

PILLAR 3
DISCLOSURES
2018



# **Table of Contents**

TABLE OF CONTENTS	2
INTRODUCTION	4
CRR DISCLOSURE REQUIREMENTS	6
RISK MANAGEMENT OBJECTIVES AND POLICIES (ART 435)	9
Overview	
RISK MANAGEMENT OBJECTIVES (ART 435.1.A)	
RISK MANAGEMENT PRINCIPLES (ART 435.1.A, 435.1.C)	
ORGANISATION OF RISK MANAGEMENT (ART 435.1.B)	
RISK CATEGORIES (ART 435.1.D)	12
DECLARATION BY MANAGEMENT BODY ON THE ADEQUACY OF RISK MANAGEMENT (ART 435.1.E).	12
RISK PROFILE (ART 435.1.F)	
GOVERNANCE ARRANGEMENTS (ART 435.2)	14
SCOPE OF APPLICATION (ART 436)	18
REGULATORY REQUIREMENTS (ART 436.A)	18
DIFFERENCES IN THE BASIS OF CONSOLIDATION FOR ACCOUNTING AND PRUDENTIAL PURPOSES (436.B)	
IMPEDIMENTS TO THE TRANSFER OF FINANCIAL FUNDS (ART 436.C)	
SHORTFALL OF OWN FUNDS FOR SUBSIDIARIES NOT INCLUDED IN CONSOLIDATION (ART 436.D)	
USE OF ARTICLE 9 FOR INDIVIDUAL REPORTING (ART 436.E)	
OWN FUNDS (ART 437)	21
CAPITAL REQUIREMENTS (ART 438)	28
GROUP'S APPROACH TO ASSESSING THE ADEQUACY OF ITS INTERNAL CAPITAL TO SUPPORT CURI	
FUTURE ACTIVITIES (ART 438.A)	28
ICAAP GOVERNANCE	31
COUNTERPARTY CREDIT RISK (ART 439)	34
INTERNAL CAPITAL ALLOCATION AND CREDIT LIMITS FOR COUNTERPARTY CREDIT EXPOSURES (A	
SECURING OF COLLATERAL AND ESTABLISHING OF RESERVES (ART 439.B)	
LIMITATION ON WRONG-WAY EXPOSURES (ART 439.C)	
IMPACT OF COLLATERALISATION OF A RATING DOWNGRADE (ART 439.D)	35
CAPITAL BUFFERS (ART 440)	36
INDICATORS OF GLOBAL SYSTEMIC IMPORTANCE (ART 441)	39
CREDIT RISK ADJUSTMENTS (ART 442)	40
DEFINITION OF PAST DUE AND IMPAIRED (ART 442.A)	40
APPROACHES TO DETERMINING SPECIFIC CREDIT RISK ADJUSTMENTS (ART 442.B)	40
UNENCUMBERED ASSETS (ART 443)	48
USE OF ECAI'S (ART 444)	51
, ,	

MARKET RISK (ART 445)	52
OPERATIONAL RISK (ART 446)	53
EXPOSURES TO EQUITIES NOT INCLUDED IN THE TRADING BOOK (ART 447 (A), (B), (C)	
EXPOSURE TO INTEREST RATE RISK ON POSITIONS NOT INCLUDED IN THE TRADING	воок
(ART 448)	57
INTEREST RATE RISK (ART 448.A)	57
QUANTITATIVE DISCLOSURE FOR VARIATION IN EARNINGS/OTHER RELEVANT MEASURE FOR SHOCKS UBROKEN DOWN BY CURRENCY (ART 448.B)	
EXPOSURE TO SECURITISATION POSITIONS (ART 449)	63
KEY OBJECTIVES OF SECURITISATION ACTIVITY (ART 449.A)	63
SECURITISATION RISKS (ART 449.B)	63
DIFFERENT ROLES IN THE SECURITISATION PROCESS (ART 449.D)	63
SUMMARY OF THE BANK'S SECURITISATION ACTIVITIES AT 31 DECEMBER 2018 (ART 449.E, 449.P)	64
EXPOSURE MONITORING PROCESSES (ART 449.F)	64
SUMMARY OF HEDGING POLICY (ART 449.G)	65
RISK-WEIGHTED EXPOSURE AMOUNTS (ART 449.H)	65
SUMMARY OF ACCOUNTING POLICIES (ART 449.J)	65
DETAILS OF SECURITISATION EXPOSURES (ART 449.M, 449.N)	
CAPITAL REQUIREMENTS (ART 449.0)	65
REMUNERATION (ART 450)	67
DECISION MAKING PROCESS AND GOVERNANCE (ART 450.1.A)	67
GROUP REMUNERATION POLICY (ART 450.1.B,C,D,E,F)	
IDENTIFICATION OF MATERIAL RISK TAKERS	
QUANTITATIVE REMUNERATION DISCLOSURES (ART 450.1.G,H,I AND ART 450.2)	
OTHER DISCLOSURES ON REMUNERATION 2018 (ART 450.1.H,I)	
LEVERAGE RATIO (ART 451.1.A)	
USE OF THE IRB APPROACH TO CREDIT RISK (ART 452)	
COMPETENT AUTHORITY'S PERMISSION OF THE APPROACH OR APPROVED TRANSITION (ART 452.A)	
INTERNAL RATINGS PROCESS (ART 452.C)	
STRUCTURE OF THE GROUP'S INTERNAL RATING SYSTEM (ART 452.B)	83
USE OF CREDIT RISK MITIGATION TECHNIQUES (ART 453)	93
POLICIES AND PROCESSES FOR NETTING (ART 453.A)	93
COLLATERAL VALUATION AND MANAGEMENT (ART 453.B & C)	93
RISK CONCENTRATIONS WITHIN CREDIT RISK MITIGATION (ART 453.E)	
QUANTITATIVE DISCLOSURE ON CREDIT RISK MITIGATION (ART 453.F)	
USE OF THE ADVANCED MEASUREMENT APPROACHES TO OPERATIONAL RISK (ART	454)
	-
USE OF INTERNAL MARKET RISK MODEL (ART 455)	96
IFRS 9 TRANSITIONAL ARRANGEMENTS (ART 473A)	97

## 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).

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: <a href="http://www.permanenttsbgroup.ie/investors/reports-and-presentations">http://www.permanenttsbgroup.ie/investors/reports-and-presentations</a>

### 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.

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 2018 Annual Report).

**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 2018 the ECB informed the Group that, as the Group had not met any of the significant criteria for 3 consecutive years, a decision was taken to categorise the Group as a less significant institution (LSI). Therefore with effect from 1 January 2019, the Group became subject to the direct supervision by the Central Bank of Ireland as the National Competent Authority.

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
	435 (1) (a)	Applicable
	435 (1) (b)	Applicable
	435 (1) (c)	Applicable
	435 (1) (d)	Applicable
	435 (1) (e)	Applicable
Article 435 – Risk Management Objectives and Policies	435 (1) (f)	Applicable
Tolleics	435 (2) (a)	Applicable
	435 (2) (b)	Applicable
	435 (2) (c)	Applicable
	435 (2) (d)	Applicable
	435 (2) (e)	Applicable
	436 (a)	Applicable
	436 (b) (i) to (iv)	Applicable
Article 436 – Scope of Application	436 (c)	Applicable
	436 (d)	Applicable
	436 (e)	Applicable
	437 (1) (a)	Applicable
	437 (1) (b)	Applicable
4 .: 1 407 0 5 1	437 (1) (c)	Applicable
Article 437- Own Funds	437 (1) (d) (i) to (iii)	Applicable
	437 (1) (e)	Applicable
	437 (1) (f)	Not applicable
	438 (a)	Applicable
	438 (b)	Not applicable
	438 (c)	Applicable
Article 438 - Capital Requirements	438 (d) (i) to (iv)	Applicable
	438 (e)	Applicable
	438 (f)	Applicable
	439 (a)	Applicable
	439 (b)	Applicable
	439 (c)	Applicable
	439 (d)	Applicable
Article 439 – Exposure to Counterparty Credit	439 (e)	Applicable
Risk	439 (f)	Applicable
	439 (g)	Not applicable
	439 (h)	Not applicable
	439 (i)	Not applicable

	440 (1) (a)	Applicable
Article 440 - Capital buffers	440 (1) (b)	Applicable
Article 441 – Indicators of global systemic importance	441	Not applicable
·	442 (a)	Applicable
	442 (b)	Applicable
	442 (c)	Applicable
	442 (d)	Applicable
Article 442 -Credit risk adjustments	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
	444 (a)	Not applicable
	444 (b)	Not applicable
Article 444 – Use of ECAIs	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
	447 (a)	Applicable
	447 (b)	Applicable
Article 447 – Exposure to equities not included	447 (c)	Applicable
in the trading book	447 (d)	Applicable
	447 (e)	Applicable
Article 448 – Exposure to interest rate risk on	448 (a)	Applicable
positions not included in the trading book	448 (b)	Applicable
	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
Article 449 – Exposure to securitisation positions	449 (i)	Not applicable
μοσιαστισ	449 (j)	Applicable
	449 (k)	Not applicable
	449 (I)	Not applicable
	449 (m)	Applicable
	449 (n) (i) to (vi)	Applicable
	449 (o) (i) to (ii)	Applicable
	449 (p)	Applicable
	449 (q)	Not applicable

	449 (r) 450 (1) (a) 450 (1) (b) 450 (1) (c)	Not applicable Applicable Applicable
	450 (1) (b)	
		Applicable
	450 (1) (c)	
		Applicable
	450 (1) (d)	Applicable
	450 (1) (e)	Applicable
Article 450 – Remuneration	450 (1) (f)	Applicable
	450 (1) (g)	Applicable
450	0 (1) (h) (i) to (vi)	Applicable
	450 (1) (i)	Applicable
	450 (1) (j)	Not applicable
	450 (2)	Applicable
	451 (1) (a)	Applicable
	451 (1) (b)	Applicable
Article 451 – Leverage Ratio	451 (1) (c)	Not applicable
	451 (1) (d)	Applicable
	451 (1) (e)	Applicable
	452 (a)	Applicable
4	52 (b) (i) to (iv)	Applicable
4	152 (c) (i) to (v)	Applicable
	452 (d)	Applicable
Article 452 – Use of the IRB Approach to Credit 4	52 (e) (i) to (iii)	Applicable
Risk	452 (f)	Applicable
	452 (g)	Applicable
	452 (h)	Applicable
	452 (i)	Applicable
	452 (j) (i) to (ii)	Applicable
	453 (a)	Applicable
	453 (b)	Applicable
	453 (c)	Applicable
Article 453 – Use of Credit Mitigation	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
	55 (a) (i) to (iv)	Not applicable
	455 (b)	Not applicable
	455 (c)	Not applicable
Article 455 - Use of Internal Market Risk Model 4	55 (d) (i) to (iii)	Not applicable
	455 (e)	Not applicable
	455 (f)	Not applicable
	455 (g)	Not applicable
Article 473a – Introduction of IFRS 9	473a	Applicable

# 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; and
- iii. Establishing independent testing of the Risk Management Process, to review for operating effectiveness across the Group.

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

The principles for effective Risk Management are as follows:

The principles	s for effective hisk intallagement 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 will be 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 – i.e. before they crystallise – 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.

<sup>\*</sup> 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 39-60 within the Risk Management section of the Group's 2018 Annual Report.

## 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 a 'no deal' Brexit has been 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 45-46 within the Risk Management section of the Group's 2018 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 44 within the Risk Management section of the Group's 2018 Annual Report.

## Risk Categories (Art 435.1.d)

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

- Funding Risk
- Liquidity Risk
- Capital Adequacy Risk
- Credit Risk
- Market Risk
- Operational and IT Risk
- Conduct Risk
- Reputational Risk
- Viability Risk
- Regulatory Compliance Risk
- Strategic Risk
- Volatility Risk
- Other Risk<sup>1</sup>

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 47-60 of the Group's 2018 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 2018 Annual Report within the Corporate Governance Statement (page 69 and pages 87 to 88). Further information on Risk Management is included on pages 39 to 60 of the Group's 2018 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

<sup>&</sup>lt;sup>1</sup> Other Risk covers all risks that have been newly identified / newly emerging, from either changing internal or external circumstances, but cannot be appropriated to any of the existing 11 defined risk categories as yet. Model Risk is currently a sub-category of Other Risk pending final classification and is currently under consideration (i.e. create a new risk category or capture model risk as a sub risk of an existing risk category).

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 39 to 60 of the Group's 2018 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 2018	31 December 2017
Capital - Transitional		
Common Equity Tier 1 Ratio	14.7%	17.1%
Tier 1 Ratio	15.5%	17.7%
<b>Total Capital Ratio</b>	16.0%	18.4%
Leverage Ratio – Transitional	8.4%	8.0%
Liquidity		
Liquidity Coverage Ratio (LCR)	160%	165%
Net Stable Funding Ratio (NSFR)	121%	114%
Loan to Deposit Ratio	93%	108%
NPLs as % of gross loans	10%	26%

All ratios are within Risk Appetite approved limits

### **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

		Total weighted value (average*)		
Quarter ending 2018	Mar-18	Jun-18	Sep-18	Dec-18
Liquidity buffer (€m)	2,588	2,851	2,970	3,031
Total net cash outflows (€m)	1,980	2,078	2,108	2,039
Liquidity coverage ratio (%)	131%	137%	141%	150%
*Number of data points used in the calculation of averages: 12				

The Group maintains a liquidity buffer to meet LCR requirements comprised of unencumbered High Quality Liquid Assets (HQLA) made up of HQLA Eurozone sovereign bonds, central bank reserves and cash.

### 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 40 of the 2018 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 2018 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 71 to 74 of the 2018 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 91 (3) and 91 (4) of Directive 2013/36/EU <sup>2</sup>
Robert Elliott	8	4
Jeremy Masding	5	1
Eamonn Crowley	10	1
Julie O'Neill	6	3
Ronan O'Neill	3	2
Ken Slattery	6	2
Andrew Power	3	4
Richard Pike	7	4
Donal Courtney	5	4
Ruth Wanderhofer	5	4

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

The responsibilities of the Nomination 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 Committee will consider tenure of existing directors when reviewing the Board's Succession Plans. A key focus for the Nomination Committee in 2019 will be succession planning and analysis of director skills for anticipated changes to the Board in 2019. Ken Slattery is due to complete his second three year term of office in August 2019. 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 and these nominations will be progressed during 2019 subject to the required regulatory approvals.

The Nomination 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 100-101 of the 2018 Annual Report, and details of Directors' key strengths, skills and experience are set out on pages 71 to 74 of the 2018 Annual Report.

#### **Board Diversity Policy** (Art 435.2.c)

The Board recognises the benefits of having a diverse Board and sees 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 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

<sup>&</sup>lt;sup>2</sup> Excludes non-commercial entities

Board appointments are made on merit, in the context of the skills and experience that the Board as a whole requires to be effective.

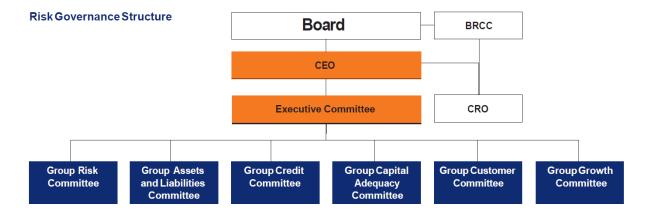
The Board Diversity Report on pages 89 to 91 of the 2018 Annual Report sets out further details on the Board Diversity Policy, its objectives, and relevant targets set out in that policy, and the extent to which these objectives and targets have been achieved.

#### **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 97 to 98 of the 2018 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 Group. It approves the Group's Risk
  Appetite, Strategic Direction, Medium Term Plan (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 or veto.
- BRCC is a Board Committee with responsibility for overseeing and providing advice to the
  Board on Risk Governance and the current and future risk exposures of the Group. It
  supports the Board in carrying out its responsibilities of ensuring that risks are properly
  identified, reported, assessed and controlled, and that the Group's strategy is consistent
  with its approved Risk Appetite.

- The Board delegates executive responsibility to the **Group CEO** for the Group's operations, compliance and performance. The Group CEO is the principal executive accountable to the Board for the day-to-day management of the Group.
- The **Group ExCo**, which is chaired by the Group CEO, is accountable to the Group Board for the implementation of the Group's Risk Appetite and delivery of the Group's MTP/Budget.
- The Board approves the Group ExCo Terms of Reference
- The Group ExCo has established sub-committees which are chaired by ExCo members and are accountable to ExCo for the Risk Management activities of the Group. Relevant decisions/matters arising from ExCo 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 discussion/noting/or approval:
  - The Group ExCo may not override or modify the decision of the Group Risk Committee, Group Assets and Liabilities Committee or Group Credit Committee but may appeal such decisions to the BRCC.
  - The CRO is assigned the right of veto over planned management action agreed by the Group Risk Committee, Group Assets and Liabilities Committee, Group Credit Committee and Group Capital Adequacy Committee, to exercise in circumstances where the CRO considers such action to be inconsistent with adherence to the Group Risk Appetite.
- 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 Group.

# 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 2018.

# Differences in the basis of consolidation for accounting and prudential purposes (Art 436.b)

The scope of consolidation for the Group is broadly the same for accounting and prudential purposes with the exception of one entity which is not consolidated for prudential purposes.

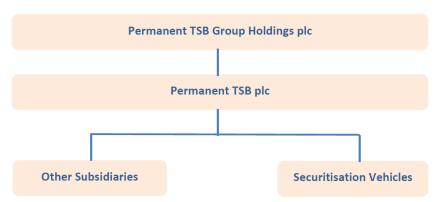


Table 4: Basis of consolidation

Company Name	Consolidated for Regulatory / Accounting	Method of Consolidation
Other Subsidiaries		
Permanent TSB Group Holdings plc	Both	Full
Permanent TSB plc	Both	Full
PBI Ltd	Both	Full
Permanent TSB Finance Ltd	Both	Full
Guinness & Mahon (Ireland) Ltd	Both	Full
Springboard Mortgages Ltd	Both	Full
Blue Cube Personal Loans Ltd	Both	Full
Kencarol Ltd	Both	Full
Erin Executor & Trustee Co Ltd	Both	Full
Mars Nominees Ltd	Both	Full
Joint Mortgage Holdings No1 Ltd	Both	Full
Springboard Funding No1 Ltd	Both	Full
Irish Permanent Property Company Ltd	Accounting	Full
Securitisation Vehicles		
Fastnet Securities 5 DAC	Both	Full
Fastnet Securities 6 DAC	Both	Full
Fastnet Securities 9 DAC	Both	Full
Fastnet Securities 10 DAC	Both	Full
Fastnet Securities 11 DAC	Both	Full
Fastnet Securities 12 DAC	Both	Full
Fastnet Securities 13 DAC	Both	Full
Fastnet Securities 14 DAC	Both	Full
Fastnet Securities 15 DAC	Both	Full

## 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 2019, 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 5: Reconciliation of shareholders' equity in Group Balance Sheet to own funds (Art 437.1.a)

	31-Dec	31-Dec
All figures in €m	2018	2017
Shareholders' equity according to the Group's balance sheet	1,980	2,111
Deconsolidation of entity not in prudential scope	(9)	(9)
Deferred tax assets	(344)	(343)
Intangible assets	(41)	(39)
Additional Tier 1 instrument	(122)	(122)
Other adjustments	303	214
of which: add back for deferred tax asset transitional adjustment	200	240
of which: deduct AFS reserve for sovereign exposures	0	(7)
of which: adjustments due to IFRS 9 transitional arrangements	111	0
Common Equity Tier 1 capital	1,768	1,812
Additional Tier 1 instrument included in consolidated own funds	87	66
Total Tier 1 capital	1,855	1,878
Tier 2 instrument	12	9
Net provisions for reported IRB credit exposures	54	56
Other adjustments	0	10
Total Tier 2 capital	66	76
Total capital base	1,921	1,954

Table 6: Difference between IFRS and CRR Balance Sheet (Art 437.1.a)

Assets:  Cash and balances with central banks  Items in course of collection  Debt Securities  Equity Securities  Derivative assets  Loans and advances to banks  Loans and advances to customers  Property and equipment  Intangible Assets	65 17 2,647 13 1 1,159 15,888 154 41	0 0 0 0 0 0 0 (5)	65 17 2,647 13 1 1,154
Cash and balances with central banks  Items in course of collection  Debt Securities  Equity Securities  Derivative assets  Loans and advances to banks  Loans and advances to customers  Property and equipment	17 2,647 13 1 1,159 15,888 154	0 0 0 0 (5)	17 2,647 13 1 1,154
Items in course of collection  Debt Securities  Equity Securities  Derivative assets  Loans and advances to banks  Loans and advances to customers  Property and equipment	17 2,647 13 1 1,159 15,888 154	0 0 0 0 (5)	17 2,647 13 1 1,154
Debt Securities  Equity Securities  Derivative assets  Loans and advances to banks  Loans and advances to customers  Property and equipment	2,647 13 1 1,159 15,888 154	0 0 0 0 (5)	2,647 13 1 1,154
Equity Securities  Derivative assets  Loans and advances to banks  Loans and advances to customers  Property and equipment	13 1 1,159 15,888 154	0 0 (5) 0	13 1 1,154
Derivative assets  Loans and advances to banks  Loans and advances to customers  Property and equipment	1 1,159 15,888 154	0 (5) 0	1 1,154
Loans and advances to banks  Loans and advances to customers  Property and equipment	1,159 15,888 154	(5) 0	1,154
Loans and advances to customers  Property and equipment	15,888 154	0	
Property and equipment	154		
		0	15,888
Intangible Assets	41		154
		0	41
Deferred taxation	355	0	355
Other assets	1,227	0	1,227
Prepayments and accrued income	93	0	93
Assets classified as held for sale	150	0	150
Investment in subsidiary undertakings	0	10	10
Total Assets	21,810	5	21,815
Liabilities:			
Deposits by banks	1,552	0	1,552
Customer accounts	17,020	14	17,034
Debt securities in issue	1,095	0	1,095
Derivative liabilities	14	0	14
Accruals	5	0	5
Current Tax liability	1	0	1
Other liabilities	69	0	69
Provisions	74	0	74
Subordinated liabilities	0	0	0
Total Liabilities	19,830	14	19,844
Shareholders' equity	1 000	(9)	1,971
Total Liabilities and equity	1,980		21,815

Table 7: 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 in	struments' main features template*		
		Permanent TSB Group	
1	Issuer	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
			Solo & (partially)
6	Eligible at solo / consolidated	Consolidated	Consolidated
			Additional Tier 1 as
_	In the second to the second	Ougling and Change	published in Regulation
7	Instrument type	Ordinary Shares	(EU) No 575/2013 article
			52
8	Amount recognised in regulatory capital	227	87
0	(€m)	227	87
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	Padamatian price	N/A	100 per cent of principal
90	Redemption price	IN/A	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	No	Yes
14	approval	NO	
			1 April 2021 and 1 April
			annually thereafter.
15	Optional call date, contingent call dates,	N/A	100 per cent of principal
13	and redemption amount	1.47.	amount
			In addition
			Tax/Regulatory call.
16	Subsequent call dates, if applicable	N/A	1 April annually from
	·	•	2022
	Coupons / dividends	21/2	ļ ,
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	N/A	Fully discretionary
	or mandatory (in terms of timing		-
20b	Fully discretionary, partially discretionary	N/A	Fully discretionary
	or mandatory (in terms of amount)		-
21	Existence of step up or other incentive to	N/A	No
22	redeem	NI/A	Non cumulativo
22	Non-cumulative or cumulative  Convertible or non-convertible	N/A N/A	Non-cumulative Convertible
25	Convertible of Hori-convertible	IN/A	
			CET 1 Capital Ratio of the Issuer or the
24	If convertible, conversion trigger(s)	N/A	CET 1 Capital Ratio of the
24	in convertible, conversion trigger(s)	17/7	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
20	ii convertible, conversion rate	14/ 🔼	LUN 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		

<sup>\*&#</sup>x27;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: <a href="http://www.permanenttsbgroup.ie/investors/shareholder-services.aspx">http://www.permanenttsbgroup.ie/investors/shareholder-services.aspx</a>
- For Additional Tier 1 instruments: <a href="http://www.permanenttsbgroup.ie/investors/debt-investors/debt-issuance-programmes.aspx">http://www.permanenttsbgroup.ie/investors/debt-investors/debt-issuance-programmes.aspx</a>

Table 8: Own funds disclosure template (Art 437.1.d & 437.1.e)

Own funds disclosure template(¹) All figures in €m		21_1)0C-12		REGULATION (EU) No 575/2013 ARTICLE REFERENCE	31-Dec-18	
		Fully load	led basis( <sup>2</sup> )		Transitional basis(3)	
Comm	on Equity Tier 1 capital: instruments and reserves					
1	Capital instruments and the related share premium accounts	561	1,590	26 (1), 27, 28, 29	561	
	of which: ordinary shares	227	227	EBA list 26 (3)	227	
	of which: deferred shares	0	1,030	EBA list 26 (3)	0	
	of which: share premium	333	333	EBA list 26 (3)	333	
2	Retained earnings	2,085	1,124	26 (1) (c)	2,196	
3	Accumulated other comprehensive income (and other reserves)	(791)	(765)	26 (1)	(791)	
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	0	32	26 (2)	0	
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	1,855	1,981	Sum of rows 1 to 5a	1,965	
Comm	on Equity Tier 1 (CET1) capital: regulatory adjustments	-	-		<u> </u>	
7	Additional value adjustments (negative amount)	(1)	(1)	34, 105	(1)	
8	Intangible assets (net of related tax liability) (negative amount)	(41)	(39)	36 (1) (b), 37	(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)	(344)	(343)	36 (1) (c), 38	(143)	
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	(8)	(8)	36 (1) (f), 42	(8)	
25a	Losses for the current financial year (negative amount)	(5)	0	36 (1) (a)	(5)	
28	Total regulatory adjustments to Common Equity Tier 1 (CET1)	(398)	(391)	Sum of rows 7 to 20a, 21, 22 and 25a to 27	(198)	
29	Common Equity Tier 1 (CET1) capital	1,456	1,590	Row 6 minus row 28	1,768	
Additi	onal Tier 1 (AT1) capital: instruments			<del>,</del>		
30	Capital instruments and the related share premium accounts	0	0	51, 52	0	
31	of which: classified as equity under applicable accounting standards	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	94	52	85, 86	87	

Own funds disclosure template(¹) All figures in €m		31-Dec-18 31-Dec-17		REGULATION (EU) No 575/2013 ARTICLE REFERENCE	31-Dec-18	
		Fully load	ed basis( <sup>2</sup> )		Transitional basis(3)	
36	Additional Tier 1 (AT1) capital before regulatory adjustments	94	52	Sum of rows 30, 33 and 34	87	
	onal Tier 1 (AT1) capital: regulatory adjustments		ı			
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital	0	0	Sum of rows 37 to 42	0	
44	Additional Tier 1 (AT1) capital <sup>(4)</sup>	94	52	Row 36 minus row 43	87	
45	Tier 1 capital (T1 = CET1 + AT1)	1,551	1,642	Sum of row 29 and row 44	1,855	
Tier 2	T2) capital: instruments and provisions					
46	Capital instruments and the related share premium accounts	0	0	62, 63	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	12	11	87, 88	12	
	, , ,	54		· '	12 54	
50	Credit risk adjustments		56	62 (c) & (d)		
51	Tier 2 (T2) capital before regulatory adjustment	66	67		66	
	(T2) capital: regulatory adjustments	0		5 ( 52) 56	0	
57	Total regulatory adjustments to Tier 2 (T2) capital		0	Sum of rows 52 to 56		
58	Tier 2 (T2) capital <sup>(4)</sup>	66	67	Row 51 minus row 57	66	
59	Total capital (TC = T1 + T2)	1,617	1,709	Sum of 45 and row 58	1,921	
60	Total risk-weighted assets	11,966	10,593		11,990	
	ratios( <sup>5</sup> ) and buffers		T .	T		
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	12.2%	15.0%	92 (2) (a)	14.7%	
62	Tier 1 (as a percentage of total risk exposure amount)	13.0%	15.5%	92 (2) (b)	15.5%	
63	Total capital (as a percentage of total risk exposure amount)	13.5%	16.1%	92 (2) (c)	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)	2.5%	2.5%	CRD 128, 129, 130, 131, 133	1.9%	
65	of which: capital conservation buffer requirement	2.5%	2.5%		1.9%	
66	of which: countercyclical buffer requirement	0.0%	0.0%		0.0%	

Own funds disclosure template(¹) All figures in €m		31-Dec-18	31-Dec-17	REGULATION (EU) No 575/2013 ARTICLE REFERENCE	31-Dec-18
		Fully load	ed basis( <sup>2</sup> )		Transitional basis( <sup>3</sup> )
	Common Equity Tier 1 available to meet buffers (as a percentage of risk				
68	exposure amount) ( <sup>6</sup> )	5.5%	8.1%	CRD 128	8.0%
Amou	nts below the thresholds for deduction (before risk-weighting)		<del>.</del>		
	Direct and indirect holdings of the capital of financial sector entities				
	where the institution does not have a significant investment in those			36 (1) (h), 46, 45, 56 (c),	
72	entities (amount below 10% threshold and net of eligible short positions	13	12	59, 60, 66 (c), 69, 70	13
	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				
73	positions	10	10	36 (1) (i), 45, 48	10
	Deferred tax assets arising from temporary differences (amount below				
	10 % threshold, net of related tax liability where the conditions in Article				
75	38 (3) are met)	2	1	36 (1) (c), 38, 48	12
Applic	able caps on the inclusion of provisions in Tier 2				
	Cap for inclusion of credit risk adjustments in T2 under internal ratings-				
79	based approach	54	56	62	54

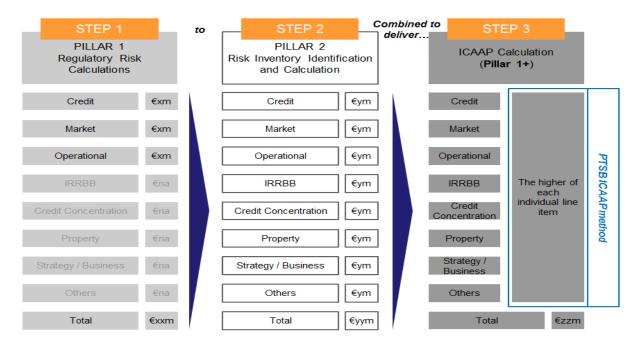
- (1) Template prescribed in Regulation EU 1423/2013 (Annex IV). Row is not shown if the question is not applicable, however in line with EBA guidance the numbering of each row is unchanged.
- (2) Fully loaded basis does not reflect the IFRS 9 transitional arrangements (see 'IFRS 9 transitional arrangements' section on page 97) and assumes the full impact of the Deferred Tax Asset deduction
- (3) Transitional basis reflects IFRS 9 transitional arrangements and the transitional impact of the 10 year phase-in of the Deferred Tax Asset deduction.
- (4) AT1 and T2 for the previous year has been restated to restrict the amount included within consolidated own funds to the limits under Articles 85 and 87 of the CRR
- (5) The Group calculates its capital ratios in accordance with EU Regulation 575/2013.
- (6) 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.

### Diagram: Pillar 2 Capital Consuming Risks



The methodology used for each material risk calculation for ICAAP (2018 and going forward) under Pillar 2 is summarised below:

Diagram: Capital Quantification Methodology for Capital-Consuming Risks.

Risk Category	Capital Quantification/methodology
	Credit
	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.
	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.
Credit Risk	Add-ons linked to Pillar 1 approaches are applied for Defaulted Assets and Standardised portfolios.
	Credit Concentration  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.
	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.
	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'.
Market Risk	Market Risk under Pillar 1 is limited to foreign exchange risk. However as the Group's net foreign exchange position at the end of 2017 and 2018 is immaterial (less < 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.

### The Group uses the industry standard Economic Value of Equity (EVE) and Earnings at Risk (EAR) methodologies to determine the level of interest rate risk to which the Group is exposed. The higher of the EV and EAR calculations across 12 key scenarios (including the 6 Basel prescribed scenarios) is assigned as the risk level. **Interest Rate** Assets and Liabilities are bucketed according to maturity (contractual or behavioural) Risk in the or re-pricing type (variable, fixed), with the parallel interest rate shock applied using **Banking Book**

# (IRRBB) incl. **Basis Risk**

the following methods:

- 1. Earnings at Risk (EaR), including Basis Risk and Re-pricing Risk;
- 2. Economic Value including Equity (Yield Curve Risk); and
- 3. Economic Value excluding Equity.

The capital required for IRRBB is considered to be the highest stress result of the above methodologies.

### **Property Risk**

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%.

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.

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.

### **Credit Spread** Risk (CSR)

As the daily market value of the bonds in the Hold to Collect and Sell (HTCS) portfolio is determined by their current yields, the Group considers relative changes in the observed yield as being the primary source of current market perceptions of the credit quality of the bond portfolio. To define potential future volatility, Group has calibrated historical observed credit spread movements as a reference point for future sources of risk in the portfolio.

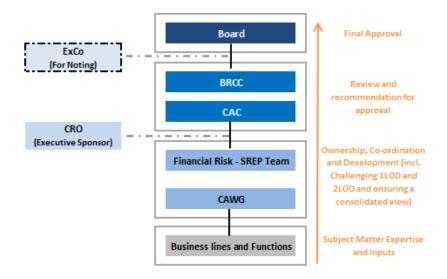
Given that the Group's HTCS bond portfolio consists of only Irish sovereigns and the going forward target HTCS portfolio duration of 3 years, the approved CSR methodology takes the German 3 year bond price as the risk free rate and measures the spread against the equivalent 3 Year Irish bond over a 7 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 hold period is used as it reflects the period of time it would take the Group to exit its bond position.

Operational & IT Risk	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.  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.  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%.
	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.
Business /	Business Risk is measured by shocking the one year base case forecast income levels
Strategic Risk	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.
	Strategic Risk is not considered to be appropriately mitigated by capitalisation.

### **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.

Diagram: Overview of the 2018 ICAAP Governance Structure



### **ICAAP Frequency**

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

#### **Design, Execution and Documentation**

The Group's Supervisory Review and Evaluation Process (SREP) Team is responsible for the coordination 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 ongoing execution of solvency stress testing exercises, including those performed external to the ICAAP. Whilst the Board maintains overall responsibility for the stress testing programme, it delegates detailed execution responsibilities 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 9: Capital Requirements by Exposure Type (Art 438.c, 438.d, 438.e, 438.f)

	Dec-1	L8	Dec-17		
Type of risk by exposure class  Figures in €'m	Capital requirements	Risk weighted assets	Capital requirements	Risk weighted assets	
Credit Risk IRB Approach	775	9,684	755	9,437	
Central Governments and Central Banks	6	77	4	52	
Institutions	22	277	28	351	
Corporate	16	205	17	215	
Retail, of which:	680	8,495	699	8,746	
SME	0	0	0	0	
Secured by immovable property	652	8,144	673	8,415	
Retail Qualified Revolving	11	139	12	151	
Retail Other	17	212	14	181	
Equity risk, of which:	6	74	5	68	
Simple risk weight approach	3	33	3	43	
Significant investments (@ 250% RW)	2	25	2	25	
Securitisation positions	44	556	0	5	
Credit Risk Standardised Approach	124	1,548	34	428	
Central Governments and Central Banks	0	0	0	0	
Corporate	0	0	0	0	
Retail	0	1	1	6	
Defaulted positions	0	4	0	3	
Other non-credit obligation assets <sup>3</sup>	123	1,543	34	419	
Credit risk	899	11,232	789	9,865	
Market risk	0	0	0	0	
Credit Value Adjustment - Standardised method	8	99	11	132	
Operational risk – Standardised Approach	53	659	48	596	
Total	959	11,990	847	10,593	

<sup>&</sup>lt;sup>3</sup> Includes capital requirements arising from the Project Glas receivable. Please see Note 43 in the Group's 2018 Annual Report for more information on Project Glas.

# 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 risk 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 2018, 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 2018, no specific credit reserves are maintained for exposures of this type.

## 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. All CSA counterparty rating triggers have been exercised at the end of 2018. As a result, a rating downgrade of the Group would not necessitate the posting of any additional collateral.

Table 10: Fair value and exposure value of derivatives using mark to market method (Art 439.e)

All figures in €m	31-Dec-18	31-Dec-17
Exposure calculated under mark to market method <sup>(1)</sup>		
Gross positive fair value of contracts	1	37
PFE Add-on	1	9
Netting benefits	-	-
Collateral held – eligible for CRM	-	-
Net derivatives credit exposure	2	46
	_	
Collateral held – not eligible for CRM	0	0

Table 11: Counterparty Credit Exposure using mark to market method (Art 439.f)

All figures in €m	31-Dec-18	31-Dec-17	
Exposure calculated under mark to market method <sup>(1)</sup>			
Interest rate contracts	1	45	
Foreign Exchange contracts	1	1	
Credit derivative contracts	-	-	
TOTAL	2	46	

(1) Per article 274 of CRR

2018

2017

# Capital buffers (Art 440)

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

Table 12: Amount of institution-specific countercyclical capital buffer (figures in €'m)

	,	010	010
010	Total risk exposure amount	11,990	10,593
020	Institution specific countercyclical buffer rate	0.0%	0.00%
030	Institution specific countercyclical buffer requirement	0	0

Table 13: Geographical distribution of credit exposures relevant<sup>4</sup> for the calculation of the countercyclical capital buffer

# December 2018

€'m	General cre	edit exposures	Trading bo	ok exposure	Securitisati	on exposure		Own funds	requirements			Countercyclical capital buffer rate
Country	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	Own funds requirements weights	
	010	020	030	040	050	060	070	080	090	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 (<€2 each)	0	13	0	0	0	0	1	0	0	1	0.00	0.00%
Total	1,954	17,916	0	0	0	44	826	0	44	870	1.00	0.01%

<sup>&</sup>lt;sup>4</sup> Relevant credit exposures exclude exposures, for example, to governments, public sector entities and institutions

# December 2017

€'m	General c	redit exposure	Trading boo		Securitisatio	n exposure		Own funds req	uirements			
Country	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: Securitisati on exposures	Total	Own funds requirements weights	Countercyclical capital buffer rate
	010	020	030	040	050	060	070	080	090	100	110	120
Ireland	749	21,147	0	0	0	0	741	0	0	741	0.98	0.00%
United Kingdom	0	179	0	0	0	65	11	0	0	11	0.01	0.00%
United States of America	0	37	0	0	0	0	2	0	0	2	0.00	0.00%
Australia	0	17	0	0	0	0	1	0	0	1	0.00	0.00%
France	0	8	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	4	0	0	0	0	0	0	0	0	0.00	0.00%
Spain	0	3	0	0	0	0	0	0	0	0	0.00	0.00%
Canada	0	2	0	0	0	0	0	0	0	0	0.00	0.00%
Jersey	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	1.25%
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	0.50%
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	0.50%
Other countries (<€2m each)	0	18	0	0	0	0	1	0	0	1	0.00	0.00%
Total	749	21,423	0	0	0	65	756	0	0	756	1.00	0.00%

# 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 (as defined within the Group's definition
  of default policy), received a concession from the Group on terms or conditions, and 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 (as defined within the Group's definition
  of default policy), received a concession from the Group on terms or conditions which result
  in a significant terminal payment obligation and consequently have been assessed as
  unlikely to repay without realisation of collateral; and
- Accounts where the customer is assessed as otherwise unlikely to pay, including bankruptcy, personal insolvency, assisted voluntary sale 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 2018, 'corporate information, basis of preparation and significant accounting policies' provides further detail on 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. 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 14: Credit exposure at default pre credit risk mitigation (CRM) broken down by exposure class (Art 442.c)

All figures in €m	Dec Exposure at period end	-18 Average⁵ exposure for the period	Exposure at period end	c-17 Average <sup>5</sup> exposure for the period
Sovereign	212	166	116	59
Institutions	976	1,141	1,157	1,343
Corporate	198	231	256	266
Total credit exposures using the foundation IRB approach	1,387	1,538	1,528	1,668
Retail Mortgages	16,763	19,296	20,354	20,756
Retail Qualified Revolving	669	623	582	580
Retail Other	263	243	209	207
Total credit exposures using the advanced IRB approach	17,695	20,162	21,146	21,544
Sovereign	2,950	3,351	3,204	3,550
Corporate	0	0	0	0
Retail	2	2	9	10
Defaulted positions	36	37	35	36
Other non-credit obligation assets	1,947	1,042	738	596
Total credit exposures using the Standardised Approach	4,935	4,432	3,986	4,191
Total credit exposures	24,016	26,132	26,660	27,403

 $<sup>^{\</sup>rm 5}$  Average exposure for the period is a simple average of the Group's exposures at the end of each quarter

Table 15: Exposures broken down by main geographical area and exposure class (Art 442.d)

Tuble 13. Exposures broken down by			•		
All figures in €m	ROI Balances	UK Balances	Other EU Balances	Rest of World	Total
As at 31 December 2018					
Sovereign	0	0	212	0	212
Institutions	37	11	449	480	976
Corporate	194	4	0	0	198
Total credit exposures using the					
foundation IRB approach	230	15	662	480	1,387
Retail Mortgages	16,573	124	25	42	16,763
Retail Qualified Revolving	664	3	1	1	669
Retail Other	262	0	0	0	263
Total credit exposures using the					
advanced IRB approach	17,499	128	26	43	17,695
Sovereign	2,950	0	0	0	2,950
Corporate	0	0	0	0	0
Retail	2	0	0	0	2
Defaulted positions	36	0	0	0	36
Other non-credit obligation assets	1,947	0	0	0	1,947
Total credit exposures using the					
Standardised Approach	4,935	0	0	0	4,935
Total credit exposures	22,664	143	687	522	24,016
As at 31 December 2017					
Sovereign	0	0	116	0	116
Institutions	48	144	518	446	1,157
Corporate	250	4	1	0	256
Total credit exposures using the					
foundation IRB approach	298	149	636	446	1,528
Retail Mortgages	20,099	162	35	59	20,354
Retail Qualified Revolving	578	3	1	1	582
Retail Other	208	0	0	0	209
Total credit exposures using the					
advanced IRB approach	20,885	165	35	60	21,146
Sovereign	3,204	0	0	0	3,204
Corporate	0	0	0	0	0
Retail	9	0	0	0	9
Defaulted positions	35	0	0	0	35
Other non-credit obligation assets	738	0	0	0	738
Total credit exposures using the					
Standardised Approach	3,986	0	0	0	3,986
Total credit exposures	25,168	314	671	506	26,660

Table 16: Exposure broken down by industry and exposure class (Art 442.e)

All figures in €m	Sovereign	Institutions	Corporate	Retail Mortgages	Retail Qualified Revolving	Retail Other	Other	Total
As at 31 December 2018								
General Government and Central Banks	3,162	0	0	0	0	0	0	3,162
Credit Institutions	0	976	0	0	0	0	0	976
Mortgage Finance	0	0	87	16,678	0	0	0	16,765
Other Real Estate activities	0	0	69	31	0	9	0	110
Personal (Private Households)	0	0	0	4	666	194	0	864
SMEs	0	0	0	0	0	0	0	0
Other	0	0	42	49	3	96	1,947	2,138
Total exposures	3,162	976	198	16,763	669	300	1,947	24,016
As at 31 December 2017								
General Government and Central Banks	3,320	0	0	0	0	0	0	3,320
Credit Institutions	0	1,157	0	0	0	0	0	1,157
Mortgage Finance	0	0	129	20,272	0	0	0	20,401
Other Real Estate activities	0	0	84	37	0	8	0	129
Personal (Private Households)	0	0	0	7	579	194	0	781
SMEs	0	0	0	0	0	0	0	0
Other	0	0	42	39	3	51	738	872
Total exposures	3,320	1,157	256	20,354	582	253	738	26,660

Table 17: Residual maturity of exposures (Art 442.f)

All figures in €m	Sovereign	Institutions	Corporate	Retail Mortgages	Retail Qualified Revolving	Retail Other	Other	Total
As at 31 December 2018								
<= 1 Year	558	396	5	402	266	78	1,947	3,652
>1 and <5 Years	2,604	580	151	1,797	403	220	0	5,756
>= 5 years	0	0	42	14,564	0	2	0	14,608
Total exposures	3,162	976	198	16,763	669	300	1,947	24,016
As at 31 December 2017								
<= 1 Year	1,347	470	7	457	582	135	738	3,736
>1 and <5 Years	1,857	688	170	2,088	0	116	0	4,918
>= 5 years	116	0	79	17,810	0	2	0	18,006
Total exposures	3,320	1,157	256	20,354	582	253	738	26,660

Table 18: Exposures by loan type and impairment information (Art 442.g)

All figures in €m	Sovereign	Institutions	ROI Residential mortgages	UK Residential mortgages	Commercial	Consumer Finance	Other	Total
As at 31 December 2018								
Neither past due nor impaired	3,162	976	15,132	0	138	905	1,949	22,263
Past due but not impaired	0	0	25	0	1	0	0	26
Impaired – provisions held	0	0	1,606	0	66	56	0	1,728
Total exposures before provisions	3,162	976	16,763	0	204	961	1,949	24,016
Provision for impairment losses	(1)	0	(1,009)	0	(47)	(28)	0	(1,084)
Total exposures after provisions	3,162	976	15,574	0	157	934	1,949	22,932
Charge / (writeback) for the year	0	0	9	0	10	(2)	0	17
As at 31 December 2017*								
Neither past due nor impaired	3,320	1,157	15,599	0	158	746	742	21,722
Past due but not impaired	0	0	447	0	5	23	0	475
Impaired – provisions held	0	0	4,342	0	68	53	0	4,463
Total exposures before provisions	3,320	1,157	20,388	0	231	821	742	26,660
Provision for impairment losses**	0	0	(2,127)	0	(70)	(49)	0	(2,246)
Total exposures after provisions	3,320	1,157	18,261	0	161	772	742	24,414
Charge / (writeback) for the year	0	0	49	0	(2)	1	0	48

<sup>\*</sup>This table has not been restated for IFRS 9.

<sup>\*\*</sup>These are all specific credit risk adjustments. Under IAS 39 the Group does not have any general credit risk adjustments.

Table 19: Exposures by main geographical area and impairment information (Art 442.h)

All figures in €m	ROI Balances	UK Balances	Other EU Balances	Rest of World	Total
As at 31 December 2018	Dalances	Datatices	LO Dalances	world	Total
Neither past due nor impaired	20,935	123	685	520	22,263
Past due but not impaired	25	0	0	0	26
Impaired – provisions held	1,704	19	2	3	1,728
Total exposures before provisions	22,664	143	687	522	24,016
Provision for impairment losses	(1,060)	(20)	(1)	(3)	(1,084)
Total exposures after provisions	21,604	123	686	520	22,932
As at 31 December 2017*					
Neither past due nor impaired	20,308	262	660	492	21,722
Past due but not impaired	464	8	1	2	475
Impaired – provisions held	4,397	44	10	12	4,463
Total exposures before provisions	25,168	314	671	506	26,660
Provision for impairment losses**	(2,207)	(29)	(4)	(6)	(2,246)
Total exposures after provisions	22,961	285	667	500	24,414

<sup>\*</sup>This table has not been restated for IFRS 9.

# Reconciliation of changes in credit risk adjustments (Art 442.i)

Please see Note 20 of the Group's 2018 Annual Report for a reconciliation of the changes in the Group's impairment provisions during the period.

<sup>\*\*</sup>These are all specific credit risk adjustments. Under IAS 39 the Group does not have any general credit risk adjustments.

# 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.<sup>6</sup>

Table 20: Template A: Encumbered and unencumbered assets\*

	<u>'</u>				
All figu	res 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
Med	lian values 2018				
010	Assets of the reporting institution	6,192		16,918	
030	Equity instruments	0		13	
040	Debt securities	41	41	2,595	2,638
060	of which: asset-backed securities	44	44	0	0
070	of which: issued by general governments	19	19	2,595	2,638
120	Other assets	6,173		14,288	
121	of which: Loans on demand	36		688	
122	of which: Loans and advances other than loans on demand	5,717		11,601	
Med	lian values 2017				
010	Assets of the reporting institution	6,107		17,042	
030	Equity instruments	0		10	
040	Debt securities	417	429	2,047	2,048
060	of which: asset-backed securities	0	0	0	0
070	of which: issued by general governments	417	429	2,047	2,048
120	Other assets	5,690		14,791	
121	of which: Loans on demand	168		403	
122	of which: Loans and advances other than loans on demand	5,522		13,639	

<sup>\*</sup>Rows deleted where question is not applicable

<sup>&</sup>lt;sup>6</sup> 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 21: Template B - Collateral Received\*

	·		Unencumbered			
All figures in €m		Fair value of encumbered collateral received or own debt securities issued	Fair value of collateral received or own debt securities issued available for encumbrance			
		010	040			
Median values 2018						
130	Collateral received by the reporting institution	1	0			
230	Other collateral received	1	0			
250	Total assets, collateral received and own debt securities issued	5,773				
Me	dian values 2017					
130	Collateral received by the reporting institution	3	0			
230	Other collateral received	3	0			
250	Total assets, collateral received and own debt securities issued	6,114				

\*Rows deleted where question is not applicable. All collateral received by the Group is in the form of cash.

Table 22: 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
Med	ian values 2018		
010	Carrying amount of selected financial liabilities	3,301	5,208
011	of which: Repurchase Agreements	2,075	3,603
012	of which: Debt Securities Issued	1,161	1,546
013	of which: Encumbered assets without an associated liability	0	520
Med	ian values 2017		
010	Carrying amount of selected financial liabilities	3,528	5,496
011	of which: Repurchase Agreements	2,557	4,093
012	of which: Debt Securities Issued	898	1,276
013	of which: Encumbered assets without an associated liability	0	577

Template D – Accompanying narrative Information

## **Encumbered Assets**

As a retail bank encumbering assets through the use of secured funding facilities forms an important pillar of the Group's funding strategy.

The Group's encumbrance level is primarily driven by mortgage assets which are included in securitisation special purpose entities (SPEs) and become encumbered when the associated notes are purchased by external investors or pledged as collateral through market repos or Central Bank

funding facilities. The amount of underlying mortgage assets included in securitisation structures has decreased year on year while the proportion of these mortgage assets encumbered has remained relatively static.

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 counterparts. 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 as available for encumbrance by the Group. Such assets include intangibles for example deferred tax assets and property, plant and equipment as well as derivative assets and held for sale assets.

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 reduced its encumbrance level over the course of 2018. The reported Asset Encumbrance ratio has reduced from 24% at 31 December 2017 to 21% at 31 December 2018. The key drivers behind this reduction were actions taken in December 2018, whereby the proceeds from a deleveraging transaction were utilised to mature two significant repurchase agreement borrowings and fully repay the Group's remaining ECB system funding.

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

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 Bank.

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 Irish sovereign exposures in April 2011 under article 89.1 (d) of the Directive 2006/48/EC relating to exposures to central governments and central banks. This exemption allows the Group to treat all exposures to the Irish Sovereign under the Standardised Approach and apply a 0% risk weighting. Consequently, ECAI ratings are not used in the calculation of risk weights for credit exposures to the Irish Sovereign.

Credit exposures to the Irish Sovereign and Central Bank of Ireland were €2.9bn as of 31 December 2018 (no credit risk mitigation (CRM) applied). Credit exposures to the Irish Sovereign and Central Bank of Ireland were €3.2bn pre CRM and €3.0bn post CRM as of 31 December 2017.

# Market Risk (Art 445)

The Group does not hold any capital against market risk as at 31 December 2018 or 31 December 2017 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 2018 and 2017 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 Group's rationale for meeting the criteria set-out in Article 320 is 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 Risk and
  Control Self-Assessments (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.

The Group position in relation to the above criteria is presented below

- 1) The Group has in place Operational and IT Risk Management Frameworks which encompass the measurement and monitoring of Operational and IT risks. The broad objectives of the Operational and IT Risk Management Frameworks are to:
  - Ensure that Operational and IT risks to which the Group is exposed are identified appropriately and in a timely manner;
  - Ensure that robust risk assessment is undertaken for all Operational and IT risks identified by the Group;
  - Ensure that effective risk mitigation strategies are adopted and applied by the Group;
  - Ensure that the Group's Operational and IT risk profile is monitored and reported on both at an individual and at an aggregate level; and
  - Ensure that a culture of risk awareness is fostered and promoted within the Group
    where all staff have an understanding of Operational and IT risk and the role they
    each play in ensuring that any impacts/losses are minimised.
- 2) The Group-wide approach to risk management includes risk identification, risk assessment, risk mitigation and risk monitoring and reporting. The management of Operational and IT risks is aligned to that approach.
  - The Group's risk identification process aims to be comprehensive in nature, considering both established and emerging risks. It seeks to identify the largest risks faced by the Group from both 'top-down' and 'bottom-up' perspectives.
    - In the 'top-down' risk identification process, senior management input is gathered via a consultation process across the Group and incorporates the Group's experience and a review of recent industry and regulatory events/commentary.

- In the 'bottom-up' approach, each Business Unit is responsible for identifying and recording risks impacting their unit and for considering both the likelihood and impact of a risk occurring. Risks are assessed both on an inherent (pre-control) and a residual (post-control) basis. The Risk and Control Self-Assessment (RCSA) Process is the process by which the Group captures, challenges and records the bottom-up identification and assessment of Operational and IT risks.
- 3) 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 submitted RCSAs, measurement and monitoring of the Group's Operational and IT risk profile is augmented by tracking a suite of Key Risk Indicators (KRIs), Operational and IT risk events (both internal and external) and through the testing of internal controls across the Group.

## **Capital Requirements for Operational and IT Risk**

The capital requirement for operational risk is calculated according to the CRR Standardised Approach, in which an institution's activities are divided into eight standardised business lines: corporate finance, trading and sales, retail brokerage, commercial banking, retail banking, payment and settlement, agency services and asset management.

Total Pillar I capital requirements for operational risk are derived from the three year average 'risk-weighted relevant indicator' (based on gross income) for each business line multiplied by a fixed beta coefficient. Beta coefficients are established under CRR for specific business lines and are calibrated to attribute higher capital requirements to business lines with perceived greater operational risk. Beta coefficients across business lines range from 12% to 18%.

The Group's principal business line is retail banking.

The regulatory Pillar 1 capital requirement for operational risk amounts to €53m as at 31 December 2018 (€48m – December 2017).

To support the Pillar II Supervisory review the Group performs stress testing and scenario analysis to facilitate a forward looking assessment in relation to strategic, capital and risk management planning and to ensure that:

- Operational and IT risks are sufficiently and adequately stressed; and
- Relevant Operational and IT risk scenarios are incorporated into its stress tests.

Scenario analysis is used to estimate the potential financial outcome of high impact, low likelihood events. It is performed annually and scenarios are revised either when a material change to any of the assessments occurs or when a new scenario is needed to address an emerging risk. A 'long-list' of potential scenarios is developed by examining internal and external data points, including prior Group financial losses, external loss events, risk assessments, audit reports, and peer surveys. A final 'short-list' of scenarios is then proposed and approved by the Group Board for further assessment. The outputs and correlations of the scenario assessment exercise are modelled for capital purposes at pre-defined percentile loss estimates.

# **Tracker Mortgage Redress Review**

Pursuant to its powers under the Administrative Sanctions Regime, the Central Bank of Ireland is conducting an enforcement investigation into the Group's compliance with the Consumer Protection

Code and, in particular, is investigating alleged breaches of the Consumer Protection Code 2006. These alleged breaches arose from the failure of the Group to inform customers that, as a consequence of exiting early from a fixed rate mortgage contract, they would not be able to avail of the option of a tracker rate in the future and/or no longer default to a tracker rate at the end of that fixed rate period. In addition, the Group's non-conformance with contractual terms was also identified in some instances in addition to operational errors in the handling of accounts.

In December 2015 the Central Bank of Ireland announced an industry-wide review of tracker mortgages (Tracker Mortgage Examination (TME)). The Group has completed its TME in line with the framework set down by the Central Bank of Ireland. The Central Bank of Ireland has conducted its own assurance review of the Group's TME.

The Group offered redress and compensation to all affected customers and payments have been made in respect of 99% of impacted customer accounts. In addition to administrative sanctions, the Group is also exposed to the risk that customers who were impacted, or who may consider themselves to have been impacted, by the loss of a tracker rate mortgage entitlement may seek alternative redress and compensation, beyond that offered by the Group, including by way of litigation, or seek to criticise the Group's actions. There may also be a number of customers who will feel that they have been wrongfully excluded from the impacted population and will seek a further review of this outcome.

# 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 €13m at 31 December 2018 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 2018 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 23: 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 2018				
VISA Incorporated preferred shares	13	13	13	0
As at 31 December 2017				
VISA Incorporated preferred shares	12	12	11	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, the Economic Value of Equity (EVE) approach measures yield curve risk while Earnings at Risk (EAR) is utilised to calculate the basis risk exposure.

These measures are further supplemented by a basis risk calculation, 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.

While not strictly IRRBB, the Bank also measures and monitors credit spread risk on the Hold to Collect and sell (HTCS) bond portfolio.

#### **Gap Analysis**

Gap analysis splits the current Balance Sheet position into re-pricing time bands, highlighting possible interest rate risk concentrations. Principal balances (and derivative notionals) 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 to the Basel prescribed time bands as outlined in table 24 below:

Table 24: 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 25: IRRBB Modelled Product Types

Product Groups	Assets	Liabilities
Customer	Mortgages by type:	Retail deposits by type:
	Tracker / SVR / MVR / Fixed	Current / Demand & Notice /
	Commercial loans	Term
	Consumer lending	Corporate deposits by type: Call /
	Credit Cards / Overdrafts	Notice / Term
	Non-Interest Bearing (NPLs)	
Treasury	Gilts / Government Bonds	Market funding (MTNs,
	Other securities	Securitisations)
	Interbank assets	System funding
		Market repos
		Interbank liabilities
Other	Impairments (deducted)	Equity
	Assets held for sale	
Derivatives	Receive leg notional by type:	Pay leg notional by type:
	Interest rate / FX swaps	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 have a specific profile (also updated quarterly by Credit Risk) and Write Offs and warehoused loans are profiled evenly over 6 years. Impairments are profiled as a direct offset to NPLs.
- 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 evenly over 1 year (buy to let assets or when there is an agreed sale date within 1 year) 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 annually and fixed rate mortgage pipeline assumptions updated monthly are also applied.

#### **EVE**

The Economic Value of Equity (EVE) component of the IRRBB framework is one of the key IRRBB measurement tools for the Bank.

The EVE component is calculated daily and uses the re-price profile generated within the Gap Analysis. Weighted risk factors are then 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. This approach is aligned to the methodology used under the 2017 SSM IRRBB Stress Testing exercise.

#### **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 these rates are likely to shift in relation to market rates when modelling EAR risk. Table 26: IRRBB Model Pass-through Assumptions below shows the assumed movement in administered rate products per 100 bps move in market rates. These assumptions are provided by the Commercial Unit with full consideration of customer fairness, political influence and the current market environment.

Table 26: IRRBB Model Pass-through Assumptions

	Upwards shock	Downwards shock
Mortgages		
Variable	0.60%	-0.60%
Fixed	0.60%	-0.60%
Deposits		
Demand	0.10%	-1.00%
FTIA	0.00%	-1.00%
Notice	0.25%	-1.00%
Term	0.40%	-0.80%
Source: Commercial Unit		

#### **Stress Testing**

The Bank stress tests IRRBB on both an EVE and EaR basis. For each stress scenario, the risk level is taken as 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 11 key stress scenarios that the Bank runs plus the result of the specific Basis Risk calculation. These scenarios are either prescribed through regulation (Revised Basel Standards), standard market or PTSB specific in terms of balance sheet composition.

The 11 core scenarios which include the six prescribed Basel scenarios are as follows:

**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.

**Parallel Up (B)\*:** This is a new shock prescribed by the Basel Committee and 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 (B):** Like the relationship between Up200 and Dn200 shocks, this shock is the mirror image of the Parallel Up shock, subject to floors.

**Steepener (B):** 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 by the Basel Committee.

**Flattener (B):** Interest rates are shocked upwards by an amount that declines as the tenor lengthens, becoming a negative shock for 7 years and further out the curve.

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

**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.

**MTP:** The interest rates forecast in the MTP are applied.

**Flat:** The current market interest rate curve is applied.

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

\*(B) represents a Basel prescribed 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 RAS limit and combines it with the more severe of the EVE 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 product lines in an adverse direction i.e. upward shock for liabilities and downward on assets.

In calibrating the severity of the spread widening shock the Bank have used a historical data set ranging from September 1999 to November 2018 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.

The 0% floor for the ECB base rate is maintained, in light of market guidance from the ECB that the base rate will no longer be used as a monetary policy tool, and projected ECB forward rate curves are on an upward trajectory. Should the ECB rate go negative, the Bank will review the validity of the flooring approach.

## **Supplementary IRRBB Risk Measures**

#### NII Sensitivity

In addition to the 12 month EAR NII calculation the Bank 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 the Bank running a specific interest rate or balance sheet scenario each month. By comparing the outcomes to the MTP base position the aim of the analysis to identify opportunities or risk exposures where strategic action may be warranted.

#### PV01 and Duration:

These relatively straightforward measures augment the PTSB 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 capital charges for the Basel prescribed scenarios are shown in table 27: IRRBB Capital charge below (GBP figures are incorporated in EUR equivalent at Year End FX rates).

Table 27: IRRBB Capital charge

EUR	Δ EVE		Δ	NII	
Period	2018	2017	2018	2017	
Parallel Up	91	69	170	199	
Parallel Down	-38	-32	0	0	
Steepener	-5	-13			
Flattener	39	42			
Short rate up	64	60			
Short rate down	-34	-34			
Maximum	38	34	0	0	
Period	2018		20	17	
Basis Risk	3				
Capital charge	41		41 34		34

The numbers above are calculated including commercial margins, discounted by the Euribor and Libor curves. The numbers are on a run-off balance sheet basis.

The Bank uses the industry standard 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 EVE and EAR calculations across the 11 key scenarios described earlier is assigned as the risk level.

The Bank applies a -0.50% floor in the Euro EVE Model and for the Bank's Euribor positions under the EaR calculation. The zero bound floor is maintained for ECB base rate positions under the EAR calculation. The model floor parameters remain under continuous review and will be re-examined in response to significant curve shifts.

The EVE calculation has increased year on year primarily due to the reduction in behaviourally profiled NPL assets following the successful execution of the NPL strategy. The €38m risk level stemming from the Parallel Down scenario represents the most severe outcome and is the driver of the Bank's IRRBB risk level and capital charge allocation.

The capital requirement has increased from €34m (EVE) in 2017 to €41m (EVE €38m and Basis Risk add on €3m) in 2018.

# 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 over the course of 2018 the Bank structured and executed a securitisation transaction (Glenbeigh) with the primary goal of reducing the Bank's NPL ratio while also generating funding. The Bank achieved derecognition of 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 2018, 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 not invested 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 2018 (Art 449.e, 449.p)

The securitisations originated by the Bank as at the 31 December 2018 do not qualify for derecognition under the CRR, with the exception of the privately issued Glenbeigh securitisation detailed below.

As at 31 December 2018, 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 2018 the Bank has €1.1bn 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 Bank's liquidity buffer and can be used to support repo funding activity. Over the course of 2018 PTSB collapsed Fastnet 3 and reused the underlying collateral to structure the retained Fastnets 14 & 15 which generated €2.1bn of counterbalancing capacity. At 31 December 2018 Permanent TSB has €5.3bn of 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.

During the course of 2018 PTSB issued a privately placed securitisation transaction with the primary goal of reducing the Bank's NPL ratio through asset de-recognition. The Glenbeigh transaction reduced the NPL ratio to below 10%. As part of this transaction, the Bank securitised €1.3bn of gross impaired loans secured against immovable properties generating €0.9bn of funding. The transaction generated €36m of losses which were recognised during 2018.

# 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 has

created a Significant Risk Transfer Policy which focuses on specific tests conducted on a quarterly basis that are designed to measure the Bank's on-going compliance with all relevant EBA and CRR SRT requirements.

# Summary of hedging policy (Art 449.g)

The Bank did not hedge any of its securitisation positions as at 31 December 2018 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 2018, the Bank applied a risk weight of 1,250% to the retained Glenbeigh V Note. However, following ECB permission the Bank intends to risk-weight the retained Glenbeigh V Note under the Supervisory Formula Approach (SFA). The estimated risk weight under the SFA is 190% based on the current CRR.

# 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 449.0)

As at 31 December 2018, the only securitisation exposure relates to the retained Glenbeigh V note which has a risk weight of 1,250%.

Table 28: Own funds requirement per Part Three – Title II, Chapter 5 of the CRR

All figures in €m	Exposure	Risk weighted Amount	Capital requirement	
Dec-18	44	556	44	
Dec-17	65	5	<1	

# 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 Group 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 Group's Annual Report for the year ended 31 December 2018 (pages 105 to 107).

# 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 Group Remuneration Policy within PTSB Group, the Group 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 Group 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.

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

The Chief Risk Officer (CRO) and Group 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, both in terms of plan design considerations and also payouts relating to Material Risk Takers. The CFO will provide an assessment on the impact of variable remuneration on the impact on 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 Group Internal Audit for compliance with policies and procedures for remuneration adopted by the Board. The CFO will provide an update annually on the impact of making variable remuneration payments on the ability of the Group to strengthen its capital base.

Number of meetings held by the Remuneration Committee during 2018, and the composition and the mandate of the Committee

The RemCo is currently comprised of four independent non-executive directors - Julie O'Neill (Chair), Robert Elliott, Ken Slattery and Andrew Power. During 2018 a total of seven meetings took place.

The Chairman of the Group (if not a member), the Group CEO, the Group 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 Group's website <a href="www.permanenttsbgroup.ie">www.permanenttsbgroup.ie</a>. 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 Group Remuneration Policy they determine is necessary.

In 2018, 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.

Other stakeholders in the development of the Group 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 Group.

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 Distribution Division.

# Group 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 Group'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 Group's strategy. Objectives are cascaded from the Group CEO throughout the organisation. Performance

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

In light of the Framework Agreement between the Minister for Finance and the Group, 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 promote the long-term success of the business whilst operating within the Group's risk appetite and taking into account the needs of our customers.

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

No material changes were enacted following a review of the Group's Remuneration Policy and supporting policies in 2018. The Policy is applicable to all employees within the PTSB Group and applies equally to its Irish and overseas subsidiaries.

#### 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 Group 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 Group 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 Group 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 Distribution Division which has been agreed with the Department of Finance and is summarised below.

#### Branch Based Commission Scheme (BBCS)

Only Territory Sales Managers, Territory Sales Staff and Branch Staff are eligible to participate in this scheme. The performance criteria for this scheme are highlighted in the section below entitled 'Information on the performance criteria on which the entitlement to variable components of remuneration is based'. 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 Group 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. During 2018, retention bonuses were paid to nine employees in our Isle of Man operation (PBI) totalling €0.17m. Following a strategic review of the activities of PBI, the Board of the Group approved a recommendation from management that a wind-down of the business be undertaken with a view to closing PBI in early 2018. The retention bonuses were paid, as a critical aspect to the effective implementation of an orderly wind down of the business was the retention of staff until the surrender of the banking licence to the Isle of Man regulator when PBI closed. No MRTs received a retention bonus.

#### 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 Group'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 105 to 107 of the Group's 2018 Annual Report.

#### 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 Group 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 Group'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 payout process rules. Redundancy payments in line with the Group's Termination Framework and VSS should not, in the normal course, be subject to the variable pay cap and/or payout 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 Group's ratio is 0:1 for 2018 (0:1 for 2017). 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.

The Group is currently restricted in terms of remuneration for MRTs and the wider employee workforce. As a result, the only variable remuneration scheme in place is the BBCS, as summarised above.

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 may not receive a payment under the scheme.

As set out above, there are no share based variable remuneration schemes in operation and the only remaining cash based variable remuneration scheme in place is the BBCS, as summarised above. This is due to the Framework Agreement in place between the Minister for Finance and PTSB.

# **Identification of Material Risk Takers**

Staff who are deemed to have a material impact on the Group'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 Group was approved by the Board Risk and Compliance Committee ('the BRCC') and the RemCo.

In line with the approved definitions and interpretations, the Group'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 are 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 2018, a total of 66 employees were identified as MRTs (2017: 72). The reduction has taken place against a background of changes to the composition of the Executive Committee, with 10 Executive Committee members identified as MRTs in 2018 compared with 14 in 2017.

Table 29: Number of Material Risk Takers - 2018

MRT Classification <sup>7</sup>	Management Body Supervisory Function	Management Body Mgt Function	Retail Banking	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

Table 29a: Number of Material Risk Takers - 2017

MRT Classification <sup>7</sup>	Management Body Supervisory Function	Management Body Mgt Function	Retail Banking	Corporate Function	Independent Control Function	Total
Senior						
Management	0	3	1	10	0	14
Other MRTS	8	0	6	19	25	58
All MRTS	8	3	7	29	25	72

Notes:

Senior Management is defined as members of the Executive Committee identified as MRTs in 2018.

These tables exclude 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.

<sup>&</sup>lt;sup>7</sup> Management Body Supervisory Function – Non-Executive Directors; Management Body Management Function – Executive Directors; Independent Control Functions - Group Risk and Compliance and Group Internal Audit

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

Table 30: 2018 Aggregate Quantitative Remuneration of Material Risk Takers by Business Area (Art 450.1.g and Art 450.2)

MRT Classification Amounts in €'m	Management Body Supervisory Function	Management Body Mgt Function	Retail Banking	Corporate Function	Independent Control Function	Total
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

Table 30a: 2017 Aggregate Quantitative Remuneration of Material Risk Takers by Business Area (Art 450.1.g and Art 450.2)

MRT Classification Amounts in €'m	Management Body Supervisory Function	Management Body Mgt Function	Retail Banking	Corporate Function	Independent Control Function	Total
Senior Management	0.0	1.2	0.0	3.6	0	4.8
Other MRTS	0.7	0.0	1.0	3.2	3.9	8.8
All MRTS	0.7	1.2	1.0	6.8	3.9	13.6

Notes:

Senior Management is defined as members of the Executive Committee identified as MRTs.

Table 30: Aggregate Remuneration for Senior Management categorised as Management Body in its Management Function excludes one 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.

Table 30a: One MRT classified as Senior Management was identified in Retail Banking for 2017. 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 30a above.

Quantitative disclosures are calculated in accordance with the EBA Guidelines on the Remuneration Benchmarking Exercise.

Table 31: 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 Mgt Function	Retail Banking	Corporate Function	Independent Control Function	Total
	Fixed	0.0	1.3	1.0	1.6	0.0	3.9
Senior	Variable	0.0	0.0	0.3	0.0	0.0	0.3
Management	Total	0.0	1.3	1.3	1.6	0.0	4.2
	#MRTS	0	3	2	5	0	10
	Fixed	0.7	0.0	1.3	2.8	3.9	8.7
Other MRT	Variable	0.0	0.0	0.0	0.0	0.1	0.1
Other Wiki	Total	0.7	0.0	1.3	2.8	4.0	8.8
	#MRTS	9	0	7	16	24	56
	Fixed	0.7	1.3	2.3	4.4	3.9	12.6
All MRTS	Variable	0.0	0.0	0.3	0.0	0.1	0.4
All WK15	Total	0.7	1.3	2.6	4.4	4.0	13.0
	#MRTS	9	3	9	21	24	66
	Fixed	0.0	0.0	50.1	62.4	15.0	127.5
Other Staff	Variable	0.0	0.0	6.1	3.7	0.3	10.1
Other Staff	Total	0.0	0.0	56.2	66.1	15.3	137.6
	#Staff	0	0	1,325	1,474	282	3,081

#### Notes:

Senior Management is defined as members of the Executive Committee identified as MRTs in 2018.

Variable remuneration for Senior Management categorised as Management Body in its Management Function excludes one 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.

Other variable remuneration awarded to MRTs is made up of 4 Voluntary Severance payments totalling €369,186.

All remuneration is paid fully in cash which is not subject to deferral.

Quantitative disclosures are calculated in accordance with the EBA Guidelines on the Remuneration Benchmarking Exercise.

Table 31a: 2017 Fixed and Variable Remuneration (Art 450.1.h.i and Art 450.2)

MRT Classification  Amounts in €'m		Management Body Supervisory Function	Management Body Mgt Function	Retail Banking	Corporate Function	Independent Control Function	Total
	Fixed	0.0	1.2	0.0	3.4	0.0	4.6
Senior	Variable	0.0	0.0	0.0	0.2	0.0	0.2
Management	Total	0.0	1.2	0.0	3.6	0.0	4.8
	#MRTS	0	3	0	11	0	14
	Fixed	0.7	0.0	1.0	3.1	3.9	8.7
Other MRT	Variable	0.0	0.0	0.0	0.1	0.0	0.1
Other Wiki	Total	0.7	0.0	1.0	3.2	3.9	8.8
	#MRTS	8	0	6	19	25	58
	Fixed	0.7	1.2	1.0	6.5	3.9	13.3
All MRTS	Variable	0.0	0.0	0.0	0.3	0.0	0.3
All WK15	Total	0.7	1.2	1.0	6.8	3.9	13.6
	#MRTS	8	3	6	30	25	72
	Fixed	0.0	0.0	46.8	66.3	13.6	126.7
Othor Stoff	Variable	0.0	0.0	3.9	0.9	0.0	4.8
Other Staff	Total	0.0	0.0	50.7	67.2	13.6	131.5
	#Staff	0	0	1,222	1,540	257	3,019

Notes:

Senior Management is defined as members of the Executive Committee identified as MRTs in 2017.

One MRT classified as Senior Management was identified in Retail Banking for 2017. 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 31a above.

MRT Variable pay is made up of 3 Voluntary Severance payments awarded in 2017 totalling €336,267.

All remuneration is paid fully in cash which is not subject to deferral.

Quantitative disclosures are calculated in accordance with the EBA Guidelines on the Remuneration Benchmarking Exercise.

#### Other disclosures on remuneration 2018 (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 2018 other than severance payments under the Group's voluntary severance scheme as referenced above. As outlined above, the severance payments are deemed to be variable for regulatory purposes only but are not performance related payments.
- In addition, one bona fide payment was made to a former director in settlement of proceedings for damages for breach of contract, totalling €200,000. The individual was not employed or identified as a MRT for 2017 or 2018.

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 2018, 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 2018.

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

- All of the 94 severance payments referenced below were both awarded and made during 2018.

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 93 severance payments were made to staff exiting in 2018, totalling €9,258,363, the highest of which was €225,000. Of the 93, 4 Voluntary Severance payments were awarded in 2018 to MRTs totalling €369,186. In addition, one bona fide payment to a former director in settlement of proceedings for damages for breach of contract, totalling €200,000, this individual was not employed or identified as a MRT for either 2018 or 2017. The majority of the severance payments to other staff resulted from a restructuring programme within the Group.

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 2018.

### 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 pending adoption of CRR 2.

The leverage ratio of the Group at 31 December 2018 on a transitional basis was 8.4% and 7.1% on a fully loaded basis (31 December 2017: 8.0% transitional and 7.1% fully loaded).

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

Table 32: Summary reconciliation of accounting assets and leverage ratio exposures (Art 451.1.b)

Table LRSum <sup>(1)</sup> All figures in €m								
		Applicable .	Amounts					
		31-Dec-18	31-Dec-17					
1	Total assets as per published financial statements	21,810	22,778					
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	5	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	9					
5	Adjustments for securities financing transactions 'SFTs'	205	573					
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	167	162					
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	(185)	(160)					
8	Total leverage ratio exposure	22,004	23,367					

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

Table 33: Leverage ratio common disclosure (Art 451.1.b)

Table I	.RCom <sup>(1)</sup>		
All figu	res in €m		
		CRR leverage ra	
		31-Dec-18	31-Dec-17
On-bal	ance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	21,814	22,747
2	Asset amounts deducted in determining Tier 1 capital	(185)	(160)
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	21,630	22,587
Deriva	tive exposures		
4	Replacement cost associated with <i>all</i> derivatives transactions (i.e. net of eligible cash variation margin)	1	37
5	Add-on amounts for Potential Future Exposure (PFE) associated with <i>all</i> derivatives transactions (mark-to-market method)	1	9
11	Total derivative exposures (sum of lines 4 to 10)	2	46
Securit	ties financing transaction exposures	•	
14	Counterparty credit risk exposure for SFT assets	205	573
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	205	573
Other	off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	518	534
18	(Adjustments for conversion to credit equivalent amounts)	(350)	(371)
19	Other off-balance sheet exposures (sum of lines 17 to 18)	167	162
Capita	and total exposures	1	
20	Tier 1 capital	1,855	1,878
21	Total leverage ratio exposures (sum of lines 3, 11, 16, 19)	22,004	23,367
	Leverage ratio		
22	Leverage ratio	8.4%	8.0%
(	Choice on transitional arrangements and amount of derecognised fid	uciary items	
EU- 23	Choice on transitional arrangements for the definition of the capital measure	Transitional	Transitional

<sup>(1)</sup> 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 34: Split-up of on balance sheet exposures (excluding derivatives and SFTs) (Art 451.1.b)

	Table LRSpl <sup>(1)</sup> All figures in €m								
		CRR leverage rat	tio exposures						
		31-Dec-18	31-Dec-17						
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	21,814	22,747						
EU-2	Trading book exposures	0	0						
EU-3	Banking book exposures, of which:	21,814	22,747						
EU-4	Covered bonds	0	0						
EU-5	Exposures treated as sovereigns	3,162	2,792						
EU-6	Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns	0	0						
EU-7	Institutions	578	648						
EU-8	Secured by mortgages of immovable properties	14,472	15,415						
EU-9	Retail exposures	304	269						
EU-10	Corporate	1	0						
EU-11	Exposures in default	1,059	2,664						
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	2,240	958						

<sup>(1)</sup> 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 2018 is 8.4%, which is 0.4% higher than the position at 31 December 2017. 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 Foundation 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, more commonly referred to as the advanced approach.

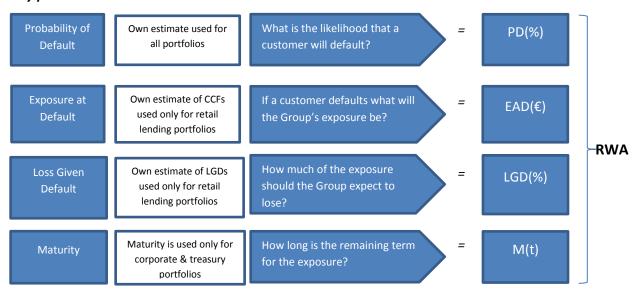
The Group is also approved to use the IRB Foundation Approach for its corporate lending portfolio and Treasury exposures, comprised mainly of bank and non-domestic sovereign counterparties.

The Group received approval from the ECB for material model changes (including default classification, PD and LGD) for its retail mortgage Home loan and Buy-to-Let portfolios in 2018 following completion of a TRIM (Targeted Review of Internal Models) review on these models. The impact of the updated models is reflected in the December 2018 RWAs for the Group.

#### Internal ratings process (Art 452.c)

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 in 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. 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 CRR 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.

#### Loss Given Default (LGD)

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. 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.

#### **Credit Conversion Factor (CCF)**

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. 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 CRR 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 2018 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 2018 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.

#### Central government exposures

#### **Probability of Default (PD)**

For exposures and non-Irish sovereigns, the internal rating process involves the selection of individual sovereign ratings from nominated ECAI's. The sovereign 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 non-Irish sovereigns the Group uses the LGDs specified in article 161 of the CRR. As of 31 December 2018 all exposures were senior and therefore carried an LGD of 45%.

#### **Credit Conversion Factor (CCF)**

For exposures to non-Irish sovereigns, 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 to sovereigns or institutional investors. Some retail exposures may be included where there is an extremely low probability of default.

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	Moodys 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 93 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, enhancements 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 as well as the relevant materiality considerations as detailed in EU 529/2014.

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 ongoing 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 35: Exposure split by exposure class (Art 452.d)

All figures in €m	Dec-18	Dec-17
Exposure class		
Sovereign	212	116
Institutions	976	1,157
Corporate	198	256
Total credit exposures using the foundation IRB approach	1,387	1,528
Retail Mortgages	16,763	20,354
Retail Qualified Revolving	669	582
Retail Other	263	209
Total credit exposures using the advanced IRB approach	17,695	21,146
Total credit exposures using IRB approach	19,081	22,674

Table 36: Exposure by grade (Art 452.e)

		<u>Sovereign</u>			<u>Institutions</u>			<u>Corpora</u>	<u>te</u>
All figures in €m Exposures by grade (non-Retail exposure classes)	EAD	Undrawn Amount	Average RW%	EAD	Undrawn Amount	Average RW%	EAD	Undrawn Amount	Average RW%
As at 31 December 2018									
Investment Grade	0	0	16.8%	704	0	29.5%	0	0	0.0%
Excellent Risk Grade	212	0	36.1%	272	0	53.0%	12	1	95.8%
Satisfactory Risk Grade	0	0	0.0%	0	0	0.0%	65	7	136.1%
Fair Risk Grade	0	0	0.0%	0	0	0.0%	55	5	189.8%
Defaulted <sup>(1)</sup>	0	0	0.0%	0	0	0.0%	66	0	0.0%
Total credit exposures using the foundation IRB approach	212	0		976	0		198	13	
As at 31 December 2017									
Investment Grade	0	0	16.8%	869	0	25.3%	0	0	0.0%
Excellent Risk Grade	116	0	44.7%	288	0	45.5%	13	1	95.3%
Satisfactory Risk Grade	0	0	0.0%	0	0	0.0%	92	8	136.6%
Fair Risk Grade	0	0	0.0%	0	0	0.0%	41	1	184.9%
Defaulted <sup>(1)</sup>	0	0	0.0%	0	0	0.0%	110	0	0.0%
Total credit exposures using the foundation IRB approach	116	0		1,157	0		256	9	

 $<sup>\</sup>ensuremath{^{(1)}}\mbox{Risk}$  weight is not calculated for defaulted exposures under the foundation IRB approach

Table 37: Exposure by grade (Art 452.f)

	<u> </u>	Retail Mortgag	<u>e</u>	Q	ualified Revo	lving		Retail Othe	<u>r</u>
All figures in €m Exposures by grade (Retail exposure classes)	EAD €m	Average RW%	Average PD%	EAD €m	Average RW%	Average PD%	EAD €m	Average RW%	Average PD%
As at 31 December 2018									
Excellent Risk Grade	7,780	26.7%	1.0%	533	9.1%	0.4%	153	64.0%	0.7%
Satisfactory Risk Grade	5,714	52.8%	2.4%	82	49.6%	2.6%	63	115.8%	2.6%
Fair Risk Grade	1,669	123.9%	18.2%	43	104.8%	11.5%	31	125.0%	11.9%
Defaulted	1,599	61.1%	100%	12	40.4%	100%	15	17.3%	100%
Total credit exposures using the advanced IRB approach	16,763	48.6%	12.6%	669	20.8%	3.13%	263	80.8%	8.3%
As at 31 December 2017									
Excellent Risk Grade	10,501	25.9%	0.7%	441	10.1%	0.4%	126	63.8%	0.6%
Satisfactory Risk Grade	4,130	48.1%	1.6%	84	50.7%	2.6%	52	113.8%	2.8%
Fair Risk Grade	1,270	86.4%	10.8%	46	108.6%	11.6%	24	119%	13.8%
Defaulted	4,452	59.4%	100.0%	12	118.2%	100.0%	7	188.3%	100.0%
Total credit exposures using the advanced IRB approach	20,354	41.5%	23.3%	582	25.9%	3.6%	209	86.5%	5.8%

Table 38: Actual specific credit risk adjustments for each exposure class (Art 452.g)

All figures in €m	31-Dec-18	31-Dec-17	Change
Sovereign	1	0	1
Institutions	0	0	0
Corporate	61	67	(6)
Total foundation IRB approach	61	67	(5)
Retail Mortgages	989	2,093	(1,104)
Retail Qualified Revolving	16	11	5
Retail Other	18	14	4
Total advanced IRB approach	1,023	2,118	(1,095)
Total specific credit risk adjustments	1,084	2,184	(1,101)

#### 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 page 30 of the Group's 2018 Annual Report.

Table 39: 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 2017 with the actual loss (charge incurred on accounts that moved into Stage 3 in 2018) in the year ended December 2018.

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.

figures in €'m	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.

figures in €'m	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	

figures in €'m Expected Loss vs Actual Loss	Regulatory Expected Loss Dec'15	Accounting Specific Impairment Dec'16	Difference
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

figures in €'m	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)	

figures in €'m Expected Loss vs Actual Loss	Regulatory Expected Loss Dec'13	Accounting Specific Impairment Dec'14	Difference
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

figures in €'m Expected Loss vs Actual Loss	Regulatory Expected Loss Dec'12	Accounting Specific Impairment Dec'13	Difference
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 40: Exposures split by geographical area by exposure class, average PD% and average LGD% (Art 452.j)

		ROI Balances			UK Balances			Other EU Balances	;		Rest of World			Total	
All figures in €m	EAD	PD%	LGD%	EAD	PD%	LGD%	EAD	PD%	LGD%	EAD	PD%	LGD%	EAD	PD%	LGD%
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%
As at 31 December 2017															
	0	0.09/	0.09/	0	0.09/	0.09/	116	0.29/	4E 00/	0	0.09/	0.0%	116	0.20/	4E 09/
Sovereign	0	0.0%	0.0%	0	0.0%	0.0%	116	0.2%	45.0%	0	0.0%	0.0%	116	0.2%	45.0%
Institutions	48	0.1%	45.0%	144	0.1%	45.0%	518	0.1%	45.0%	446	0.1%	45.0%	1,157	0.1%	45.0%
Institutions Corporate															
Institutions Corporate Total foundation IRB	48 250	0.1% 45.7%	45.0% 45.0%	144	0.1% 2.9%	45.0% 45.0%	518	0.1% 100.0%	45.0% 45.0%	446	0.1%	45.0% 0.0%	1,157 256	0.1% 45.3%	45.0% 45.0%
Institutions Corporate Total foundation IRB approach	48 250 <b>298</b>	0.1% 45.7% <b>38.3%</b>	45.0% 45.0% <b>45.0</b> %	144 4 149	0.1% 2.9% <b>0.2%</b>	45.0% 45.0% <b>45.0</b> %	518 1 <b>636</b>	0.1% 100.0% <b>0.4%</b>	45.0% 45.0% <b>45.0</b> %	446 0 <b>446</b>	0.1% 0.0% <b>0.1%</b>	45.0% 0.0% 45.0%	1,157 256 <b>1,528</b>	0.1% 45.3% <b>7.7%</b>	45.0% 45.0%
Institutions Corporate Total foundation IRB approach Retail Mortgages	48 250	0.1% 45.7%	45.0% 45.0%	144	0.1% 2.9%	45.0% 45.0%	518	0.1% 100.0%	45.0% 45.0%	446	0.1%	45.0% 0.0%	1,157 256	0.1% 45.3%	45.0% 45.0%
Institutions Corporate Total foundation IRB approach Retail Mortgages Retail Qualified	48 250 <b>298</b> 20,099	0.1% 45.7% <b>38.3%</b> 22.9%	45.0% 45.0% 45.0% 12.9%	144 4 149 162	0.1% 2.9% <b>0.2%</b> 29.4%	45.0% 45.0% 45.0% 13.7%	518 1 <b>636</b> 35	0.1% 100.0% <b>0.4%</b> 27.5%	45.0% 45.0% 45.0% 13.1%	446 0 <b>446</b>	0.1% 0.0% <b>0.1%</b> 23.4%	45.0% 0.0% 45.0% 12.7%	1,157 256 1,528 20,354	0.1% 45.3% <b>7.7%</b> 23.0%	45.0% 45.0% <b>45.0%</b> 12.9%
Institutions Corporate Total foundation IRB approach Retail Mortgages Retail Qualified Revolving	48 250 <b>298</b> 20,099	0.1% 45.7% <b>38.3%</b> 22.9% 3.6%	45.0% 45.0% 45.0% 12.9%	144 4 149 162	0.1% 2.9% <b>0.2%</b> 29.4%	45.0% 45.0% 45.0% 13.7% 71.8%	518 1 <b>636</b> 35	0.1% 100.0% <b>0.4%</b> 27.5%	45.0% 45.0% 45.0% 13.1% 76.7%	446 0 446 59	0.1% 0.0% <b>0.1%</b> 23.4%	45.0% 0.0% 45.0% 12.7% 72.1%	1,157 256 1,528 20,354	0.1% 45.3% <b>7.7%</b> 23.0% 3.6%	45.0% 45.0% 45.0% 12.9% 55.0%
Institutions Corporate Total foundation IRB approach Retail Mortgages Retail Qualified Revolving Retail Other	48 250 <b>298</b> 20,099	0.1% 45.7% <b>38.3%</b> 22.9%	45.0% 45.0% 45.0% 12.9%	144 4 149 162	0.1% 2.9% <b>0.2%</b> 29.4%	45.0% 45.0% 45.0% 13.7%	518 1 <b>636</b> 35	0.1% 100.0% <b>0.4%</b> 27.5%	45.0% 45.0% 45.0% 13.1%	446 0 <b>446</b>	0.1% 0.0% <b>0.1%</b> 23.4%	45.0% 0.0% 45.0% 12.7%	1,157 256 1,528 20,354	0.1% 45.3% <b>7.7%</b> 23.0%	45.0% 45.0% <b>45.0%</b> 12.9%
Institutions Corporate Total foundation IRB approach Retail Mortgages Retail Qualified Revolving	48 250 <b>298</b> 20,099	0.1% 45.7% <b>38.3%</b> 22.9% 3.6%	45.0% 45.0% 45.0% 12.9%	144 4 149 162	0.1% 2.9% <b>0.2%</b> 29.4%	45.0% 45.0% 45.0% 13.7% 71.8%	518 1 <b>636</b> 35	0.1% 100.0% <b>0.4%</b> 27.5%	45.0% 45.0% 45.0% 13.1% 76.7%	446 0 446 59	0.1% 0.0% <b>0.1%</b> 23.4%	45.0% 0.0% 45.0% 12.7% 72.1%	1,157 256 1,528 20,354	0.1% 45.3% <b>7.7%</b> 23.0% 3.6%	45.0% 45.0% 45.0% 12.9% 55.0%

## 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 the LGD estimation process.

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

Table 41: Exposure weighted indexed LTV for retail mortgage portfolios

Indexed LTV	Rol Residential Mortgages				
	Owner Occupied	Buy-to-let			
Dec-18	65%	96%			
Dec-17	76%	108%			

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 2018, the average exposure weighted LGD for the Group's retail mortgage portfolios in Ireland was 23.7% (2017: 12.8%).

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 2018, 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 2018 Annual Report.

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 42: F-IRB and STA Credit Exposures

All figures in €m	Dec-1	18	Dec-17		
F-IRB Exposure Class	Pre-CRM	Post-CRM	Pre-CRM	Post-CRM	
Central Banks or Central Governments	212	212	116	116	
Institutions	2,271	976	2,541	1,157	
Securitisations	44	44	65	65	

All figures in €m	Dec-1	18	Dec-17		
STA Exposure Class	Pre-CRM	Post-CRM	Pre-CRM	Post-CRM	
Central Banks or Central Governments	2,950	2,950	3,204	3,035	
Institutions	-	-	-	-	
Securitisations	-	-	-	-	

#### 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 2018. 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 2018 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 43: Comparison of own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9

Template I	FRS 9-FL:  n of institutions' own funds and capital and leverage ratios with and without the application of	f transitional
arrangeme	nts for IFRS 9 or analogous ECLs	
€m		Dec-18
Available c	apital (amounts)	
1	Common Equity Tier 1 (CET1) capital	1,768
2	Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	1,657
3	Tier 1 capital	1,855
4	Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	1,751
5	Total capital	1,921
6	Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	1,817
Risk-weigh	ted assets (amounts)	
7	Total risk-weighted assets	11,990
8	Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	11,966
Capital rati		
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	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	13.8%
11	Tier 1 (as a percentage of risk exposure amount)	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	14.6%
13	Total capital (as a percentage of risk exposure amount)	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	15.2%
Leverage ra	atio	
15	Leverage ratio total exposure measure	22,004
16	Leverage ratio	8.4%
17	Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	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.

**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.

**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.

**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 will be 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 defined as impaired loans, loans which are greater than 90 days in arrears, loans where the borrower is assessed as unlikely to repay the loan in full without the realisation of the collateral and loans which are deemed unlikely to pay as defined by the May 2013 CBI Guidelines on impairment provisioning / EBA ITS.

**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.

**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 revaluation reserves, undisclosed reserves, 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.