	267	
Other Retail								
0.00 to <0.15	N/A	0.1%	0.1%	170	152	-	-	0.0%
0.15 to <0.25	N/A	0.2%	0.2%	7,009	7,146	2	-	0.1%
0.25 to <0.50	N/A	0.4%	0.3%	6,776	6,061	10	1	0.1%
0.50 to <0.75	N/A	0.6%	0.6%	10,085	11,545	16	-	0.3%
0.75 to <2.50	N/A	1.4%	1.4%	11,698	14,193	84	9	0.9%
2.50 to <10.00	N/A	4.7%	4.9%	6,081	7,628	337	38	3.2%
10.00 to <100.00	N/A	21.3%	18.5%	1,304	2,064	163	3	19.4%
100.00 (Default)	N/A	100.0%	100.0%	538	779	-	-	0.0%
Subtotal				43,661	49,568	612	51	

2018

FIRB Exposure Class**PD range****Institutions**

0.00 to <0.15
0.15 to <0.25
0.25 to <0.50
0.50 to <0.75
0.75 to <2.50
2.50 to <10.00
10.00 to <100.00
100.00 (Default)

Subtotal

External rating equivalent				Number of obligors					Average historical annual default rate
Moody's	S&P	Fitch	Weighted average PD	Arithmetic average PD by obligors	End of previous year	End of the year	Defaulted obligors in the year	of which new obligors	
Aaa to A3	AAA to A-	AAA to A-	0.1%	0.1%	53	49	-	-	-
Baa1	BBB+	BBB+	0.2%	0.2%	30	27	-	-	-
Baa2	BBB	BBB	-	-	3	-	-	-	-
Baa3	BBB-	BBB-	-	-	-	-	-	-	-
Ba1 to Ba2	BB+ to BB	BB+ to BB	-	-	-	-	-	-	-
Ba3 to B1	BB- to B+	BB- to B+	-	-	-	-	-	-	-
B2 to C	B to C	B to C	-	-	-	-	-	-	-
D	D	D	-	-	-	-	-	-	-
					86	76	-	-	

Description of the factors that impacted on the loss experience (Art 452.h)

For a detailed description of the factors impacting on the loss experience during the year, please see pages 38 and 39 of the Group's 2019 Annual Report.

Table 51: CRR Expected losses compared to accounting specific credit risk adjustments for each exposure class since 2012 (Art 452.i)

The table below makes a comparison between the expected loss on performing IRB loans as at December 2018 with the actual loss (charge incurred on accounts that moved into Stage 3 in 2019) in the year ended December 2019.

Regulatory EL provides a view of the expected losses that are likely to arise in the non-defaulted book over the coming 12 month period, using through the cycle estimates for PD and through the cycle or downturn estimates (as appropriate) for LGD and EAD. In order to validate this expected loss, the realised losses would need to be all realised losses which have arisen on all assets when they have gone through their full life cycle – this is not possible as it may take years for the full loss to be realised. The provision charge does not provide a suitable alternative as this information is calculated at a point in time. For these reasons the table below should be reviewed bearing in mind these limitations.

<i>figures in €'m</i>	Performing Regulatory Expected Loss	ECL Charge (on accounts that moved into Stage 3 in 2019)	Difference
Expected Loss vs Actual Loss	Dec'18	Dec'19	
Sovereign	0	0	(0)
Institutions	0	0	(0)
Corporate	3	11	8
Total foundation IRB approach	4	11	7
Retail Mortgages	117	34	(83)
Retail Qualified Revolving	5	2	(3)
Retail Other	5	2	(3)
Total advanced IRB approach	126	38	(89)
Total IRB approach	130	48	(82)

<i>figures in €'m</i>	Performing Regulatory Expected Loss	ECL Charge (on accounts that moved into Stage 3 in 2018)	Difference
Expected Loss vs Actual Loss	Dec'17	Dec'18	
Sovereign	0	0	(0)
Institutions	0	0	(0)
Corporate	3	2	(1)
Total foundation IRB approach	3	2	(1)
Retail Mortgages	72	38	(34)
Retail Qualified Revolving	5	2	(3)
Retail Other	4	9	5
Total advanced IRB approach	82	49	(32)
Total IRB approach	85	52	(33)

The tables below show the actual provisions held by the Group under the accounting standards (IAS39) compared to the regulatory expected losses predicted by the Group's IRB models.

<i>figures in €'m</i>	Regulatory Expected Loss	Accounting Specific Impairment	Difference
Expected Loss vs Actual Loss	Dec'16	Dec'17	
Sovereign	0	0	0
Institutions	1	0	(1)
Corporate	52	67	15
Total foundation IRB approach	53	67	14
Retail Mortgages	2,042	2,093	51
Retail Qualified Revolving	27	11	(16)
Retail Other	19	14	(5)
Total advanced IRB approach	2,088	2,118	30
Total IRB approach	2,141	2,184	43

<i>figures in €'m</i>	Regulatory Expected Loss	Accounting Specific Impairment	Difference
Expected Loss vs Actual Loss	Dec'15	Dec'16	
Sovereign	0	0	0
Institutions	1	0	(1)
Corporate	89	83	(6)
Total foundation IRB approach	90	83	(7)
Retail Mortgages	2,255	2,317	61
Retail Qualified Revolving	28	24	(4)
Retail Other	21	26	5
Total advanced IRB approach	2,304	2,366	62
Total IRB approach	2,394	2,449	55

<i>figures in €'m</i>	Regulatory Expected Loss	Accounting Specific Impairment	Difference
Expected Loss vs Actual Loss	Dec'14	Dec'15	
Sovereign	0	0	0
Institutions	12	0	(12)
Corporate	605	114	(491)
Total foundation IRB approach	617	114	(503)
Retail Mortgages	2,614	2,490	(124)
Retail Qualified Revolving	31	29	(3)
Retail Other	27	29	3
Total advanced IRB approach	2,672	2,548	(124)
Total IRB approach	3,289	2,662	(627)

<i>figures in €'m</i>	Regulatory Expected Loss	Accounting Specific Impairment	Difference
Expected Loss vs Actual Loss	Dec'13	Dec'14	
Sovereign	0	0	0
Institutions	1	0	(1)
Corporate	623	770	147
Total foundation IRB approach	624	770	146
Retail Mortgages	2,749	2,851	102
Retail Qualified Revolving	41	29	(12)
Retail Other	35	40	5
Total advanced IRB approach	2,825	2,920	95
Total IRB approach	3,449	3,690	241

<i>figures in €'m</i>	Regulatory Expected Loss	Accounting Specific Impairment	Difference
Expected Loss vs Actual Loss	Dec'12	Dec'13	
Sovereign	0	0	0
Institutions	2	0	(2)
Corporate	515	728	213
Total foundation IRB approach	517	728	211
Retail Mortgages	1,966	2,935	969
Retail Qualified Revolving	49	42	(8)
Retail Other	140	36	(104)
Total advanced IRB approach	2,155	3,013	857
Total IRB approach	2,672	3,740	1,068

Table 52: Exposures split by geographical area by exposure class, average PD% and average LGD% (Art 452.j)

All figures in €m	ROI Balances			UK Balances			Other EU Balances			Rest of World			Total		
	EAD	PD%	LGD%	EAD	PD%	LGD%	EAD	PD%	LGD%	EAD	PD%	LGD%	EAD	PD%	LGD%
As at 31 December 2019															
Sovereign	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%
Institutions	38	0.1%	45.0%	2	0.1%	45.0%	132	0.1%	45.0%	344	0.0%	45.0%	516	0.0%	45.0%
Corporate	194	43.1%	45.0%	4	2.9%	45.0%	0	0.0%	0.0%	0	0.0%	0.0%	198	42.3%	45.0%
Total foundation IRB approach	232	36.1%	45.0%	6	2.0%	45.0%	132	0.1%	45.0%	344	%	45.0%	714	11.8%	45.0%
Retail Mortgages	16,069	8.9%	23.6%	105	11.7%	30.9%	22	6.4%	25.3%	38	9.3%	26.1%	16,234	8.9%	23.6%
Retail Qualified															
Revolving	665	2.5%	54.4%	3	1.7%	67.5%	1	0.8%	73.0%	1	1.3%	67.7%	670	2.5%	54.5%
Retail Other	301	7.5%	64.4%	0	24.7%	64.1%	0	1.9%	51.7%	0	1.6%	52.0%	302	7.5%	64.4%
Total advanced IRB approach	17,036	8.6%	25.5%	109	11.4%	32.1%	23	6.2%	27.0%	39	9.0%	27.2%	17,206	8.6%	25.6%
Total IRB approach	17,268	9.0%	25.8%	115	10.9%	32.8%	155	1.0%	42.3%	383	1.0%	43.2%	17,921	8.7%	26.3%
As at 31 December 2018															
Sovereign	0	0.0%	0.0%	0	0.0%	0.0%	212	0.1%	45.0%	0	0.0%	0.0%	212	0.1%	45.0%
Institutions	37	0.1%	45.0%	11	0.1%	45.0%	449	0.1%	45.0%	480	0.0%	45.0%	976	0.1%	45.0%
Corporate	194	37.3%	45.0%	4	2.9%	45.0%	0	0%	0%	0	0%	0%	198	36.6%	45.0%
Total foundation IRB approach	230	31.4%	45.0%	15	0.9%	45.0%	662	0.1%	45.0%	480	0.0%	45.0%	1,387	5.3%	45.0%
Retail Mortgages	16,573	12.6%	23.8%	124	19.0%	31.8%	25	9.1%	26.3%	42	10.5%	26.1%	16,763	12.6%	23.9%
Retail Qualified															
Revolving	664	3.1%	54.5%	3	1.9%	68.0%	1	1.6%	72.9%	1	1.9%	68.3%	669	3.1%	54.7%
Retail Other	262	8.2%	63.9%	0	19.2%	64.9%	0	30.3%	55.7%	0	1.4%	66.5%	263	8.3%	63.9%
Total advanced IRB approach	17,499	12.1%	25.6%	128	18.5%	32.9%	26	8.9%	27.9%	43	10.3%	27.1%	17,695	12.2%	25.7%
Total IRB approach	17,729	12.4%	25.9%	143	16.7%	34.2%	687	0.5%	44.4%	522	0.9%	43.5%	19,081	11.7%	27.1%

Use of Credit Risk Mitigation Techniques (Art 453)

Policies and processes for netting (Art 453.a)

The Group does not currently apply contractual netting for its derivative exposures. Credit Risk Mitigation (CRM) is, however, used to calculate credit exposure for the Group's repurchase agreements. Credit exposure on these agreements is calculated using the Financial Collateral Comprehensive Method whereby regulatory volatility adjustments are applied to both sides of a transaction and the adjusted amounts are offset against each other to arrive at the Exposure at Default. The remainder of the Group's non-retail IRB and Standardised credit exposures are not impacted by CRM.

Collateral valuation and management (Art 453.b & c)

As the Group's principal exposure to credit risk is in respect of residential mortgages, which are calculated under the IRB approach, the value of the collateral held is reflected in its LGD estimation process.

A common way to view residential real estate collateral is to view it by loan to value (LTV). The following table summarises the overall exposure weighted indexed LTV.

Table 53: Exposure weighted indexed LTV for retail mortgage portfolios

Indexed LTV	RoI Residential Mortgages	
	Owner Occupied	Buy-to-let
Dec-19	62%	92%
Dec-18	65%	96%

The LGDs for the Group's retail portfolios are based on internal models and are divided into pools driven by appropriate drivers of loss. As is required by the CRD there is currently a minimum value of 10% utilised where internal estimates are less than this value. As at 31 December 2019, the average exposure weighted LGD for the Group's retail mortgage portfolios in Ireland was 23.7% (2018: 23.7%).

For non-retail IRB exposures, supervisory LGDs are used for minimum regulatory capital requirements calculation purposes as is required under CRD IV. These LGDs are not reduced through CRM and are applied directly to obligors in the calculation of risk weights.

Although the Group's derivative portfolio is typically collateralised in excess of 99% through CSA agreements, and was as at 31 December 2019, the Group has not received regulatory approval to recognise these agreements as CRM techniques for regulatory returns and consequently, do not reduce credit exposure. Collateral valuations are automated where possible and performed

frequently by obtaining market prices from both licensed third party data providers and regulatory bodies.

Further information regarding the policies and processes for collateral valuation and management are described in Note 35 of the Group's Annual Report 2019.

The collateral taken by the group to mitigate risk is influenced by the exposure type and primarily consists of cash and real estate (for mortgage lending only).

Risk Concentrations within credit risk mitigation (Art 453.e)

The Group is an ROI based retail bank and due to its customer structure and operating focus in this market, the only collateral concentration risk that the Group is exposed to is the Irish residential property market.

Quantitative Disclosure on credit risk mitigation (Art 453.f)

The table below shows the Group's total exposure calculated under the Foundation IRB and Standardised Approaches before and after netting, volatility adjustments and CRM.

Table 54: EU CR3: CRM techniques – Overview (Art 453.f)

	Exposures unsecured - Carrying amount €m	Exposures secured - Carrying amount €m	Exposures secured by collateral €m	Exposures secured by financial guarantees €m	Exposures secured by credit derivatives €m
2019					
Total loans	1,554	-	-	-	-
Total debt securities	1,963	-	-	-	-
Total exposures	3,517	-	-	-	-
Of which defaulted	-	-	-	-	-
	Exposures unsecured - Carrying amount €m	Exposures secured - Carrying amount €m	Exposures secured by collateral €m	Exposures secured by financial guarantees €m	Exposures secured by credit derivatives €m
2018					
Total loans	1,136	396	-	-	-
Total debt securities	2,604	-	-	-	-
Total exposures	3,740	396	-	-	-
Of which defaulted	-	-	-	-	-

Increase in total loans due to additional cash placed with othr financial institutions at the end of 2019. The decrease in debt securities held was due to maturities during 2019.

Table 55 :EU CR4: Standardised approach – Credit risk exposure and CRM effects (Art 453.f)

2019 Exposure classes	Exposures before CCF and CRM		Exposures post CCF and CRM		RWA and RWA density	
	On-balance sheet amount €m	Off-balance sheet amount €m	On-balance sheet amount €m	Off-balance sheet amount €m	RWA €m	RWA density %
Central governments or central banks	3,002	-	3,002	-	-	-
Regional governments or local authorities	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-
International organisations	-	-	-	-	-	-
Institutions	-	-	-	-	-	-
Corporates	-	-	-	-	-	-
Retail	-	-	-	-	-	-
Secured by mortgages on immovable property	-	-	-	-	-	-
Exposures in default	-	-	-	-	-	-
Items associated with particularly high risk	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-
Other items	-	-	-	-	-	-
Total	3,002	-	3,002	-	-	-

There were no significant changes over the reporting period.

	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	%
2018						
Exposure classes						
Central governments or central banks	2,950	-	2,950	-	-	-
Regional governments or local authorities	-	-	-	-	-	-
Public sector entities	-	-	-	-	-	-
Multilateral development banks	-	-	-	-	-	-
International organisations	-	-	-	-	-	-
Institutions	-	-	-	-	-	-
Corporates	-	-	-	-	-	-
Retail	-	-	-	-	-	-
Secured by mortgages on immovable property	-	-	-	-	-	-
Exposures in default	-	-	-	-	-	-
Items associated with particularly high risk	-	-	-	-	-	-
Covered bonds	-	-	-	-	-	-
Claims on institutions and corporates with a short-term credit assessment	-	-	-	-	-	-
Collective investment undertakings	-	-	-	-	-	-
Equity exposures	-	-	-	-	-	-
Other items	-	-	-	-	-	-
Total	2,950	-	2,950	-	-	-

Article 453 (g)

Not applicable.

Use of the Advanced Measurement Approaches to operational risk (Art 454)

The Group does not use the Advanced Measurement Approach to operational risk.

Use of internal market risk model [\(Art 455\)](#)

The Group does not use any internal market risk models under article 363 of the CRR to calculate its capital requirements.

IFRS 9 transitional arrangements (Art 473a)

The Group applied the IFRS 9 transitional arrangements under Article 473a of the CRR throughout 2019. The Group applied the transitional arrangements in full, including paragraph 4.

The IFRS 9 transitional arrangements help to mitigate the negative impact on CET1 capital arising from the introduction of expected credit loss accounting over a 5-year transitional period beginning 1 January 2018.

The increase in available capital amounts and capital ratios as a result of application of the IFRS 9 transitional arrangements is primarily derived (approx. 85%) from the 'day 1' impact of IFRS 9 expected credit losses as at 1 January 2018 compared to IAS 39 impairment provisions at 31 December 2017. The remaining impact is derived from an increase in IFRS 9 Stage 1 and Stage 2 expected credit losses as at 31 December 2019 compared to 1 January 2018.

The increase in the leverage ratio as a result of application of the IFRS 9 transitional arrangements is due to higher Tier 1 capital.

Table 56: Comparison of own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9

Template 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			
€m		Dec-19	Dec-18
Available capital (amounts)			
1	Common Equity Tier 1 (CET1) capital	1,765	1,768
2	Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	1,631	1,657
3	Tier 1 capital	1,850	1,855
4	Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	1,716	1,751
5	Total capital	1,911	1,921
6	Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	1,776	1,817
Risk-weighted assets (amounts)			
7	Total risk-weighted assets	10,012	11,990
8	Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	9,996	11,966
Capital ratios			
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	17.6%	14.7%
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	16.3%	13.8%
11	Tier 1 (as a percentage of risk exposure amount)	18.5%	15.5%
12	Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	17.2%	14.6%
13	Total capital (as a percentage of risk exposure amount)	19.1%	16.0%
14	Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	17.8%	15.2%
Leverage ratio			
15	Leverage ratio total exposure measure	20,389	22,006
16	Leverage ratio	9.1%	8.4%
17	Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	8.4%	7.9%

Glossary of terms

Advanced IRB The Advanced Internal Ratings Based (IRB) approach allows a bank to use its own estimated risk parameters for the purpose of calculating regulatory capital for credit risk to estimate probability of default (PD), loss given default (LGD), exposure at default (EAD), maturity (M) and other parameters required to arrive at the total risk weighted assets (RWA).

Arrears Arrears relates to any interest or principal payment on a loan which has not been received on its due date. When customers are behind in fulfilling their obligations with the result that an outstanding loan is unpaid or overdue, they are said to be in arrears.

Basis point One hundredth of a per cent (0.01%), so 100 basis points is 1%. It refers to changes in interest rates and bond yields.

Basel III Basel III is a global, voluntary regulatory framework on bank capital adequacy, stress testing and market liquidity risk.

Buy-to-let Residential mortgage loan provided to purchase residential investment property for rental purposes.

CCF Credit Conversion Factor converts an off balance sheet exposure (e.g. guarantee or credit facility) into its credit exposure equivalent.

CET 1 ratio Ratio of a bank's common equity capital to its total risk-weighted assets.

Common Equity Tier 1 capital Common Equity Tier 1 (CET1) capital is recognised as the highest quality component of capital. It is subordinated to all other elements of funding, absorbs losses as and when they occur, has full flexibility of dividend payments and has no maturity date. It is predominately comprised of common shares; retained earnings; undistributed current year earnings; but may also include non-redeemable non-cumulative preferred stock.

Concentration risk The risk that any single (direct or indirect) exposure or group of exposures has the potential to produce losses large enough to threaten the institution's health or its ability to maintain its core business.

Contractual Maturity Date on which a scheduled payment is due for settlement and payable in accordance with the terms of a financial instrument.

CBI The Central Bank of Ireland directly supervises the bank since 1 January 2019 as a less significant institution.

CRD Capital requirements directive: Statutory law implemented by the European Union for capital adequacy. The CRD has introduced a supervisory framework in the European Union which reflects the Basel II and Basel III rules on capital measurement and capital standards.

CRR Capital Requirements Regulation is a European regulation on prudential requirements for credit institutions

Credit risk The risk of loss resulting from a counterparty being unable to meet its contractual obligations to the Group in respect of loans or other financial transactions.

Credit Risk Mitigation Methods to reduce the credit risk associated with an exposure by the application of credit risk mitigants. Examples include: collateral; guarantee; and credit protection.

CSA Credit Support Annex is an annex to an ISDA agreement which allows the exchange of cash, or other allowed collateral, between the counterparties based on the mark to market movements of their derivative contracts.

CVA Credit valuation adjustment is the difference between the risk-free portfolio value and the true portfolio value that takes into account the possibility of a counterparty's default.

Debt securities Instruments representing certificates of indebtedness of credit institutions, public bodies and other undertakings. Debt securities can be secured or unsecured.

Default When a customer fails to make timely payment of interest or principal on a debt security or to otherwise comply with the provisions of a bond indenture. Depending on the materiality of the default, if left unmanaged it can lead to loan impairment.

EAD Exposure at default Exposure at default is the gross exposure under a facility upon default of an obligor.

ECAI (External Credit Assessment Institution) means a credit rating agency registered or certified in accordance with Regulation EC 1060/2009.

Fair value The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Forbearance Forbearance occurs when a borrower is granted a temporary or permanent concession or agreed change to a loan, for reasons relating to the actual or apparent financial stress or distress of that borrower. Forbearance strategies are employed in order to improve the management of customer relationships, maximise collection opportunities and, if possible, avoid foreclosure or repossession. Such arrangements can include extended payment terms, a temporary reduction in interest or principal repayments, payment moratorium and other modifications.

Foundation IRB The Foundation Internal Ratings Based (IRB) Approach allows a bank to use their own estimated risk parameters for the purpose of calculating regulatory capital for credit risk to estimate probability of default (PD) to arrive at the total risk weighted assets (RWA).

GDP Gross Domestic Product is a monetary measure of the value of all final goods and services produced in a period of time (quarterly or yearly). GDP estimates are commonly used to determine the economic performance and standard of living of a whole country or region, and to make international comparisons.

Group Permanent TSB Group Holdings plc and its subsidiary undertakings.

Home loan A loan provided by a bank, secured by a borrower's primary residence or second home.

ICAAP Internal Capital Adequacy Assessment Process undertaken to ensure the Group is adequately capitalised against the risks in its business operations. The ICAAP is subject to review and evaluation by the regulatory authorities.

ILAAP Internal Liquidity Adequacy Assessment is similar to the ICAAP process but concentrates on the adequacy of a bank's liquidity rather than capital.

IRB The Internal Ratings Based Approach (IRB) Approach allows a bank to use its own estimated risk parameters for the purpose of calculating regulatory capital for credit risk to estimate probability of default (PD), loss given default (LGD), exposure at default (EAD), maturity (M) and other parameters required to arrive at the total risk weighted assets (RWA).

ISDA Master Agreements A standard agreement used in over-the-counter derivatives transactions. The ISDA Master Agreement, published by the International Swaps and Derivatives Association (ISDA), is a document that outlines the terms applied to a derivatives transaction between two parties. Once the two parties agree to the standard terms, they do not have to renegotiate each time a new transaction is entered into.

LCR Liquidity Coverage Ratio: The ratio to ensure that a bank has an adequate amount of high quality liquid assets in order to meet short-term obligations under a stress scenario lasting for 30 days. The LCR was phased in over a number of years, with credit institutions obliged to hold 60% of their full LCR in 2015, 70% in 2016, 80% in 2017 and 100% in 2018, as per CRD IV.

LGD Loss Given Default is the share of an asset that is lost when a borrower defaults on a loan.

Liquidity risk The risk that the Group may experience difficulty in financing its assets and / or meeting its contractual obligations as and when they fall due, without incurring excessive cost.

Loan to Deposit Ratio is a commonly used statistic for assessing a bank's liquidity by dividing the banks total loans by its total deposits.

LTV Loan to value is a lending risk assessment ratio of mortgage amount to the value of property.

Market risk The risk of change in fair value of a financial instrument due to adverse movements in equity prices, property prices, interest rates or foreign currency exchange rates.

NPLs Non-performing loans are loans which are credit impaired or loans which are classified as defaulted, in accordance with the Group's definition of default. The Group's definition of default considers objective indicators of default including the 90 days past due criterion, evidence of exercise of concessions or modifications to terms and conditions; and are designed to be consistent with European Banking Authority (EBA) guidance on the definition of forbearance.

Non-performing assets Non-performing assets are defined as NPLs plus foreclosed assets.

NSFR Net Stable Funding Ratio: The NSFR is defined as the amount of available stable funding (ASF) relative to the amount of required stable funding (RSF). The ASF is defined as the portion of capital and liabilities expected to be stable over the time horizon considered by the NSFR, which extends to one year.

Operational Risk The risks inherently present in the Group's business, including the risk of direct or indirect loss resulting from inadequate or failed internal and external processes, systems and human error, fraud, or from external events.

Own funds The sum of Tier 1 and Tier 2 capital.

Past Due Loan where repayment of interest or principal is overdue by at least one day.

PD Probability of Default is a financial term describing the likelihood that a borrower will be unable to meet its debt obligations.

PPU Permanent Partial Use is a permission received from a bank's supervisor to allow it to revert to using the standardised approach instead of the IRB approach.

RWAs Risk weighted assets is a measure of amount of bank's assets or off-balance sheet exposures which are weighted according to risk.

Securitisation Securitisation is the process of taking an illiquid asset, or group of assets, and through financial engineering, transforming them into a security.

SSM The Single Supervisory Mechanism (SSM) is a mechanism which has granted the European Central Bank (ECB) a supervisory role to monitor the financial stability of banks based in participating states. The main aims of the SSM are to ensure the safety and soundness of the European banking system and to increase financial integration and stability in Europe.

Standardised The Standardised Approach requires banks to follow prescribed steps to arrive at the total risk weighted assets (RWA) unless they have been approved to use a different approach (e.g. IRB).

Tier 1 capital A term used to describe the capital adequacy of a bank. Tier 1 capital is core capital; this includes equity capital and disclosed reserves.

Tier 2 capital Tier 2 capital is supplementary bank capital that includes items such as hybrid instruments and subordinated term debt.

Total Net Cash Outflows means total expected cash outflows, minus total expected cash inflows, in the specified stress scenario for the subsequent 30 calendar days.

Tracker mortgage A mortgage which follows the Base Rate of interest set by the European Central Bank and will be fixed at a certain percentage above this rate.

TRIM Targeted Review of Internal Models