2019

The Governor and Company of the Bank of Ireland
Annual Report

Bank of Ireland

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These are the consolidated results of The Governor and Company of the Bank of Ireland (the 'Bank') and its subsidiaries (together the 'Group')

The Group's forward looking statement can be found on page 259.

Business Review

Operating and financial review

Basis of presentation

This operating and financial review is presented on an underlying basis. For an explanation of underlying see page 4.

Percentages presented throughout the Business Review are calculated on the absolute underlying figures and so may differ from the percentage variances calculated on the rounded numbers presented. Where the percentages are not measured this is indicated by n/m.

Principal rates of exchange used in the preparation of the Financial Statements are set out on page 74.

References to 'the State' throughout this document should be taken to refer to the Republic of Ireland (RoI), its Government and, where and if relevant, Government departments, agencies and local Government bodies. References to Bank of Ireland Group plc ('BOIG plc Group') throughout this document should be taken to be referred to BOIG plc and its subsidiaries.

Group income statement

Summary consolidated income statement on an underlying[1] basis

	2019 €m	2018 €m	Change %
Net interest income	2,143	2,143	-
Net other income	686	660	4%
Operating income (net of insurance claims)	**2,829**	**2,803**	**1%**
Operating expenses (before levies and regulatory charges)	(1,784)	(1,851)	4%
Levies and regulatory charges	(117)	(101)	(16%)
Operating profit before net impairment gains / (losses) on financial instruments	**928**	**851**	**9%**
Net impairment gains / (losses) on financial instruments	(215)	42	n/m
Share of results of associates and joint ventures (after tax)	39	41	(5%)
Underlying[1] profit before tax	**752**	**934**	**(19%)**
Non-core items	(113)	(100)	(13%)
Profit before tax	**639**	**834**	**(23%)**
Tax charge	(196)	(160)	(23%)
Profit for the year	**443**	**674**	**(34%)**
Profit attributable to stockholders	443	674	34%
Profit attributable to non-controlling interests	-	-	-
Profit for the year	**443**	**674**	**34%**
Return on assets (bps)	34	54	

Profit before tax of €639 million was generated by the Group for 2019 (2018: €834 million).

Operating profit before net impairment (losses) / gains for 2019 is €77 million higher than 2018 predominantly reflecting lower operating expenses (before levies and regulatory charges) of €67 million and a growth in operating income (net of insurance claims) of €26 million.

Net impairment losses for the year are €215 million whereas in 2018 the Group benefitted from a net impairment gain of €42 million. This movement is the key driver in the decrease of €182 million in underlying profit before tax, representing a return to more normalised impairment levels.

Operating income has increased by €26 million compared to 2018. Net interest income has remained stable year on year. A strong performance in our Wealth and Insurance business together with higher valuation items are the key drivers of operating income growth.

[1] *Underlying excludes non-core items which are those items that the Group believes obscure the underlying performance trends in the business. See page 4 for further information.*

Summary consolidated income statement on an underlying basis *(continued)*

Operating expenses (before levies and regulatory charges) of €1,784 million are €67 million or 4% lower than 2018. The Group continues to focus on reducing its operational costs through simplifying the organisation and strategic sourcing, driving a decrease in third party spend. The reduction has been achieved while absorbing increased costs from wage inflation and higher depreciation.

Our transformation programme continues to make progress and a further €263 million was invested in this programme in 2019, of which €100 million is capitalised on the balance sheet (2018: €100 million), with an income statement charge of €108 million (2018: €113 million) and €55 million (2018: €93 million) recognised through non-core items.

Net impairment losses on financial instruments of €215 million in 2019 was higher than 2018 and primarily reflects a more normalised level of impairments and also losses on a small number of large exposures.

Non-core charges increased by €13 million for the year. The increased charge is principally due to customer redress charges of €74 million, increased losses of €30 million on disposal / liquidation of business activities partially offset by a €52 million reduction in the cost of restructuring programme, and an increase of €42 million in the gain on the gross-up policyholder tax in the Wealth and Insurance business.

The **taxation charge** for the Group was €196 million in 2019 with an effective taxation rate on a statutory basis of 31% (2018: €160 million and 19%, respectively). The increased rate is primarily due to the re-assessment of the tax value of the UK tax losses carried forward and the tax impact of the gross-up for policyholder tax in the Wealth and Insurance business. On an underlying basis and excluding the impact of the re-assessment of the tax value of the tax losses carried forward, the effective taxation rate in 2019 was 17% (2018: 19%). The effective tax rate is influenced by changes in the geographic mix of profits and losses.

Non-core items

Non-core items	**2019 €m**	**2018 €m**	**Change %**
Customer redress charges	(74)	-	n/m
Cost of restructuring programme	(59)	(111)	47%
- Transformation Investment costs	*(55)*	*(93)*	*41%*
- Other restructuring charges	*(4)*	*(18)*	*78%*
Gross-up for policyholder tax in the Wealth and Insurance business	35	(7)	n/m
UK portfolio divestments	12	-	n/m
- Operating income	*51*	-	n/m
- Operating expenses[1]	*(40)*	-	n/m
- Impairment gains on other financial instruments	*1*	-	*n/m*
(Loss) / gain on disposal / liquidation of business activities	(25)	5	n/m
Investment return on treasury shares held for policyholders	(2)	6	n/m
Gain on disposal of property	-	7	100%
Total non-core items	**(113)**	**(100)**	**(13%)**

Underlying performance excludes non-core items which are those items that the Group believes obscure the underlying performance trends in the business. The Group has treated the following items as non-core:

Customer redress charges
The Group has set aside a further €67 million provision in respect of the Tracker Mortgage Examination to cover the additional redress and compensation costs for a number of customers, operational costs associated with the length and nature of the review and costs of closing out the review. In addition, a further €7 million has been provided in respect of other customer redress.

Cost of restructuring programme
During 2019, the Group recognised a charge of €59 million. Transformation Investment costs of €55 million relate to a reduction in employee numbers (€34 million), programme management costs (€17 million) and costs related to the implementation of the Group's property strategy (€4 million). Other restructuring charges of €4 million relate to impairment of property, plant and equipment. A restructuring charge of €93 million was incurred in 2018, predominantly related to changes in employee numbers.

Gross-up for policyholder tax in the Wealth and Insurance business
Accounting standards require that the income statement be grossed up in respect of the total tax payable by Wealth and Insurance, comprising both policyholder and shareholder tax. The tax gross-up relating to policyholder tax is included within non-core items.

During 2019, the Group recognised a credit of €35 million (2018: €7 million charge). The year on year movement is mainly due to favourable investment market performance in 2019.

[1] *Includes staff costs of €5 million (2018: €nil).*

Non-core items *(continued)*

UK portfolio divestments
Where the Group has made a strategic decision to exit an area of a business, the related income and expenses of that business are treated as non-core. During the year, the Group disposed of the UK credit card portfolio and exited unprofitable ATMs. As a result, in 2019, €51 million of operating income, €40 million of operating expenses and €1 million of impairment gains arising from these businesses have been treated as non-core (2018: €nil).

Gain / loss on disposal / liquidation of business activities
The loss on disposal of business activities reflects the loss on sale of the UK credit card portfolio. The assets were classified as assets held for sale up to the date of disposal in July 2019. The portfolio was sold for total consideration of €580 million resulting in a net loss on disposal of €21 million after making a provision related to the cost of migration and other costs associated with the disposal (note 18).

In addition, a loss of €4 million (2018: €5 million gain) was recognised relating to the recycling of cumulative unrealised foreign exchange (FX) gains and losses through the income statement following the liquidation of foreign denominated subsidiaries. These losses were previously held in the FX reserve.

Investment return on treasury shares held for policyholders
Under accounting standards, the Group income statement excludes the impact of the change in value of BOIG plc shares held by Wealth and Insurance for policyholders. In 2019, there was a €2 million loss (2018: €6 million gain). At 31 December 2019, there were 5.0 million shares (2018: 3.3 million shares) held by Wealth and Insurance for policyholders.

Group balance sheet

The following tables show the composition of the Group's balance sheet including the key sources of the Group's funding and liquidity.

Summary consolidated balance sheet

Summary consolidated balance sheet	**2019 €bn**	**2018 €bn**	**Change %**
Assets (after impairment loss allowances)			
Loans and advances to customers[1,2]	79	77	3%
Liquid assets	27	25	8%
Wealth and Insurance assets	20	17	18%
Other assets	6	5	20%
Total assets	**132**	**124**	**6%**
Liabilities			
Customer deposits	84	79	6%
Wholesale funding	11	11	-
Wealth and Insurance liabilities	20	17	18%
Other liabilities	5	6	17%
Subordinated liabilities	2	2	-
Total liabilities	**122**	**115**	**6%**
Stockholders' equity	9	8	13%
Other equity instruments	1	1	-
Total liabilities and shareholders' equity	**132**	**124**	**6%**
Credit-impaired loans and advances to customers	3.1	4.5	
Non-performing exposures	3.5	5.0	
Non-performing exposures ratio	4.4%	6.3%	
Liquidity Coverage Ratio[3]	138%	136%	
Net Stable Funding Ratio[4]	131%	130%	
Loan to Deposit Ratio	95%	97%	

[1] *Includes €0.3 billion of loans and advances to customers at 31 December 2019 (2018: €0.3 billion) that are measured at fair value through profit or loss and are therefore not subject to impairment under IFRS 9.*
[2] *Includes €nil of loans and advances to customers classified as held for sale at 31 December 2019 (2018: €0.6 billion) .*
[3] *The Liquidity Coverage Ratio is calculated under the prudential scope of consolidation of the BOIG plc Group and based on the Commission Delegated Regulation (EU) 2015/61 which came into force on 1 October 2015.*
[4] *The Group's Net Stable Funding Ratio is calculated under the prudential scope of consolidation of the BOIG plc Group and based on the Group's interpretation of the Basel Committee on Banking Supervision October 2014 document.*

Summary consolidated balance sheet *(continued)*

The Group's **loans and advances to customers (after impairment loss allowances)** of €79.5 billion are €2.5 billion higher than 31 December 2018, primarily due to net new lending of €2.0 billion and the impact of foreign exchange rates. During 2019, the Group completed the sale of its UK credit card portfolio (€0.6 billion) and also derecognised via securitisation and sale transactions, non-performing Retail Ireland loans of €0.5 billion. Gross new lending increased by 3% to €16.5 billion compared to €15.9 billion in 2018.

The Group's **asset quality** continues to improve. **NPEs** reduced by €1.5 billion to €3.5 billion during 2019, and represented 4.4% of gross loans at 31 December 2019.

At 31 December 2019, Group **customer deposits** volumes are €5.1 billion higher than 2018. The main drivers of this movement were growth of €4.3 billion in Retail Ireland primarily due to growth in current account credit balances (€3.6 billion), reflecting strong economic activity and a €0.5 billion increase in Corporate and Treasury. Retail UK decreased by Stg£0.6 billion, primarily driven by lower UK Post Office balances due to pricing optimisation. However due to sterling strengthening against the Euro, Retail UK balances increased on a headline basis by €0.3 billion.

Wholesale funding sources have remained broadly unchanged at €11 billion, primarily due to the full repayment of Targeted Longer Term Refinancing Operation (TLTRO) funding offset by more expensive MREL eligible debt (€0.6 billion in July 2019 and €0.7 billion in November 2019).

The net defined benefit pension deficit has decreased by c.€0.1 billion since 2018. The primary drivers of the movement in the pension deficit were positive asset returns, experience gains and employer contributions offset by the negative impact of assumption changes in 2019. The interest rate and inflation rate hedging strategies in the investment portfolios have offset the impact of the significant reductions in discount rates in 2019.

The balance sheet remains strong with the Group generating **robust organic capital growth**. Our fully loaded Common equity tier 1 (CET1) ratio increased by c.40 basis points during 2019 to 13.8% and our regulatory CET1 ratio increased by c.10 basis points to 15.1%. The increase of c.40 basis points is predominantly due to organic capital generation (c.+170 basis points) and the sale of NPEs and the UK credit card portfolio (c.+40 basis points) offset by risk weighted assets (RWAs) growth (c.-50 basis points), investment in the Group's transformation programmes (c.-50 basis points), an accrual for a proposed dividend (c.-40 basis points), the impact of International Financial Reporting Standard (IFRS) 16 implementation (c.-20 basis points) and net movements, including movements in the Group's defined benefit pension schemes (c.10 basis points).

Capital

CRD IV - 2018			CRD IV - 2019[1]	
Regulatory %	Fully loaded %		Regulatory %	Fully loaded %
		Capital ratios		
15.0%	13.4%	Common equity tier 1	15.0%	13.8%
16.0%	14.4%	Tier 1	16.3%	15.1%
18.8%	17.2%	Total capital	18.6%	17.4%
7.0%	6.3%	Leverage ratio	7.1%	6.5%

Fully loaded ratio[1]
BOIG plc Group's fully loaded CET1 ratio is estimated at 13.8% at 31 December 2018 (2018: 13.4%).

Leverage ratio[1]
BOIG plc Group's leverage ratio is 7.1% on a Capital Requirements Directive (CRD) IV regulatory basis (2018: 7.0%) and 6.6% on a pro-forma fully loaded basis (2018: 6.3%).

Distributable items
As at 31 December 2019, the Bank had reserves available for distribution in excess of €3.3 billion (2018: €2.7 billion).

Individual consolidation
The regulatory CET1 ratio of the Bank calculated on an individual consolidated basis as referred to in Article 9 of the Capital Requirements Regulation (CRR) is 15.2% at 31 December 2019 (2018: 15.2%).

[1] *The capital and leverage ratios are calculated under the prudential scope of consolidation of the BOIG plc Group. Further details on the capital position of BOIG plc Group and The Governor and Company of the Bank of Ireland can be found in BOIG plc's Pillar 3 disclosures for the year ended 31 December 2019, available on the Group's website.*

Income statement - Operating segments

2019	Net interest income / (expense) €m	Net insurance premium income €m	Other income €m	Total operating income €m	Insurance contract liabilities and claims paid €m	Total operating income net of insurance claims €m	Operating expenses €m	Operating profit / (loss) before net impairment gains / (losses) on financial instruments €m	Net impairment (losses) / gains on financial instruments €m	Share of results of associates and joint ventures (after tax) €m	Gain on disposal / liquidation of business activities and property €m	Profit / (loss) before taxation €m
Retail Ireland	990	-	268	1,258	-	1,258	(745)	513	(50)	5	-	468
Wealth and Insurance	(8)	1,521	1,433	2,946	(2,642)	304	(135)	169	-	-	-	169
Retail UK	563	-	(15)	548	-	548	(329)	219	(82)	34	-	171
Corporate and Treasury	609	-	123	732	-	732	(195)	537	(82)	-	-	455
Group Centre	(6)	(3)	9	-	(5)	(5)	(500)	(505)	(1)	-	-	(506)
Other reconciling items	2	-	(3)	(1)	-	(1)	2	1	-	-	-	1
BOIG Group plc - underlying[1]	**2,150**	**1,518**	**1,815**	**5,483**	**(2,647)**	**2,836**	**(1,902)**	**934**	**(215)**	**39**	**-**	**758**
Less:												
Attributable to BOIG plc	(7)	-	-	(7)	-	(7)	1	(6)	-	-	-	(6)
Group underlying[1]	**2,143**	**1,518**	**1,815**	**5,476**	**(2,647)**	**2,829**	**(1,901)**	**928**	**(215)**	**39**	**-**	**752**
Total non-core items												
Customer redress charges	(10)	-	-	(10)	-	(10)	(64)	(74)	-	-	-	(74)
Cost of restructuring programme	-	-	-	-	-	-	(59)	(59)	-	-	-	(59)
Gross-up for policyholder tax in the Wealth and Insurance business	-	-	35	35	-	35	-	35	-	-	-	35
Gain on liquidation of business activities	-	-	-	-	-	-	-	-	-	-	(25)	(25)
UK portfolio divestments	15	-	36	51	-	51	(40)	11	1	-	-	12
Investment return on treasury stock held for policyholders	-	-	(2)	(2)	-	(2)	-	(2)	-	-	-	(2)
Group total	**2,148**	**1,518**	**1,884**	**5,550**	**(2,647)**	**2,903**	**(2,064)**	**839**	**(214)**	**39**	**(25)**	**639**

[1] *Underlying performance excludes the impact of non-core items (page 4).*

Income statement - Operating segments *(continued)*

2018	Net interest income / (expense) €m	Net insurance premium income €m	Other income €m	Total operating income €m	Insurance contract liabilities and claims paid €m	Total operating income net of insurance claims €m	Operating expenses €m	Operating profit / (loss) before net impairment gains / (losses) on financial instruments €m	Net impairment gains / (losses) on financial instruments €m	Share of results of associates and joint ventures (after tax) €m	Gain on disposal / liquidation of business activities and property €m	Profit / (loss) before taxation €m
Retail Ireland	992	-	272	**1,264**	-	**1,264**	(776)	**488**	157	4	-	**649**
Wealth and Insurance	(9)	1,499	(345)	**1,145**	(951)	**194**	(127)	**67**	-	-	-	**67**
Retail UK	596	-	21	**617**	-	**617**	(398)	**219**	(74)	37	-	**182**
Corporate and Treasury	555	-	166	**721**	-	**721**	(194)	**527**	(41)	-	-	**486**
Group Centre	10	(3)	21	**28**	(4)	**24**	(464)	**(440)**	-	-	-	**(440)**
Other reconciling items	2	-	(17)	**(15)**	-	**(15)**	6	**(9)**	-	-	-	**(9)**
BOIG Group plc - underlying[1]	**2,146**	**1,496**	**118**	**3,760**	**(955)**	**2,805**	**(1,953)**	**852**	**42**	**41**	**-**	**935**
Less:												
Attributable to BOIG plc	(3)	-	1	**(2)**	-	**(2)**	1	**(1)**	-	-	-	**(1)**
Group underlying[1]	**2,143**	**1,496**	**119**	**3,758**	**(955)**	**2,803**	**(1,952)**	**851**	**42**	**41**	**-**	**934**
Total non-core items												
Cost of restructuring programme	-	-	-	**-**	-	**-**	(111)	**(111)**	-	-	-	**(111)**
Gain on disposal of property	-	-	-	**-**	-	**-**	-	**-**	-	-	7	**7**
Gross-up for policyholder tax in the Wealth and Insurance business	-	-	(7)	**(7)**	-	**(7)**	-	**(7)**	-	-	-	**(7)**
Investment return on treasury stock held for policyholders	-	-	6	**6**	-	**6**	-	**6**	-	-	-	**6**
Gain on disposal of business activities	-	-	-	**-**	-	**-**	-	**-**	-	-	5	**5**
Customer redress charges	(12)	-	-	**(12)**	-	**(12)**	12	**-**	-	-	-	**-**
Group total	**2,131**	**1,496**	**118**	**3,745**	**(955)**	**2,790**	**(2,051)**	**739**	**42**	**41**	**12**	**834**

[1] *Underlying performance excludes the impact of non-core items (page 4).*

Principal Risks and Uncertainties

Key risks identified by the annual risk identification process, together with other significant and emerging risks facing the Group and key mitigating considerations are set out below. For many of the risks, the allocation of capital against potential loss is a key mitigant; other mitigating considerations include those outlined below.

This summary should not be regarded as a complete and comprehensive statement of all potential risks, uncertainties or mitigants; nor can it confirm that the mitigants would apply to fully eliminate or reduce the corresponding key risks. Additionally, other factors not yet identified, or not currently material, may adversely affect the Group.

Business and strategic risk

Principal risks and uncertainties

Business and strategic risk arises from changes in the external environment including economic trends and competitive environment; failure to develop and / or execute an appropriate business model or strategy; and ability to anticipate or mitigate a related risk.

Business and strategic risk encompasses the Group's current business model on the basis of its ability to generate acceptable returns, given its quantitative performance, key success drivers and dependencies, and business environment and the sustainability of the Group's strategy on the basis of its ability to generate acceptable returns, based on its strategic plans and financial forecasts, and an assessment of the business environment.

Key mitigating considerations

- Business divisional strategy is developed within the boundaries of the Group's strategy as well as the Board approved risk appetite limit. These strategies are developed within the divisions and challenged, endorsed, supported and monitored by Group functions.
- The Board receives regular deep dive presentations on key aspects of the Group's strategy, and regular updates on performance against strategic objectives by way of the Group organisational scorecard.
- The Board receives comprehensive reports setting out business and financial performance relative to plan, financial projections, capital and liquidity plans, along with reports on the Group's key risks, risk appetite and risks outlook. The Board's business, financial and risk considerations are further informed by regular economic updates, together with updates on developments relevant to the Group's franchises, operations, customers, colleagues, and other business activities.
- An independent Court Risk Report is produced quarterly and reviewed by the Executive and Non-executive Risk Committees. The content of the report includes an analysis of, and commentary on, the key existing and emerging risk types and also addresses governance, control issues and compliance with risk appetite.

Transformation risk

Principal risks and uncertainties

The Group is undergoing significant Transformation across Culture, Business Model and Systems, which presents challenges and risks, and significant customer considerations. Failure to transform successfully could prevent the Group from realising its strategic priorities.

Key mitigating considerations

- The Board has responsibility for developing the Group's strategic priorities. These priorities were set out at the Group Investor Day on 13 June 2018.
- The Group has mobilised a number of significant change programmes under each of the key Transformational change areas to deliver against this strategy. These operate within both existing governance fora and newly established fora to closely monitor and manage the change, and the specific risks and challenges associated with same.
- The Group Transformation Oversight Committee (GTOC) oversees the business and strategy aspects of the programme for its duration including review of transformation risk updates.

Principal Risks and Uncertainties *(continued)*

Business and strategic risk *(continued)*

Brexit

Principal risks and uncertainties

Following the UK exit from the European Union (EU), ongoing uncertainty relating to the nature of the future trading relationship between the UK and EU could impact the markets in which the Group operates including pricing, partner appetite, customer confidence and credit demand, collateral values and customers' ability to meet their financial obligations and consequently the Group's financial performance, balance sheet, capital and dividend capacity. Other effects may include changes in official interest rate policy in both the UK and Eurozone, which can impact the Group's revenues and also the Group's International Accounting Standard (IAS) 19 defined benefit pension deficit, and foreign exchange rate volatility, which can impact the translation of the Group's non-euro denominated net assets and profits.

Key mitigating considerations

- The Group has established a comprehensive Brexit programme to identify, monitor and mitigate risks associated with various outcomes of Brexit. The Board and Senior Management receive updates on the Group's Brexit preparations ensuring close monitoring and management of the specific risks and challenges associated with same.
- The Group's ongoing operations in the UK are managed within a ring-fenced, Prudential Regulation Authority (PRA) regulated subsidiary, Bank of Ireland (UK) plc. and primarily conducted through key partnerships, which reduces the Group's investment in infrastructure and other items of a fixed cost nature.
- Bank of Ireland (UK) plc is primarily funded from deposits gathered through partnerships with two iconic UK-focused brands, the Post Office and the Automobile Association (AA), and predominately from deposits below the £85,000 Financial Services Compensation Scheme (FSCS) limit.
- The Group manages its exposure to interest rate risk, including GBP / EUR, through the hedging of its fixed-rate customer and wholesale portfolios, the investment of its non-interest bearing liabilities (free funds) and the setting of conservative limits on the assumption of discretionary interest rate risk.
- To minimise the sensitivity of the Group's capital ratios to changes in FX rates, the Group maintains reserves in sterling, ensuring that the currency composition of capital is broadly similar to the currency composition of RWAs.

People risk

Principal risks and uncertainties

The continuing impact of remuneration restrictions on the Group, where the improvement in the macro economic environment and a close to full capacity labour market, have significantly increased competition for talent in Ireland. This may be further exacerbated post Brexit with increasing competition for skilled resources and / or restricted mobility between jurisdictions. It also includes people management, recruitment and retention risks in relation to the Group's transformation and digitalisation of banking products and services, as the Group adapts to the changing needs and preferences of our customer base. Variable remuneration is an important tool in the management of people risk, hence remuneration restrictions also limit the ability to encourage and incentivise the behavioural change required for culture transformation.

Key mitigating considerations

- The Group has a Board approved people strategy providing it with a range of programmes and initiatives to enable the Group to retain appropriate numbers and / or calibre of staff having regard to remuneration restrictions imposed by government, tax or regulatory authorities. These include Board Talent Reviews including succession planning, investment in Leadership and Management Development, the Group's Performance Management Framework, and the Career and Reward Framework as aligned to our purpose and values.

Principal Risks and Uncertainties *(continued)*

Business and strategic risk *(continued)*

Digital

Principal risks and uncertainties

Banking models are rapidly evolving, for both consumers and businesses in Ireland and globally. Rapidly shifting consumer behaviours and available technologies are changing how customers consume products and services.

These developments affect the manner in which customers manage their day to day financial affairs. Money transmission and data driven integrated services are also forecast to rapidly evolve in the coming years, underpinned by regulatory developments including the revised Payment Services Directive and the General Data Protection Regulation (GDPR). How the Group adapts to these developments could impact the realisation of market strategies and financial plans, dilute customer propositions and cause reputational damage.

Key mitigating considerations

- In the context of the overall business strategy, the Group assesses and develops its complementary technology strategy to support and mitigate these risks.
- Given the significant developments in digital demands on technology as well as increased regulatory requirements the Group rigorously manages these demands within risk, capacity and financial constraints.
- The Group's policies, standards, governance and control models undergo ongoing review to reference the Group's digital strategy and solutions.
- To support the Group's digital strategy, as necessary, the Group engages with appropriate external experts.
- The GTOC provides oversight on the Group's digital strategy.

Macroeconomic conditions and geopolitical uncertainty

Principal risks and uncertainties

The Group's businesses may be affected by adverse economic conditions in countries where we have exposures, particularly in Ireland and the UK, unfavourable exchange rate movements and changes in interest rates, with a potential increase in global protectionism and changes in the international tax environment posing additional risks.

Geopolitical uncertainties could impact economic conditions in countries where the Group has exposures, market risk pricing and asset price valuations thereby potentially reducing returns.

The Group businesses may be affected by political, economic, financial and regulatory uncertainty arising from the inconclusive outcome of the recent general election (8 February 2020) in Ireland.

Key mitigating considerations

- The Group monitors the risks and impact of changing current and forecast macroeconomic conditions on the likely achievement of the Group's strategy and objectives.
- The Group manages its exposures in accordance with key risk policies including maximum single counterparty limits and defined country limits.
- The Group has in place a comprehensive stress and scenario testing process.
- The Group is diversified in terms of asset class, industry and funding source.

Principal Risks and Uncertainties *(continued)*

Business and strategic risk *(continued)*

Key benchmark interest rate reform

Principal risks and uncertainties

Following the financial crisis, the reform and replacement of benchmark interest rates to alternative or nearly risk-free rates has become a priority for global regulators. The Group's exposures to benchmark interest rates will be replaced or reformed as part of this market-wide initiative.
Transition efforts in connection with these reforms are complex, with significant risks and challenges. Key mitigating considerations

Key mitigating considerations

- A formal Group-wide Benchmark Reform Programme has been mobilised since early 2018 to manage the orderly transition to new regulatory compliant benchmarks.
- The Group Asset and Liability Committee (ALCO) provides oversight to the programme, and updates are provided to the Court Risk Committee ensuring close monitoring and management of the specific risks and challenges associated with same.
- The Group has begun to transition to new Risk Free Rates where market liquidity allows.

Climate risk

Principal risks and uncertainties

Climate related considerations are a developing and growing agenda item for financial institutions globally and an increasing focus for key stakeholders including investors and customers. The Group's businesses, operations and assets could be affected by climate change and climate-related risks. Two key risks identified are physical risks from climate change, i.e. extreme weather events such as flooding; and transition risks which are risks associated with transitioning to a low carbon economy, where the Group and its customer base could be impacted by a range of impacts such as changes to consumer behaviour and environmental legislation i.e. changes in how cars are powered. Accelerating climate change could lead to sooner than anticipated physical risk impacts to the Group and the wider economy and there is uncertainty in the scale and timing of technology, commercial and regulatory changes associated with the transition to a low carbon economy.

Key mitigating considerations

- Conducting our business in a responsible and sustainable way is fundamental to achieving our purpose of enabling our customers, colleagues and communities to thrive.
- The Group continues to develop its Responsible and Sustainable Business (RSB) agenda which considers climate related impacts across its own footprint and that of its key stakeholders.
- The Group has strengthened its governance in relation to RSB. It has also signed up to the United Nations Principles of Responsible Banking and has become a supporter of the Task Force for Climate-related Financial Disclosure.
- As part of our enterprise approach to manage climate risks the Group is embedding the assessment of risks and opportunities into key business planning and risk management governance frameworks, policies and processes.
- During 2020 the Group will identify activities and assets exposed to climate related risks and measure possible financial risk impacts. This impact assessment and associated materiality exercise together with forward-looking scenario analysis will inform our business planning and associated risk management strategies.

Principal Risks and Uncertainties *(continued)*

Credit risk

Principal risks and uncertainties

Credit risk is 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. This risk includes, but is not limited to, default risk, concentration risk, country risk, migration risk and collateral risk.

Credit risk arises from loans and advances to customers and from certain other financial transactions such as those entered into by the Group with financial institutions, sovereigns and state institutions.

Key mitigating considerations

- Board approved Group Credit Policy and risk appetite limits, including credit category limits, together with a framework for cascade to businesses and portfolios.
- Exposure limits for credit concentration risk.
- Defined credit processes and controls, including credit policies, independent credit risk assessment and defined authority levels for sanctioning lending.
- Processes to monitor compliance with policies and limits.
- Dedicated workout structures focused on the management and reduction of NPEs.

Funding and liquidity risk

Principal risks and uncertainties

Funding and liquidity risk is the risk that the Group will experience difficulty in financing its assets and / or meeting its contractual payment obligations as they fall due, or will only be able to do so at substantially above the prevailing market cost of funds.

Liquidity risk arises from differences in timing between cash inflows and outflows. Cash inflows are driven by, amongst other things, the maturity structure of loans and investments held by the Group, while cash outflows are driven by items such as the term maturity of debt issued by the Group and outflows from customer deposit accounts.

Funding Risk can occur where there is an over-reliance on a particular type of funding, a funding gap or a concentration of wholesale funding maturities.

The Group funds an element of its sterling balance sheet in part from euro (via cross currency derivatives), which creates an exposure to the cost of this hedging.

Key mitigating considerations

- Board approved risk appetite limits.
- Group funding and liquidity policies, systems and controls.
- Comprehensive liquidity monitoring framework.
- Annual Board approved forward looking Internal Liquidity Adequacy Assessment Process (ILAAP).
- Strategic plan articulating and quantifying deposit projections, wholesale funding and lending projections for all divisions.
- Contingency Funding Plan and Recovery Plan in place with annual update.
- Maintenance of liquid assets and contingent liquidity available for use with market counterparties and / or in liquidity operations offered by Monetary Authorities.
- The maturity profile of the Group's cross currency hedging is broadly spread over 24 months.

Market risk

Principal risks and uncertainties

Market risk is the risk of loss arising from movements in interest rates, FX rates, credit spreads or other market prices.

Market risk arises from the structure of the balance sheet, the Group's business mix and discretionary risk-taking. Additionally, market risk arises through the conduct of customer business, particularly in respect to fixed-rate lending and the execution of derivatives and FX business.

Within limits and policy, the Group seeks to generate income from Market Risk leaving some customer-originated or intra-Group originated risk unhedged or through assuming risk proactively in the market.

Structural market risk arises from the presence of non-interest bearing liabilities (equity and some current accounts) on the balance sheet, the multi-currency nature of the Group's balance sheet and changes in the floating interest rates to which the Group's assets and liabilities are linked (basis risk).

Key mitigating considerations

- Board approved risk appetite limits.
- Group Market Risk Policy.
- Comprehensive framework for monitoring compliance with the Board's market risk appetite limits, more granular market risk limits and other controls.
- The Group substantially reduces its market risk through hedging in external markets.
- Value at Risk (VaR) and extensive stress testing of market risks.

Principal Risks and Uncertainties *(continued)*

Life insurance risk

Principal risks and uncertainties

Life insurance risk is the risk of unexpected variation in the amount and timing of claims associated with insurance benefits. This variation, arising from changing customer mortality, life expectancy, health or behavioural characteristics, may be short or long term in nature.

Life insurance risk arises from the Group's life insurance subsidiary (New Ireland Assurance Company plc (NIAC)) selling life insurance products in the Irish market.

Key mitigating considerations

- Board approved risk appetite limits.
- Underwriting standards and limits are in place and apply throughout the policy lifecycle from risk acceptance to claim settlement.
- Reinsurance is used to manage the volatility from both individual claims and aggregate risk exposures. Coverage is placed with a diversified list of approved counterparties.
- The sensitivity of the Group's exposure to life insurance risk is assessed regularly and appropriate levels of capital are held to meet ongoing capital adequacy requirements.
- A range of sensitivities and scenario tests are performed as part of the annual Own Risk and Solvency Assessment (ORSA) process.
- Management undertakes a rigorous analysis of claims and persistency experience on a regular basis and monitors these against the assumptions in its valuation and pricing bases so that these can be adjusted to reflect experience. Management undertakes pro-active operational initiatives in order to manage persistency risk.

Conduct risk

Principal risks and uncertainties

Conduct risk is the risk that the Group and / or its staff conduct business in an inappropriate or negligent manner that leads to adverse customer outcomes.

Examples of conduct risk include:

- risk of not delivering fair outcomes to customers;
- risk of the design and development of products and services that do not continue to be suitable over the lifetime of the product or respond to changing customer needs; and
- risk of staff not meeting set standards of behaviour with a consequential material negative outcome for customers, colleagues and communities.

Conduct risk arises from day-to-day execution of business processes, provision of sales and services, management of key stakeholder expectations and the various activities performed by staff, contractors and third party suppliers.

Key mitigating considerations

- Board approved risk appetite limits.
- A robust, structured and methodical approach for the management of conduct risk is in place across the Group including the Group Conduct Risk Policy, the Conduct Risk Management Framework (CRMF), a suite of policy standards which clearly define expected standards of behaviour supported by additional guidance, Group-wide and bespoke training to assist the implementation and understanding of the CRMF.
- Supporting customer-focused oversight measures.
- The Group have developed a strategy to develop culture based on the outcomes we wish to deliver guided by the Group's values.

Principal Risks and Uncertainties *(continued)*

Regulatory risk

Principal risks and uncertainties

Regulatory risk is the risk of failure by the Group to meet new or existing regulatory and / or legislative requirements and deadlines or to embed regulatory requirements into processes.

The Group is exposed to regulatory risk as a direct and indirect consequence of its normal business activities. These risks may materialise from failures to comply with regulatory requirements or expectations in the day-to-day conduct of its business, as an outcome of risk events in other key risk categories and / or from changes in external market expectations or conditions.

Key mitigating considerations

- Board approved risk appetite limits.
- Policies, statements, policy standards in place for compliance risk, conduct risk, prudential risk, regulatory change risk and financial crime risk.
- Specific Group-wide processes in place to identify, assess, plan, develop and implement key compliance requirements.
- Regular status updates and monitoring at senior levels in the Group including reporting to the Court Risk Committee and Board.
- Processes in place to identify, assess, manage, monitor and report financial crime risks as well as controls to mitigate those risks.
- Processes in place to support the reporting, investigation, resolution and remediation of incidents of non-compliance.
- Group-wide education and training in place.

Operational risk

Principal risks and uncertainties

Operational risk is loss resulting from inadequate or failed internal processes, people and systems or from external events. This risk includes Business Continuity Risk, Data Quality & Reliability, Fraud, Information Security and Cyber Risk, Information Technology, Insurable, Legal & Contractual, Model, Payments, Sourcing, Unauthorised Trading and Business Processes.

Operational risk arises as a direct or indirect consequence of the Group's normal business activities through the day-to-day execution of business processes, the functioning of its technologies and in the various activities performed by its staff, contractors and third party suppliers. This also includes the risks associated with major change and the failure to deliver on the Group's multi-year investment programme to replace the core banking platforms.

It also arises from the risk of cybersecurity attacks which target financial institutions and corporates as well as governments and other institutions. The risk of these attacks remains material as their frequency, sophistication and severity continue to develop in an increasingly digital world.

Key mitigating considerations

- Board approved risk appetite limits.
- The Group utilises a number of strategies in controlling its exposure to operational risk, with the primary strategy being the maintenance of an effective control environment, coupled with appropriate management actions.
- The Operational Risk Management Framework, consisting of processes and policy standards, aims to embed adequate and effective risk management practices within business units throughout the Group.
- Processes to identify, assess, manage, monitor and report operational risks as well as controls to mitigate those risks in place.
- Processes to support the reporting, investigation, resolution and remediation of incidents in place.
- Given the significant developments in digital demands on technology as well as increased regulatory requirements, an overarching Technology Investment Prioritisation Plan, which includes the Core Banking Transformation Programme, is in place to ensure these demands are managed within risk, capacity and financial constraints.
- Clear contracts and accountability in place for third party partners for the Transformation Programme.
- Regular internal audits and testing carried out to ensure adequacy of controls.

Principal Risks and Uncertainties *(continued)*

Operational risk *(continued)*

Litigation and regulatory proceedings

Principal risks and uncertainties

Uncertainty surrounding the outcome of disputes, legal proceedings and regulatory investigations and administrative sanctions proceedings, as well as potential adverse judgements in litigation or regulatory proceedings remains a risk.

Key mitigating considerations

The Group has processes in place to seek to ensure the Group's compliance with legal and regulatory obligations, together with clear controls in respect of the management and mitigation of such disputes, proceedings and investigations as may be instigated against the Group from time to time.

Pension risk

Principal risks and uncertainties

The Group sponsored defined benefit pension schemes are currently in deficit under the IAS 19 accounting definition, requiring the Group to set aside capital to mitigate these risks.

The defined benefit pension schemes are subject to market fluctuations and these movements impact on the Group's capital position, particularly the Group's CET1 capital ratio, which amongst other things, could impact on the Group's dividend capacity. See note 46 Retirement benefit obligations on page 210.

Key mitigating considerations

- Board approved risk appetite limits.
- To help manage pension risk, defined benefit schemes were closed to new entrants in 2007 and a new hybrid scheme (which included elements of defined benefit and defined contribution) was introduced for new entrants to the Group. The hybrid scheme was subsequently closed to new entrants in 2014 and a new defined contribution scheme was introduced for new entrants to the Group from that date.
- In addition, the Group implemented two Pension Review programmes in 2010 and 2013 resulting in significant restructuring of defined benefit scheme benefits which were accepted by unions and by staff through individual staff member consent.
- In return for the deficit reduction achieved through these programmes, the Group also agreed to increase its support for the schemes, above existing arrangements, so as to broadly match the IAS 19 deficit reduction arising from the benefit changes, and to facilitate a number of de-risking initiatives.
- The Group monitors on an ongoing basis the opportunities at an appropriate cost to increase the correlation between the assets and liabilities of the scheme.

Reputation risk

Principal risks and uncertainties

Reputation risk is the risk to earnings or franchise value arising from an adverse perception of the Group's image on the part of customers, suppliers, counterparties, shareholders, investors, staff, legislators, regulators or partners.

Reputation risk arises as a direct or indirect consequence of the Group's operations and business activities. Reputation is not a standalone risk but overlaps with other risk areas and may often arise as a consequence of external events or operational risk related issues.

Key mitigating considerations

- Group ambition, purpose, values and strategic priorities communicated to all stakeholders.
- Potential impact on reputation is considered in the decision making process.
- Media, government, political, regulatory and administrative stakeholder engagement is actively managed.
- Print, broadcast, online and social media reportage and commentary is monitored.
- Process of 'Early Warning Reports' - to alert senior management on emerging issues that have the potential to expose the Group to reputational risk - is embedded across the Group.
- Active Group RSB programme in place.
- Strong focus on internal communications to ensure that colleagues are kept informed on all important Group announcements, issues and developments.
- Colleagues are required to comply with the Group Code of Conduct.

Principal Risks and Uncertainties *(continued)*

Capital adequacy

Principal risks and uncertainties

Capital adequacy risk is the risk that the Group breaches or may breach regulatory capital ratios and internal targets. The Group's business and financial condition would be negatively affected if the Group was, or was considered to be, insufficiently capitalised.

While all material risks impact on the Group's capital adequacy to some extent, capital adequacy is primarily impacted by significant increases in credit risk or RWAs, materially worse than expected financial performance and changes to minimum regulatory requirements as part of the annual Supervisory Review and Evaluation Process review conducted by the Single Supervisory Mechanism (SSM).

Key mitigating considerations

- The Group closely monitors capital and leverage ratios to ensure all regulatory requirements and internal targets are met. In addition, these metrics are monitored against the Board approved Risk Appetite Statement and suite of Recovery Indicators.
- Comprehensive stress tests / forward-looking Internal Capital Adequacy Assessment Process (ICAAP) financial projections are prepared, reviewed and challenged by the Board to assess the adequacy of the Group's capital, liquidity and leverage positions.
- The Group has a contingency capital plan which sets out the framework and reporting process for identifying the emergence of capital concerns and potential options to remediate same.

Risk in relation to Irish Government shareholding

Principal risks and uncertainties

The risk that the Irish Government, which has a c.14% discretionary shareholding in the Group via the ISIF, uses its voting rights in a way that might not be in the best interests of the Group's private sector shareholders.

Key mitigating considerations

- The Minister for Finance and the Bank entered into a Relationship Framework Agreement dated 30 March 2012, the terms of which were prepared in the context of EU and Irish competition law and to accommodate considerations and commitments made in connection with the EU / International Monetary Fund Programme for Financial Support for Ireland.
- The Framework Agreement provides inter-alia that the Minister will ensure that the investment in the Group is managed on a commercial basis and will engage with the Group in accordance with best institutional shareholder practice in a manner proportionate to the shareholding interest of the State in the Group. In March 2017, as part of the corporate reorganisation, the BOIG plc agreed to be bound by and comply with certain provisions of the relationship framework in relation to the Ministerial consent, consultation process and the Group's business plan.

Resolution risk

Principal risks and uncertainties

Arising from the implementation of the EU Bank Recovery and Resolution Directive (BRRD) and Single Resolution Mechanism Regulation in Ireland and the UK, the relevant authorities have wide powers to impose resolution measures on the Group which could materially adversely affect the Group, as well as the shareholders and unsecured creditors of the Group. The Single Resolution Board (SRB) has the authority to exercise specific resolution powers pursuant to the Single Resolution Mechanism Regulation similar to those of the competent authorities under the BRRD, including in relation to resolution planning and the assessment of resolvability.

Key mitigating considerations

- Following notification that the SRB's preferred resolution strategy consisted of a single point of entry bail-in strategy, the Group implemented a holding company, BOIG plc, during 2017.
- The Group continues to engage constructively with its resolution authorities, including the SRB, in order to meet regulatory expectations in respect of resolvability.
- Scenario planning and strategic planning tools are used to identify impacts.

Principal Risks and Uncertainties *(continued)*

Tax rates, legislation and practice

Principal risks and uncertainties

The Group's financial position and outlook are exposed to the risks associated with a change in tax laws, tax rates, regulations or practice and the risks associated with non-compliance with existing requirements. The Group is also exposed to the risk that tax authorities may take a different view to the Group on the treatment of certain items. Furthermore, failure to demonstrate that it is probable that future taxable profits will be available, or changes in government policy or tax legislation may reduce the recoverable amount of the deferred tax assets (DTAs) currently recognised in the financial statements.

Key mitigating considerations

- The Group has clearly defined tax compliance procedures to identify, assess, manage, monitor and report tax risks and to ensure controls mitigating those risks are in place and operate effectively.
- The Group monitors the expected recovery period for DTAs.
- The Group monitors potential changes to tax legislation or government policy and considers any appropriate remedial actions.

Governance

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Corporate Governance Statement
Governor's Introduction

Patrick Kennedy
Governor

Dear Shareholders,

I am pleased to present our Corporate Governance Report for 2019. This report provides an overview of our governance in practice, including how the Court of Directors (the 'Court') operates, how it spent its time during the year and how it has evaluated its performance. It includes reports from the four mandatory Court committees and explains how the principles of good governance are embedded.

Following a corporate reorganisation in 2017 Bank of Ireland Group plc (BOIG plc), was introduced as the listed holding company of the Group. As existing corporate governance requirements continue to apply at Bank level, with certain of those requirements also applying at BOIG plc level, the existing Court committees were replicated at BOIG plc level. It was agreed with the ECB that the Membership of the Board and Court and their main committees (Audit, Risk, Nomination and Governance and Remuneration) would be identical. This mirrored board approach means that matters relevant to both BOIG plc (the 'Holding company') and Bank can be considered by their Boards and Committees simultaneously.

Any references to the 'Board' or 'Court' / 'Board' or 'Court' Risk Committee, etc., individually in this document should be read as a reference to that body for both BOIG plc and Bank unless the context specifies or requires otherwise.

We believe that the role of the Court is to promote the long-term success of the Group, whilst contributing to wider society. In order to do this, the Group must have a robust corporate governance framework, providing systems of checks and controls to drive accountability and better decision-making, with appropriate policies and practices in place to ensure that the Court and its committees operate effectively.

The Court is committed to high standards of governance designed to protect the long-term interests of shareholders and all other stakeholders, while promoting the highest standards of integrity, transparency and accountability.

A key objective of the Group's governance framework is to ensure compliance with applicable corporate governance requirements. During 2019 the Group's requirements comprised of:

- Central Bank of Ireland Corporate Governance Requirements for Credit Institutions 2015 ('Irish Code')[1].
- Irish Corporate Governance Annex[2].
- S.I. No. 158/2014 - European Union (Capital Requirements) Regulations 2014.
- European Banking Authority Guidelines on internal governance under Directive 2013/36/EU.
- Joint European Securities and Markets Authority (ESMA) and European Banking Authority (EBA) Guidelines on the assessment of the suitability of members of the management body.
- UK Corporate Governance Code 2018 ('UK Code').

The Group complied with all applicable corporate governance requirements throughout 2019. Corporate governance developments are kept under continuous review in order to ensure that the Group's governance structures evolve and remain appropriate for a significant credit institution.

People and culture

Our people remain at the very core of what we do, and I continue to be impressed by the commitment and enthusiasm shown by all of our colleagues during the Court's visits to various locations and other engagements with colleagues during the year. Our culture and values are key to help us achieve our strategic objectives and create value for all stakeholders, and I was delighted to see an improvement in our engagement and cultural embedding scores during 2019. I know we still have a way to go but I am encouraged by the commitment and progress I am seeing, with more colleagues taking accountability for making the Group a better place to work.

The Court has worked with the Executive team to ensure a continued focus on the Group's culture, where high standards and customer values are at the core of all decisions. The Court is satisfied that the Group's purpose of enabling our customers, colleagues and communities to thrive is fully aligned with the Group's culture, values and strategic priorities.

As noted on page 21, we took the positive step to designate Eileen Fitzpatrick as our Workforce Engagement Director, with a view to enhancing the Group's existing engagement mechanisms between the Court and the workforce and to strengthen the 'employee voice' at the Court table and when making decisions. This mechanism, along with other ways in which we seek out the views of the Group's stakeholders, notably our customers, shareholders and regulators, will continue to enhance the Court's discussions and decisions.

Strategic priorities

Delivery of the Group's strategic priorities, to Transform the Bank, Serve Customers Brilliantly and Grow Sustainable Profits, remains a priority for the

[1] *The Governor and Company of the Bank of Ireland, was subject to the Irish Code, (which is available on www.centralbank.ie) throughout 2019. The Bank is also subject to the additional requirements of Appendix 1 and Appendix 2 of the Irish Code for High Impact Designated Institutions, and Credit Institutions which are deemed 'Significant' Institutions (for the purposes of the CRD IV), respectively.*

[2] *The Irish Corporate Governance Annex to the Listing Rules of the Irish Stock Exchange, t/a Euronext Dublin which is available on www.ise.ie.*

Governor's Introduction *(continued)*

Court and Executive team. These priorities were originally set out at the Group Investor Day on 13 June 2018.

Progress against key performance indicators (KPIs) linked to the Group's strategic priorities is overseen by the Court. Given the scale of the transformation that the Group is embarking upon, across our culture systems and business model BOIG plc established a GTOC to facilitate more detailed and timely oversight of the Group's transformation programme, which reports to each Court meeting. I am joined on that Committee by my Court colleagues, Ian Buchanan, Patrick Mulvihill, Richard Goulding and Michele Greene. The CEO, Chief Operating Officer, CEO Retail Ireland and Chief Risk Officer (CRO) attend Committee meetings along with other members of senior management as required.

Responsible and Sustainable Business

We have enhanced our governance structure to provide more board focused oversight and responsibility for our RSB agenda. The Court Nomination and Governance Committee, a committee of the Court with oversight of the Group's Corporate Responsibility Programme as well as nomination and corporate governance matters, will now oversee the Group's RSB framework and strategy on behalf of the Court. To reflect its expanded remit, the Committee is being renamed the Court Nomination, Governance and Responsible Business Committee. The Court recognises and appreciates the key role it has in ensuring that RSB is increasingly integral to the Group's operations and long term sustainability.

Court changes in 2019

The Court Nomination and Governance Committee is responsible for reviewing the composition of the Court and its Committees and assessing whether the balance of skills, experience, knowledge and independence is appropriate to enable them to operate effectively.

Eileen Fitzpatrick joined the Court in May 2019 as an independent Non-Executive Director (NED), bringing extensive public sector and capital markets experience to the Court. Michele Greene was nominated by the Minister for Finance and was appointed to the Court in December 2019. Michele is an experienced retail banker with a strong understanding of evolving customer requirements and has significant experience in the digitalisation of banking processes and systems. Having been identified by the Court during October 2019 to succeed Andrew Keating as Chief Financial Officer (CFO) and Executive Director, Myles O'Grady received regulatory approval and was appointed to the Court in January 2020. I am delighted they have joined the Court and look forward to working with them in the years ahead.

I would like to thank each of the Directors for their commitment and support during 2019. I would also like to express the Court's appreciation to Kent Atkinson and Andrew Keating, both of whom stepped down during 2019, for their significant contributions to the Group during their respective tenures.

The composition of the Court remains under continuous review and the Court Nomination and Governance Committee maintains a constant focus on succession planning to ensure the continuation of a strong and diverse Court, which is appropriate to the Group's purpose and the industry within which it operates.

Court and Individual Effectiveness Evaluation

During 2019, Praesta Ireland conducted the annual effectiveness evaluation of the Court. Detail on the outcome of this evaluation, which, in summary, concluded that the Court is effective can be found on page 30. I also conducted a review of the performance of individual Directors, following which I concluded that individual directors continue to demonstrate commitment to their roles. All Directors are considered to be experienced and knowledgeable, and I am confident that they each bring valuable skills to the Court and provide an objective perspective. The Court considers that the effective contribution of each of the individual directors and the Court as a whole is, and continues to be, important to the long-term sustainable success of the Group. As part of the evaluation process, we have identified some areas for enhancement which are welcomed, and I look forward to reporting on progress in those areas in the next report.

Looking ahead

The Court will continue to work effectively with the Executive team into 2020 to ensure continued focus on and delivery of the Group's strategy in order to create sustainable long-term value for our shareholders. The Group's governance framework will remain under continuous review to ensure it remains robust and facilitates effective decision making and appropriate Court oversight.

Patrick Kennedy
Governor

21 February 2020

Your Court

Patrick Kennedy
Independent (on appointment)

Role
Non-Executive Director (July 2010). Governor (August 2018, Deputy Governor April 2015). Chair, Court Nomination and Governance Committee (August 2018, Member from September 2014).

Member, Risk Committee from January 2011 and Chair July 2016 to July 2018. Member, Remuneration Committee from January 2011 to July 2016. Member of the Audit Committee from July 2016 to July 2018.

Member of GTOC (August 2018).

Particular Skills
Strong leadership qualities. Deep knowledge of the Bank with exceptional commercial acumen. In-depth knowledge of international business, management, finance, corporate transactions, strategic development and risk management gained from a highly successful career in national and international business.

External Appointments
Chairman and chair of the audit, risk, remuneration and nomination committees of Cartrawler.

Experience
Patrick was chief executive of Paddy Power plc from 2006 to 2014, prior to which he served as an executive director from 2005 and non-executive director from 2004. Prior to joining Paddy Power plc, Patrick worked at Greencore Group plc for seven years where he was chief financial officer and also held a number of senior strategic and corporate development roles. He previously worked with KPMG corporate finance in Ireland and the Netherlands, with McKinsey & Co. in London, Dublin and Amsterdam and as a non-executive director of Elan Corporation plc.

Qualifications
Fellow of Chartered Accountants Ireland.

Patrick Haren
Independent

Role
Non-Executive Director (January 2012). Deputy Governor (August 2018). Senior Independent Director (SID) (April 2015). Member, Nomination and Governance Committee (November 2015). Member, Audit Committee from January 2012 to July 2018. Remuneration committee Chair from May 2015 and Member from January 2012 to January 2020.

Trustee of the Bank of Ireland Staff Pensions Fund (BSPF).

Particular Skills
Experienced chief executive officer who has gained extensive strategic, corporate development and transactional experience.

External Appointments
None.

Experience
Patrick acts as an Advisor to Green Sword Environmental Ltd. He is a former chief executive officer of the Viridian Group, having joined Northern Ireland Electricity in 1992 as chief executive. He previously worked with the ESB, including as director - New Business Investment and also served as a board member of Invest Northern Ireland for a number of years. Patrick led the privatisation of Northern Ireland Electricity by Initial Public Offering (IPO) and grew the business under the new holding company Viridian through to 2007, positioning the company as the market leader in independent electricity generation and supply in competitive markets in Ireland, North and South. He is a past director of Bank of Ireland (UK) plc where he also served as Chair of the Remuneration Committee and a member of the Nomination Committee.

Qualifications
Fellow of the Institute of Directors (UK). Awarded a knighthood in 2008 for services to the electricity industry in NI Member of the Institute of Banking (Ireland).

Francesca McDonagh
Non-Independent

Role
Group Chief Executive Officer and Executive Director (October 2017).

Particular Skills
A skilled global banker, renowned for strategic thinking and a proven track record in successfully executing strategy. A history of delivering strong financial performance coupled with leadership of transformation to drive future results. Experience in a range of senior banking roles, and in a range of countries and operating structures. She brings to the Board a leadership style characterised by strong commercial results orientation, a clear strategic vision and significant customer focus.

External Appointments
Director of IBEC Company Limited by Guarantee. Member of the Prudential Regulation Authority (PRA) Practitioner Panel.

Experience
Francesca joined the Group from HSBC Group, where she held a number of senior management roles over a twenty year period including Group General Manager and Regional Head of Retail Banking and Wealth Management, UK and Europe, Regional Head of Retail Banking and Wealth Management, Middle East and North Africa, and Head of Personal Financial Services, Hong Kong. She has previously served on the board of the British Bankers' Association, where she was Deputy Chair, and on the board of the National Centre for Universities and Business in the UK.

Qualifications
Bachelor of Arts Degree in Politics, Philosophy and Economics from Oxford University. Awarded an Order of the British Empire in 2017 for services to banking.

Your Court *(continued)*

Ian Buchanan
Independent

Role
Non-Executive Director (May 2018). Member, Risk Committee (May 2018). Director, Bank of Ireland (UK) plc (September 2018) and a member of its Risk Committee (October 2019).

Chair of GTOC (August 2018).

Particular Skills
Extensive technology, digital, business transformation and customer operations experience gained through his work in a number of international retail, commercial and investment banks.

External Appointments
Non-executive director of Openwork Holdings Limited.

Experience
Ian was group chief information officer for Barclays plc and chief operating officer for Barclaycard until 2016. Before joining Barclays in 2011, Ian was chief information officer for Société Générale Corporate & Investment Banking (2009 to 2011), a member of the public board and group manufacturing director of Alliance & Leicester plc (2005 to 2008) and a member of the executive committee and chief operations and technology officer of Nomura International (1994 to 2005). Ian's earlier career was spent at Credit Suisse, Guinness, and BP.

Qualifications
Bachelor of Science degree in Physics from the University of Durham.

Evelyn Bourke
Independent

Role
Non-Executive Director (May 2018). Member, Audit and Nomination and Governance Committees (May 2018).

Particular Skills
Strong track record in global executive management and extensive experience in financial services, risk and capital management, and mergers and acquisitions.

External Appointments
Group chief executive officer of BUPA.

Experience
Evelyn was appointed group chief executive officer of BUPA in July 2016, having been Acting CEO from April 2016. She is also a member of the BUPA board. She joined BUPA as chief financial officer in September 2012, from Friends Life Group, where she was chief executive officer of its Heritage division. Previously at Friends Provident, she was the executive director responsible for strategy, capital and risk and, prior to that, chief financial officer. She was previously a non-executive director of the IFG plc, Dublin, where she was chair of the board risk committee. Evelyn's earlier career was spent at Standard Life Assurance plc, Chase De Vere Financial Solutions, St. James's Place, Nascent Group, Tillinghast Towers Perrin, in the UK, and Lifetime Assurance and New Ireland Assurance in Dublin.

Qualifications
Fellow of Institute and Faculty of Actuaries. MBA from London Business School.

Eileen Fitzpatrick
Independent

Role
Non-Executive Director (May 2019), Member, Audit and Remuneration Committees (May 2019). Workforce engagement Director (January 2020).

Particular Skills
Eileen has extensive capital markets and public sector experience, and has held a number of senior roles in both the asset management and stockbroking industries.

External Appointments
Chairman of the Outside Appointments Board, Department of Public Expenditure and Reform.

Experience
Eileen joined the National Treasury Management Agency (NTMA) in 2006 as a director, where she oversaw the Alternative Assets Investment Programme, for the National Pensions Reserve Fund. Eileen was subsequently appointed as head of NewERA at the NTMA, a position she held from November 2011 to January 2019. Prior to her appointment at the NTMA Eileen was chief executive officer at AIB Investment Managers from 2000 to 2006. From 1987 to 2000 Eileen held a number of senior investment and stockbroking positions, including with AIB Investment Managers, Goodbody Stockbrokers, National City Brokers and Montgomery Govett.

Eileen has served in a number of non-executive positions including as chairman of the Irish Association of Investment Managers, as a board member of the Chartered Accountants Regulatory Board, as a member of the Government's Top Level Appointments Committee, and as a member of the Governing Body of University College Dublin.

Qualifications
Phd in Science from University College Dublin.

Your Court *(continued)*

Richard Goulding
Independent

Role
Non-Executive Director (July 2017). Chair, Risk Committee (Aug 2018, Member, July 2017). Member, Remuneration Committee (July 2017). Member, Audit Committee (August 2018).

Member of GTOC (August 2018).

Particular Skills
Extensive risk management and executive experience in a number of banks with an international profile, and brings a strong understanding of banking and banking risks, with a deep knowledge of operational risk.

External Appointments
Non-executive director of Citigroup Global Markets Limited, where he is chair of the risk committee and a member of the audit and remuneration and nomination committees. Non-executive director of Zopa Bank Limited, where he is chair of the risk committee and a member of the audit, nomination and remuneration committees.

Experience
Richard held the role of group chief risk officer (2006 to 2015) and director (2013 to 2015) at Standard Chartered Bank, where he was a member of the group executive committee, prior to which he held the role of chief operating officer, Wholesale Banking Division. Before joining Standard Chartered in 2002, he held senior executive positions with Old Mutual Financial Services in the U.S., UBS Warburg / SBC Warburg, London and Switzerland, Astra Holding plc, Bankers Trust Company and the Midland Bank Group, London.

Qualifications
Qualified Chartered Accountant (South Africa), Bachelor of Commerce degree and a postgraduate degree in finance from the University of Natal, South Africa.

Michele Greene
Non-Independent

Role
Non-Executive Director (December 2019). Member, Risk Committee and GTOC (December 2019).

Particular Skills
Extensive experience of financial services and retail banking, particularly in the areas of payments and digital innovation.

External Appointments
Director of Mololo Limited.

Experience
Michele held the role of managing director of Virgin Money's Digital Bank until July 2018, prior to which she was director of strategic development, responsible for the bank's future development. Michele joined Virgin Money initially as director of banking, with responsibility for building the bank's new credit card business. Before joining Virgin Money, she was chief financial officer of MBNA Europe where she held executive positions on the boards of MBNA Europe Ltd and Premium Credit Finance Limited.

Michele's earlier career was spent at Goldman Sachs, Credit Lyonnais and KPMG.

Qualifications
Masters Degree from Trinity College Dublin and Fellow of Chartered Accountants Ireland.

Fiona Muldoon
Independent

Role
Non-Executive Director (June 2015). Member, Risk Committee (November 2015). Member, Nomination and Governance Committee (January 2019).

Particular Skills
Significant experience in governance, regulatory compliance and financial oversight and is an experienced financial services professional. Significant previous experience within a financial institution with an international focus.

External Appointments
Group Chief Executive of FBD Holdings plc and Chief Executive of FBD Insurance plc. Director of Insurance Ireland (Member Association) CLG.

Experience
Fiona is group chief executive of FBD Holdings plc and FBD Insurance plc, one of Ireland's largest property and casualty insurers. She served from 2011 to 2014 with the Central Bank of Ireland (CBI) including as director, Credit Institutions and Insurance Supervision. Fiona spent 17 years of her career with XL Group in Dublin, London and Bermuda, where she worked in various management positions including general insurance responsibilities, corporate treasury and strategic activities including capital management, rating agency engagement and corporate development.

Qualifications
Bachelor of Arts Degree from University College Dublin, Fellow Chartered Accountants Ireland.

Your Court *(continued)*

Patrick Mulvihill
Independent

Role
Non-Executive Director (December 2011). Chair, Audit Committee (April 2018, Member December 2011). Member, Risk Committee (December 2011 to May 2017, January 2018 to date).

Member of GTOC (April 2016). Trustee of the BSPF (December 2017).

Particular Skills
In-depth knowledge of financial and management reporting, regulatory compliance, operational, risk and credit matters within a global financial institution.

External Appointments
Non-executive director of International Fund Services (Ireland) Limited. Director of Beachvista Limited.

Experience
Patrick spent much of his career at Goldman Sachs, retiring in 2006 as global head of operations covering all aspects of capital markets operations, asset management operations and payment operations. He previously held the roles of co-controller, co-head of global controller's department, covering financial / management reporting, regulatory reporting, product accounting and payment services. He was also a member of the firm's risk, finance and credit policy committees. Patrick has over twenty years' experience of international financial services and has held a number of senior management roles based in London and New York with Goldman Sachs.

Qualifications
Fellow of Chartered Accountants Ireland and Associate of the Institute of Directors.

Myles O'Grady
Non-Independent

Role
Group Chief Financial Officer, Executive Director (January 2020).

Particular Skills
Significant expertise working with international and domestic regulators, government and state authorities, investors, market analysts and international investment banks. Experienced across strategy development, business restructuring and recovery, finance function transformation, investor relations and IPOs.

External Appointments
None.

Experience
Myles has 30 years' experience as a finance professional with over 25 years in financial services. Prior to joining the Group he was chief financial officer at D|Res Properties, an Irish homebuilding and property development company. Previously, he was group director of finance and investor relations at Allied Irish Bank Group plc and Subsidiaries (AIB), an Irish financial services group operating predominantly in the Republic of Ireland and the UK.

Myles' earlier career was spent at Citibank, Dresdner Kleinwort Benson and AIB Bank.

Qualifications
Fellow of the Chartered Association of Certified Accounts, an INSEAD certified board director and member of the Institute of Directors Ireland.

Steve Pateman
Independent

Role
Non-Executive Director (September 2018). Chair, Remuneration Committee (January 2020, Member September 2018). Member, Audit and Risk Committees (September 2018).

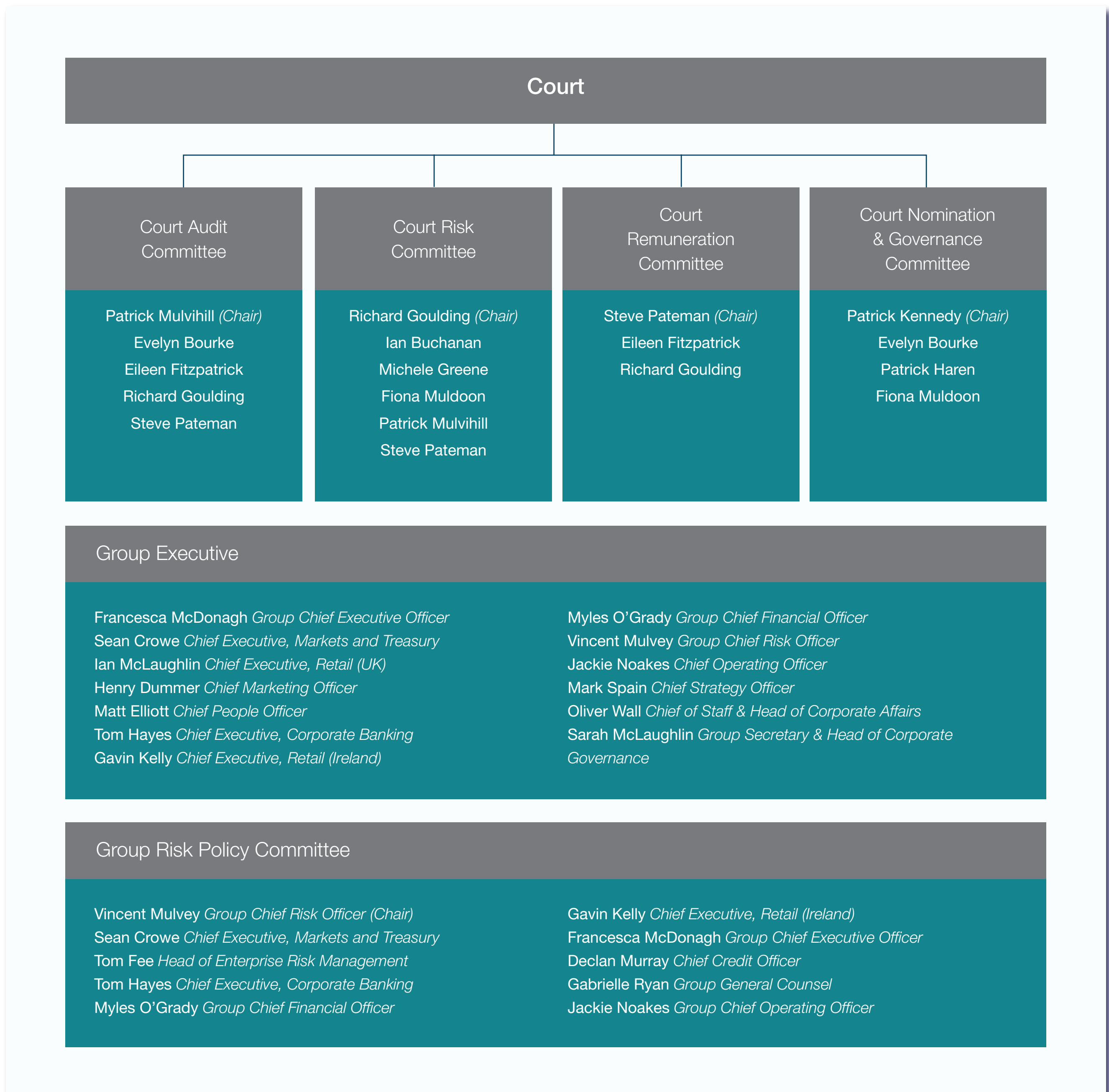
Particular Skills
Brings to the Board the strategic insights of a chief executive officer of a UK Bank and a strong lending and credit background with deep commercial experience including the operational challenges facing lending institutions.

External Appointments
Director and CEO of Hodge Group (stepping down in 2020 due to join Arora Group later in 2020 as CEO.

Experience
Steve joined Julian Hodge Bank Limited as CEO in January 2019, and was appointed to its board in February 2019. Prior to this, Steve was CEO of Shawbrook Bank Limited from October 2015 to December 2018. He joined Shawbrook from Santander UK, where he was executive director and head of UK banking and was responsible for the bank's corporate, commercial, business and retail banking operations as well as wealth management. He also held a number of senior positions at Santander UK, Royal Bank of Scotland and NatWest. Steve was appointed vice president of the Chartered Bankers Institute in June 2017. He was director of The Mortgage Lender Limited from May 2018 to January 2019.

Qualifications
Fellow of the Chartered Banker Institute. Awarded an Honorary Doctorate from the University of Kent for services to banking.

Your Court *(continued)*



Your Court *(continued)*

Governor's tenure

The new UK Code and the supporting Guidance on Board Effectiveness nominate service on the board for more than nine years from the date of first appointment as a specific consideration in the evaluation of the independence of Non-Executive Directors. The Governor is not subject to the UK Code's independence test other than on appointment. However, the UK Code recommends that the chairman is subject to similar length of service considerations and should not remain in post longer than nine years. The UK Code provides for extension of the chairman's tenure to facilitate succession planning and the development of a diverse board, particularly in those cases where the chairman was an existing non-executive director on appointment. The principles and provisions of the UK Code in this area are in support of the maintenance of the right combination of skills, experience and knowledge on the board, supported by formal processes of appointment and annual evaluation of performance.

Patrick Kennedy was appointed Governor in August 2018. He was independent under the UK Code at the time of his appointment.

Mr Kennedy's appointment followed a rigorous process, led by the SID, with external benchmarking by Egon Zehnder which rated him as an exceptional candidate for the role. Mr Kennedy was an existing Non-Executive Director, appointed to the Court in July 2010. During his tenure, Mr Kennedy served on every major committee of the Board, including as Chair of the Risk Committee and Deputy Governor until July and August 2018 respectively. The years prior to his appointment as Governor, which are calculated in the assessment of tenure, provided Mr Kennedy with a detailed understanding of the business and enabled him to forge effective relationships not only with the executive but also with the wider management team, factors which the Court regard as critical to his current success as Governor.

As set out in some detail in the 2018 Annual Report, in arriving at its decision at the time of his appointment as Governor, the Court took into account a number of exceptional factors, including: the anticipated very significant level of turnover on the Court due to retirements over the medium term; the recent appointment of an external candidate, previously UK-based, to the Group CEO role; and the Court's preference that the incoming Governor should have a complementary knowledge of the Irish environment, embracing customers, regulators and Government, and knowledge and understanding of the Bank of Ireland Group. In the view of the Court, these factors continue to be relevant as the company goes through a period of continuing significant change, including transformation of culture and a multi-year programme of investment in systems. In addition, having regard for the relatively recent appointments of the two externally recruited executive directors (the CEO in October 2017 and CFO in January 2020), the Court is satisfied that there is no issue of significant concurrent service arising as a governance concern.

Mr Kennedy brings very strong leadership to the Court. He demonstrates independent and objective judgement and promotes constructive challenge amongst Court members. In his short time in the role, he has demonstrated an innovative approach to bringing new formats and structures to Court meetings to improve the effectiveness of the Court. He has focused strongly on Court succession and diversity and has reinforced relationships with customers, regulators and shareholders. He is rated very highly by all Court members in the 2019 Governor effectiveness evaluation led by the SID, supported by Praesta Ireland who led the external effectiveness review of the Court as a whole in 2019.

Mr Kennedy combines a deep knowledge of the Group with exceptional commercial acumen gained from a highly successful career in national and international business. As an Irish-based Governor, the Court believes he provides valuable knowledge and experience of the customer, regulatory and political environment and necessary continuity during a period of significant change. As such, the Court considers it appropriate for Mr Kennedy to remain in role for a further period and will be recommending his re-election in 2020. The company will consult with shareholders on the matter of tenure during the second half of the year, setting out its views on the wider issues of succession planning at Court level and its assessment of the best interests of shareholders.

Court committees

The Court is assisted in the discharge of its duties by a number of Court Committees, whose purpose it is to consider, in greater depth than would be practicable at Court meetings, matters for which the Court retains responsibility. Each Committee operates under terms of reference approved by the Court. Appropriate cross-membership of key Court Committees, including between the Audit and Risk Committees and Remuneration and Risk Committees, is ensured. The Court Nomination and Governance Committee formally review the composition and purpose of the Court Committees annually on behalf of the court.

The minutes of all meetings of Court Committees are circulated to all Directors for information and are formally noted by the Court. Papers for all Court Committee meetings are also made available to all Directors, irrespective of membership. Such circulation of minutes and papers are restricted should there be a conflict of interest or issues of personal confidentiality.

The terms of reference of the Court Audit Committees, the Court Risk Committee, the Court Nomination and Governance Committee and the Court Remuneration Committee are available on the Group's website: www.bankofireland.com/about-bank-of-ireland/corporate-governance.

In carrying out their duties, Court Committees are entitled to take independent professional advice, at the Group's expense, where deemed necessary or desirable by the Committee Members.

Reports from the Court Audit Committee (CAC), the Court Risk Committee, the Court Nomination and Governance Committee and the Court Remuneration Committee are presented on pages 37 to 51.

Your Court *(continued)*

Court composition and succession

The Court comprises twelve Directors: two Executive Directors, the Governor, who was independent on appointment, eight independent NEDs and a Director nominated by the Minister for Finance, who is deemed to be a non-independent NED. The biographical details of each of the directors, along with each of their individual dates of appointment, are set out on pages 22 to 25.

The Court considers that a board size of 10 to 12 Directors allows for a good balance between having the full range of skills necessary on the Court and to populate its committees and retaining a sense of accountability by each Director for Court decisions.

Both on an individual and a collective basis, the Directors are considered to have the range of skills, understanding, experience and expertise necessary to ensure the effective leadership of the Group and that high corporate governance standards are maintained. The Court Nomination and Governance Committee (the 'Committee') leads the process for appointments to the Court and ensures plans are in place for orderly succession to both the Court and Executive positions.

The Committee ensures a formal, rigorous and transparent procedure when considering candidates for appointment to the Court and maintains continuous oversight of the Court's composition to ensure it remains appropriate and has regard for its purpose, culture, major business lines, geographies, risk profile and governance requirements.

As part of the Committee's succession planning process, it has regard for the impact of expected retirements of directors and the Group's desired culture and strategic direction. As part of the process, the Committee prepares a detailed role profile, based on its analysis of the skills and experiences needed and selects, where appropriate, an external search firm to facilitate the process. The Committee follows the requirements of the Directors Assessment Policy, which is fully aligned with the Joint ESMA and EBA Guidelines on the assessment of the suitability of members of the management body, and ensures a robust assessment of potential candidates which includes interview by the Court Nomination and Governance Committee members and recommendation to the Court prior to the submission of fitness and probity applications to the regulator for consideration.

All potential candidates are assessed to ensure they have the ability to act with integrity, lead by example and promote the desired culture, which evidences a commitment to high standards and values where customers are at the heart of decision-making.

2019 Court changes

During 2019, Kent Atkinson, an experienced banker, retired from the Court. In preparation for his retirement, the Committee had identified deep experience in corporate and retail banking as a key requisite skills and experience profile for the Court. Steve Pateman, who joined the Court in September 2018, replenished the Court's core banking skills.

Also during 2018, the Committee commenced a search for a director with a number of skills, experiences and characteristics, with a focus on further diversity and knowledge of the Irish market and environment. Eileen Fitzpatrick was identified from that search and was appointed in May 2019. Eileen brings strategic insights of a chief executive officer of an Irish asset management company and a strong financial services background, with extensive public sector and deep commercial experience.

Having regard for the Group's transformation programme, the Committee identified transformation, change and technology as potential areas of focus for further NED recruitment. Against that backdrop, Michele Greene was nominated by the Minister for Finance and was appointed to the Court in December 2019. Michele brings significant and recent experience of digital banking and a focus on evolving customer expectations.

The selection of Myles O'Grady as the preferred candidate to succeed Andrew Keating as CFO and Executive Director was led by the CEO and supported by the Committee. Myles joined the Group in June 2019 and brings a wealth of relevant external experience to the role.

An active search is underway to identify a NED with further technology transformation experience and the Group looks forward to reporting positively on that search during 2020.

External support

The search process leading to the appointment of Eileen Fitzpatrick was facilitated externally by Leaders Mores, a consulting company specialising in board level appointments. Leaders Mores is used for Court searches but has no other connection with the Group or individual directors. While the nomination of Michele Greene was a matter for the Minister for Finance, the Group requested Leaders Mores to provide the Court with an independent assessment of Michele Greene's suitability as part of the wider due diligence assessment, prior to her being recommended by the Court for appointment.

Regulatory assessment and formal approval is required and received for all Court appointments.

Induction and continuous development

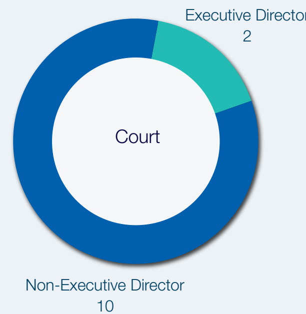
On appointment, each director receives an induction plan tailored to his or her specific requirements. It consists of meetings with senior management on Group and Divisional strategy, deep dives on businesses and an overview of the Group's risk appetite and Group Risk Framework, supplemented by sessions on the management of key risks and a comprehensive range of meetings covering the Group's regulatory environment, people strategies, technology and payments. Deep dives on capital and liquidity management and an overview of the Group's financial position are also included, along with sessions relevant to membership of specific committees.

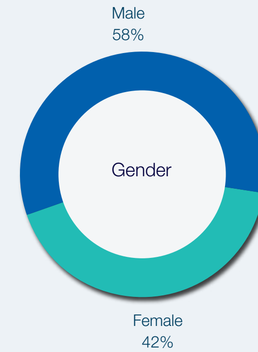
The continuous development requirements of the Court and individual directors, as required, is informed by the outcome of annual effectiveness reviews, emerging external developments and areas where individual directors have identified as areas requiring focus. These requirements are met through the provision of Court training, presentations, site visits and individual bespoke training sessions as required.

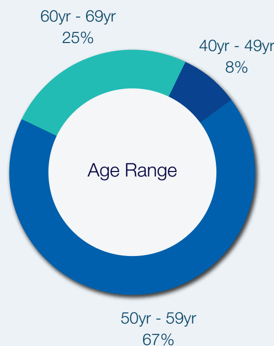
Your Court *(continued)*

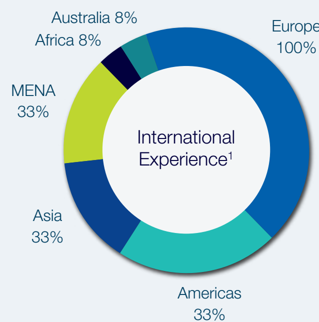
Diversity

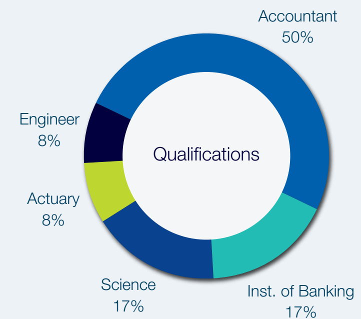
The Court is fully committed to diversity in all forms and truly believes that diversity is an essential ingredient of sound decision-making. The Court has an approved Court Diversity Policy in place and, following review in 2019, it has retained its target of a minimum of 33% female representation on the Court by the end of 2020, with a medium term aspiration of achieving equal gender representation on the Court. Below is an overview of the current Court profile.











Tailored Induction Programmes
Eileen Fitzpatrick: As NED and member of Court Audit and Court Remuneration Committees. **Michele Greene:** As NED. Further induction on the Group Transformation Programme and Group Risk is scheduled to take place in 2020, in recognition of her committee roles. **Myles O'Grady:** As Group CFO and Executive Director.

Court and Committee Education and Development

- Brexit preparedness.
- Business module - Site visit to Banking 365 Kilkenny including management presentation / listening in sessions.
- Market risk training: Regulatory and market developments from Group Market and Liquidity Risk (GM&LR).
- Education / deep dive session on the net interest income reporting process.
- Code of Conduct.
- Business module - Site visit to Northridge and Donegal Square including management presentation / listening in sessions.
- Risk appetite: Definitions of non-financial risks and articulation of appetite.
- IFRS17 and accounting standards.
- Business module - Site visit to BOI IT Centre and Operations Centre; Robotics and Automated Operations.
- Business module - Site Visit to Limerick branch, BOI Workbench and Bereavement Support Unit .

In addition to collective education and development programmes in 2019, individual Directors actively engaged in one to one focus sessions with Management on topics such as vulnerable customers, wealth and insurance, Small and Medium Enterprises (SMEs), the Irish Mortgage Market, technology transformation and the Irish Economy.

[1] *International experience shows Directors with experience in more than one geographical location.*

Your Court *(continued)*

Assessing the Effectiveness of the Court

Court

The Court seeks to continually enhance its operations and, each year, conducts a formal effectiveness evaluation of the Court, Court Committees and individual Directors. The Court is required to have an external evaluation conducted once every three years. During 2019, an external evaluation was carried out by Praesta Ireland, an executive coaching and leadership consultancy company. Praesta Ireland has no other connection to the Group.

The Praesta Ireland evaluation comprised:

- One to one interviews with all Directors, the Group Secretary and a number of Group Executives.
- A review of Court papers, including Court packs, Court minutes and Court committee papers.
- An online survey of Directors which sought their views on a range of topics.
- Attendance as an observer at the December 2019 Court meetings.

The scope of the Praesta Ireland evaluation included:

- The role of the Court.
- Court culture and dynamics.
- Court papers and reporting.
- Risk management and internal control.
- Performance evaluation.
- Chairing of the Court.
- Court composition, structure and processes.
- Stakeholder management and communications.
- Strategic focus, mission and vision.
- Effectiveness of the committees of the Court.

Governor

The performance of the Governor was assessed during the Praesta Ireland evaluation and, led by the SID, the Court met to discuss the Governor's performance, in his absence. The SID subsequently provided an update on the positive outcome of the review to the Governor. Patrick Kennedy is considered to be a highly effective Governor and provides very strong leadership to the Court. The Court confirmed its continued support for Patrick Kennedy and his proposal for re-election at the 2019 Annual General Court (AGC). The Court also actively considered the Governor's tenure during this assessment.

Individual Directors

In addition to the Praesta Ireland evaluation process, the Governor met with Directors on a one to one basis to discuss their individual performance, taking account of their input, which was submitted in advance of the meetings. The Governor assessed each Director as being fully effective, with all Directors demonstrating commitment to their role, and their contributions continue to be important to the company's long-term sustainable success.

The independence of each Director is considered by the Court Nomination and Governance Committee prior to appointment and reviewed annually thereafter using the independence criteria set out in the Irish Code, relevant EBA / ESMA Guidelines and the UK Code. Michele Greene has been designated as non-independent by virtue of her nomination by the Minister for Finance. It has been determined that all other NEDs in office during 2019, with the exception of Michele Greene, are independent in character and judgement and free from any business or other relationship with the Group that could affect their judgement.

While Michele Greene has been designated as non-independent, the Court believes, based on her performance to date, that she too brings independent challenge and judgement to the deliberations of the Court.

Patrick Kennedy was determined as independent on appointment. Whilst acknowledging that his independence may be perceived to be impacted during his tenure due to nature of the role of Governor, as reported on page 27, Patrick Kennedy is regarded as continuing to operate in a manner that is independent in character and judgement and remains objective in his opinions.

A rigorous assessment was also undertaken of the independence of Patrick Haren and Patrick Mulvihill who have served more than six years on the Court. In both cases, the Governor concluded that they continue to demonstrate independence of mind and therefore remain independent.

2019 Conclusion

A consolidated report on the findings of the full evaluation process was presented to the Court. The outcome of the evaluation was positive, concluding that the Court and its Committees continued to be effective, with all Directors demonstrating commitment to their roles.

Progress had been made on areas for enhancement identified during the 2018 internal effectiveness evaluation process, relating to a continued focus on Group Strategy, Court training and engagement with management on talent and succession planning.

Recommendations from the 2019 Praesta Ireland evaluation, actions in respect of each of which are actively underway, included:

- while recognising progress made in recent years on the quality of Court reporting, room for greater brevity and sharper focus in Court papers;
- the need for the 2020 Court plan to allocate sufficient time to agreed key areas of focus;
- evolution of the continuous development programme for individual Directors and the Court as a whole; and
- enhanced focus on non-financial risk management.

Your Court *(continued)*

How the Court spent its time at Court meetings in 2019

The Court considers and addresses opportunities and threats to its future success. It assesses the sustainability of its business model and ensures that there is a strong corporate governance structure in place in order to deliver its strategy.

While not intended to be exhaustive, below is a high-level overview of a number of matters considered by the Court during 2019.

Business Context
- Governor's update.
- CEO perspective and priorities.
- Organisational Balanced Scorecard: Reporting on performance relative to strategic, financial and non-financial KPIs.
- Tracker Mortgage Examination Programme.

Business Performance and Risk Management Reports
- Financial and Business Performance.
- Risk Reports.
- Regulatory Interactions.
- Funding and Liquidity Policy.
- Internal Capital Adequacy Assessment.
- Internal Liquidity Adequacy Assessment.

Strategic Priorities and Business Deep Dives
- Group's risk appetite framework and Risk Appetite Statement.
- Brexit Readiness.
- Progress implementing the Group's 2018–2021 strategy
- Key strategic priorities, including, but not limited to, reports on:
  - the Transformation Programme, including systems and Customer journey transformation;
  - the Group Culture Programme, including Inclusion and Diversity and Employee Engagement;
  - Customer Experience, including Financial Wellbeing, Customer Insights and Customer Experience reports; and
  - the Group's 'Fit for the Future' cost management programme.
- Marketing and Brand Framework.
- Business Deep Dives, including on RoI Mortgages, Wealth and Insurance, Great Britain (GB) and NI, Loan Book Growth, Home Building and Buying.

Reports from Court Committees
- Recommendations from committees on key policies and matters reviewed in depth by committees for Court decision.
- Reports on committee proceedings.

Governance and Oversight
- Key governance policies and documents.
- Court, Committee and Individual Director's Effectiveness Evaluation.
- Endorsement of Material Risk Takers (MRT)
- Subsidiary oversight.
- Tracking of agreed actions.

Environment
- Investor Relations.
- Economic Environment.
- Stakeholder Engagements.

Attendance at meetings in 2019
The Court held eight meetings during the year ended 31 December 2019. Further details on the number of Court and Committee meetings and attendance by individual Directors are set out on page 52.

Roles and Responsibilities

Role of the Court
The Group is led by an effective and committed Court of Directors, who are collectively responsible for the long-term success of the Group. The Court's role is to provide leadership of the Group within the boundaries of risk appetite and a framework of prudent and effective controls which enable risk to be identified, assessed, measured and controlled.

The Court sets the Group's strategic aims and risk appetite to support the strategy, ensuring that the necessary financial and human resources are in place for the Group to meet its objectives. The Court ensures that the Group's purpose, values, strategy and culture are all aligned and reviews management performance in that regard.

The Court is responsible for endorsing the appointment of individuals who may have a material impact on the risk profile of the Group and monitoring on an ongoing basis their appropriateness for the role. The removal from office of the head of a 'control function', as defined in the Irish Code, is also subject to Court approval.

The respective roles of the Governor and the Group CEO which are separate, are set out in writing and have been agreed by the Court. The Court has a schedule of matters specifically reserved for its decision which is reviewed and updated regularly.

The Court approves the Group Risk Framework on an annual basis and receives regular updates on the Group's risk environment and exposure to the Group's material risk types. Further information on risk management and the Court's role in the risk governance of the Group is set out in the Risk Management Report on pages 110 to 160 of the BOIG plc Group Annual Report 2019.

Your Court *(continued)*

Roles and Responsibilities (continued)

The work of the Court follows an agreed schedule of topics which evolves based on business needs and is formally reviewed annually by the Court.

Role of the Governor
The Governor oversees the operation and effectiveness of the Court, including ensuring that agendas cover the key strategic items confronting the Group and encouraging all Directors to participate fully in the discussions and activities of the Court. He also ensures that there is effective communication with shareholders and promotes compliance with corporate governance standards. The Governor commits a substantial amount of time to the Group and his role has priority over any other business commitment. During the year, the Governor and NEDs met without the Executive Directors present, to discuss a range of business matters.

Role of the Deputy Governor and Senior Independent Director
The Deputy Governor adopts the role of SID and deputises for the Governor as required and is a Trustee of the BSPF scheme. The SID provides a sounding board for the Governor and serves as an intermediary for the other directors and shareholders if they have concerns that contact through the normal channels of Governor, Chief Executive or other Executive Directors has failed to resolve or for which such contact is inappropriate. As appropriate and when required, the SID meets a range of major shareholders in order to develop a balanced understanding of their views. The SID leads the evaluation of the Governor in conjunction with the other directors and would normally take responsibility for an orderly succession process for the Governor, working closely with the Nomination and Governance Committee.

Role of the Independent Non-Executive Directors
The NEDs (including the Governor and the Deputy Governor) bring independent challenge and judgement to the deliberations of the Court through their character, objectivity and integrity. As reported, while Michele Greene has been designated as non-independent by virtue of her nomination by the Minister for Finance, the Court believes, based on her performance to date, that she too brings independent challenge and judgement to the deliberations of the Court.

Role of the Group Chief Executive Officer
The Group CEO is responsible for execution of approved strategy, holds delegated authority from the Court for the day to day management of the business and has ultimate executive responsibility for the Group's operations, compliance and performance. Procedures are in place to review the Group Chief Executive's contract at least every five years.

The Directors have access to the advice and services of the Group Secretary, who is responsible for advising the Court on all governance issues and for ensuring that the Directors are provided with relevant information on a timely basis to enable them to consider issues for decision and to discharge their oversight responsibilities.

The Directors also have access to the advice of the Group Legal Adviser and to independent professional advice, at the Group's expense, if and when required. Committees of the Court have similar access and are provided with sufficient resources to undertake their duties.

The Group Secretary provides dedicated support for Directors on any matter relevant to the business on which they require advice separately from or additional to that available in the normal board process. The Group has in place Directors' and Officers' liability insurance in respect of legal actions against its Directors.

Matters reserved for the Court for approval include:

- Determination of strategy.
- Determination of risk appetite within the parameters of the Group's Risk Appetite Statement.
- Approval of the Group's Internal Capital Adequacy Assessment Process (ICAAP).
- Promoting the appropriate culture, corporate values, behaviours and ethics of the Bank.
- Overseeing the management of the business.
- Overseeing organisational structure.
- Overseeing the internal control, compliance, and risk management systems of the Bank.
- Approval of the Bank's business plans and budgets.
- Overseeing corporate governance and succession planning.
- Overseeing remuneration framework.
- Acquisitions or divestments of companies involving a third party or management buyout except for credit management purposes.
- Approval of CET1 capital investments of greater than €20 million in a regulated subsidiary and €40 million in any other subsidiary.
- Capital expenditure (in excess of €40 million)
- Guarantees including those in respect of subsidiary companies, entered into by the Bank, other than in the normal course of business.
- Pension scheme funding / benefits - all changes to the funding of pension schemes in the Bank and / or benefits of same.
- The approval of equity underwriting sums of greater than €20 million.
- The approval of the appointment of directors and certain specified senior management appointments.

The Group's approach to Strategy Development and Monitoring
Development of Transformation Strategy
From mid-2017 the Court commenced work on a new strategy in the context of a fundamental shift in customer demands for service, increasing and changing competition and the need for business and core systems transformation.

Your Court *(continued)*

In June 2018, the Group's three strategic priorities were identified and announced to the Market:
- Transform the Bank.
- Serve customers brilliantly.
- Grow sustainable profits.

These strategic priorities remain relevant today and significant time has been spent during 2019 reviewing progress against the strategy, framing the agenda for further strategic considerations to take place during 2020. Dedicated focus has been applied by the GTOC on the transformation of the Bank, with notable attention and consideration applied to the systems transformation aspect of the strategy.

Monitoring of Transformation Strategy

In order to facilitate the Court in monitoring the execution of the strategic plan, the Court:
- regularly discussed progress against execution priorities and targets with the Group Chief Executive;
- received insights on stakeholder, employee and cultural matters;
- assessed the progress of execution of strategy through deep-dive sessions across the key business divisions;
- received regular updates on the systems transformation, culture transformation and cost reduction programmes;
- received regular briefings from GTOC which has a mandate to oversee the transformation of the culture, systems and business model structure, as well as the safe delivery of some regulatory mandated change programmes; and
- reviewed the potential implications of the UK's preparations to leave the EU and oversight of management monitoring and risk mitigation activities.

Stakeholder Engagement

Customers

The Group's aim is to serve customers brilliantly by being the number one bank for service and having the best brand in our target markets including the best bank for partnerships in the UK. The Court consistently reviews the strategy, receives updates on implementation and reviews progress as part of the governance process. The Group Customer Board, established in 2018, ensures customer focus by management, along with a Customer Advisory Council which ensures external challenge to our approach to customer engagement. The Court receives regular updates on progress against customer metrics and reports from the Group CEO, the Chief Marketing Officer and the respective business CEOs. In addition, its understanding of customers' perspectives is informed by deep dives on customer themes and customer complaints, and visits by Directors to customer call centres to hear customer voices at first hand. Directors met on several occasions with customers directly in 2019 reflecting the importance of 'serving customers brilliantly' in our strategy.

Colleagues

The Court receives regular updates on the progress of the Group Culture Programme and reviews the outputs from the Group's Open View staff survey and receives updates on progress in implementing actions in response to staff feedback. The Court pays particular attention to the Group Code of Conduct and Speak Up Policy, and the Court Nomination and Governance Committee (CN&GC) reviews its effectiveness annually. The Court strives to create an environment in which staff are encouraged to speak up where they have any concerns. Fiona Muldoon, on behalf of the Court, actively sponsors the Group Code of Conduct and Speak-Up Policy.

During 2019, the Court met on several occasions with small groups of managers from across the Group in sessions called 'Visibility Sessions', which form part of the annual Court programme of work which is considered and approved each year. Directors conduct site visits from time to time, and during 2019 the Court visited sites and met with staff in Belfast, Limerick and Kilkenny. The 2020 Court programme of work is designed to further enhance engagement with colleagues and includes a wider range of site visits across the Group.

Another positive step was taken in response to the UK Code, with the Court designating Eileen Fitzpatrick as the Workforce Engagement NED, the objective of which is to enhance the Group's existing engagement mechanisms between the Court and the workforce and to strengthen the 'employee voice' at the Court table and when making decisions. A set of objectives for the designated role has been established which will evolve during 2020 as the role and its effectiveness, both for the Court and our colleagues, are considered. The role supplements what the Court is already hearing about culture and behaviour and will report to the Court regularly. Among other things, as part of the role, in 2020, the Workforce Engagement NED will:
- Engage with Management in deep dives on results of OpenView staff surveys and planned actions.
- Host Open Door sessions with self-nominating employees on a bi-annual basis.
- Attend the Group's Colleague Recognition Event.

Regulators and Government

The Governor and members of the Court regularly meet with representatives from the regulators and government bodies, including the Joint Supervisory Team, the CBI, Bank of England (BoE), Financial Conduct Authority (FCA), PRA, European Central Bank (ECB) and the Department of Finance. Core themes discussed at these meetings include regulation and supervision, risk governance and oversight, challenges facing the banking industry, strategic challenges and rebuilding trust and culture. The Governor and Group CEO update the Court on their meetings with regulators and government representatives at each Court meeting. Management provide regular briefings to the Court on regulatory engagement and correspondence which ensures that the Court remains aware of regulatory expectations and areas of focus.

Communities

The Group's communities are those where it has a physical presence, where its employees live and work, as well as other local and global groups and partners. The Group supports the wider community through its community investment programme, its support of local enterprise and through its financial wellbeing programmes as well as playing an active role in society. In 2019, the Group has donated over €2 million to charitable causes.

Your Court *(continued)*

Stakeholder Engagement (continued)

Stockholders
Following a corporate reorganisation in July 2017 whereby BOIG plc became the new holding company of the Bank. BOIG plc became the new listed company on both the Irish and London stock exchanges. All ordinary shareholdings in the Bank were cancelled by way of a scheme of arrangement and replaced by shareholdings in BOIG plc, on the basis of the exchange ratio of one BOIG plc share for each individual holding of 30 units of ordinary stock in the Bank (which included a rounding up mechanism).

Notice of the Annual General Court (AGC) is provided at least 21 days before the meeting, notice of the 2019 AGC was circulated to stockholders on 9 April 2019. The Governor (who is also Chair of the Court Nomination & Governance Committee) and the Chairs of the Court Audit Committee (CAC), Court Risk Committee and Court Remuneration Committee (CRC) were in attendance to hear the views of preference shareholders and answer questions. It is usual for all Directors at the time of the AGC to attend. All members of the Court attended the AGC 2019.

The AGC of the Group in 2020 is scheduled to be held on 19 May 2020. Stockholders who will be unable to attend on this date are encouraged to submit queries and vote in advance to ensure continued participation.

Court's oversight of risk management and internal control systems

Accountability and audit
The Report of the Directors, including a going concern statement and a viability statement, is set out on pages 53 to 54. This Corporate Governance Statement forms part of the Report of the Directors.

Court Responsibility
The Court is responsible for overseeing the Group's risk management and internal control systems, which are designed to facilitate effective and efficient operations and to ensure the quality of internal and external reporting and compliance with applicable laws and regulations, and to review the effectiveness of same.

In establishing and reviewing the risk management and internal control systems, the Directors carried out a robust assessment of the principal risks facing the Group including those that would threaten its business model, future performance, solvency or liquidity, the likelihood of a risk event occurring and the costs of control. The process for identification, evaluation and management of the principal risks faced by the Group is integrated into the Group's overall framework for risk governance. The Group is forward-looking in its risk identification processes to ensure emerging risks are identified. The risk identification, evaluation and management process also identifies whether the controls in place result in an acceptable level of risk. At Group level, a consolidated risk report and risk appetite dashboard is reviewed and regularly debated by the Court Risk Committee and the Court to ensure satisfaction with the overall risk profile, risk accountabilities and mitigating actions.

The report and dashboard provide a monthly view of the Group's overall risk profile, key risks and management actions, together with performance against risk appetite and an assessment of emerging risks which could affect the Group's performance over the life of the operating plan.

Information regarding the main features of the internal control and risk management systems is provided within the risk management report on pages 110 to 160 of the BOIG plc Group Annual Report 2019. The Court concluded that the Group's risk management arrangements are adequate to provide assurance that the risk management systems put in place are suitable with regard to the Group's profile and strategy.

Control systems
The Group's overall control systems include:
- a clearly defined organisation structure with defined authority limits and reporting mechanisms;
- three lines of defence approach to the management of risk across the Group: line management in individual businesses and relevant Group functions, central risk management functions, and Group Internal Audit (GIA);
- Court and Management Committees with responsibility for core policy areas;
- a set of policies and processes relating to key risks;
- reconciliation of data consolidated into the Group's financial statements to the underlying financial systems. A review of the consolidated data is undertaken by management to ensure that the financial position and results of the Group are appropriately reflected, through compliance with approved accounting policies and the appropriate accounting for non-routine transactions;
- Codes of Conduct setting out the standards expected of all Directors, officers and employees in driving an appropriate, transparent risk culture;
- a Risk Control Self-Assessment (RCSA) framework, where risks are logged, managed and mitigated across the first-line, with clear reporting, escalation and second-line oversight. Action plans are developed and implemented to address any control deficiencies;
- a comprehensive set of accounting policies; and
- a compliance framework incorporating the design and testing of specific controls over key financial processes.

The Group operates a comprehensive internal control framework over financial reporting with documented procedures and guidelines to support the preparation of the consolidated financial statements.

Your Court *(continued)*

The main features are as follows:

- a comprehensive set of accounting policies relating to the preparation of the annual and interim financial statements in line with IFRS as adopted by the EU;
- an independent internal audit function with responsibility for providing independent, reasonable assurance to key internal (Court and Subsidiary Audit and Risk committees and Senior Management) and external (Regulators and external auditor) stakeholders on the effectiveness of the Group's risk management and internal control framework;
- a compliance framework incorporating the design and testing of specific controls over key financial processes to confirm that the Group's key controls are appropriate to mitigate the financial reporting risks;
- a robust control process is followed as part of interim and annual financial statements preparation, involving the appropriate level of management review and attestation of the significant account line items, and where judgements and estimates are made, they are independently reviewed to ensure that they are reasonable and appropriate. This ensures that the consolidated financial information required for the interim and annual financial statements is presented fairly and disclosed appropriately;
- the Annual Report and Interim Report are also subject to detailed review and approval through a structured governance process involving senior and executive finance personnel;
- summary and detailed papers are prepared for review and approval by the CAC covering all significant judgemental and technical accounting issues, together with any significant presentation and disclosure matters; and
- user access to the financial reporting system is restricted to those individuals that require it for their assigned roles and responsibilities.

Reviews by the Court

The effectiveness of the risk management and internal control systems is reviewed regularly by the Court, the CAC and the Court Risk Committee, which also receive reports of reviews undertaken by Group Risk and GIA. The CAC receives reports from the Group's external auditor (which include details of significant internal control matters that they have identified), and has separate discussions with the external and internal auditors at least once a year without executives present, to ensure that there are no unresolved issues of concern.

The Group's risk management and internal control systems are regularly reviewed by the Court and are consistent with the Guidance on Risk Management, Internal Control and Related Financial and Business Reporting issued by the Financial Reporting Council and compliant with the requirements of CRD IV. They have been in place for the year under review and up to the date of the approval of the annual report. The Group has determined a pathway to compliance with the Basel Committee on Banking Supervision (BCBS) 239 risk data aggregation and risk reporting requirements and continues to actively manage enhancements.

Continuous improvement

The Group's controls frameworks are continuously improved and enhanced, addressing known issues and keeping pace with the dynamic environment. Progress continues to be made in operational (including IT and Information Security), regulatory and conduct risks. The 2019 internal control assessment provides reasonable assurance that the Group's controls are effective, or that, where control weaknesses are identified, they are subject to management oversight and action plans. The CAC, in conjunction with the Court Risk Committee, following an assessment of whether the significant challenges facing the Group are understood and are being addressed, concluded that the assessment process was effective and made a positive recommendation to the Court in that regard.

Court Governance

Conflicts of Interest

The Court has an approved Conflicts of Interest Policy which sets out how actual, potential or perceived conflicts of interest are to be identified, reported and managed to ensure that Directors act at all times in the best interests of the Group. This policy is reviewed on an annual basis.

The Group Code of Conduct, which applies to all employees and Directors of the Group, clarifies the duty on all employees to avoid conflicts of interests. The Code of Conduct is reviewed on an annual basis and communicated throughout the Group.

Time Commitment

The Group ensures that individual Court Directors have sufficient time to dedicate to their duties, having regard to applicable regulatory limits on the number of directorships which may be held by any individual Director. The Company and the Bank have each been classified as 'significant institutions' under CRD IV. During the year ended 31 December 2019, all Directors were within the directorship limits set out for significant institutions under the Regulations.

All newly-appointed Directors are provided with a comprehensive letter of appointment detailing their responsibilities as Directors, the terms of their appointment and the expected time commitment for the role. A copy of the standard terms and conditions of appointment of NEDs can be inspected during normal business hours by contacting the Group Secretary. Directors are required to devote adequate time to the business of the Group, which includes attendance at regular meetings and briefings, preparation time for meetings and visits to business units. In addition, NEDs are normally required to sit on at least one Court Committee, which involves the commitment of additional time. Certain NEDs, such as the Deputy Governor, SID and Committee Chairs, are required to allocate additional time in fulfilling those roles.

Before being appointed, Directors disclose details of their other significant commitments along with a broad indication of the time absorbed by such commitments. Before accepting any additional external commitments, including other directorships that might impact on the time available to devote to their role, the agreement of the Governor and the Group Company Secretary, or, depending on the nature of the proposed commitment, the full Court, must be sought. In certain cases, advanced CBI approval must also be sought.

Term of Appointment and Re-election of Directors

NEDs are normally appointed for an initial three-year term, with an expectation of a further term of three years, assuming satisfactory performance and subject to the needs of the business, shareholder re-election and continuing fitness and probity.

Your Court *(continued)*

A NED's term of office will generally not extend beyond nine years in total unless the Court, on the recommendation of the Group Nomination and Governance Committee, concludes that such extension is necessary due to exceptional circumstances. In such a situation the Court will document its rationale for any continuance and so advise the CBI in writing as required under the Irish Code.

In respect of Executive Directors, no service contract exists between the Company and any Director which provides for a notice period from the Group of greater than one year. None of the NEDs have a contract of service with the Group.

It is Group practice that, following evaluation, all Court Directors are subject to annual re-election by stockholders. All Directors retired at the AGC held on 14 May 2019. The following Directors, being eligible, offered themselves for election and were elected at the 2019 AGC:

- Ian Buchanan.
- Evelyn Bourke.
- Richard Goulding.
- Patrick Haren.
- Andrew Keating.
- Patrick Kennedy.
- Francesca McDonagh.
- Fiona Muldoon.
- Patrick Mulvihill.
- Steve Pateman.

The names of Directors submitted for election or re-election are accompanied by sufficient biographical details and any other relevant information in the AGC documentation to enable shareholders to take an informed decision on their election. The 2020 AGC is scheduled for 19 May 2020 and, in line with previous AGCs, all directors will retire from office at the date of the AGC and may choose to offer themselves for election.

Organisational Structure

The Group believes it has robust governance arrangements, which include a clear organisational structure with well defined, transparent and consistent lines of responsibility, effective processes to identify, manage, monitor and report the risks to which it is or might be exposed, and appropriate internal control mechanisms, including sound administrative and accounting procedures, IT systems and controls. The system of governance is subject to regular internal review. These governance arrangements provide systems of checks and controls to ensure accountability and drive better decision-making, and also include policies and practices which ensure that the Court and its Committees operate effectively.

The Group's overall control systems include a clearly defined organisation structure with defined authority limits and reporting mechanisms to higher levels of management and to the Court, which support the maintenance of a strong control environment. Corporate and capital structure is a matter requiring Court approval. In accordance with section 225(2) of the Companies Act 2014, the Directors acknowledge that appropriate structures that are, in the Directors' opinion, designed to secure material compliance with the relevant obligations (as defined in section 225(1)) have been put in place. The Court reviews annually the corporate legal structure of the Group and any changes to the structure of the Group effected since the Court's previous review.

Subsidiary Governance

The interaction between the Court and the boards of our strategically significant subsidiaries are closely monitored. The Governor meets regularly with the Chairmen of these subsidiaries in order to ensure good communication and alignment and attends a number of subsidiary boards meetings during the year. The Court receives reports conducted on the effectiveness of these significant subsidiaries. Ian Buchanan is also a NED of Bank of Ireland (UK) plc and a member of its risk committee.

The Chairs of Court Committees attend the equivalent committees of the strategically significant subsidiaries once a year. Similarly, the respective subsidiary board committee chairs attend and present at the Group Court Committees annually to provide an account of the subsidiary board committees activities.

In 2019, the Court reviewed the Group Subsidiary Governance Policy including the New Subsidiary / Entity process document, which sets out the required procedure should any party in the Group wish to set up a new Group subsidiary or entity in which the Group will have a controlling interest. This is reviewed annually.

The Group's corporate simplification programme, designed to remove a number of subsidiaries from the Group, made considerable progress in 2019 with the dissolution of 11 companies. The purpose of this programme is to simplify corporate structure of the Group with a view to generating efficiencies and cost savings and reducing risk.

Report of the Court Nomination and Governance Committee

Patrick Kennedy
Chair

Dear Shareholders,

Membership and meetings

At close of business on 31 December 2019, the Court Nomination and Governance Committee (the 'Committee') comprised Patrick Kennedy, Patrick Haren, Evelyn Bourke and Fiona Muldoon. Biographical details, including each member's background and experience, are set out on pages 22 to 25.

The Committee met six times during 2019, five of which were scheduled meetings. The Chair and Members of the Committee, together with their attendance at meetings, are shown below. The Group CEO, Chief People Officer and other members of management are invited to attend meetings where the agenda item is relevant to them and their attendance is requested by the Committee. The Committee meets annually with no management present.

Court Nomination and Governance Committee Meetings	Eligible to attend	Attended
Patrick Kennedy	6	6
Patrick Haren	6	6
Evelyn Bourke	6	5
Fiona Muldoon[1]	5	5

Role and responsibilities

The key responsibilities of the Committee are set out in its terms of reference (which are available on www.bankofireland.com) and include:

- leading the process for appointments and renewals for Court and Court Committees as appropriate, and making recommendations in this regard to the Court for its approval;
- ensuring plans are in place for orderly succession to both the board and senior management positions, and oversee the development of a diverse pipeline for succession;
- keeping Court governance arrangements under review and making appropriate recommendations to the Court to ensure corporate governance practices are consistent with good practice corporate governance standards;
- overseeing subsidiary governance to ensure that appropriate and proportionate governance arrangements are in place for Group subsidiaries; and
- agreeing the Group's RSB policy and overseeing its implementation.

Matters considered by the Committee
The principal matters considered, and actions taken by the Committee during the year are described on pages 38 and 39.

Court Composition, Succession and Diversity
The Committee continued to keep under review the structure, size and composition of the Court and its Committees. During 2019 the Committee devoted considerable time to succession planning and recruitment, having regard to the tenures of a number of its directors to ensure readiness and appropriate and timely succession activities. Further details are set out on page 28.

The Committee engaged Leaders Mores, a consulting company specialising in board level appointments, to support Director searches conducted during the year and considered a number of potential candidates, leading to the successful appointment of Eileen Fitzpatrick.

In addition, the Committee considered the nominee of the Minister for Finance, Michele Greene, who was subject to the same level of consideration and suitability review by the Committee as applied to all other NEDs. Leaders Mores supported the Court with an independent assessment of Michele Greene's suitability as part of the wider due diligence assessment, prior to her being recommended by the Court for appointment.

An active search is underway to identify a NED with technology transformation experience, with additional ideal traits including financial services experience and Irish residency. Leaders Mores and MWM Consulting are facilitating this search. Other than in connection with the Court searches, Leaders Mores and MWM Consulting have no connection with the Group.

The selection of Myles O'Grady as the preferred candidate to succeed Andrew Keating as CFO and Executive Director was led by the CEO and supported by the Committee.

As part of the process of succession planning and determining the appropriate range and mix of skills

[1] *Appointed 20 January 2019*

Report of the Court Nomination and Governance Committee *(continued)*

required to maintain an effective Court, each member of the Court is requested to self-assess against the skills template set out in the Joint ESMA and EBA Guidelines on the assessment of the suitability of members of the management body and key function holders. This assessment provided the Committee with valuable analysis of the skills and experience of Court members, relative to required and desirable Court competencies, and contributes to ensuring that the Court continues to have an appropriate range and depth of skills and experience.

While potential candidates were assessed against developed candidate specifications for particular identified roles and skill sets, potential candidates were also required to be of sufficient calibre and suitable for appointment to the Court as NED and enhance the Court's overall effectiveness, facilitating the Court by acting with integrity, leading by example and promoting the desired customer-focused culture.

The Group recognises the benefits of having a diverse Court and workforce, creating a work environment where everyone has an opportunity to fully participate in creating business success, and where each person is valued for his or her distinctive skills, experiences and perspectives. In reviewing Court composition and identifying suitable candidates, the Committee considers the benefits of all aspects of diversity including the skills identified as relevant to the business of the Group, regional and industry experience, social and ethnic backgrounds, gender, age and other relevant cognitive and personal qualities in order to maintain an appropriate range and balance of skills, experience and background on the Court. All Court appointments are made on merit, in the context of the skills, experience, independence and knowledge which the Court as a whole requires to be effective.

Matters considered and action taken by the Committee in 2019

Key issue	Committee considerations	Committee conclusion
Court Composition, renewal, succession and effectiveness	• Court skills assessment, composition, diversity, size, tenure, succession planning. • Committee composition and succession planning. • NED recruitment and appointments, including Fitness and Probity assessments. • Effectiveness Reviews of Court, Governor and Individual Directors.	Court appointments during the year were made to enhance the composition, diversity and skills profile of the Court, replacing skills of retiring Directors and introducing additional skills, experience and perspectives that equip the Court to address the strategic challenges facing the Group. Having regard to the requisite skillsets of each Court Committee and Members' Tenures, the Committee recommended the appointment of: • Michele Greene to the Risk Committee and GTOC; • Eileen Fitzpatrick to the Audit and Remuneration Committees; • Steve Pateman as Chair of the Remuneration Committee. The 2018 internal effectiveness review concluded in January 2019 and the 2019 external effectiveness review concluded in January 2020; both reviews were positive of the Court and its Committees.
Executive	• Senior Executive succession planning and appointments, including Fitness and Probity assessments. • GEC Appointments and Group Structure Changes. • Assessment of Suitability of Key Function Holders and MRTs. • Individual Accountability Regime Developments. • Gender diversity of leaders and senior managers.	The Committee supported the Group CEO's proposed appointments in 2019 to the key roles of Chief People Officer, Chief Strategy Officer, CFO, Group Secretary and CEO Retail (UK). A deep dive of executive succession planning for key roles was undertaken with the Court, which evidenced positive focus and development by the Group CEO, supported by the Chief People Officer, on succession planning and development of key talent during 2019.

Report of the Court Nomination and Governance Committee *(continued)*

Matters considered and action taken by the Committee in 2019 *(continued)*

Key issue	Committee considerations	Committee conclusion
Governance and corporate responsibility	• Annual Corporate Governance Statement. • Matters Reserved to Court and delegations. • Code of Conduct. • Group Speak Up Policy. • Group Conflicts of Interests Policy. • Updates to key corporate governance codes and regulations, including 2018 UK Code, EBA Guidelines on Internal Governance and Joint ESMA and EBA Guidelines on the assessment of the suitability of members of the management body and key function holders. • Consideration of actions to enhance workforce engagement. • Key Court Governance Policies. • Approval of Governance Disclosures. • Modern Slavery Statement for 2018.	The Committee approved changes to internal Polices to ensure continued compliance with all applicable corporate governance requirements. The Group's Code of Conduct and Speak Up policies were considered and changes agreed to ensure they remained appropriate. The external communication of the Group's corporate governance standards through disclosures and the annual report was approved. The Committee considered and recognised the strength of the mechanisms in place to engage with and hear from colleagues but agreed that a further positive action to appoint a workforce engagement director should be taken. A recommendation was made to the Court and Eileen Fitzpatrick was designated as the Workforce engagement NED in January 2020.
Policies	• Court Terms of Reference. • Court Conflicts of Interest Policy. • Director Assessment Policy • Board Diversity Policy. • Court Training and Induction Policy. • Group Fitness and Probity and Suitability Assessment Policy	The Committee approved proposed amendments to the policies to ensure that the key board policies remained appropriate and effective.
Subsidiary Governance	• Appointments to boards of substantial regulated subsidiaries. • Subsidiary Governance Policy and Guidelines. • Review of composition and succession plans of key subsidiary Boards. • Review of effectiveness of key subsidiary Boards. • Pension Scheme trustee appointments.	The Committee ensured that the boards of subsidiaries are properly composed with suitable directors and have sound governance structures, and that Group oversight of subsidiaries remained appropriate.
Committee Governance	• Committee Effectiveness Review • Committee Terms of Reference	The Committee recommended amendments to its terms of reference to ensure continued compliance with evolving corporate governance requirements. The Committee considered the outcome of the external review of the Court's effectiveness as it related specifically to the Committee. A positive outcome with regard to the Committee's continued effectiveness was reported.

Report of the Court Nomination and Governance Committee *(continued)*

During 2019 the Committee reviewed the Court Diversity Policy (the latest version of which is available on the Group's website) and the measurable objectives set out thereunder. The Court has set a target of achieving a minimum of 33% female representation on the Court for the year ending 31 December 2020, with a medium-term aspiration to have broadly equal gender representation. As at 31 December 2019 there was 45% female representation on the Court, which reduced to 42% in January 2020, following the appointment of Myles O'Grady to the Court.

In 2019, the Group made further progress in addressing diversity in the Group's workforce through its Inclusion and Diversity Programme, which recognises that developing and utilising the skills and perspectives of all our employees is critical to the Group's ongoing business success. While considering Senior Executive succession planning, the Committee and the Court ensured that diversity in its widest sense was at the forefront of related considerations.

Governance matters

The Committee keeps under review updates to corporate governance regulations and requirements and briefs the Court on their effective implementation. In 2019, the Committee oversaw the final implementation of the 2018 UK Code, many provisions of which were in place in advance of the required date of 1 January 2019. As reported earlier, the Committee is being renamed as the Nomination, Governance and Responsible Business Committee and its terms of reference are being updated to reflect its wider remit in relation to RSB.

Effectiveness Reviews

The Committee oversaw the 2018 internal review of the effectiveness of the Court and its Committees, including the Court Nomination and Governance Committee, which concluded in January 2019, and the 2019 external review conducted externally by Praesta Ireland, which concluded in January 2020. For further details, see page 30.

The Chair reports to the Court after each meeting to ensure all members are fully informed of its committee's activities and decisions.

Patrick Kennedy
Chair of the Court Nomination and Governance Committee

21 February 2020

Report of the Court Remuneration Committee

Patrick Haren
Chair
(stood down January 2020)

Dear Shareholders,

Membership and meetings

At close of business on 31 December 2019, the Court Remuneration Committee (the 'Committee' or the 'CRC') comprised four independent NEDs from diverse backgrounds to provide a balanced and independent view on remuneration matters. Its composition is compliant with the requirements of the Irish Code and CRD IV, and with the recommendations of the 2018 UK Code.

I stood down from the Committee in January 2020, having been Chair since May 2015. My colleague, Steve Pateman, who joined the Committee in September 2018, was appointed Chair in January 2020. I would like to take this opportunity to wish Steve well as he takes on this role.

In order to ensure that remuneration policies and procedures are consistent with effective risk management, there is common membership between the CRC and the Court Risk Committee. Kent Atkinson, Richard Goulding and Steve Pateman were members of both Committees in 2019. Kent Atkinson stood down from the Committee, following his resignation from the Group and Eileen Fitzpatrick joined the Committee during 2019. Biographical details, including each member's background and experience, are set out on pages 22 to 25.

The CRC met 7 times in 2019. The Members of the CRC, together with their attendance at meetings, are shown below. The Governor, the Group Chief Executive, Chief People Officer, CRO, and the Head of Reward are invited to attend meetings as appropriate.

Role and responsibilities

The CRC holds delegated responsibility from the Court of Directors for the oversight of Group-wide remuneration policy with specific reference to the Governor, Directors and senior management, heads of and senior officers in independent control functions, and those employees whose activities have a material impact on the Group's risk profile.

The CRC is responsible for overseeing the annual review of the Group Remuneration Policy with input from the Court Risk Committee and relevant risk management functions.

The remuneration of NEDs is determined by a Board Committee of the Governor and the Executive Directors within the boundaries of the Bank's constitution. No Director is involved in decisions regarding their own remuneration. The remuneration of the Chairman is a matter for the Committee.

The Group is currently operating under a number of remuneration restrictions which cover all Directors, senior management, employees and certain service providers across the Group. For further information, please see page 98 of the Remuneration Report in the BOIG plc Group Annual Report 2019.

Mercer Kepler, advisors to the Committee, Willis Towers Watson and Deloitte provided remuneration advice during 2019. The Committee is of the view that they provided independent remuneration advice to the Committee and they do not have any connections with the Group that may impair their independence.

Matters considered by the Court Remuneration Committee

The matters considered and action taken by the CRC during the year are set out on the following page. The Committee reviews and challenges information provided by management and takes advice from external advisors, as appropriate The Committee ensures at all times to exercise independent judgment and makes informed decisions.

The Chair of the CRC reported to the Court after each meeting to ensure all Directors were fully informed of the CRC's activities.

Court Remuneration Committee Meetings	Eligible to attend	Attended
Patrick Haren	7	7
Kent Atkinson[1]	3	3
Eileen Fitzpatrick[2]	4	4
Richard Goulding	7	7
Steve Pateman	7	7

[1] *Kent Atkinson stood down 14 May 2019.*
[2] *Eileen Fitzpatrick joined 15 May 2019.*

Report of the Court Remuneration Committee *(continued)*

Matters considered and action taken by the Committee in 2019

Key issue	Committee considerations	Committee conclusion
Remuneration Policy, including impact of risk profile.	• Approval of Group Remuneration Policy and of governance and monitoring of that policy. • Review of Group risk profile and implications of remuneration policies for risk and risk management. • Design of a potential incentive scheme, including scope, reflection of risk, and application at various levels, including Executive Directors. • Governance of potential incentive scheme. • Design of Organisational Balanced Scorecard. • Investor perspectives on potential incentive scheme.	• Current Remuneration Policy is properly governed and implemented and does not lead to inappropriate risk taking. • Any potential incentive scheme design will be subject to removal of relevant restrictions and shareholder approval.
Remuneration Disclosure	• Pillar 3 disclosures and the Remuneration Report (review and approval). • Design of Remuneration Report and disclosures if an incentive scheme is introduced.	• Current disclosures are appropriate. • Future disclosures should reflect good practice and shareholder expectations.
Performance and Remuneration of Senior Management	• Objective setting and performance appraisal of Senior Executives to inform the setting of remuneration, including for heads of independent control functions. • Review of approach to remuneration of Senior Officers in independent control functions. • Benchmarking and approval of changes to remuneration of Senior Executives. • Review of Executive Director Remuneration Policy and practice, with a view to clarity, simplicity, risk predictability, proportionality, and alignment to culture.	• There is an appropriate process in place to assess the performance of Senior Executives. • Changes to Senior Executive remuneration are properly assessed and approved.
Governance and review of remuneration practice.	• Approval of the Group Remuneration Policy • Approval of Group MRT Policy. • Approval of Group MRT list. • Approval of remuneration of Heads of and Senior Officers in Independent Control Functions. • Review of workforce remuneration, top earners, staff with specific Minister for Finance approvals and compliance with remuneration restrictions. • Review of regulatory developments. • Review of internal audits relevant to remuneration policy or practice.	• There is good governance around remuneration, particularly of Executive Directors, Senior Management and those who could materially impact the Group's risk profile.
NED fees	• Review and benchmarking of fees paid to the Group Chairman and NEDs of subsidiary boards.	• Group Governor fees are subject to the remuneration restrictions and remain unchanged • Subsidiary NED fees are appropriate.
Committee Governance	• Review of Committee Terms of Reference and effectiveness.	• The Committee considered the outcome of the external review of the Court's effectiveness as it related specifically to the Committee. A positive outcome with regard to the Committee's continued effectiveness was reported.

Patrick Haren
Chair of the Court Remuneration Committee
(stood down January 2020)

21 February 2020

Report of the Court Audit Committee

Patrick Mulvihill
Chair

Dear Shareholders,

On behalf of the Court Audit Committee (the ‘Committee’ or ‘CAC’), I am pleased to introduce the report on the Committee’s activities during the financial year ended 31 December 2019.

At a high level, the Committee operates in conjunction with the Court Risk Committee to ensure the Group operates a strong internal control environment, with the Committee specifically focused on protecting the interests of the shareholders in relation to internal controls as they relate to financial reporting. The Committee also evaluates the independence and performance of GIA and the External Auditor, KPMG, and considers and recommends the interim and annual financial statements to the Board for approval.

During 2019, we had a number of changes to the composition of the Committee, with Kent Atkinson standing down on his retirement from the Court at the 2019 AGC and Eileen Fitzpatrick joining us in May 2019. Common membership between the Committee and the Court Risk Committee is maintained through the membership of Patrick Mulvihill, Richard Goulding and Steve Pateman, which facilitates appropriate co-ordination and effective governance across key areas of internal control.

A number of key management changes took place during 2019, and the Committee welcomed Steve Sanders as Interim Group Chief Internal Auditor, pending appointment of a permanent successor to Steve O’Regan who left the Group in July 2019, and Myles O’Grady as the Group Chief Financial Officer, succeeding Andrew Keating who left the Group in October 2019.

Further details on Committee Members, Committee meetings and attendance at meetings during 2019 are outlined on page 52.

While not intending to be an exhaustive list of the Committee’s considerations and activities in 2019, a number of areas that were subject to Committee focus during the year are outlined below.

Group Internal Audit

In monitoring the activities and effectiveness of Group Internal Audit, the Committee approved the annual audit plan and budget, including resources, and reviewed progress against the plan throughout the year.

The Committee received regular reports from Group Internal Audit on internal audit activities across the Group which outline details of the audit approach, Management engagement and areas identified during audits for further strengthening across the Group’s risk management and internal control framework. These reports cover matters of relevance to the Committee in assessing, the effectiveness of the internal controls over the financial reporting processes. Reports are rated based on the strength of the control environment in operation, Management’s awareness of the risks facing their business areas, and the controls in place to mitigate those risks. In conjunction with Group Internal Audit reports, the Committee considers Management’s responses to, and the timeliness of the remediation of, identified issues.

Having regard for Group Internal Audit activities and the Committee’s review of the extent of the work undertaken by the Finance and Risk teams across the Group, the Committee is satisfied that internal controls over financial reporting were appropriately designed and operating effectively. Full details of the internal control and risk management systems in relation to the financial reporting process are detailed within the risk management section on pages 110 to 160 of the BOIG plc Group Annual Report 2019.

External audit

The Committee oversees the relationship with KPMG and, Niamh Marshall, KPMG’s lead audit partner, attends all Committee meetings.
During the year, the Committee considered KPMG’s terms of engagement (including remuneration), its independence, audit quality / performance, objectivity and considered the plans for the interim review and year end audit. The Committee also assessed KPMG’s findings, conclusions and recommendations arising from the interim review and year-end audit.

Appropriate safeguards are in place to protect the independence and objectivity of KPMG. The Committee operates a policy to regulate the use of KPMG for non-audit services, to ensure compliance with the revised Ethical Standards for Auditors (Ireland) 2017 from the Irish Auditing Accounting Standards Authority (IAASA).

In order to ensure the objectivity and independence of KPMG, the policy formalises certain restrictions on the provision of non-audit services by KPMG and requires all non-audit services provided by the KPMG must be approved in advance by the Committee. Additional provision is made for the approval of non-material services which are below the threshold. Annually, details of expected non-audit services for the coming year are presented to the Committee for approval. Any proposed additional services exceeding these levels require additional specific pre-approval.

Report of the Court Audit Committee *(continued)*

The fees paid to KPMG for the year ended 31 December 2019 amounted to €4.6 million (2018: €3.9 million), of which €1.1 million (2018: €0.6 million) was payable in respect of non-audit services. Non-audit services represented 24% of the statutory audit fee (2018: 15%). Further information on fees paid in respect of audit and non-audit services, along with details of non-audit services provided during the year are set out in note 15 to the consolidated financial statements 'Auditor's remuneration'.

The Committee concluded that it was satisfied with the independence, quality and performance of KPMG and recommended that the Board propose KPMG in respect of the year ended 31 December 2019 for reappointment for approval at the 2020 AGM.

Financial reporting

A key activity for the Committee is the consideration of significant matters relating to the annual financial report, with key accounting judgements and disclosures subject to in depth discussion with Management and KPMG. The Committee provides robust challenge to key judgements in advance of making a recommendation to the Board that all financial reports are considered to be a fair, balanced and understandable assessment of the Group's financial position.

Further information on some of these significant items is set out in the Critical Accounting Estimates and Judgements on pages 90 to 93. Overall the Committee was satisfied that the 2019 annual report, including the financial statements, is fair, balanced and understandable.

Matters considered and action taken by the Committee in 2019

Key issue	Committee considerations	Committee conclusion
IFRS 9 and impairment of financial instruments	The Committee reviewed management papers and discussed and challenged management judgements used in determining the following based on IFRS 9 requirements: • correct classification and measurement of financial instruments; • stage allocations and stock of impairment loss allowance (including any necessary Group management adjustments to reflect model limitations and / or late breaking events); • model parameter updates incorporating forward looking information (FLI); • net impairment loss for the year; and • quantum of NPEs. The Group's approach to the measurement of impairment is set out in the Group Impairment Policy. The policy includes the Group's criteria for allocating financial instruments to stages, the method used to measure impairment for each material portfolio, core impairment model methodologies, and the criteria for classifying financial assets as NPEs. The policy has been approved by the Court on the recommendation of the Committee, following recommendation by the Impairment Committee and the Group Risk Policy Committee (GRPC). The impairment models are approved for use by the Risk Measurement Committee (RMC) and are maintained and executed by a specialist central unit within Group Risk. The Committee reviewed the impact of key model changes made during the reporting period.	The Committee was satisfied that the classification and measurement of financial assets, stage allocations, model parameter updates (including FLI), impairment loss allowances, and the net impairment loss for the reporting year, had been appropriately determined in accordance with the Group's methodologies and IFRS 9 accounting standard. The Committee was also satisfied that the associated disclosures were appropriate based on the relevant accounting standards including IAS 1 and IFRS 7.
Retirement benefit obligations	The Committee considered management's key assumptions and judgements used in determining the actuarial values of the liabilities of each of the Group's sponsored defined benefit pension schemes under IAS 19 'Employee Benefits'. Management considered advice from independent actuaries, Willis Towers Watson, for the determination of significant actuarial assumptions. The key assumptions proposed by management and considered by the Committee were assumptions relating to inflation rates, demographics and discount rates in Ireland and the UK which are used in determining liabilities at the reporting date.	The Committee was satisfied that the inflation rates, discount rates and other significant assumptions were appropriate and that the accounting for the Group's sponsored defined benefit pension schemes and related disclosures was in accordance with IAS 19.

Report of the Court Audit Committee *(continued)*

Matters considered and action taken by the Committee in 2019 *(continued)*

Key issue	Committee considerations	Committee conclusion
Deferred taxation	The Committee considered the extent of DTAs to be recognised in respect of unutilised tax losses, and in particular the projections for future taxable profits against which those losses may be utilised. In order for the Group to recognise these assets, it must be probable that sufficient future taxable profits will be available against which the losses can be utilised. The Group has prepared financial projections which are being used to support the Group's ICAAP. The financial projections are prepared for the purpose of the Group's assessment of its capital adequacy. They are subjected to considerable internal governance at a divisional and Group level and are reviewed and approved by executive management and the Court. Management's assessment of the projections determined that it was probable that there would be sufficient taxable profits in the future to recover the DTA recognised arising from unused tax losses. In relation to DTAs arising from Irish tax losses carried forward by the Bank management's assessment of the projections determined that it was probable that there would be sufficient taxable profits in the future to recover the DTA of €1,088 million arising from those tax losses. In relation to Bank of Ireland (UK) plc, notwithstanding its continued profitability and the Group's commitment to the UK, updated profit projections indicate an increase in the projected DTA recovery period. In consideration of this, management proposed to restrict the recovery period of the DTA in Bank of Ireland (UK) plc to ten years. As a consequence, the carrying value of the DTA relating to trading losses of Bank of Ireland (UK) plc was reduced by €45 million, to €35 million, in the year ended 31 December 2019.	The Committee discussed with management its assessment of the recoverability of the DTA and the related disclosures. The Committee and the Court concluded that it was probable that there would be sufficient taxable profits in the future to recover the DTAs recognised arising from unused tax losses, and that the related disclosures were as required under IAS 12 'Income Taxes'.
Intangible assets - Capitalisation of the Transformation Investment asset	The Committee considered the appropriateness of Management's internal controls and governance surrounding the capitalisation of costs related to internally generated intangible assets associated with the Transformation Investment asset.	The Committee was satisfied, based on the effective operation of governance and controls, that the capitalisation of costs relating to the Transformation Investment asset, and the carrying value of the related intangible assets, was reasonable and in line with the requirements of IFRS.
Life assurance accounting	The Committee considered management's key assumptions and judgements used in determining the valuations of the Value of in Force (ViF) and insurance contract liabilities. The key assumptions in projecting future surpluses and other net cash flows attributable to the shareholder arising from business written were the interest rate and unit growth rates, lapse rates, mortality, morbidity and expenses. Interest rates and unit-growth rates are based on a range of duration specific rates determined by a risk free yield curve. This yield curve is provided by the European Insurance and Occupational Pensions Authority (EIOPA). Whilst not relevant to the 2019 financial reporting period, the Committee also considered the future potential impact of IFRS 17.	The Committee was satisfied that the significant assumptions are appropriately applied and that the accounting for the Group's ViF and insurance contract liabilities is appropriate.

Report of the Court Audit Committee *(continued)*

Matters considered and action taken by the Committee in 2019 *(continued)*

Key issue	Committee considerations	Committee conclusion
IFRS 16	The Committee considered the impact of IFRS 16 'Leases' which came into effect on 1 January 2019, replacing IAS 17 'Leases' and related interpretations. It addresses the definition of a lease, recognition and measurement of leases and establishes principles for reporting useful information to users of financial statements about the leasing activities of both lessees and lessors. A key change arising from IFRS 16 is that all operating leases are accounted for on balance sheet for lessees. The accounting for lessors has not materially changed. The Committee's objective was to ensure the impact of IFRS 16 was appropriately reflected in the financial statements, including an update to relevant accounting policies and new disclosures. Key judgements included the choice of implementation option, the use of practical expedients and judgements in relation to lease terms and incremental borrowing rates.	The Committee was satisfied that the approach / impact of transition to IFRS 16 had been appropriately determined and that the associated judgements / disclosures were appropriate based on the relevant accounting and disclosure requirements, contained in IFRS 16.
Going concern	The Committee considered management's assessment of the appropriateness of preparing the financial statements of the Group for the year ended 31 December 2019 on a going concern basis. In making this assessment, matters considered included the performance of the Group's business, profitability projections, funding and capital plans, under both base and plausible stress scenarios. The considerations assessed by the CAC are set out on page 74 in the Going Concern disclosure within the Accounting Policies in note 1 to the consolidated financial statements.	On the basis of the review performed and the discussions with management, the Committee was satisfied that there were no material uncertainties related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern over the period of assessment. This assessment together with the Going Concern disclosure (as set out on page 74) was subsequently approved by the Court.
Viability Statement	In accordance with the requirements of the UK Code, the CAC considered whether it had a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment and made a recommendation to the Board in that regard. This required a robust assessment of the principal risks facing the Group, including those that would threaten its business model and future performance, solvency and liquidity.	CAC concluded that a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity, and that there was a reasonable expectation that the Group would be able to continue in operation and meet its liabilities as they fall due over the period of their assessment. The Group adopted a three-year period, having regard to existing relevant process and frameworks which are performed over time periods ranging from six months to three years.
IT risk	The Committee considered and discussed management's assessment of IT risks and the ongoing risk management programme to identify, rate, mitigate and report on IT risks, including GIA and the KPMG's reviews.	On the basis of the review performed, discussions with management, and the continued operation of the comprehensive internal control framework over financial reporting, the Committee was satisfied that these risks did not impact financial reporting processes.

Report of the Court Audit Committee *(continued)*

Other matters

The Committee also:

- received reports from the Group's Money Laundering Reporting Officer on the operation and effectiveness of the systems and controls established by the Group to manage Financial Crime Compliance (FCC) risk. FCC incorporates money laundering, terrorist financing, sanctions and bribery and corruption and is a key area of Committee focus;
- received reports from Group Compliance on matters relating to Regulatory Risk and Conduct Risk profiles;
- dedicated time to review and oversee a number of key programmes with potential financial reporting impacts such as the EU General Data Protection Regulation and the Basel Committee on Banking Supervision Principles for Effective Risk Data Aggregation and Risk Reporting (BCBS 239); and
- reviewed talent development in and succession planning for the finance function.

A full list of responsibilities are detailed in the Committee's terms of reference, which can be found at https://www.bankofireland.com/about-bank-of-ireland/corporate-governance/.

Committee membership and meetings

The Committee acts independently of the Executive. All members of the Committee are independent NEDs with relevant competence in the financial sector, and their biographies can be found on pages 22 to 25. The members of the Committee have extensive knowledge of financial markets, treasury, risk management and international accounting standards, and the Committee's composition is considered to meet all of the applicable requirements, including the need for recent and relevant financial experience and competence in accounting or auditing.

The members of the Committee maintain their knowledge base on relevant Committee matters, through Court deep dives and dedicated Committee training. During 2019, the Committee received training on the net interest income reporting process, forthcoming changes regarding the implementation of IFRS 17, which will introduce an updated reporting standard for insurance contracts, and the impact of new accounting standards which came into effect during 2019, including IFRS 16 'Leases' (further details of which are provided in this report).

Details of the Committee members' meeting attendance are shown below.

Court Audit Committee Meetings	Eligible to attend	Attended
Kent Atkinson[1]	2	1
Evelyn Bourke	7	6
Eileen Fitzpatrick[2]	5	5
Richard Goulding	7	7
Patrick Mulvihill	7	7
Steve Pateman	7	6

The Group Chief Financial Officer, the Head of Group Finance, the Group Chief Internal Auditor, the Group's lead audit partner the Group Chief Executive Officer, and the Group Chief Risk Officer attend meetings of the Committee as appropriate.

The Committee also holds individual private sessions with each of the Internal and External Audit teams (without other members of the executive management being present) and the Group's Chief Financial Officer during the year.

An external effectiveness evaluation of the Board was conducted during 2019, and, as part of that process, a positive outcome with regard to the Committee's continued effectiveness was reported. The Committee reports to the Board on how it discharges its responsibilities and makes recommendations to the Board on key matters.

Patrick Mulvihill
Chair of the Court Audit Committee

21 February 2020

[1] *Kent Atkinson stood down in May 2019.*
[2] *Eileen Fitzpatrick joined in May 2019.*

Report of the Court Risk Committee

Richard Goulding
Chair

Dear Shareholders,

The Court Risk Committee (the 'Committee') gives detailed consideration to existing and emerging risks, through a balanced agenda which ensures sufficient focus on standing areas of risk management through the Group Risk Framework, together with specific attention being given to those emerging risks which are considered to be of ongoing importance to the Group and its customers.

On existing risks, there was significant focus on the non-financial risk areas of operational risk, conduct risk and regulatory risk. The Court Risk Committee has overseen the establishment of a non-financial risk improvement programme to uplift the Group's operational risk framework and capability, proactively identify and resolve conduct issues and enhance management of regulatory risk. There has been a particular focus on operational risk arising from change programmes. Further progress across each of these areas will be a key ongoing focus for the Committee during 2020.

Emerging risks included areas such as transformation risk, data management, IT resilience and cyber security, where the dynamic nature and significance of related risks and challenges continue to evolve.

The environment within which the Group operates continues to be subject to considerable change. Uncertainties, including the consequences of the UK exit from the EU and wider geo-political risks continue to provide challenges, and the Court Risk Committee will continue to monitor developments and any associated impact on the Group's risk profile.

The Court Risk Committee concluded that the Group continues to have strong discipline in the management of both emerging and existing financial risks and is satisfied with the level of focus being applied to ensure continuing strengthening of non-financial risk management.

Risk Management - Discussions and Decisions

Key matters covered included:

- recommending the Group's Risk Appetite Framework and Risk Appetite Statement. Considering breaches of risk appetite, remediation plans and required communications;
- recommending policies for Credit, Market and Liquidity risks and approving other key risk policies;
- regularly assessing the Group's overall risk profile and emerging risk themes, hearing directly from the Group CRO and regularly reviewing the consolidated risk report and risk appetite dashboard;
- receiving reports on the Group's operational and technology capability, including specific updates on cyber risk capability, IT resilience, IT Service Continuity Management (ITSCM), and Data Management;
- recommending the Group's plan for managing NPEs, a key driver of managing legacy credit risk, and reviewing the risk aspects of NPE sales;
- recommending the Group's 2019 ICAAP, ILAAP and Recovery Plan; and
- hearing from representatives of the ECB and CBI regulators about regulatory expectations and their specific views on the Group.

Committee purpose and responsibilities

The Committee is responsible for the risk culture of the Group and setting the tone from the top in respect of risk management. It is also responsible for ensuring the risk culture is fully embedded and supports at all times the Group's agreed risk appetite, covering the extent and categories of risk which the Court considers acceptable for the Group.

In seeking to achieve this, the Committee assumes responsibility for monitoring the Group's Risk Management Framework, which embraces risk principles, policies, methodologies, systems, processes, procedures and people. It also includes the review of new, or material amendments to, risk principles and policies, and overseeing any action resulting from material breaches of such policy. More details on the Group's wider approach to risk management can be found in the risk management report on pages 110 to 160 of the BOIG plc Group Annual Report 2019. Full details of the Committee's responsibilities are set out in its terms of reference, which can be found at https://www.bankofireland.com/about- bank-of-ireland/corporate-governance/.

Committee composition, skills and experience

The Committee is composed of NEDs, who provide core banking skills and risk knowledge, together with breadth of experience which brings knowledge from other sectors, and a clear awareness of the importance of putting the customer at the centre of all that the Group does.

The Group CRO has full access to the Committee and normally attends meetings. The Group Chief Internal Auditor and members of the Executive also attend meetings, as appropriate.

During the year the Committee met its key objectives and carried out its responsibilities effectively. Details of Committee membership and meeting attendance are shown below.

Court Risk Committee Meetings	Eligible to attend	Attended
Kent Atkinson[1]	3	3
Ian Buchanan	8	8
Richard Goulding	8	8
Michele Greene[2]	-	-
Fiona Muldoon	8	8
Patrick Mulvihill	8	8
Steve Pateman	8	8

[1] *Kent Atkinson stood down in May 2019.*
[2] *Michele Greene joined in December 2019.*

Report of the Court Risk Committee *(continued)*

Matters considered and action taken by the Committee in 2019

Key issue	Committee considerations	Committee conclusion
Credit Risk	Credit quality continues to improve as the Group's key economies perform strongly. The Committee considered overall credit quality during the year and the Group's strategy and operating plan for NPEs. The Committee also reviewed the risk aspects of NPE sales, residual risk in the motor finance portfolio, sectors most exposed to Brexit and concentrations in the mortgage portfolio.	Credit portfolios continue to perform well. NPEs continue to decrease in line with the approved NPE strategy, albeit they remain higher than long-term appetite.
Capital Adequacy	Regular reviews are undertaken to ensure that Regulatory and Fully Loaded capital ratios have appropriate buffers above the Group's own minimum targets and regulatory requirements. The Committee considered the impacts of future capital requirement and capital availability and reviewed in detail the ICAAP, including under stress scenarios.	The Group holds sufficient capital to deliver its planning horizon.
Funding and Liquidity Risk	Regular reviews are undertaken to ensure that the Group is compliant with all risk appetite measures and regulatory liquidity requirements. The Committee reviewed the results of regular stress testing and of the ILAAP.	The Group continues to be fully compliant and has no issues with market access or pricing.
Market Risk	Regular reviews are undertaken to ensure that the Group is compliant with all risk appetite measures across credit spread risk, discretionary risk, VaR and scenario-based stress testing. The Committee reviewed the results of regular market risk reporting and considered the impacts of emerging market developments including Brexit.	The Group continues to operate within risk appetite in this area.
Pension Risk	The Group is exposed to Pension Risk as a consequence of its sponsorship of the Group's defined benefit pension schemes. The key sensitivities associated with Pension Risk are outside the control of the Group.	The Group continues to take asset and liability management actions in order to reduce volatility and consequent capital impact. The Group has made and continues to make progress.

Report of the Court Risk Committee *(continued)*

Matters considered and action taken by the Committee in 2019 *(continued)*

Key issue	Committee considerations	Committee conclusion
Operational Risk	Managing operational risk continues to be a key focus within the Group due to the complexity and volume of change, the Group's IT infrastructure, cyber risk and reliance on third party suppliers. The Committee continues to focus on ensuring the Group has an effective framework for managing operational risk, including enhancing the use of key risk and control indicators and residual risk reporting. The Committee has considered a number of reports in relation to operational risk framework across cyber, IT, sourcing, information security, data, and business continuity.	The Group has made progress in its management of operational risk. The Group will continue to focus on enhancing the maturity of the framework during 2020.
Regulatory Risk	Managing regulatory risk continues to be a key focus for the Group due to the complexity and volume of change and interdependent regulatory reform to be managed. The Committee continues to focus on ensuring there are sufficient controls in place and oversight of compliance programmes.	The Group has placed significant focus on overseeing compliance with regulatory requirements. Regulatory risk will remain a key area of focus for the Committee in 2020 given the importance of continued compliance.
Conduct Risk	The Committee focused on the Group's management of conduct risk. Throughout 2019, the Committee has considered reports on the resolution of customer conduct issues, with a particular focus on tracker mortgages. The pace and quality of remediation remained a focus, including root cause analysis to establish lessons learned and help prevent similar issues in the future. The Committee continues to consider developments in the Group's conduct culture as well as reports on rectification programmes, complaints, and conduct risk appetite metric performance.	While good progress has been made in 2019, ongoing improvement in risk profile and embedding of conduct initiatives will remain a priority for the Group in 2020, and a subject of focus for the Committee.
Business and Strategic Risk	The Committee recognises the risks in delivering the agreed strategy, associated with the transformation agenda, customer expectations, and regulatory change.	The Group is engaged in a significant programme to transform the Bank, serve customers brilliantly and grow sustainable profits. It acknowledges the challenges faced with delivering this strategy whilst additionally enhancing systems and controls, and meeting regulatory change. New performance measures have been introduced to enable performance monitoring, risk management, and the assessment of delivery. These will be further developed and embedded during 2020.

Report of the Court Risk Committee *(continued)*

Matters considered and action taken by the Committee in 2019 *(continued)*

Key issue	Committee considerations	Committee conclusion
IT and Information Security	A resilient IT environment is critical to providing reliable services to customers, and meeting current and future demands. The risk of cybersecurity attacks, which target financial institutions and corporates as well as governments and other institutions, remains material as their frequency, sophistication and severity continue to develop in an increasingly digital world. In conjunction with the GTOC (the committee overseeing the Group's transformation programme), the Court Risk Committee gave consideration to a wide range of issues, including cyber and IT controls, technology resilience and cybersecurity programme updates. The Committee also worked closely with GTOC, overseeing transformation to ensure appropriate prioritisation to risk management.	Whilst there has been significant improvement in cyber capability, IT resilience and transformation risk will remain areas of key focus during 2020 as the Group continues to invest in its infrastructure and replace core systems.
Brexit	Whilst progress has been made, Brexit carries considerable uncertainty for our RoI and UK markets with the shape of any final trade deal not yet clear.	The Brexit risks impacting the Group are credit risk, business and strategic risk, and operating model risk. The Committee continues to oversee the Group's preparation and risk mitigations plans, which have been executed effectively.
People	With a substantial transformation programme underway, a strongly performing economy in Ireland and remuneration restrictions in place, the Court Risk Committee regularly reviewed the arrangements to manage people risk.	In 2019 the risks were mitigated and managed. This will be a key area of focus during 2020.

Richard Goulding
Chair of the Court Risk Committee

21 February 2020

Attendance table

Attendance at scheduled meetings of the Court and its Committees during the year ended 31 December 2019.

	Court		Audit Committee		Nomination and Governance Committee		Remuneration Committee		Risk Committee	
Name	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**
Kent Atkinson *(resigned 14 May 2019)*	3	3	2	1	-	-	3	3	3	3
Evelyn Bourke	8	8	7	6	6	5	-	-	-	-
Ian Buchanan	8	8	-	-	-	-	-	-	8	8
Eileen Fitzpatrick *(appointed 15 May 2019)*	5	5	5	5	-	-	4	4	-	-
Richard Goulding	8	8	7	7	-	-	7	7	8	8
Michele Greene *(appointed 5 December 2019)*	-	-	-	-	-	-	-	-	-	-
Patrick Haren	8	8	-	-	6	6	7	7	-	-
Andrew Keating *(resigned 18 October 2019)*	7	7	-	-	-	-	-	-	-	-
Patrick Kennedy	8	8	-	-	6	6	-	-	-	-
Francesca McDonagh	8	8	-	-	-	-	-	-	-	-
Fiona Muldoon	8	8	-	-	5	5	-	-	8	8
Patrick Mulvihill	8	8	7	7	-	-	-	-	8	8
Myles O'Grady *(appointed 15 January 2020)*	-	-	-	-	-	-	-	-	-	-
Steve Pateman	8	8	7	6	-	-	7	7	8	8

Column A: *Indicates the number of meetings held during the year the Director was a member of the Court and / or the Committee and was eligible to attend.*
Column B: *Indicates the number of meetings attended.*

Report of the Directors

Results
In 2019, the Group made a profit before tax of €639 million and an after tax profit of €443 million. Profit of €443 million is attributable to the stockholder and a €nil profit is attributable to non-controlling interests.

Group activities
The Group provides a range of banking and other financial services. The business review on pages 3 to 8 contains a review of the results and operations of the Group, of most recent events, and of likely future developments.

In relation to the Group's business, no contracts of significance to the Group within the meaning of LR 6.8.1(10) of the Euronext Dublin Listing Rules existed at any time during the year ended 31 December 2019.

Principal Risks and Uncertainties
Information concerning the Principal Risks and Uncertainties facing the Group is set out on pages 9 to 18.

Financial risk management objectives and policies
Information regarding the financial risk management objectives and policies of the Group, in relation to the use of financial instruments, is given in note 27 on page 147. The Group's approach to risk management, including risk policies, risk appetite, measurement bases and sensitivities, in particular for credit risk, liquidity risk, market risk and life insurance risk, is aligned to that of BOIG plc, the Bank's immediate and ultimate parent. Further information can be found in the BOIG plc Group Annual Report 2019.

Capital stock
At 31 December 2019, the Group had 32,363,275,074 units of issued ordinary stock of €0.05 each. Further detail on the structure of the Bank's capital is set out in note 48 to the consolidated financial statements.

Directors
At the Annual General Court (AGC) held on 14 May 2019, Evelyn Bourke and Ian Buchanan were elected having both been appointed to the Court in May 2018. Steve Pateman was also elected having been appointed to the Court in September 2018. Richard Goulding, Patrick Haren, Andrew Keating, Patrick Kennedy, Francesca McDonagh, Fiona Muldoon and Patrick Mulvihill were re-elected. Eileen Fitzpatrick was appointed to the Court as an Independent NED on 15 May 2019. Michele Greene was also appointed to the Court as an Independent NED on 5 December 2019.

Kent Atkinson and Andrew Keating retired from the Court on the 14 May 2019 and 18 October 2019 respectively. On the 15 October 2019, the Group announced that Myles O'Grady had been identified as a successor to Andrew Keating as Group CFO and Executive Director of the Group, subject to regulatory approval. Myles O'Grady received regulatory approval to act as Group CFO and Executive Director on 15 January 2020. The names of the persons who were Directors of the Bank at any time during the year ended 31 December 2019 and up to the date of the approval of the financial statements are set out in Table 1

Table 1:

Directors

Patrick Kennedy *Governor*	**Andrew Keating** *Group Chief Financial Officer* *(resigned 18 October 2019)*
Kent Atkinson *Independent NED* *(resigned 14 May 2019)*	**Francesca McDonagh** *Group Chief Executive Officer*
Ian Buchanan *Independent NED*	**Fiona Muldoon** *Independent NED*
Richard Goulding *Independent NED*	**Patrick Mulvihill** *Independent NED*
Patrick Haren *Deputy Governor* *Independent NED*	**Steve Pateman** *Independent NED*
Michele Greene *Independent NED* *(appointed 5 December 2019)*	**Eileen Fitzpatrick** *Independent NED* *(appointed 15 May 2019)*
Evelyn Bourke *Independent NED*	**Myles O'Grady** *Group Chief Financial Officer* *(appointed 15 January 2020)*

Substantial stockholdings
All ordinary stock of the Bank was held by its parent company, BOIG plc, at 31 December 2019. There were no other interests disclosed to the Bank in accordance with the Market Abuse Regulation and Part 5 of the Transparency Regulations and the related transparency rules during the period from 31 December 2019 to 21 February 2020.

Corporate Governance
Statements by the Directors in relation to the Bank's compliance with the CBI's Corporate Governance Requirements for Credit Institutions 2015, (the 'Irish Code') and additional requirements of Appendix 1 and Appendix 2 of the Irish Code for High Impact Designated Institutions, and Credit Institutions which are deemed 'Significant' Institutions (for the purposes of the CRD IV), respectively, are set out on page 20. The Bank is also subject to the to the Listing rules of the Irish Stock Exchange, t/a Euronext Dublin.

The Corporate Governance Statement forms part of the Report of the Directors.

Directors' Compliance Statement
As required by Section 225 of the Companies Act 2014, as amended, of Ireland, the Directors acknowledge that they are responsible for securing the Company's compliance with its 'relevant obligations' (as defined in that legislation). The Directors further confirm that a compliance policy statement has been drawn up, and that appropriate arrangements and structures have been put in place that are, in the directors' opinion, designed to secure material compliance with the relevant obligations. A review of those arrangements and structures has been conducted in the financial year to which this report relates.

Environment
The Group's environmental policy is accessible at www.bankofireland.com and details of its environmental activities are outlined in the RSB section of the Strategic Report in the BOIG plc Group Annual Report 2019. Further information is available on the Group's website.

Political donations
Political donations are required to be disclosed under the Electoral Acts 1992 to 2014. The Directors, on enquiry, have satisfied themselves that there were no political donations made during 2018.

Branches outside the State
The Bank has branches in the UK, France, Germany the United States (US) and Spain.

Going concern
The Directors have considered the appropriateness of the going concern basis in preparing the financial statements for 2019 on page 74 which forms part of the Report of the Directors and on page 46 in the Corporate Governance Statement.

Viability statement
In accordance with the requirements of the UK Code, the Directors have assessed the viability of the Group, taking account of the Group's current position and the potential impact of the principal risks facing the Group.

The Directors have selected a three-year period for this assessment, reflecting the time horizon that they consider fits with the various risk and planning frameworks taken into account in arriving at the viability statement.

The Directors have assessed the prospects of the Group through a number of frameworks, including the ICAAP, the ILAAP, each of which include an assessment of the impact of Brexit, the monitoring of key risks identified under the Group's risk identification process by the GRPC, the Court Risk Committee and the Court (see page 124 of the BOIG plc Group Annual Report 2019), and the assessment of Principal Risks and Uncertainties (pages 9 to 18). Within the Principal Risks and Uncertainties, the Directors consider Credit risk, Funding and Liquidity risk and Capital adequacy to be the most relevant to the viability assessment.

The ICAAP process facilitates the Court and senior management in adequately identifying, measuring and monitoring the Group's risks and ensures that the Group holds adequate capital to support its risk profile. ICAAP is subject to review by the Group's prudential regulator, the ECB SSM. Underpinning the ICAAP process, the Group prepares detailed financial projections under both a base case and a stress case. Base case projections are prepared using consensus macroeconomic forecasts together with Group-specific assumptions, and the stress case is prepared based on a severe but plausible stress economic scenario. The ICAAP process demonstrates that the Group has sufficient capital under both the base and stress case scenarios to support its business and achieve its objectives having regard to Board approved Risk Appetite and Strategy, and to meet its CRD IV regulatory capital, leverage and liquidity requirements.

The Group's ILAAP analysis demonstrates that the volume and capacity of liquidity resources available to the Group are adequate to support its business model, to achieve its strategic objectives under both business as usual and severe but plausible stress scenarios and to meet regulatory requirements including the Liquidity Coverage and Net Stable Funding Ratios.

The Directors confirm that their assessment of the principal risks facing the Group, through the processes set out above, was robust. Based upon this assessment, and their assessment of the Group's prospects, the Directors have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period to 31 December 2022.

Accounting records
The Directors ensure that adequate accounting records are kept at the Bank's registered office, through the appointment of suitably qualified competent personnel, the implementation of appropriate computerised systems and the use of financial and other controls over the systems and the data.

Auditor
KPMG, Chartered Accountants, were appointed statutory auditor on 19 May 2017. They have been re-appointed annually since that date and will continue in office in accordance with section 383(2) of the Companies Act 2014.

Relevant audit information
The Directors in office at the date of this report have each confirmed that as far as they are aware, there is no relevant audit information of which the Group's Auditor is unaware; and they have taken all the steps that they ought to have taken as Directors in order to make themselves aware of any relevant audit information and to establish that the Group's Auditor is aware of that information.

Directors' and Secretary's interests in stock
The Directors and Secretary had no interests in the stock / securities of the Bank or its Group undertakings at 31 December 2019 and no change to this provision has been disclosed to the Bank under the provisions of article 19 of the Market Abuse Regulation occurring between the end of the year under review and 21 February 2020.

Non-Financial Information
Information required in accordance with the EU (Disclosure of Non-Financial and Diversity Information by certain large undertakings and Groups) Regulations 2017 can be found in the Strategic Report in the BOIG plc Group Annual Report 2019 on page 34.

Post balance sheet events
These are described in note 63 to the financial statements.

Patrick Kennedy
Governor

Patrick Haren
Deputy Governor

Bank of Ireland Group
Registered Office
40 Mespil Road,
Dublin 4

21 February 2020

Financial Statements

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Statement of Directors' Responsibilities

The following statement, which should be read in conjunction with the Independent Auditor's Report set out on pages 57 to 62, is made with a view to distinguishing for shareholders the respective responsibilities of the Directors and of the Auditor in relation to the financial statements.

The Directors are responsible for preparing the Annual Report and the consolidated financial statements in accordance with IFRS adopted by the EU and with those parts of the Companies Act 2014 applicable to companies reporting under IFRS, the EU (Credit Institutions: Financial Statements) Regulations, 2015 and, in respect of the consolidated financial statements, Article 4 of the IAS regulation. Company law requires the Directors to prepare Group and Bank financial statements for each financial year.

The Directors are responsible for preparing the Bank financial statements in accordance with Generally Accepted Accounting Practice in Ireland (accounting standards issued by the Financial Reporting Council of the UK, including Financial Reporting Standard 101 '*Reduced disclosure framework*', and promulgated by the Institute of Chartered Accountants in Ireland and Irish law).

Under Irish law the Directors shall not approve the Group's and Bank's financial statements unless they are satisfied that they give a true and fair view of the Group's and the Bank's assets, liabilities and financial position as at the end of the financial year and of the profit or loss of the Group for the financial year.

In preparing these financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether the consolidated financial statements have been prepared in accordance with IFRS adopted by the EU, and the Bank financial statements have been prepared in accordance with Financial Reporting Standards (FRS) 101, and ensure that they contain the additional information required by the Companies Act 2014; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and Bank will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to:

- correctly record and explain the transactions of the Bank; and
- enable, at any time, the assets, liabilities, financial position and profit or loss of the Bank to be determined with reasonable accuracy.

The Directors are also responsible under Section 282 of the Companies Act, 2014 for taking all reasonable steps to ensure such records are kept by its subsidiaries which enable them to ensure that the financial statements of the Group comply with the provisions of the Companies Act, 2014, including Article 4 of the IAS Regulation and enable the financial statements to be audited.

The Directors are also responsible for monitoring the effectiveness of the Bank's systems of internal control in relation to the financial reporting processes, and have a general responsibility for safeguarding the assets of the Group and the Bank and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Under applicable law and the requirements of the Listing Rules issued by the Irish and London Stock Exchanges, the Directors are also responsible for preparing a Directors' Report and report relating to corporate governance. The Directors are also required by the Transparency (Directive 2004/109/EC) Regulations 2007 and the Transparency Rules to include a management report containing a fair review of the business and a description of the Principal Risks and Uncertainties facing the Group.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Group's website.

Legislation in Ireland governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The Directors confirm that, to the best of each Director's knowledge and belief:

- they have complied with the above requirements in preparing the financial statements;
- the consolidated financial statements, prepared in accordance with IFRS as adopted by the EU, give a true and fair view of the assets, liabilities and financial position of the Group and of the profit of the Group;
- the Bank financial statements, prepared in accordance with FRS 101, give a true and fair view of the assets, liabilities and financial position of the Bank;
- the management report contained in the Business Review includes a fair review of the development and performance of the business and the position of the Group and the Bank, together with a description of the Principal Risks and Uncertainties that they face; and
- the Annual Report and the financial statements, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy.

Signed on behalf of the Court by
21 February 2020

Patrick Kennedy	**Patrick Haren**	**Francesca McDonagh**
Governor	*Deputy Governor*	*Group Chief Executive*

Independent Auditor's Report
to the members of The Governor and Company of the Bank of Ireland

Report on the audit of the financial statements

Opinion

We have audited the Group and Company financial statements of The Governor and Company of the Bank of Ireland (the 'Bank') for the year ended 31 December 2019 set out on pages 63 to 257, which comprise the consolidated income statement, consolidated statement of comprehensive income, balance sheet of the Group and Bank, statement of changes in equity of the Group and Bank, consolidated cash flow statement, and related notes including the Group and Bank accounting policies set out in note 1. The financial reporting framework that has been applied in their preparation is Irish Law and International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) and, as regards the Company financial statements, Irish Law and FRS 101 Reduced Disclosure Framework.

In our opinion:
- the financial statements give a true and fair view of the assets, liabilities and financial position of the Group and Bank as at 31 December 2019 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with IFRS as adopted by the EU;
- the Bank financial statements have been properly prepared in accordance with FRS 101 Reduced Disclosure Framework issued by the UK's Financial Reporting Council; and
- the Group and Bank financial statements have been properly prepared in accordance with the requirements of the Companies Act 2014 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (Ireland) (ISAs (Ireland)) and applicable law. Our responsibilities under those standards are further described in the Auditor's Responsibilities section of our report. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion. Our audit opinion is consistent with our reporting to the Court Audit Committee.

We were appointed as Auditor by the Court of Directors on 19 April 2018. The period of total uninterrupted engagement is therefore two years for the year ended 31 December 2019. We have fulfilled our ethical responsibilities under, and we remained independent of the Group in accordance with, ethical requirements applicable in Ireland, including the Ethical Standard issued by the Irish Auditing and Accounting Supervisory Authority (IAASA) as applied to public interest entities. No non-audit services prohibited by that standard were provided.

Key audit matters: our assessment of risks of material misstatement

Key audit matters are those matters that, in our professional judgment, were of most significance in the audit of the financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

In arriving at our audit opinion above, the key audit matters, in decreasing order of audit significance, were as follows:

Impairment loss allowance under IFRS 9

Refer to pages 79 to 80 (accounting policy) and note 26 (financial disclosures)

The key audit matter

The calculation of credit provisions requires a high degree of judgement to reflect recent developments in credit quality, arrears experience, and / or emerging macroeconomic risks.

The key areas where we identified greater levels of management judgement and therefore increased levels of audit focus in the Group's compliance with IFRS 9 include but are not limited to:

- ***Accuracy of Expected Credit Loss (ECL) models:*** The calculation of ECL uses complex and inherently judgemental modelling techniques. The models used in the various loan portfolios are the key drivers of the Group's ECL results and are therefore the most significant judgemental aspect of the Group's ECL modelling approach.

- ***Significant Increase in Credit Risk (SICR):*** The criteria selected to identify a significant increase in credit risk is a key area of judgement within the Group's ECL calculation. The application of the criteria relies on a significant number of data elements, which form the basis of modelling of ECL. The application of the appropriate criteria and accuracy of the key data elements used in the loan processes are significant in determining the ECL allowances.

- ***Forward looking macroeconomic scenarios:*** IFRS 9 requires the Group to measure ECL on a forward-looking basis reflecting future economic conditions. Significant management judgement is applied to determining the economic scenarios used and the probability weightings applied to them, particularly given these assessments are subject to material uncertainty from Brexit. The impact of Brexit is subject to unprecedented levels of uncertainty of consequences, with the full range of possible effects unknown.

- ***Management adjustments:*** Adjustments to the model-driven ECL results are applied by management to address known impairment model limitations or emerging trends. Such adjustments are inherently uncertain and significant management judgement is involved.

- *Individual provisions for Stage 3 assets:* Provisions for loans identified as credit impaired in the secured lending portfolios are determined by means of discounted cash flows (DCF) and require significant judgement in many cases.

How the matter was addressed in our audit

- We performed end-to-end process walkthroughs to identify the key systems, applications and controls used in the ECL processes. We tested the design and operating effectiveness of the key controls over the completeness and accuracy of the key data inputs into the impairment models.
- We tested SICR criteria relating to the authorisation of the criteria, the validation metrics, and the application of the criteria in the models.
- In conjunction with our modelling specialists, we tested the design and implementation of controls over the modelling process and methodologies, including model monitoring, validation and approval, as well as testing the design and implementation of controls over model outputs and recognition and approval of post model adjustments.
- We tested the design and implementation of key controls relating to the estimation of macroeconomic forecast used in measuring ECL including the economic scenarios and probability weightings applied to them.
- We re-performed key aspects of the Group's SICR calculations and selected samples of financial instruments to determine whether a SICR was appropriately identified.
- We assessed the appropriateness of the key judgements in the ECL models and the loss rate ECL calculations.
- We performed independent reperformance testing over key aspects of the models underlying the calculation of expected credit losses.
- We compared the Forward Looking Information (FLI) against industry forecasts and the inputs used by management in order to determine the base case and upside and downside scenarios.
- We assessed the adequacy of post model adjustments for certain portfolios, having regard for the risk profile of loan books, recent loss history and performance of the relevant portfolios and key uncertainties such as Brexit. We challenged whether the modelled collective impairment provision already appropriately reflected the assumptions underpinning the adjustments or if a management adjustment was required.
- For a risk-based selection of loans, we critically assessed, by reference to the underlying documentation and through inquiry of management, whether the indicators for a credit impairment had been identified. We challenged the reasonableness of management's judgement in this regard.
- For a selection of credit-impaired loans, where relevant, we examined the forecasts of future cash flows prepared by management to support the calculation of the impairment provision and challenged the assumptions through comparing estimates to external support where available. Where appropriate, this work involved considering third party valuations of collateral, internal valuation guidelines derived from benchmark data and / or externally prepared reports to determine whether appropriate valuation methodologies were employed.
- We found the judgements used by management in determining the ECL charge and provision recognised to be reasonable.

Valuation of defined benefit pension net liability €139 million (2018: €228 million)

Refer to pages 86 to 87 (accounting policy) and note 46 (financial disclosures)

The key audit matter

The Group operates a number of defined benefit pension schemes which in total are significant in the context of both the overall balance sheet and the results of the Group. The schemes have an aggregate IAS 19 defined benefit pension deficit of €139 million at 31 December 2019.

The valuations of the pension obligations are calculated with reference to a number of actuarial assumptions and inputs including discount rate, rate of inflation and mortality rates. The treatment of curtailments, settlements, past service costs and other amendments can significantly impact the balance sheet and results of the Group.

We regard the determination of the Group's defined benefit pension liability as a key audit matter because its valuation is complex and requires judgement in choosing appropriate actuarial assumptions. Small changes in these assumptions can have a material impact on the liability.

How the matter was addressed in our audit

- We obtained an understanding of the process around the defined benefit pension schemes and tested the design and implementation and operating effectiveness of the key controls relating to the defined benefit pension schemes.
- We tested key data to source documentation establishing the obligation to members, and vice versa.
- We obtained independent confirmations relating to the valuation of the schemes' assets.
- In conjunction with our actuarial specialists we met with management and the scheme actuary to understand any changes in methodology and challenged the reasonableness of the key assumptions used in the calculation of the liability comparing them to industry benchmarks.
- We also assessed the adequacy of the Group's disclosures in respect to the sensitivity of the pension liability to these assumptions.
- Overall, we found that the key assumptions and methodologies used by management in the valuation of the retirement benefit obligations to be appropriate.

Conduct Risk - specifically, the Tracker Mortgage Examination (TME) provision of €75 million (2018: €42 million)

Refer to page 86 (accounting policy) and note 43 (financial disclosures)

The key audit matter

At 31 December 2019, the Company's provision in respect of the tracker mortgage examination (TME) was approximately €75 million, primarily relating to remaining unpaid customer remediation and appeals costs, enforcement action costs and other remaining programme costs.

The primary development during the year relates to the increase in the amount provided to cover the estimated costs of closing out the Tracker Mortgage Examination review, including any potential CBI sanction.

As a result of the level of uncertainty associated with the ultimate CBI sanction remaining high, we consider this to be a key audit matter.

How the matter was addressed in our audit

- We read relevant correspondence between the CBI and the Company in relation to the TME and discussed the key matters with senior management and with those charged with governance. We considered the Group Internal Audit findings in respect of the matter.
- We obtained an understanding of the methodology used by management in the determination of the provision and assessed the design and implementation of controls relating to the provision calculation at year end.
- For key assumptions inherent in the provision at year end, we challenged the judgements made by management to determine whether they were reasonable.
- We reviewed the adequacy of disclosures in respect of the TME provision to determine whether they were consistent with our understanding and in line with the requirements of IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

Based on the evidence obtained, we found that the provision and disclosures provided in respect of the TME are appropriate in accordance with IAS 37.

Valuation of the insurance contract liabilities €12,694 million (2018: €11,003 million) and the Value of in Force (ViF) asset €631 million (2018: €571 million)

Refer to pages 88 to 89 (accounting policy) and notes 37 and 41 (financial disclosures)

The key audit matter

We consider the valuation of insurance contract liabilities and the related ViF asset to be a key audit matter owing to the complex calculations and the use of detailed methodologies and significant judgements. This includes judgement over uncertain future outcomes which for insurance contract liabilities mainly relate to the ultimate settlement value of long term policyholder liabilities; and for the ViF asset, includes future margins on insurance contracts.

The valuation of the insurance contract liabilities and the related ViF asset is based on a number of key assumptions such as mortality, morbidity, persistency, expenses, unit growth rates and interest rates.

How the matter was addressed in our audit

In testing the valuation of the insurance contract liabilities and ViF asset:

- We tested the design, implementation and operating effectiveness of the key controls relevant to the valuation of the insurance contract liabilities and the ViF asset.
- We tested, on a sample basis, the completeness and accuracy of the key data used in the valuation calculation.
- In conjunction with our actuarial specialists, we evaluated the methodologies, including consideration of alternatives used and the key assumptions applied in the valuation.
- We assessed and challenged the methodology and basis used to set the underlying assumptions with reference to guidance issued by the European Insurance and Occupational Pensions Authority (EIOPA), the Group's actuarial experience investigations and our experience of similar companies in the marketplace as applicable.
- We assessed the calculation of insurance contract liabilities and the ViF asset through:
  - agreeing the assumptions and key data inputs into the actuarial models to those we had evaluated;
  - testing the design, implementation and operating effectiveness of management's controls over the output of the calculations; and
  - evaluating the external actuary's report on the actuarial methodologies, assumptions and calculations.
- We found that the insurance contract liabilities and the ViF asset were appropriately calculated.

IT Operational Risk

The key audit matter

As with many banks, the Group is highly dependent on IT systems for the processing and recording of significant volumes of transactions. Our audit approach relies extensively on automated controls and therefore on the effectiveness of controls over IT systems.

In particular, we consider privileged user access management controls to be critical in ensuring that only appropriately authorised changes are made appropriately to relevant IT systems. Moreover, appropriate access controls contribute to mitigating the risk of potential fraud or error as a result of changes to applications and data.

The Group has a complex IT environment and operates a large number of applications, many of which are legacy systems which we understand will be replaced as the Group executes its multi-year investment programme to replace its core banking IT platforms. This programme operates in tandem with existing initiatives to maintain the operating effectiveness of the Group's existing IT systems. Each of these elements has been brought together in an Integrated IT Plan. Management has an ongoing risk management programme in place to identify, rate, mitigate and report on risk including IT and Operational risk matters.

We regard this area as a key audit matter owing to the high level of IT dependency within the Group as well as the associated complexity and the risk that automated controls are not designed and operating effectively.

How the matter was addressed in our audit

- We evaluated the design and operating effectiveness of the controls over the continued integrity of the IT systems that are relevant to financial reporting.
- In conjunction with our IT audit specialists, we updated our understanding of the Group's IT environment having particular regard for developments with respect to the Integrated IT plans. We used this understanding to identify those IT systems which support financial reporting processes.
- We examined the design of the governance framework associated with the Group's IT architecture. We tested relevant General IT Controls for IT applications we considered relevant to the financial reporting process, including access management, program development and change management.
- We also tested the design, implementation and operating effectiveness of key IT application controls, including the configuration, security and accuracy of end user computing controls. Where IT controls could not be relied upon we conducted additional substantive procedures and where relevant, we determined whether compensating controls were effective mitigants for any design or operating deficiencies.
- While we continue to identify certain design and operating effectiveness deficiencies with user access controls, the existence of compensating controls provided us with sufficient evidence to rely on the operation of the Group's IT systems for the purposes of our audit.

Recognition and impairment of internally generated intangible assets €760 million (2018: €708 million)
Refer to page 86 (accounting policy) and notes 14 and 32 (financial disclosures)

The key audit matter
The Group balance sheet includes capitalised intangible assets of €760 million.

Owing to the significance of the costs capitalised and the fact that there is judgement involved in assessing whether the criteria in IAS 38 required for capitalisation of such costs, have been met - including the likelihood of the project delivering sufficient future economic benefits - we considered this a key audit matter.

Where the costs incurred are internally generated (for example employee costs) there is further judgement required, such as the accuracy of amount of time spent on the projects.

How the matter was addressed in our audit
- We obtained an understanding of the various projects, and their stage of completion. We tested the design, implementation and operating effectiveness of key controls relating to the capitalisation of expenditure and challenged. the impairment analysis performed by management in 2019.
- We inquired of management responsible for certain costs to obtain an understanding of their associated projects so as to enable us to determine whether the costs met the criteria for capitalisation and tested a sample of costs capitalised in the period to assess whether these had been appropriately treated in line with the Group's accounting policy and IAS 38, vouching to supporting documentation.
- Where external third-party contractors were used, we agreed on a sample basis that the amounts invoiced were appropriately capitalised. To determine whether internal employee costs were directly attributable to projects, we obtained listings of hours worked on individual projects for the employment costs capitalised. We selected a sample of the individual hours recorded and checked that the hours charged were appropriately capitalised.
- We considered whether the development of new software provided any evidence of obsolescence for existing internally generated intangible assets on the balance sheet. We challenged management's assessment of the appropriate useful economic lives (UELs) for material assets capitalised in 2019.
- We found that the costs were capitalised in line with group policy and on a basis which is consistent with the requirements of IAS 38. We found that management's assessment that there were no objective indicators of impairment at the year end to be reasonable.

Recoverability of deferred tax assets €1,088 million (2018: €1,165 million)
Refer to page 87 (accounting policy) and note 35 (financial disclosures)

The key audit matter
The Group has DTAs of €1,088 million which are projected to be recovered by 2037. The total DTAs before netting by jurisdiction is €1,183 million. This includes unutilised tax losses of €1,089 million, of which €1,032 million relates to Ireland and €50 million relates to the UK, with recovery periods of 18 and 10 years respectively.

Detailed projections of future taxable profits for a five year period are prepared by the Group. The projections for the final year are then extrapolated at estimated annual long term growth rates for the Irish and UK economies for the purposes of projecting future taxable profits beyond five years.

The recognition of a DTA relies on management's judgements relating to the probability, timing and sufficiency of future taxable profits, which in turn is based on assumptions concerning future economic conditions and business performance and current legislation governing the use of historical trading losses carried forward. These are inherently subjective and subject to a high degree of estimation uncertainty particularly given the Brexit uncertainty at year end and the differing jurisdictions in which the DTA arises.

Under UK and Irish tax legislation, there is no time limit on the utilisation of the Group's tax losses. However, in the UK the amount of a bank's annual profits that can be sheltered with trading losses carried forward is restricted to 25%. We regard this area as a key audit matter because of the judgements required by management as the estimation of future taxable profits is inherently judgmental.

How the matter was addressed in our audit
- We tested the design and implementation of key controls over the determination and approval of the forecast taxable profits used to support the recognition of the deferred tax assets.
- With the assistance of our tax specialists we tested the accuracy of the DTA calculations and the appropriateness of any tax utilisation strategies applied.
- We assessed whether the forecasted profits were reasonable by comparing to recent actual performance and challenging the assumptions particular to the Group's future performance using our knowledge of the business, Group strategy and wider initiatives within the group. We focused on those assumptions directly impacting the forecasted profits, we assessed the reasonableness of the external economic assumptions - particularly interest rate forecast - applied in the assessment with reference to observable market data.
- We assessed how management considered alternative outcomes and potential estimation uncertainty in arriving at their base case projections.
- We considered whether key assumptions within the DTA calculations were internally consistent and assessed the reasonableness of the period over which the asset is projected to be recovered.
- We assessed the adequacy of disclosures provided in the financial statements, including disclosures of the assumptions and found them to be appropriate.
- On the basis of the work performed, we found management's judgement relating to the profitability, timing and sufficiency of future taxable profits to be reasonable.

Our application of materiality and an overview of the scope of our audit
The materiality for the Group financial statements as a whole was set at €38 million. This has been calculated as c.5% of the benchmark of Group underlying profit before taxation of €752 million, which we consider to be one of the principal considerations for members of the Bank in assessing the financial performance of the Group. We reported to the Court Audit Committee all corrected and uncorrected misstatements we identified through our audit with a value in excess of €1.9 million in addition to other audit misstatements below that threshold that we believe warranted reporting on qualitative grounds.

The materiality for the Bank financial statements is €38 million which represents c.0.5% of total equity. Total equity is a proxy for Capital resources and is included in the audited financial

statements. Capital resources is a key metric used externally by the users of the Bank's financial statements. Hence a benchmark based on total equity reflects the focus of the users of the financial statements.

Our audit work addressed each of the Group’s five operating segments which are headquartered in Ireland and the UK: Retail Ireland, Wealth and Insurance, Retail UK, Corporate and Treasury (C&T) and Group Centre. We performed full scope audits of the complete financial information of the Retail Ireland, Wealth and Insurance and Retail UK operating segments. Audits of account balances were performed on Corporate and Treasury and Group Centre operating segments.

The Group audit team instructed component auditors as to the significant areas to be covered, including the relevant risks detailed above and the information to be reported back. The Group audit team approved the materiality for components which ranged from €10 million to €25 million, having regard to the mix of size and risk profile of the Group across the components.

The Group team visited all component locations in Dublin and London and undertook an assessment of the audit risk and strategy. Regular meetings were held both in person and through telephone conference meetings with these component auditors. At these visits and meetings, the findings reported to the Group team were discussed in more detail, and any further work required by the Group team was then performed by the component auditor.

Audit coverage for individual line items within the consolidated income statement and consolidated balance sheet falls in the range 60% to 100%; most line items have audit coverage above 90%.

The work on five of the six components was performed by KPMG Ireland, including the audit of the parent company. The remaining work was covered by overseas component auditors.

We have nothing to report on going concern

We are required to report to you if:

- we have anything material to add or draw attention to in relation to the Directors’ statement in note 1 to the financial statements on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group and Bank’s use of that basis for a period of at least twelve months from the date of approval of the financial statements.

We have nothing to report in these respects.

Other information

The Directors are responsible for the other information presented in the Annual Report together with the financial statements. The other information comprises the information included in the Business Review on pages 3 to 18, the Governance section on pages 19 to 54, the unaudited parts of Other Information on pages 258 to 262. The financial statements and our auditor's report thereon do not comprise part of the other information. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.

Based solely on our work on the other information, in those parts of the Directors’ report specified for our consideration:

- we have not identified material misstatements in the Directors’ report;
- in our opinion, the information given in the Directors’ report is consistent with the financial statements; and
- in our opinion, the Directors’ report has been prepared in accordance with the Companies Act 2014.

Disclosures of principal risks and longer-term viability

As a result of the Directors’ voluntary reporting on how they have applied the UK Corporate Governance Code, we are required to report to you based on the knowledge we acquired during our financial statements audit, we have nothing material to add or draw attention to in relation to:

- the Principal Risks disclosures describing these risks and explaining how they are being managed and mitigated;
- the Directors’ confirmation within the Report of the Directors on page 54 that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency and liquidity; and
- the Directors’ explanation in the Report of the Directors of how they have assessed the prospects of the Group, over what period they have done so and why they considered that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Other corporate governance disclosures

As a result of the Directors’ voluntary reporting on how they have applied the UK Corporate Governance Code, we are required to report to you we are required to address the following items and report to you in the following circumstances:

- Fair, balanced and understandable: if we have identified material inconsistencies between the knowledge we acquired during our financial statements audit and the Directors’ statement that they consider that the Annual Report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for stockholders to assess the Group’s position and performance, business model and strategy;
- Report of the Audit Committee: if the section of the Annual Report describing the work of the Court Audit Committee does not appropriately address matters communicated by us to the Court Audit Committee; or
- Statement of compliance with UK Corporate Governance Code: if the Directors’ statement does not properly disclose a departure from provisions of the UK Corporate Governance Code specified by the Listing Rules for our review.

We have nothing to report in these respects.

In addition as required by the Companies Act 2014, we report, in relation to information given in the Governance section on pages 19 to 54, that:

- based on the work undertaken for our audit, in our opinion, the description of the main features of internal control and risk management systems in relation to the financial reporting process, and information relating to voting rights and other matters required by the European Communities (Takeover Bids (Directive 2004/EC) Regulations 2006 and specified for our consideration, is consistent with the financial statements and has been prepared in accordance with the Act; and
- based on our knowledge and understanding of the Bank and its environment obtained in the course of our audit, we have not identified any material misstatements in that information.

We also report that, based on work undertaken for our audit, other information required by the Act is contained in the Corporate Governance Statement.

Our opinions on other matters prescribed by the Companies Act 2014 are unmodified

We have obtained all the information and explanations which we consider necessary for the purpose of our audit.

In our opinion, the accounting records of the Bank were sufficient to permit the Bank financial statements to be readily and properly audited and the Bank's financial statements are in agreement with the accounting records.

We have nothing to report on other matters on which we are required to report by exception

The Companies Act 2014 requires us to report to you if, in our opinion, the disclosures of Directors' remuneration and transactions required by Sections 305 to 312 of the Act are not made.

The Companies Act 2014 also requires us to report to you if, in our opinion, the Bank has not provided the information required by section 5(2) to (7) of the European Union (Disclosure of non-financial and diversity Information by certain large undertakings and groups) Regulations 2017 for the year ended 31 December 2019 as required by the European Union (Disclosure of non-financial and diversity Information by certain large institutions and groups) (amendment) Regulations 2018.

Respective responsibilities and restrictions on use

Directors' responsibilities

As explained more fully in their statement set out on page 56, the Directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; assessing the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not guarantee that an audit conducted in accordance with ISAs (Ireland) will always detect a material misstatement when it exists. Misstatements can arise from fraud, other irregularities or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements. The risk of not detecting a material misstatement resulting from fraud or other irregularities is higher than for one resulting from error, as they may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control and may involve any area of law and regulation and not just those directly affecting the financial statements.

A fuller description of our responsibilities is provided on IAASA's website at https://www.iaasa.ie/getmedia/b2389013-1cf6-458b-9b8f-a98202dc9c3a/Description_of_auditors_responsiblities_for_audit.pdf

The purpose of our audit work and to whom we owe our responsibilities

Our report is made solely to the Bank's members, as a body, in accordance with Section 391 of the Companies Act 2014. Our audit work has been undertaken so that we might state to the Bank's members those matters we are required to state to them in an Auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Bank and the Bank's members, as a body, for our audit work, for our report, or for the opinions we have formed.

N Marshall
for and on behalf of
KPMG
Chartered Accountants, Statutory Audit Firm
1 Harbourmaster Place
IFSC
Dublin 1
Ireland

21 February 2020

Consolidated and Bank financial statements

Consolidated income statement *(for the year ended 31 December 2019)*

	Note	2019 €m	2018 €m
Interest income calculated using the effective interest method	4	2,350	2,354
Interest income on finance leases and hire purchase receivables	4	175	159
Interest income		**2,525**	**2,513**
Interest expense	5	(377)	(382)
Net interest income		**2,148**	**2,131**
Net insurance premium income	6	1,518	1,496
Fee and commission income	7	510	521
Fee and commission expense	7	(205)	(224)
Net trading income	8	138	55
Life assurance investment income, gains and losses	9	1,311	(330)
Other leasing income	10	62	52
Other leasing expense	10	(52)	(41)
Other operating income	11	120	85
Total operating income		**5,550**	**3,745**
Insurance contract liabilities and claims paid	12	(2,647)	(955)
Total operating income, net of insurance claims		**2,903**	**2,790**
Other operating expenses	13	(2,005)	(1,940)
Cost of restructuring programme	14	(59)	(111)
Operating profit before impairment (losses) / gains on financial instruments		**839**	**739**
Net impairment (losses) / gains on financial instruments	16	(214)	42
Operating profit		**625**	**781**
Share of results of associates and joint ventures (after tax)	17	39	41
Gain on disposal of asset held for sale	25	-	7
(Loss) / gain on disposal / liquidation of business activities	18	(25)	5
Profit before tax		**639**	**834**
Taxation charge	19	(196)	(160)
Profit for the year		**443**	**674**
Attributable to stockholders		443	674
Attributable to non-controlling interests		-	-
Profit for the year		**443**	**674**

Consolidated statement of comprehensive income *(for the year ended 31 December 2019)*

	Note	2019 €m	Restated[1] 2018 €m
Profit for the year		**443**	**674**
Other comprehensive income, net of tax:			
Items that may be reclassified to profit or loss in subsequent years:			
Debt instruments at fair value through other comprehensive income reserve, net of tax:			
Changes in fair value		28	(137)
Transfer to income statement			
- Asset disposal		(3)	(2)
Net change in debt instruments at fair value through other comprehensive income reserve		**25**	**(139)**
Cash flow hedge reserve, net of tax:			
Changes in fair value		(390)	(1)
Transfer to income statement		386	(50)
Net change in cash flow hedge reserve		**(4)**	**(51)**
Foreign exchange reserve:			
Foreign exchange translation gains / (losses)		139	8
Transfer to income statement		(9)	2
Net change in foreign exchange reserve		**130**	**10**
Total items that may be reclassified to profit or loss in subsequent years		**151**	**(180)**
Items that will not be reclassified to profit or loss in subsequent years:			
Remeasurement of the net defined benefit pension liability, net of tax		39	129
Revaluation of property, net of tax		3	5
Net change in liability credit reserve, net of tax		(18)	37
Total items that will not be reclassified to profit or loss in subsequent years		**24**	**171**
Other comprehensive expense for the year, net of tax		**175**	**(9)**
Total comprehensive income for the year, net of tax		**618**	**665**
`			
Total comprehensive income attributable to equity stockholders		618	665
Total comprehensive income attributable to non-controlling interests		-	-
Total comprehensive income for the year, net of tax		**618**	**665**

The effect of tax on these items is shown in note 19.

[1] *As outlined in the Group accounting policies on page 74, comparative figures have been adjusted to reflect a restatement of revaluation of property net of tax for 2018.*

Balance sheet *(as at 31 December 2019)*

		Group		Bank	
	Note	31 Dec 2019 €m	31 Dec 2018 €m	31 Dec 2019 €m	31 Dec 2018 €m
Assets					
Cash and balances at central banks	50	8,325	6,033	5,817	3,163
Items in the course of collection from other banks		223	259	54	71
Trading securities		32	29	32	29
Derivative financial instruments	20	1,999	1,724	2,066	1,771
Other financial assets at fair value through profit or loss	21	16,484	14,160	517	121
Loans and advances to banks	22	3,328	2,625	14,277	12,300
Debt securities at amortised cost	23	4,511	3,928	6,675	6,050
Financial assets at fair value through other comprehensive income	24	10,797	12,048	10,797	12,048
Assets classified as held for sale	25	-	602	-	-
Loans and advances to customers	26	79,487	76,363	38,583	38,826
Shares in Group undertakings	29	-	-	4,256	4,161
Interest in associates	30	56	53	-	-
Interest in joint ventures	31	76	69	-	-
Intangible assets and goodwill	32	838	802	744	721
Investment properties	33	999	1,037	-	-
Property, plant and equipment	34	1,009	438	832	304
Current tax assets		36	33	29	10
Deferred tax assets	35	1,088	1,165	1,055	1,090
Other assets	36	2,501	2,282	427	425
Retirement benefit assets	46	129	46	119	34
Total assets		**131,918**	**123,696**	**86,280**	**81,124**
Equity and liabilities					
Deposits from banks	38	2,179	2,482	4,526	5,399
Customer accounts	39	84,043	78,971	64,417	59,649
Items in the course of transmission to other banks		219	268	108	147
Derivative financial instruments	20	2,478	1,819	2,620	1,950
Debt securities in issue	40	8,815	8,907	2,913	2,763
Liabilities to customers under investment contracts	41	5,890	5,239	-	-
Insurance contract liabilities	41	12,694	11,003	-	-
Other liabilities	42	3,043	3,262	1,011	1,281
Lease liabilities	60,61	565	-	551	-
Current tax liabilities		33	11	-	-
Provisions	43	143	84	46	38
Loss allowance provision on loan commitments and financial guarantees	45	30	29	28	23
Deferred tax liabilities	35	72	42	-	-
Retirement benefit obligations	46	268	274	142	167
Subordinated liabilities	47	1,693	2,107	1,655	2,071
Total liabilities		**122,165**	**114,498**	**78,017**	**73,488**

Balance sheet *(as at 31 December 2019) (continued)*

		Group		Bank	
	Note	31 Dec 2019 €m	31 Dec 2018 €m	31 Dec 2019 €m	31 Dec 2018 €m
Equity					
Capital stock	48	1,625	1,625	1,625	1,625
Stock premium account		571	571	561	561
Retained earnings		5,915	5,542	4,526	3,954
Other reserves		900	718	811	756
Stockholders' equity		**9,011**	**8,456**	**7,523**	**6,896**
Other equity instruments	49	740	740	740	740
Total equity excluding non-controlling interests		**9,751**	**9,196**	**8,263**	**7,636**
Non-controlling interests		2	2	-	-
Total equity		**9,753**	**9,198**	**8,263**	**7,636**
Total equity and liabilities		**131,918**	**123,696**	**86,280**	**81,124**

The Bank recorded a profit after tax of €565 million for the year ended 31 December 2019 (2018: €388 million).

Patrick Kennedy	***Patrick Haren***	***Francesca McDonagh***	***Sarah McLoughlin***
Governor	*Deputy Governor*	*Group Chief Executive*	*Group Secretary*

Consolidated statement of changes in equity

(for the year ended 31 December 2019)

Group	Capital stock €m	Stock premium account €m	Retained earnings €m	Other reserves: Debt instruments at FVOCI reserve €m	Cash flow hedge reserve €m	Liability credit reserve €m	Foreign exchange reserve €m	Capital reserve €m	Revaluation reserve €m	Attributable to equity holders of Parent €m	Other equity instruments €m	Non-controlling interests €m	Total €m
Balance at 1 January 2019	**1,625**	**571**	**5,542**	**133**	**(10)**	**24**	**(833)**	**1,373**	**31**	**8,456**	**740**	**2**	**9,198**
Profit for the year	-	-	443	-	-	-	-	-	-	443	-	-	443
Other comprehensive income for the year	-	-	39	25	(4)	(18)	130	-	3	175	-	-	175
Total comprehensive income for the year	-	-	482	25	(4)	(18)	130	-	3	618	-	-	618
Transactions with owners													
Contributions by and distributions to owners of the Group													
- Dividends on preference equity interests paid in cash	-	-	(7)	-	-	-	-	-	-	(7)	-	-	(7)
- Distribution on other equity instruments - Additional tier 1 coupon, net of tax	-	-	(55)	-	-	-	-	-	-	(55)	-	-	(55)
Total transactions with owners	**-**	**-**	**(62)**	**-**	**-**	**-**	**-**	**-**	**-**	**(62)**	**-**	**-**	**(62)**
Transfer from capital reserve to retained earnings	-	-	(55)	-	-	-	-	55	-	-	-	-	-
Transfer from liability credit reserve to retained earnings	-	-	9	-	-	(9)	-	-	-	-	-	-	-
Other movements	-	-	(1)	-	-	-	-	-	-	(1)	-	-	(1)
Balance at 31 December 2019	**1,625**	**571**	**5,915**	**158**	**(14)**	**(3)**	**(703)**	**1,428**	**34**	**9,011**	**740**	**2**	**9,753**

Consolidated statement of changes in equity *(continued)*
(for the year ended 31 December 2018) (restated)

Group				Other reserves									
	Capital stock €m	Stock premium account €m	Retained earnings €m	Debt instruments at FVOCI reserve €m	Cash flow hedge reserve €m	Liability credit reserve €m	Foreign exchange reserve €m	Capital reserve €m	Revaluation reserve €m	Attributable to equity holders of Parent €m	Other equity instruments €m	Non-controlling interests €m	Total €m
Balance at 1 January 2018	**1,625**	**571**	**4,747**	**272**	**41**	**(13)**	**(843)**	**1,410**	**35**	**7,845**	**740**	**2**	**8,587**
Profit for the year	-	-	674	-	-	-	-	-	-	674	-	-	674
Other comprehensive income for the year	-	-	129	(139)	(51)	37	10	-	5	(9)	-	-	(9)
Total comprehensive income for the year	**-**	**-**	**803**	**(139)**	**(51)**	**37**	**10**	**-**	**5**	**665**	**-**	**-**	**665**
Transactions with owners													
Contributions by and distributions to owners of the Group													
- Dividends on preference equity interests paid in cash	-	-	(7)	-	-	-	-	-	-	(7)	-	-	(7)
- Distribution on other equity instruments - Additional tier 1 coupon, net of tax	-	-	(48)	-	-	-	-	-	-	(48)	-	-	(48)
Total transactions with owners	**-**	**-**	**(55)**	**-**	**-**	**-**	**-**	**-**	**-**	**(55)**	**-**	**-**	**(55)**
Transfer from capital reserve to retained earnings	-	-	37	-	-	-	-	(37)	-	-	-	-	-
Transfer from revaluation reserve to retained earnings	-	-	9	-	-	-	-	-	(9)	-	-	-	-
Other movements	-	-	1	-	-	-	-	-	-	1	-	-	1
Balance at 31 December 2018	**1,625**	**571**	**5,542**	**133**	**(10)**	**24**	**(833)**	**1,373**	**31**	**8,456**	**740**	**2**	**9,198**

Consolidated statement of changes in equity *(continued)*

(for the year ended 31 December 2019)

Bank				Other reserves								
	Capital stock €m	Stock premium account €m	Retained earnings €m	Debt instruments at FVOCI reserve €m	Cash flow hedge reserve €m	Liability credit reserve €m	Foreign exchange reserve €m	Capital reserve €m	Revaluation reserve €m	Attributable to equity holders of Parent €m	Other equity instruments €m	Total €m
Balance at 1 January 2019	**1,625**	**561**	**3,954**	**133**	**(5)**	**21**	**(402)**	**976**	**33**	**6,896**	**740**	**7,636**
Profit for the year	-	-	565	-	-	-	-	-	-	565	-	565
Other comprehensive income for the year	-	-	61	25	(33)	(17)	86	-	3	125	-	125
Total comprehensive income for the year	**-**	**-**	**626**	**25**	**(33)**	**(17)**	**86**	**-**	**3**	**690**	**-**	**690**
Transactions with owners												
Contributions by and distributions to owners of the Group												
- Dividends on preference equity interests paid in cash	-	-	(7)	-	-	-	-	-	-	(7)	-	(7)
- Distribution on other equity instruments - Additional tier 1 coupon, net of tax	-	-	(55)	-	-	-	-	-	-	(55)	-	(55)
Total transactions with owners	**-**	**-**	**(62)**	**-**	**-**	**-**	**-**	**-**	**-**	**(62)**	**-**	**(62)**
Transfer from liability credit reserve to retained earnings	-	-	9	-	-	(9)	-	-	-	-	-	-
Other movements	-	-	(1)	-	-	-	-	-	-	(1)	-	(1)
Balance at 31 December 2019	**1,625**	**561**	**4,526**	**158**	**(38)**	**(5)**	**(316)**	**976**	**36**	**7,523**	**740**	**8,263**

Consolidated statement of changes in equity *(continued)*
(for the year ended 31 December 2018)

Bank				Other reserves								
	Capital stock €m	Stock premium account €m	Retained earnings €m	Debt instruments at FVOCI reserve €m	Cash flow hedge reserve €m	Liability credit reserve €m	Foreign exchange reserve €m	Capital reserve €m	Revaluation reserve €m	Attributable to equity holders of Parent €m	Other equity instruments €m	Total €m
Balance at 1 January 2018	**1,625**	**561**	**3,479**	**272**	**40**	**(24)**	**(416)**	**976**	**28**	**6,541**	**740**	**7,281**
Profit for the year	-	-	388	-	-	-	-	-	-	388	-	388
Other comprehensive income for the year	-	-	143	(139)	(45)	45	14	-	5	23	-	23
Total comprehensive income for the year	**-**	**-**	**531**	**(139)**	**(45)**	**45**	**14**	**-**	**5**	**411**	**-**	**411**
Transactions with owners												
Contributions by and distributions to owners of the Group												
- Dividends on preference equity interests paid in cash	-	-	(7)	-	-	-	-	-	-	(7)	-	(7)
- Distribution on other equity instruments - Additional tier 1 coupon, net of tax	-	-	(48)	-	-	-	-	-	-	(48)	-	(48)
Total transactions with owners	**-**	**-**	**(55)**	**-**	**-**	**-**	**-**	**-**	**-**	**(55)**	**-**	**(55)**
Other movements	-	-	(1)	-	-	-	-	-	-	(1)	-	(1)
Balance at 31 December 2018	**1,625**	**561**	**3,954**	**133**	**(5)**	**21**	**(402)**	**976**	**33**	**6,896**	**740**	**7,636**

Consolidated cash flow statement *(for the year ended 31 December 2019)*

	Note	2019 €m	2018 €m
Cash flows from operating activities			
Profit before tax		639	834
Share of results of associates and joint ventures	17	(39)	(41)
Loss / (gain) on disposal / liquidation of business activities	18	25	(5)
Loss / (gain) on disposal of asset held for resale	25	-	(7)
Depreciation and amortisation	10,13	317	235
Net impairment loss on financial instruments, excluding cash recoveries	10	262	7
Impairment of property, plant and equipment	14	4	9
Impairment of intangible assets	14	-	6
Reversal of impairment on property	13	-	(4)
Revaluation of investment property	33	3	(33)
Interest expense on subordinated liabilities	51	108	121
Interest expense on lease liabilities		15	-
Charge for pension and similar obligations	46	101	118
Net change in accruals and interest payable		(14)	13
Net change in prepayments and interest receivable		(16)	17
Charge for provisions		111	94
Non-cash and other items		(1)	7
Cash flows from operating activities before changes in operating assets and liabilities		**1,515**	**1,371**
Net change in items in the course of collection from other banks		(13)	53
Net change in trading securities		(3)	39
Net change in derivative financial instruments		250	359
Net change in other financial assets at fair value through profit or loss		(2,325)	708
Net change in loans and advances to banks		(18)	(71)
Net change in loans and advances to customers, including loans and advances to customers held for sale		(1,322)	(1,334)
Net change in other assets		(211)	(308)
Net change in deposits from banks		(392)	(1,841)
Net change in customer accounts		3,906	3,104
Net change in debt securities in issue		(144)	523
Net change in liabilities to customers under investment contracts		651	(527)
Net change in insurance contract liabilities		1,691	125
Net change in other operating liabilities		(227)	(311)
Net cash flow from operating assets and liabilities		**1,843**	**519**
Net cash flow from operating activities before tax		**3,358**	**1,890**
Tax paid		(54)	(44)
Net cash flow from operating activities		**3,304**	**1,846**
Investing activities (section a below)		651	(3,552)
Financing activities (section b below)		(878)	(179)
Effect of exchange translation and other adjustments		(100)	33
Net change in cash and cash equivalents		**2,977**	**(1,852)**
Opening cash and cash equivalents		8,349	10,201
Closing cash and cash equivalents	50	**11,326**	**8,349**

Consolidated cash flow statement *(for the year ended 31 December 2019) (continued)*

	Note	2019 €m	2018 €m
(a) Investing activities			
Additions to financial assets at FVOCI	24	(1,525)	(4,652)
Disposal / redemption of financial assets at FVOCI	24	2,827	2,541
Additions to debt securities at amortised cost		(803)	(1,440)
Disposal / redemption of debt securities at amortised cost		373	293
Additions to property, plant and equipment - owned assets		(81)	(72)
Disposal of property, plant and equipment	34	22	14
Additions to intangible assets	32	(223)	(207)
Additions to investment property	33	(11)	(123)
Disposal of investment property	33	39	13
Disposal of assets held for sale	25	-	35
Dividends received from joint ventures	31	31	36
Net change in interest in associates	30	2	10
Cash flows from investing activities		**651**	**(3,552)**
(b) Financing activities			
Repayment of subordinated liabilities	51	(750)	-
Proceeds from issue of subordinated liabilities	51	300	-
Partial remittance of dividend payable to Parent	51	(173)	-
Interest paid on subordinated liabilities	51	(109)	(117)
Payment of lease liability		(69)	-
Interest paid on lease liability	51	(15)	-
Distributions paid on other equity instruments - Additional tier 1 coupon	49	(55)	(55)
Dividend paid on 2009 Preference Stock and other preference equity interests		(7)	(7)
Cash flows from financing activities		**(878)**	**(179)**

Notes to the consolidated and Bank financial statements

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1 Group accounting policies

Basis of preparation
These financial statements are the consolidated financial statements of The Governor and Company of the Bank of Ireland (the 'Bank') and its subsidiaries (collectively the 'Group'), and the separate financial statements of the Bank.

The financial statements comprise the Consolidated income statement, the Consolidated statement of comprehensive income, the Consolidated and Bank balance sheets, the Consolidated and Bank statements of changes in equity, the Consolidated cash flow statement and the notes to the Consolidated and Bank statements on pages 74 to 89.

The separate financial statements of the Bank reflect the financial position of the Bank only and do not consolidate the results of any subsidiaries.

The consolidated financial statements of the Group are prepared in accordance with IFRS as adopted by the EU and with those parts of the Companies Act 2014 applicable to companies reporting under IFRS and with the EU (Credit Institutions: Financial Statements) Regulations, 2015 and the Asset Covered Securities Acts 2001 and 2007. The financial statements of the Bank are prepared under FRS 101 'Reduced disclosure framework' and in accordance with Section 290 (1) of the Companies Act 2014.

In preparing these financial statements the Bank applies the recognition, measurement and disclosure requirements of IFRS as adopted by the EU (but makes amendments where necessary in order to comply with the Companies Act 2014). The Bank has applied the exemptions available under FRS 101 in respect of the following disclosures:
- statement of Cash Flows;
- disclosures in respect of transactions with wholly-owned subsidiaries;
- certain requirements of IAS 1 'Presentation of Financial Statements';
- certain disclosure requirements in respect of IFRS 15, 'Revenue from Contracts with Customers'; and
- the effects of new but not yet effective IFRSs.

Where relevant, equivalent disclosures have been given in the Group financial statements. Accounting policies that are relevant to the Bank only are set out on page 89.

The financial statements have been prepared under the historical cost convention as modified to include the fair valuation of certain financial instruments and land and buildings.

The preparation of the financial statements in conformity with IFRS or FRS 101 requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Although these estimates are based on management's best knowledge of the amount, event or actions, actual results ultimately may differ from those estimates. A description of the critical estimates and judgements is set out in note 2.

References to the 'State' throughout this document should be taken to refer to the RoI, its Government and, where and if relevant, Government departments, agencies and local Government bodies.

FX rates used during the year are as follows:

	2019		2018	
	Average	Closing	Average	Closing
€ / Stg£	0.8778	0.8508	0.8847	0.8945
€ / US$	1.1195	1.1234	1.1810	1.1450

Going concern
The time period that the Directors have considered in evaluating the appropriateness of the going concern basis in preparing the financial statements for 2019 is a period of twelve months from the date of approval of these financial statements (the 'period of assessment').

In making this assessment, the Directors considered the Group's business, profitability projections, funding and capital plans, together with a range of other factors such as the outlook for the Irish economy, the impact of Brexit, along with ongoing developments in EU economies.

The matters of primary consideration by the Directors are set out below:

Capital
The Group has developed capital plans under base and stress scenarios and the Directors believe that the Group has sufficient capital to meet its regulatory capital requirements throughout the period of assessment.

Funding and liquidity
The Directors have considered the Group's funding and liquidity position and are satisfied that the Group has sufficient funding and liquidity throughout the period of assessment.

Conclusion
On the basis of the above, the Directors consider it appropriate to prepare the financial statements on a going concern basis having concluded that there are no material uncertainties related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern over the period of assessment.

Comparatives
Comparative figures have been restated where necessary, to conform with changes in presentation or where additional analysis has been provided in the current period. Any adjustments to comparatives are disclosed in the relevant note or supplementary asset disclosure as appropriate.

In the consolidated statement of comprehensive income the revaluation of property, net of tax for the year ended 31 December 2018 has been increased by €10 million from a charge of €5 million to a gain of €5 million arising as the pre-tax change in the revaluation reserve was misstated. Consequently other comprehensive income (OCI) has increased by €10 million from €19 million (expense) to €9 million (expense) and total comprehensive income has been increased by €10 million from €656 million to €666 million, the restatement is attributable in full

1 Group accounting policies *(continued)*

to equity shareholders. The impact of this restatement affects the Consolidated statement of comprehensive income as set out on page 74 and the Taxation note on page 106. The restatement has no impact on the Consolidated statement of changes in equity.

Adoption of new and amended accounting standards

The following new standards and amendments to standards have been adopted by the Group during the year ended 31 December 2019:

- IFRS 16 'Leases'
- International Financial Reporting Interpretation Committee (IFRIC) 23 'Uncertainty over Income Tax Treatments'
- Amendment to IAS 19 'Plan Amendment, Curtailment or Settlement'
- Amendments to IAS 28 'Investments in Associates'
- Interest Rate Benchmark Reform (Amendments to IFRS 9 'Financial instruments', IFRS 7 'Financial Instruments: Disclosures' and IAS 39 'Financial Instruments: Recognition and Measurement)'
- Annual improvements 2015 to 2017 - These amendments include minor changes to the following standards:
  - IAS 12 'Income Taxes'
  - IFRS 3 'Business Combinations'
  - IFRS 11 'Joint Arrangements'
  - IAS 23 'Borrowing Costs'

The Group's accounting policies have been updated for the application of the above new and amended accounting standards from 1 January 2019. The updates together with the accounting policies for the comparative year up to 31 December 2018 are detailed below.

IFRS 16 'Leases'

IFRS 16 'Leases' replaces IAS 17 'Leases' and related interpretations. It addresses the definition of a lease, recognition and measurement of leases and establishes principles for reporting useful information to users of financial statements about the leasing activities of both lessees and lessors. A key change arising from IFRS 16 is that all operating leases are accounted for on balance sheet for lessees. The accounting for lessors has not materially changed.

As permitted under IFRS 16, the Group has elected to apply the standard under the modified retrospective application rather than full retrospective application. Under the modified retrospective application, the Group as a lessee has not restated comparative information, instead recognising the cumulative effect of initially applying the standard as an adjustment to retained earnings (€nil effect).

As permitted, the Group has availed of the following exemptions:

- short-term leases (lease term of 12 months or less);
- leases where the lease term ends within 12 months of the date of initial application; and
- leases for which the underlying asset is of low value, except for leases of computer equipment which were previously classified as finance leases under IAS 17.

The Group recognises the lease payments associated with those lease payments as an expense on a straight line basis over the lease term.

As permitted the Group has applied the practical expedient to leases of computer equipment previously classified as operating leases under IAS 17. For certain computer equipment where the Group is the lessee, it has elected not to separate the non-lease components and accounts for lease and non-lease components as a single lease.

The Group recognises the lease payments associated with those leases as an expense on a straight line basis over the lease term.

The principal impact on the Group is in relation to property leases that the Group, as the lessee, previously classified as operating leases under IAS 17. These include primarily branches and office premises, The commercial leases typically run for an original period of 25 to 35 years (from inception) with five-yearly rent reviews. The majority of the rent reviews are on an upwards only basis. Some leases also include break options. The Group now recognises a lease liability for the leases measured at the present value of the remaining lease payments discounted using the Group's incremental borrowing rate (IBR). The Group has recognised a Right of Use (RoU) asset equal to the lease liability, adjusted by the amounts of any prepaid or accrued lease payments relating to that lease recognised in the balance sheet immediately prior to date of initial application.

In addition the Group relied on its assessment of whether leases were onerous immediately before the date of initial application. Consequently the Group adjusted the RoU asset by the amount of any such provision for onerous leases recognised in the balance sheet immediately prior to date of initial application.

The Group leases a number of items of computer equipment which were previously classified as finance leases under IAS 17. For these leases, excluding those items for which the Group availed of the low value exemption, the initial carrying amounts of RoU asset and lease liability at 1 January 2019 were determined to be the carrying amount of the lease asset and lease liability under IAS 17 immediately before that date.

The Group reassessed contracts that were not identified as leases under IAS 17. As a result of this assessment service contracts for computer equipment were deemed to meet the definition of a lease under IFRS 16 resulting in the recognition of lease liabilities and RoU assets.

The effect of adoption of IFRS 16 is explained further in note 60.

International Financial Reporting Interpretation Committee (IFRIC) 23 'Uncertainty over Income Tax Treatments'

IFRIC 23 clarifies how the recognition and measurement requirements of IAS 12 'Income Taxes', are applied where there is uncertainty over income tax treatments.

An uncertain tax treatment is any tax treatment applied by an entity where there is uncertainty over whether that treatment will be accepted by the tax authority. IFRIC 23 applies to all aspects of income tax accounting where there is an uncertainty regarding the treatment of an item, including taxable profit or loss, the tax bases of assets and liabilities, tax losses and credits and tax rates.

The introduction of IFRIC 23 has no impact on the Group's financial statements. The Group's approach to accounting for uncertain tax positions heretofore has embodied the clarifications outlined in IFRIC 23. In particular, the Group considers uncertain tax positions together or separately depending on which approach better predicts how the uncertainties will be resolved.

1 Group accounting policies *(continued)*

Where the Group concludes it is not probable that a tax authority will accept its assessment of an uncertain tax position, it reflects the effect of the uncertainty using either the 'most likely amount' method or the 'expected value' method, as appropriate for the particular uncertainty.

Amendment to IAS 19 'Plan Amendment, Curtailment or Settlement'
This amendment requires an entity to use updated assumptions to determine current service cost and net interest for the remainder of the period after a plan amendment, curtailment or settlement and recognise in profit or loss as part of past service cost, or a gain or loss on settlement, any reduction in a surplus, even if that surplus was not previously recognised because of the impact of the asset ceiling. The amendment does not have a significant impact on the Group at 31 December 2019.

Amendments to IAS 28 'Investments in Associates'
This narrow scope amendment clarifies that a long term interest in an associate or joint venture to which the equity method is not applied should be accounted for in the first instance under IFRS 9.

Interest Rate Benchmark Reform (Amendments to IFRS 9, IFRS 7 and IAS 39)
The International Accounting Standards Board (IASB) has issued amendments to IFRS 9, IAS 39 and IFRS 7 that provide certain temporary reliefs from applying specific hedge accounting requirements in connection with the ongoing reform of the interbank offered rate (IBOR). The temporary reliefs relate to issues affecting financial reporting in the period before the replacement of an existing IBOR with an alternative interest rate (pre-replacement issues) and have the effect that IBOR reform should not generally cause hedge accounting relationships to terminate. However, any hedge ineffectiveness should continue to be recorded in the income statement under both IAS 39 and IFRS 9.

The main exceptions relate to:

- *The highly probable requirement and reclassifying the cumulative gain or loss recognised in other comprehensive income*
  Under IFRS 9 and IAS 39, a forecast transaction designated as the hedged item in a cash flow hedge must meet the 'highly probable requirement'. IFRS 9 and IAS 39 also require amounts accumulated in the cash flow hedge reserve to be reclassified to profit or loss when the hedged future cash flows affect profit or loss. The relief provided by the amendments requires an entity to assume that the existing interest rate benchmark on which the hedged cash flows are based do not change as a result of the IBOR reform.

- *Prospective assessments*
  A hedging relationship qualifies for hedge accounting only if it is expected to be highly effective (IAS 39) or there is an economic relationship between the hedged item and the hedging instrument (IFRS 9). Under the amendments, an entity assumes that the interest rate benchmark on which the cash flows of the hedged item, hedging instrument or hedged risk are based is not altered by the IBOR reform.

- *Separately identifiable risk components*
  IFRS 9 and IAS 39 allow entities to designate only changes in the cash flows or fair value of an item attributable to a specific risk (i.e. a risk component) if that risk component is separately identifiable and reliably measurable. Under the amendments, entities shall apply the separately identifiable requirement only at the inception of a hedging relationship and are not required to continue this assessment over the life of the hedge.

The exceptions related to the highly probable requirement, reclassifying the cumulative gain or loss recognised in OCI and prospective assessment will apply for a limited period ending on the earlier of the date when:

- the uncertainty arising from IBOR reform is no longer present; and
- the hedging relationships to which the exceptions apply are discontinued or, in the case of reclassifying the cumulative gain or loss recognised in OCI, when the entire cumulative gain or loss recognised in OCI with respect to discontinued hedging relationship has been reclassified to profit or loss.

The amendments apply for annual reporting periods beginning on or after 1 January 2020 and earlier application is permitted. The amendments were endorsed by the EU in January 2020. Having made the accounting policy choice allowed under IFRS 9 to continue to apply the hedge accounting requirements of IAS 39, the Group has elected to early adopt the interest rate benchmark reform amendments to IFRS 7 and IAS 39. The adoption of these amendments did not result in any adjustment to the amounts presented in the financial statements.

Annual improvements 2015-2017
These amendments include minor changes to the following standards:

- Amendment to IAS 12 'Income Taxes' - this amendment clarifies that the income tax consequences of dividends on a financial instrument classified as equity should be recognised according to where the previous transactions or events that generated distributable profits were recognised. As a result at 31 December 2019, the Group has recognised the income tax effect of the Additional tier 1 (AT1) dividend within the income statement. Comparatives have not been restated, as the impact was not material.
- IFRS 3 'Business Combinations' - a company remeasures its previously held interest in a joint operation when it obtains control of the business.
- IFRS 11 'Joint Arrangements' - a company does not remeasure its previously held interest in a joint operation when it obtains joint control of the business.
- IAS 23 'Borrowing Costs' - a company treats as part of general borrowings, any borrowing originally made to develop an asset when the asset is ready for its intended use or sale.

Interest income and expense

Interest income and expense are recognised in the income statement using the effective interest method for financial instruments measured at amortised cost and financial assets which are debt instruments measured at fair value through other comprehensive income (FVOCI), in accordance with IFRS 9. Interest income and expense from derivative financial instruments designated as hedging instruments are accounted for in net interest income, in line with the underlying hedged asset or liability. Interest in relation to derivatives not designated as a hedging instrument is included in trading income.

1 Group accounting policies *(continued)*

The effective interest method is the method that is used in the calculation of the amortised cost of a financial asset or liability and in the allocation and recognition of interest revenue or interest expense in profit or loss over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial asset or financial liability to the gross carrying amount of a financial asset or to the amortised cost of a financial liability.

When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options) but does not consider the expected credit losses (ECL) (except, in accordance with IFRS 9 in the case of Purchased or Originated Credit-impaired (POCI) financial assets where ECL are included in the calculation of a 'credit-adjusted effective interest rate'). The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts.

In the case of a financial asset that is neither credit-impaired nor a POCI financial asset, interest revenue is calculated by applying the effective interest rate to the gross carrying amount.

In the case of a financial asset that is not a POCI financial asset but is credit-impaired at the reporting date, interest revenue is calculated by applying the effective interest rate to the amortised cost, which is the gross carrying amount adjusted for any impairment loss allowance.

In the case of a POCI financial asset, interest revenue is recognised by applying the credit-adjusted effective interest rate to the amortised cost.

Where the Group revises its estimates of payments or receipts on a financial instrument (excluding modifications of a financial asset and changes in ECL), it recalculates the gross carrying amount of the financial asset or amortised cost of the financial liability as the present value of the estimated future contractual cash flows that are discounted at the financial instrument's original effective interest rate (or credit-adjusted effective interest rate for POCI financial assets). The adjustment is recognised as interest income or expense.

Modifications

Where the contractual cash flows of a financial asset are modified and the modification does not result in derecognition of the financial asset, the Group recalculates the gross carrying amount of the financial asset as the present value of the modified contractual cash flows that are discounted at the financial asset's original effective interest rate and recognises a modification gain or loss in the income statement. Where a modification is a forbearance measure which does not result in derecognition, the modification gain or loss is included in the income statement within net impairment gains or losses. Otherwise, the modification gain or loss is included within interest income.

Interest income and expense excludes interest on financial instruments at fair value through profit or loss (FVTPL) which is instead included within the fair value movements recognised within net trading income.

Fee and commission income

The Group accounts for fee and commission income when the contract with the customer is agreed and each party's rights under the contract, together with the payment terms, are identified. In addition it must be probable that the Group will collect the consideration to which it is entitled. Fee and commission income is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. The Group recognises revenue when it transfers control of a product or service to a customer. Fee income on the provision of current accounts to customers is recognised as the service is provided. Portfolio and other management advisory and service fees are recognised based on the applicable service contracts usually on a time apportioned basis. Asset management fees related to investment funds are recognised rateably over the period the service is provided. The same principle is applied for wealth management, financial planning and custody services that are continuously provided over an extended period of time. Loan syndication and arrangement fees are recognised at a point in time when the performance obligation is completed. Other fees including interchange income, ATM fees and FX fees are recognised on completion of the transaction and once the Group has completed its performance obligations under the contract.

Financial assets

1. **Recognition, classification and measurement**

   A financial asset is recognised in the balance sheet when, and only when, the Group becomes a party to its contractual provisions. At initial recognition, a financial asset is measured at fair value (plus, in the case of a financial asset not at FVTPL, directly attributable transaction costs) and is assigned one of the following classifications for the purposes of subsequent measurement:
   - financial assets at amortised cost;
   - financial assets at FVOCI; or
   - financial assets at FVTPL.

   The Group determines the appropriate classification based on the contractual cash flow characteristics of the financial asset and the objective of the business model within which the financial asset is held.

   In determining the business model for a group of financial assets, the Group considers factors such as how performance is evaluated and reported to key management personnel (KMP); the risks that affect performance and how they are managed; how managers are compensated; and the expected frequency, value and timing of sales of financial assets.

   In considering the contractual cash flow characteristics of a financial asset, the Group determines whether the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. In this context, 'principal' is the fair value of the financial asset on initial recognition and 'interest' is consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well

1 Group accounting policies *(continued)*

as profit margin. In making the determination, the Group assesses whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, the Group considers contingent events, leverage features, prepayment and term extensions, terms which limit the Group's recourse to specific assets and features that modify consideration of the time value of money.

(a) Financial assets at amortised cost.

Debt instruments

A debt instrument is measured, subsequent to initial recognition, at amortised cost where it meets both of the following conditions and has not been designated as measured at FVTPL:

- the financial asset has contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding; and
- the financial asset is held within a business model whose objective is achieved by holding financial assets to collect contractual cash flows.

Purchases and sales of debt securities at amortised cost are recognised on trade date: the date on which the Group commits to purchase or sell the asset. Loans measured at amortised cost are recognised when cash is advanced to the borrowers.

Interest revenue using the effective interest method is recognised in the income statement. An impairment loss allowance is recognised for ECL with corresponding impairment gains or losses recognised in the income statement.

(b) Financial assets at fair value through other comprehensive income

Debt instruments

A debt instrument is measured, subsequent to initial recognition, at FVOCI where it meets both of the following conditions and has not been designated as measured at FVTPL:

- the financial asset has contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding; and
- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.

Purchases and sales of debt instruments at fair value through OCI are recognised on trade date. Gains and losses arising from changes in fair value are included in OCI. Interest revenue using the effective interest method and FX gains and losses on the amortised cost of the financial asset are recognised in the income statement. The impairment loss allowance for ECL does not reduce the carrying amount but an amount equal to the allowance is recognised in OCI as an accumulated impairment amount, with corresponding impairment gains or losses recognised in the income statement. On derecognition, the cumulative gain or loss previously recognised in OCI is reclassified to the income statement.

Equity instruments

Where an irrevocable election has been made by the Group at initial recognition, an investment in an equity instrument that is neither 'held for trading' nor contingent consideration recognised by the Group in a business combination to which IFRS 3 'Business Combinations' applies, is measured at FVOCI. Amounts presented in OCI are not subsequently transferred to profit or loss. Dividends on such investments are recognised in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment.

Regular way purchases and sales of financial assets measured at FVOCI are recognised on trade date.

(c) Financial assets at fair value through profit or loss

All other financial assets are measured, subsequent to initial recognition, at FVTPL. Financial assets at FVTPL comprise:

Financial assets mandatorily measured at fair value through profit or loss

Financial assets meeting either of the conditions below are mandatorily measured at FVTPL (other than in respect of an equity investment designated as at FVOCI):

- financial assets with contractual terms that do not give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding; and
- financial assets held within a business model whose objective is achieved neither by collecting contractual cash flows nor both collecting contractual cash flows and selling financial assets. This includes financial assets held within a portfolio that is managed and whose performance is evaluated on a fair value basis, such as investments held by the Group's life assurance business. It further includes portfolios of financial assets which are 'held for trading', which includes financial assets acquired principally for the purpose of selling in the near term and financial assets that on initial recognition are part of an identified portfolio where there is evidence of a recent pattern of short-term profit-taking.

Financial assets designated as measured at fair value through profit or loss

A financial asset may be designated at FVTPL only if doing so eliminates or significantly reduces measurement or recognition inconsistencies (an 'accounting mismatch') that would otherwise arise from measuring financial assets or liabilities or recognising gains and losses on them on different bases.

Regular way purchases and sales of financial assets at FVTPL are recognised on trade date. They are carried on the balance sheet at fair value, with all changes in fair value included in the income statement.

2. Reclassification

When, and only when, the Group changes its business model for managing financial assets, it reclassifies all affected financial assets. Reclassification is applied prospectively from the reclassification date, which is the first day of the first reporting period, interim or annual, following the change in business model that results in the reclassification. Any

1 Group accounting policies *(continued)*

previously recognised gains, losses or interest are not restated.

3. **Derecognition**
A financial asset is derecognised when the contractual rights to the cash flows from the financial asset expire or the Group has transferred substantially all the risks and rewards of ownership. Where the Group retains the obligation to service the transferred financial asset, the transferred asset is derecognised if it meets the derecognition criteria and an asset or liability is recognised for the servicing contract if the servicing fee is more than adequate (an asset) or is less than adequate (a liability) for performing the servicing.

Where a modification results in a substantial change to the contractual cash flows of a financial asset, it may be considered to represent expiry of the contractual cash flows, resulting in derecognition of the original financial asset and recognition of a new financial asset at fair value. The Group reduces the gross carrying amount of a financial asset and the associated impairment loss allowance when it has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof.

Impairment of financial instruments

Scope
The Group recognises impairment loss allowances for ECL on the following categories of financial instruments unless measured at FVTPL:
- financial assets that are debt instruments;
- loan commitments;
- lease receivables recognised under IFRS 16 'Leases' (IAS 17 'Leases' until 31 December 2018);
- financial guarantee contracts issued and not accounted for under IFRS 4 'Insurance Contracts'; and
- receivables and contract assets recognised under IFRS 15 'Revenue from Contracts with Customers'.

Basis for measuring impairment
The Group allocates financial instruments into the following categories at each reporting date to determine the appropriate accounting treatment.

Stage 1: 12-month expected credit losses (not credit-impaired)
These are financial instruments where there has not been a significant increase in credit risk since initial recognition. An impairment loss allowance equal to 12- month ECL is recognised. This is the portion of lifetime ECL resulting from default events that are possible within the next 12 months.

Stage 2: Lifetime expected credit losses (not credit-impaired)
These are financial instruments where there has been a significant increase in credit risk since initial recognition but which are not credit-impaired. An impairment loss allowance equal to lifetime ECL is recognised. Lifetime ECL are the ECL resulting from all possible default events over the expected life of the financial instrument.

Stage 3: Lifetime expected credit losses (credit-impaired) These are financial instruments which are credit-impaired at the reporting date but were not credit-impaired at initial recognition. An impairment loss allowance equal to lifetime ECL is recognised.

Purchased or originated credit-impaired financial assets
These are financial assets that were credit-impaired at initial recognition. They are not subject to any initial impairment loss allowance but an impairment loss allowance is subsequently recognised for the cumulative changes in lifetime ECL since initial recognition. A POCI financial asset remains classified as such until it is derecognised, even if assessed as no longer credit-impaired at a subsequent reporting date.

With the exception of POCI financial assets, a financial instrument may migrate between stages from one reporting date to the next.

Significant increase in credit risk
In determining if a financial instrument has experienced a significant increase in credit risk since initial recognition, the Group assesses whether the risk of default over the remaining expected life of the financial instrument is significantly higher than had been anticipated at initial recognition, taking into account changes in prepayment expectations where relevant. The Group uses reasonable and supportable information available without undue cost or effort at the reporting date, including forward-looking information. A combination of quantitative, qualitative and backstop indicators are generally applied in making the determination. For certain portfolios, the Group assumes that no significant increase in credit risk has occurred if credit risk is 'low' at the reporting date.

Credit-impaired
A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:
(a) significant financial difficulty of the issuer or the borrower;
(b) a breach of contract, such as a default or past due event;
(c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
(d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation;
(e) the disappearance of an active market for that financial asset because of financial difficulties; or
(f) the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

It may not be possible to identify a single discrete event - instead, the combined effect of several events may have caused financial assets to become credit-impaired.

Measurement of expected credit losses and presentation of impairment loss allowances
ECL are measured in a way that reflects:
(a) an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
(b) the time value of money; and
(c) reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

ECL are measured as follows:
- Financial assets that are not credit-impaired at the reporting date: the present value of the difference between all contractual cash flows due to the Group in accordance with the contract and all the cash flows the Group expects to receive.

1 Group accounting policies *(continued)*

- Financial assets that are credit-impaired at the reporting date: the difference between the gross carrying amount and the present value of estimated future cash flows.
- Undrawn loan commitments: the present value difference between the contractual cash flows that are due to the Group if the commitment is drawn and the cash flows that the Group expects to receive.
- Financial guarantee contracts: the expected payments to reimburse the holder less any amounts that the Group expects to recover, discounted at an appropriate risk-free rate.

Expected cash flows arising from the sale on default of a loan are included in the measurement of ECL under IFRS 9 where the following conditions are met:
- selling the loan is one of the recovery methods that the Group expects to pursue in a default scenario;
- the Group is neither legally nor practically prevented from realising the loan using that recovery method; and
- the Group has reasonable and supportable information upon which to base its expectations and assumptions.

For financial assets, the discount rate used in measuring ECL is the effective interest rate (or 'credit-adjusted effective interest rate' for a POCI financial asset) or an approximation thereof. For undrawn loan commitments, it is the effective interest rate, or an approximation thereof, that will be applied when recognising the financial asset resulting from the loan commitment.

Impairment loss allowances for ECL are presented in the financial statements as follows:
- **Financial assets at amortised cost:** as a deduction from the gross carrying amount in the balance sheet.
- **Loan commitments and financial guarantee contracts:** generally, as a provision in the balance sheet.
- **Debt instruments at fair value through other comprehensive income:** an amount equal to the allowance is recognised in OCI as an accumulated impairment amount.

Utilisation of impairment loss allowances
The Group reduces the gross carrying amount of a financial asset and the associated impairment loss allowance when it has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. Indicators that there is no reasonable expectation of recovery include the collection process having been exhausted or it becoming clear during the collection process that recovery will fall short of the amount due to the Group. The Group considers, on a case-by-case basis, whether enforcement action in respect of an amount that has been written off from an accounting perspective is or remains appropriate. Any subsequent recoveries are included in the income statement as an impairment gain.

Forbearance
Forbearance occurs when a borrower is granted a concession or agreed change to a loan ('forbearance measure') for reasons relating to the actual or apparent financial stress or distress of that borrower. Forbearance has not occurred if the concession or agreed change to a loan granted to a borrower is not related to the actual or apparent financial stress or distress of that borrower. Prior to any decision to grant forbearance, the Group performs an assessment of a customer's financial circumstances and ability to repay and assesses whether the loan is credit-impaired. Where the loan is credit-impaired, it is allocated to Stage 3 (unless a POCI financial asset). If a forborne loan has a variable interest rate, the discount rate for measuring ECL is the current effective interest rate determined under the contract before the modification of terms.

Financial assets to which forbearance has been applied continue to be reported as forborne until such time as they satisfy conditions to exit forbearance in line with EBA guidance on non-performing and forborne classifications. Forborne financial assets which are not credit-impaired are generally allocated to Stage 2.

Where the cash flows from a forborne loan are considered to have expired, the original financial asset is derecognised and a new financial asset is recognised, initially measured at fair value. Any differences between the carrying value of the original financial asset and the fair value of the new financial asset on initial recognition are recognised in the income statement. The new financial asset may be initially allocated to Stage 1 or, if credit-impaired, be categorised as a POCI financial asset.

Where a forbearance measure represents a modification of the contractual cash flows of a financial asset and does not result in its derecognition, the Group recalculates the gross carrying amount of the financial asset as the present value of the modified contractual cash flows that are discounted at the financial asset's original effective interest rate (before any modification of terms) and a modification gain or loss is included in the income statement within net impairment gains or losses.

Financial liabilities

The Group classifies its financial liabilities as being measured at amortised cost unless it has designated liabilities at FVTPL or is required to measure liabilities mandatorily at FVTPL, such as derivative liabilities. Financial liabilities are initially recognised at fair value, (normally the issue proceeds i.e. the fair value of consideration received) less, in the case of financial liabilities subsequently carried at amortised cost, transaction costs. For financial liabilities carried at amortised cost, any difference between the proceeds, net of transaction costs, and the redemption value is recognised in the income statement using the effective interest method.

When a financial liability that is measured at amortised cost is modified without resulting in derecognition, a gain or loss is recognised in profit or loss. The gain or loss is calculated as the difference between the original contractual cash flows and the modified contractual cash flows discounted at the original effective interest rate.

Preference shares which carry a mandatory coupon are classified as financial liabilities. The dividends on these preference shares are recognised in the income statement as interest expense using the effective interest method.

A financial liability may be designated as at FVTPL only when:
(i) it eliminates or significantly reduces a measurement or recognition inconsistency (an 'accounting mismatch') that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases; or
(ii) a group of financial assets, financial liabilities or both is managed and its performance is evaluated on a fair value basis in accordance with documented risk management or investment strategy; or

1 Group accounting policies *(continued)*

(iii) a contract contains one or more embedded derivatives that significantly changes the cash flows of the contract and the separation of the embedded derivative(s) is not prohibited.

The Group designates certain financial liabilities at FVTPL as set out in note 21 to the financial statements.

The movement in own credit risk related to financial liabilities designated at FVTPL is recorded in OCI unless this would create or enlarge an accounting mismatch in profit or loss for the Group (in which case all gains or losses are recognised in profit or loss).

Financial liabilities are derecognised when they are extinguished, that is when the obligation is discharged, cancelled or expires.

Embedded derivatives

An embedded derivative is a component of a hybrid contract that also includes a non-derivative host, with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative.

If a hybrid contract contains a host that is not a financial asset within the scope of IFRS 9, an embedded derivative is separated from the host and accounted for as a derivative if, and only if, its economic characteristics and risks are not closely related to those of the host, a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative, and the hybrid contract is not measured at FVTPL.

Financial guarantees

Financial guarantees are contracts that require the issuer to make specified payments to reimburse the holder for a loss that it incurs because a specified debtor fails to make payment when it is due in accordance with the original or modified terms of a debt instrument.

Financial guarantees held by the Group

A financial guarantee contract requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due. Where the Group is the holder of such a guarantee and it is considered integral to the contractual terms of the guaranteed debt instrument(s), the guarantee is not accounted for separately but is considered in the determination of the impairment loss allowance for ECL of the guaranteed instrument(s).

Financial guarantees issued by the Group

The Group issues financial guarantees to banks, financial institutions and other bodies on behalf of customers to secure loans, overdrafts and other banking facilities and in connection with the performance of customers under payment obligations related to contracts and the payment of import duties. The Group's liability under an issued financial guarantee contract is initially measured at fair value. The liability is subsequently measured at the higher of the amount of the impairment loss allowance for ECL determined in accordance with the requirements of IFRS 9, and the initial measurement less the cumulative amount of income recognised in accordance with the principles of IFRS 15.

Any change in the liability is taken to the income statement and recognised on the balance sheet within provisions. Where the Group issues a financial liability which contains a financial guarantee, the liability is measured at amortised cost using the effective interest method.

Offsetting

Financial assets and liabilities are offset and the net amount reported in the balance sheet when there is currently a legally enforceable right of set off and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously. No impairment loss allowance for ECL is recognised on a financial asset, or portion thereof, which has been offset.

Valuation of financial instruments

The Group recognises trading securities, other financial assets and liabilities designated at FVTPL, derivatives and financial assets at FVOCI at fair value in the balance sheet. Fair value is 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 in the principal, or in its absence, the most advantageous market to which the Group has access at that date.

The fair values of financial assets and liabilities traded in active markets are based on unadjusted bid and offer prices respectively. If an active market does not exist, the Group establishes fair value using valuation techniques. These include the use of recent arm's length transactions, DCF analysis, option pricing models and other valuation techniques commonly used by market participants. To the extent possible, these valuation techniques use observable market data. Where observable data does not exist, the Group uses estimates based on the best information available.

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price in an arm's length transaction, unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument (i.e. without modification or repackaging) or based on a valuation technique which uses only observable market inputs. When such evidence exists, the initial valuation of the instrument may result in the Group recognising a profit on initial recognition. In the absence of such evidence, the instrument is initially valued at the transaction price. Any day one profit is deferred and recognised in the income statement to the extent that it arises from a change in a factor that market participants would consider in setting a price. Straight line amortisation is used where it approximates to that amount. Subsequent changes in fair value are recognised immediately in the income statement without the reversal of deferred day one profits or losses.

Where a transaction price in an arm's length transaction is not available, the fair value of the instrument at initial recognition is measured using a valuation technique.

For liabilities designated at FVTPL, the fair values reflect changes in the Group's own credit spread.

Transfers between levels of the fair value hierarchy

The Group recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change occurred.

1 Group accounting policies *(continued)*

Group accounts

1. Subsidiaries

Subsidiary undertakings are investees controlled by the Group. The Group controls an investee when it has power over the investee, is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The Group reassesses whether it controls an investee when facts and circumstances indicate that there are changes to one or more elements of control. The existence and effect of potential voting rights are considered when assessing whether the Group controls an investee only if the rights are substantive.

A structured entity is an entity designed so that its activities are not governed by way of voting rights. The Group assesses whether it has control over such entities by considering factors such as: the purpose and design of the entity; the nature of its relationship with the entity; and the size of its exposure to the variability of returns from the entity.

Assets, liabilities and results of all Group undertakings have been included in the Group financial statements on the basis of financial statements made up to the end of the financial year.

Business combinations

Except for where predecessor accounting applies, subsidiaries are consolidated from the date on which control is transferred to the Group and are no longer consolidated from the date that control ceases. The Group uses the acquisition method of accounting to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Group recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets. The excess of the sum of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition date fair value of any previous equity interest in the acquiree, over the fair value of the Group's share of the identifiable net assets acquired, is recorded as goodwill.

Intercompany transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of impairment of the asset transferred. In addition, FX gains and losses which arise on the retranslation to functional currency of intercompany monetary assets and liabilities are not eliminated.

Accounting policies of subsidiaries have been changed, where necessary, to ensure consistency with the policies adopted by the Group.

2. Associates and Joint Ventures

Associates are all entities over which the Group has significant influence, but not control, over the entity's financial and operating decisions, generally accompanying a shareholding of between 20% and 50% of the voting rights.

A joint arrangement is an arrangement of which two or more parties have joint control. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Those parties are called joint venturers.

Investments in associates and joint ventures are accounted for by the equity method of accounting and are initially recognised at cost.

The Group utilises the venture capital exemption for investments where significant influence is present and the business operates as a venture capital business. These investments are designated at initial recognition at FVTPL.

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Those parties are called joint operators.

The Group accounts for the assets, liabilities, revenues and expenses relating to its interest in joint operations in accordance with the IFRSs applicable to the particular assets, liabilities, revenues and expenses.

Accounting policies of associates and joint ventures have been changed, where necessary, to ensure consistency with the policies adopted by the Group.

3. Non-controlling interests

Transactions with non-controlling interests where the Group has control over the entity are accounted for using the Economic entity model. This accounting model requires that any surplus or deficit that arises on any transaction(s) with non-controlling interests to dispose of or to acquire additional interests in the entity that does not result in loss of control is recognised in equity.

4. Securitisations

Certain Group undertakings have entered into securitisation transactions in order to finance specific loans and advances to customers.

All financial assets continue to be held on the Group balance sheet, and a liability recognised for the proceeds of the funding transaction, unless:

- the rights to the cash flows have expired or been transferred;
- substantially all the risks and rewards associated with the financial instruments have been transferred outside the Group, in which case the assets are derecognised in full; or
- a significant portion, but not all, of the risks and rewards have been transferred outside the Group. In this case the asset is derecognised entirely if the transferee has the ability to sell the financial asset. Otherwise the asset continues to be recognised only to the extent of the Group's continuing involvement.

1 Group accounting policies *(continued)*

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

Foreign currency translation

Items included in the financial statements of each entity of the Group are measured using the currency of the primary economic environment in which the entity operates (the 'functional currency'). The consolidated financial statements of the Group and the financial statements of the Company are presented in euro.

Foreign currency transactions are translated into functional currency at the exchange rates prevailing at the dates of the transactions. FX gains and losses resulting from the settlement of such transactions and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement. Translation differences on non-monetary items, such as equities held at FVTPL, are reported as part of the fair value gain or loss. Translation differences on non- monetary items such as equities classified at FVOCI are recognised in OCI. Exchange differences arising on translation to presentation currency and on consolidation of overseas net investments, are recognised in OCI.

Assets, liabilities and equity of all the Group entities that have a functional currency different from the presentation currency ('foreign operations') are translated at the closing rate at the reporting date and items of income and expense are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions). All resulting exchange differences are recognised in OCI and accumulated in a separate component of equity. On disposal of a foreign operation the amount accumulated in the separate component of equity is reclassified from equity to profit or loss. The Group may dispose of its interest in a foreign operation through sale, liquidation, repayment of share capital, abandonment or through loss of control or significant influence.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

Operating profit / loss

Operating profit / loss includes the Group's earnings from ongoing activities after net impairment gains / (losses) on financial instruments, and before share of profit or loss on associates and joint ventures (after tax), profit / loss on disposal of property and profit / loss on disposal / liquidation of business activities.

Leases

Identifying a lease
Under IFRS 16, a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

A Group company is the lessee
From 1 January 2019, the Group recognises a RoU asset and lease liability at the lease commencement date. RoU assets are initially measured at cost, and subsequently measured at cost less any accumulated depreciation and impairment losses, and adjusted for certain remeasurement of lease liabilities. The recognised RoU assets are depreciated on a straight-line basis over the shorter of their estimated useful lives and the lease term. RoU assets are subject to impairment under IAS 36 'Impairment of Assets'.

The Group has elected not to recognise right-of-use assets and lease liabilities for leases of low-value assets and short-term leases. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

RoU assets, comprised of leases of buildings which do not meet the definition of investment properties, and computer equipment, are presented in property, plant and equipment. RoU assets which meet the definition of investment properties are presented within investment properties.

Lease liabilities are initially measured at the present value of lease payments that are not paid at the commencement date, discounted using the IBR if the interest rate implicit in the lease is not readily determinable. Lease payments include fixed rental payments. Generally, the Group uses its IBR as the discount rate. The lease liability is subsequently increased by the interest cost on the lease liability and decreased by lease payments made. It is remeasured if there is a change in future lease payments, a change in the lease term, or as appropriate, a change in the assessment of whether an extension option is reasonably certain to be exercised or a termination option is reasonable certain not to be exercised.

When the lease liability is remeasured a corresponding adjustment is made to the RoU asset and / or profit or loss, as appropriate.

The Group has applied judgement in determining the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised. The assessment of whether the Group is reasonably certain to exercise such options impacts the lease term, which significantly affects the amount of lease liabilities and RoU assets recognised.

The Group has a number of leases which contain break options and applies judgement in evaluating whether it is reasonably certain not to exercise the option. That is, on commencement of a lease the Group considers all relevant factors that create an incentive for it to exercise the option. After the commencement date, the Group reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise (or not to exercise) the option.

Under IFRS 16, where the Group is an intermediate lessor the subleases are classified with reference to the RoU asset arising from the head lease, not with reference to the underlying asset. Where the Group continues to retain the risks and rewards of ownership as the intermediate lessor, it retains the lease liability and the RoU asset relating to the head lease in its balance sheet. If the Group does not retain the risks and rewards of ownership as the intermediate lessor, these subleases are deemed finance leases. During the term of the sublease, the group recognises both finance lease income on the sublease and interest expense on the head lease.

1 Group accounting policies *(continued)*

Until 31 December 2018, the Group applied the following accounting policy in respect of leases in accordance with IAS 17.

1. A Group company is the lessee
   The total payments made under operating leases are charged to the income statement on a straight line basis over the period of the lease.

   When an operating lease is terminated before the lease period has expired, any payment required to be made to the lessor by way of penalty is recognised as an expense in the period in which termination takes place.

   Leases of property, plant and equipment where the Group has substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the lease's inception at the lower of the fair value of the leased property and the present value of the minimum lease payments.

   The corresponding rental obligations, net of finance charges, are included in long-term payables. The interest element of the finance costs is charged to the income statement over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

2. A Group company was the lessor
   When assets are held under a finance lease, the present value of the lease payments is recognised as a receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income. Lease income is included within net interest income and is recognised over the term of the lease reflecting a constant periodic rate of return on the net investment in the lease.

Sale and repurchase agreements and lending of assets

Assets sold subject to repurchase agreements ('repos') are retained on the balance sheet and reclassified as pledged assets when the transferee has the right by contract or custom to sell or repledge the collateral; the counterparty liability is included in deposits by banks or customer accounts, as appropriate.

Securities purchased under agreements to resell ('reverse repos') are treated as collateralised loans and recorded as loans and advances to banks or customers, as appropriate.

The difference between sale and repurchase price is treated as interest and recognised in the income statement over the life of the agreement using the effective interest method.

Securities lent to counterparties are also retained on the balance sheet. Securities borrowed are not recognised in the financial statements, unless these are sold to third parties, in which case the purchase and sale are recorded with the gain or loss included in trading income. The obligation to return the securities is recorded at fair value as a trading liability.

Issued debt and equity securities

The classification of instruments as a financial liability or an equity instrument is dependent upon the substance of the contractual arrangement. Instruments which carry a contractual obligation to deliver cash or another financial asset to another entity are classified as financial liabilities. The coupons on these instruments are recognised in the income statement as interest expense using the effective interest method. Where the Group has absolute discretion in relation to the payment of coupons and repayment of principal, the instrument is classified as equity and any coupon payments are classified as distributions in the period in which they are made.

If the Group purchases its own debt, it is removed from the balance sheet and the difference between the carrying amount of the liability and the consideration paid is included in other operating income, net of any costs or fees incurred.

Derivative financial instruments and hedge accounting

The Group has made the accounting policy choice allowed under IFRS 9 to continue to apply the hedge accounting requirements of IAS 39.

Derivatives are initially recognised at fair value on the date on which the contract is entered into and are subsequently remeasured at their fair value at each reporting date. All derivatives are carried as assets when their fair value is positive and as liabilities when their fair value is negative.

Certain derivatives embedded in other financial instruments that are not financial assets are separated from the host contract and accounted for as derivatives, when their economic characteristics and risks are not closely related to those of the host contract and the entire host contract is not carried at FVTPL.

Fair value gains or losses on derivatives are normally recognised in the income statement. However where they are designated as hedging instruments, the treatment of the fair value gains and losses depends on the nature of the hedging relationship.
The Group designates certain derivatives as either:
(i) hedges of the exposure to changes in the fair value of recognised assets or liabilities that is attributable to a particular risk (fair value hedge); or
(ii) hedges of highly probable future cash flows attributable to a recognised asset or liability, or a forecast transaction (cash flow hedge).

Hedge accounting is applied to these derivatives provided certain criteria are met. The Group documents, at the inception of the transaction, the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items. Hedge relationships are concluded to be effective if the hedging instruments that are used in hedging transactions offset the changes in fair value or cash flow of the hedged items within a range of 80% to 125%.

1 Group accounting policies *(continued)*

Where a hedging instrument is novated to a clearing counterparty, the Group does not discontinue hedge accounting where the following criteria are met:
- the novation arises due to laws or regulations, or the introduction of laws and regulations;
- the parties to the hedging instrument agree that one or more clearing counterparties replace their original counterparty to become the new counterparty to each of the parties; and
- the novation does not result in changes to the terms of the original instrument except for those changes necessary to effect the change in counterparty.

(a) Fair value hedge

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

The hedged item in a micro fair value hedge is a single specified item e.g. a fixed rate commercial loan or a FVOCI bond. If the criteria for hedge accounting cease to be met, no further adjustments are made to the hedged item for fair value changes attributable to the hedged risk. The cumulative adjustment to the carrying amount of a hedged item is amortised to profit or loss over the period to maturity using the effective interest method.

The hedged item in a macro fair value hedge is a pool of assets or liabilities with similar risk characteristics and profiles, such as a pool of fixed rate mortgages. Unlike micro fair value hedge accounting, macro fair value hedge accounting is not discontinued if an individual asset or liability within the pool of hedged items is sold, so long as the overall pool of hedged items retains its characteristics as documented at inception of the hedge. In addition, hedge effectiveness testing is performed on a portfolio basis rather than on an individual hedge relationship by hedge relationship basis.

The Group also avails of the relaxed hedge accounting provisions permitted by IAS 39 'Financial Instruments: recognition and measurement' as adopted by the EU. Under these provisions the Group applies portfolio fair value hedge accounting of interest rate risk to its demand deposit book. The Group resets portfolio fair value hedges of its demand deposit book on a weekly basis and other macro fair value hedges are reset on a monthly basis.

If the criteria for hedge accounting cease to be met, no further adjustments are made to the hedged item for fair value changes attributable to the hedged risk. The cumulative adjustment to the carrying amount of a hedged item is amortised to profit or loss over the period to maturity using the effective interest method.

(b) Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in OCI. The gain or loss relating to the ineffective portion is recognised immediately in the income statement.

Amounts accumulated in OCI are reclassified to the income statement in the periods in which the hedged item affects profit or loss.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in OCI at that time remains in OCI and is recognised in the income statement when the forecast transaction occurs. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in OCI is immediately reclassified to the income statement.

Property, plant and equipment

Freehold land and buildings are initially recognised at cost, and subsequently are revalued annually to fair value by independent external valuers. Revaluations are made with sufficient regularity to ensure that the carrying amount does not differ materially from the open market value at the reporting date.

RoU assets recognised as property, plant and equipment are measured at cost less any accumulated depreciation and impairment losses, and adjusted for certain remeasurement of lease liabilities.

All other property, plant and equipment, including freehold and leasehold adaptations, are stated at historical cost less accumulated depreciation.

Increases in the carrying amount arising on the revaluation of land and buildings, are recognised in OCI. Decreases that offset previous increases on the same asset are recognised in OCI: all other decreases are charged to the income statement.

The Directors consider that residual values of freehold and long leasehold property based on prices prevailing at the time of acquisition or subsequent valuation are such that depreciation is not material.

Depreciation is calculated on the straight line method to write down the carrying value of other items of property, plant and equipment to their residual values over their estimated useful lives as follows:
- adaptation works on freehold and leasehold property - 15 years, or the remaining period of the lease; and
- computer and other equipment - maximum of ten years.
- the recognised RoU assets are depreciated on a straight-line basis over the earlier of the end of the useful life of the RoU asset or the end of the lease term.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each reporting date. Property, plant and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An asset's carrying amount is written down immediately to its recoverable amount if its carrying amount is greater than its estimated recoverable amount. The estimated recoverable amount is the higher of the asset's fair value less costs to sell or its value in use (VIU).

Gains and losses on the disposal of property, plant and equipment are determined by reference to their carrying amount and are taken into account in determining profit before tax. If the asset being disposed of had previously been revalued then any amount in OCI relating to that asset is reclassified directly to retained earnings on disposal rather than the income statement.

1 Group accounting policies *(continued)*

Investment property

Property held for long-term rental yields and capital appreciation is classified as investment property except where the property is used by the Group for administrative purposes or the supply of services, in which case it is classified as owner occupied property Investment property comprises freehold and long leasehold land and buildings. It is carried at fair value in the balance sheet based on annual revaluations at open market value as determined by external qualified property surveyors and is not depreciated. Changes in fair values are recorded in the income statement. Rental income from investment properties is recognised as it becomes receivable over the term of the lease.

Intangible assets

(a) Computer software

Acquired computer software licences are capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised on the basis of the expected useful lives, which is normally five years.

Costs associated with research activities or maintaining computer software programmes are recognised as an expense as incurred. Costs that are directly associated with the production of identifiable and unique software products controlled by the Group and which will probably generate economic benefits exceeding costs beyond one year, are recognised as intangible assets. Direct costs include software development, employee costs and an appropriate portion of relevant overheads. Computer software development costs recognised as assets are amortised using the straight line method over their useful lives, which is normally between five and ten years.

(b) Other intangible assets

Other intangible assets are carried at cost less amortisation and impairment, if any, and are amortised on a straight line basis over their useful lives, which range from five years to twenty years.

Computer software and other intangible assets are assessed for impairment indicators annually or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If such indicators exist, the asset's recoverable amount is estimated. An asset's carrying amount is written down immediately to its recoverable amount if its carrying amount is greater than its estimated recoverable amount. The estimated recoverable amount is the higher of the asset's fair value less costs to sell and its VIU.

(c) Goodwill

Goodwill represents the excess of consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition date fair value of any previous equity interest in the acquiree, over the fair value of the Group's share of identifiable net assets acquired. Goodwill on acquisition of subsidiaries is included in intangible assets.

Goodwill is tested annually for impairment or more frequently if there is any indication that it may be impaired, and carried at cost less accumulated impairment losses. Goodwill is allocated to cash generating units (CGU) for the purpose of impairment testing. An impairment loss arises if the carrying value of the CGU exceeds the recoverable amount. The recoverable amount of a CGU is the higher of its fair value less costs to sell and its VIU, where the VIU is the present value of the future cash flows expected to be derived from the CGU.

Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

Provision is made for the anticipated costs of restructuring, including related redundancy costs, when an obligation exists. An obligation exists when the Group has a detailed formal plan for restructuring a business and has raised valid expectations in those affected by the restructuring by starting to implement the plan or announcing its main features. A levy payable to a Government is provided for on the occurrence of the event identified by the legislation that triggers the obligation to pay the levy.

Contingent liabilities are not recognised but are disclosed unless the probability of their occurrence is remote.

Employee benefits

(a) Pension obligations

The Group operates both defined contribution and defined benefit plans. A defined benefit plan is a pension plan that defines an amount of pension benefit to be provided, usually as a function of one or more factors such as age, years of service or compensation. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees' benefits relating to employee service in the current and prior periods.

The asset or liability recognised in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the reporting date minus the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates on high quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension liability.

Where a plan amendment, curtailment or settlement occurs and the net defined benefit liability is remeasured to determine past service cost or the gain or loss on settlement, the current service cost and net interest for the remainder of the period are remeasured using the same assumptions.

Service cost and net interest on the net defined benefit liability / (asset) are recognised in profit or loss, within operating expenses.

1 Group accounting policies *(continued)*

Remeasurements of the net defined benefit liability / (asset) that are recognised in OCI include:
- actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions; and
- the return on plan assets, excluding amounts included in net interest on the net defined benefit liability / (asset).

A settlement is a transaction that eliminates all further legal and constructive obligations for part or all of the benefits provided under a defined benefit plan, other than a payment of benefits to, or on behalf of, employees that is set out in the terms of the plan and included in the actuarial assumptions.

For defined contribution plans, contributions are recognised as employee benefit expense when they are due.

(b) Short-term employee benefits
Short-term employee benefits, such as salaries and other benefits, are accounted for on an accruals basis over the period in which the employees' service is rendered.

(c) Termination payments
Termination payments are recognised as an expense at the earlier of:
- when the Group can no longer withdraw the offer of those benefits; and
- when the Group recognises costs for a restructuring that is within the scope of IAS 37 and involves the payment of termination benefits.

For this purpose, in relation to termination benefits for voluntary redundancies, the Group is considered to be no longer able to withdraw the offer on the earlier of the following dates:
- when the employee accepts the offer; and
- when a restriction (e.g. a legal, regulatory or contractual requirement) on the Group's ability to withdraw the offer takes effect.

Income taxes

(a) Current income tax
Income tax payable on profits, based on the applicable tax law in each jurisdiction, is recognised as an expense in the period in which profits arise.

Tax provisions are provided on a transaction by transaction basis using either the 'most likely amount' method or the 'expected value' method as appropriate for the particular uncertainty and by management assessing the relative merits and risks of tax treatments assumed, taking into account statutory, judicial and regulatory guidance and, where appropriate, external advice.

A current tax provision is recognised when the Group has a present obligation as a result of a past event and it is probable that there will be a future outflow of funds to a fiscal authority to settle the obligation.

(b) Deferred income tax
Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred income tax is determined using tax rates (and tax laws) that have been enacted or substantively enacted by the reporting date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

The tax effects of income tax losses available for carry forward are recognised as DTAs to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised and by reference to the expiry dates (if any) of the relevant unused tax losses or tax credits. DTAs and deferred tax liabilities are not discounted.

Deferred income tax is provided on temporary differences arising from investments in subsidiaries, associates and joint ventures, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the difference will not reverse in the foreseeable future.

Deferred tax on items taken to OCI is also recognised in OCI and is subsequently reclassified to the income statement together with the deferred gain or loss. Income tax on items recognised directly in equity is recognised directly in equity, except for the income tax consequences of dividends on a financial instrument classified as equity, which are recognised according to where the previous transactions or events that generated distributable profits were recognised.

(c) Uncertain tax positions
IFRIC 23, which applies to all aspects of income tax accounting, clarifies how the recognition and measurement requirements of IAS 12 'Income Taxes' are applied where there is uncertainty over income tax positions.

The Group considers uncertain tax positions together or separately depending on which approach better predicts how the uncertainties will be resolved. Where the Group concludes it is not probable that a tax authority will accept its assessment of an uncertain tax position, it reflects the effect of the uncertainty using either the 'most likely amount' method or the 'expected value' method, as appropriate for the particular uncertainty.

Capital stock and reserves

1 Equity transaction costs
Incremental external costs directly attributable to equity transactions, including the issue of new equity stock or options, are shown as a deduction from the component of equity in which the equity transaction is recognised, net of tax.

2 Dividends on ordinary stock and preference stock
Dividends on ordinary stock and preference stock are recognised in equity in the period in which they are approved by the Bank's stockholders or the Court of Directors, as appropriate.

1 Group accounting policies *(continued)*

3 Treasury stock
Where the Bank or its subsidiaries purchase the Bank's equity capital stock, the consideration paid is deducted from total stockholders' equity as treasury stock until they are cancelled. Where such stock is subsequently sold or reissued, any consideration received is included in stockholders' equity. Any changes in the value of treasury stock held are recognised in equity at the time of the disposal and dividends are not recognised as income or distributions.

4 Capital reserve
The capital reserve represents transfers from capital stock, retained earnings and other reserves in accordance with relevant legislation. The capital reserve is not distributable.

5 Foreign exchange reserve
The FX reserve represents the cumulative gains and losses on the translation of the Group's net investment in its foreign operations since 1 April 2004. Gains and losses accumulated in this reserve are reclassified to the income statement when the Group loses control, joint control or significant influence over the foreign operation or on disposal or partial disposal of the operation.

6 Revaluation reserve
The revaluation reserve represents the cumulative gains and losses on the revaluation of property occupied by Group businesses, included within property, plant and equipment and non-financial assets classified as held for sale. The revaluation reserve is not distributable.

7 Cash flow hedge reserve
The cash flow hedge reserve represents the cumulative changes in fair value, excluding any ineffectiveness, of cash flow hedging derivatives. These are transferred to the income statement when the hedged transactions impact the Group's profit or loss.

8 Stock premium account
Where the Bank issues shares at a premium a sum equal to the aggregate amount of value of the premium on those shares is transferred to the share premium account. Where, pursuant to Section 84 of the Companies Act 2014, there has been a reduction of the Bank's capital stock by the cancellation of stock premium, the resulting profits available for distribution, as defined by Section 117 of the Companies Act 2014, are reclassified from the stock premium account to retained earnings.

9 Debt instruments at fair value through other comprehensive income reserve
The debt instruments at FVOCI reserve comprises the cumulative net change in the fair value of debt securities measured at FVOCI together with the impact of fair value hedge accounting, less the ECL allowance recognised in profit or loss.

10 Liability credit reserve
The liability credit reserve represents the cumulative changes in the fair value of financial liabilities designated as at FVTPL that are attributable to changes in the credit risk of those liabilities, other than those recognised in profit or loss.

Life assurance operations

In accordance with IFRS 4, the Group classifies all life assurance products as either insurance or investment contracts for accounting purposes.

Insurance contracts are those contracts that transfer significant insurance risk. These contracts are accounted for using an embedded value basis.
Investment contracts are accounted for in accordance with IFRS 9. All of the Group's investment contracts are unit linked in nature. These contracts are accounted for as financial liabilities whose value is contractually linked to the fair value of the financial assets within the policyholders' unit linked funds. The value of the unit linked financial liabilities is determined using current unit prices multiplied by the number of units attributed to the contract holders at the reporting date. Their value is never less than the amount payable on surrender, discounted for the required notice period where applicable.

The Group recognises an asset for deferred acquisition costs relating to investment contracts. Upfront fees received for investment management services are deferred. These amounts are amortised over the period of the contract.

Non-unit linked insurance liabilities are calculated using a gross premium method of valuation. The computation is made on the basis of recognised actuarial methods annually by an actuary, with due regard to the applicable actuarial principles recognised in the European framework for the prudential and financial monitoring of direct life assurance business.

The Group recognises the ViF life assurance business asset as the present value of future profits expected to arise from contracts classified as insurance contracts under IFRS 4. This represents the present value of expected future cash flows, using appropriate assumptions in assessing factors such as future mortality, lapse rates and levels of expenses, and discounting using the risk free interest rate curve. Thus, the use of best estimate assumptions in the valuation of the ViF asset ensures that the net carrying amount of insurance liabilities less the ViF asset is adequate.

The ViF asset in the consolidated balance sheet and movements in the asset in the income statement are presented on a gross of tax basis. The tax charge comprises both current and deferred tax expense and includes tax attributable to both shareholders and policyholders for the period.

Premiums and claims
Premiums receivable in respect of non-unit linked insurance contracts are recognised as revenue when due from policyholders.

Premiums received in respect of unit linked insurance contracts are recognised in the same period in which the related policyholder liabilities are created. Claims are recorded as an expense when they are incurred.

Reinsurance
Contracts entered into by the Group with reinsurers under which the Group is compensated for losses on one or more contracts issued by the Group are dealt with as insurance contracts,

1 Group accounting policies *(continued)*

subject to meeting the significant insurance risk test in IFRS 4. The impairment requirements of IFRS 4 are applied to these assets. Outward reinsurance premiums are accounted for in accordance with the contract terms when due for payment.

Collateral

The Group enters into master agreements with counterparties, to ensure that if an event of default occurs, all amounts outstanding with those counterparties will be settled on a net basis. The Group obtains collateral in respect of customer liabilities where this is considered appropriate. The collateral normally takes the form of a lien over the customers' assets and gives the Group a claim on these assets for both existing and future liabilities. The collateral is, in general, not recorded on the Group balance sheet.

The Group also receives collateral in the form of cash or securities in respect of other credit instruments, such as stock borrowing contracts and derivative contracts, in order to reduce credit risk. Collateral received in the form of securities is not recorded on the balance sheet. Collateral received in the form of cash is recorded on the balance sheet, with a corresponding liability recognised within deposits from banks or deposits from customers. Any interest payable arising is recorded as interest expense.

In certain circumstances, the Group pledges collateral in respect of liabilities or borrowings. Collateral pledged in the form of securities or loans and advances continues to be recorded on the balance sheet. Collateral placed in the form of cash is recorded in loans and advances to banks or customers. Any interest receivable arising is recorded as interest income.

Operating segments

The Group's reportable operating segments have been identified on the basis that the chief operating decision maker uses information based on these segments to make decisions about assessing performance and allocating resources. The analysis of results by operating segment is based on management accounts information.

Accounting Policies relevant to the Bank only

Common control transactions

A business combination involving entities or businesses under common control is excluded from the scope of IFRS 3: Business Combinations. The exemption is applicable where the combining entities or businesses are controlled by the same party both before and after the combination. Where such transactions occur, the Bank, in accordance with IAS 8, uses its judgement in developing and applying an accounting policy that is relevant and reliable. Where the transactions meet the definition of a group reconstruction or achieve a similar result, predecessor accounting is applied. The assets and liabilities of the business transferred are measured in the acquiring entity upon initial recognition at their existing book value in the Group, as measured under IFRS. The Bank incorporates the results of the acquired businesses only from the date on which the business combination occurs.

Shares in Group undertakings

The Bank's shares in Group undertakings are stated at cost less any impairment. The Bank reviews its shares in Group undertakings for impairment at each reporting date. Impairment testing involves the comparison of the carrying value of the investment with its recoverable amount. The recoverable amount is the higher of the investment's fair value and its VIU. VIU is the present value of expected future cash flows from the investment. Fair value is 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. Impairment testing inherently involves a number of judgemental areas: the preparation of cash flow forecasts for periods that are beyond the normal requirements of management reporting; the assessment of the discount rate appropriate to the business; estimation of the fair value of the investment; and the valuation of the separable assets comprising the overall investment in the Group undertaking. The use of reasonably possible alternative assumptions would not materially impact the carrying value of the Bank's shares in Group undertakings. See note 29 for further information.

Impact of new accounting standards

The following standard will be relevant to the Group but was not effective at 31 December 2019 and has not been applied in preparing these financial statements. There are no other standards that are not yet effective and that would be expected to have a material impact on the Group in future reporting periods. The Group's current view of the impact of this standard is outlined as follows:

Pronouncement
IFRS 17 'Insurance Contracts'

Nature of change
IFRS 17 replaces IFRS 4 'Insurance Contracts', which was introduced as an interim standard in 2004. IFRS 17 addresses the comparison problems created by IFRS 4 by requiring all insurance contracts to be accounted for in a consistent manner. IFRS 17 establishes the principles for the recognition, measurement, presentation and disclosures of insurance contract liabilities, ensuring an entity provides relevant information that faithfully represents those contracts.

The standard is still subject to EU endorsement.

Effective date
Currently the effective date is for financial periods beginning on or after 1 January 2021, however the IASB have proposed delaying the mandatory implementation date by 1 year to 2022. Earlier application of the standard is permissible.

Impact
The Group began a business and financial assessment of the impacts of IFRS 17 during 2018. The Group expects that IFRS 17 is likely to have a significant adverse impact on the recognition, measurement and presentation of the insurance business in the financial statements.

2 Critical accounting estimates and judgements

In preparing the financial statements, the Group makes estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Due to the inherent uncertainty involved in estimating the likelihood of future events, actual results could differ from those estimates, which could affect the future reported amounts of assets and liabilities. The estimates and judgements that have had the most significant effect on the amounts recognised in the Group's financial statements are set out below.

(a) Impairment loss allowance on financial assets

The measurement of impairment loss allowance requires significant judgement and estimation and is dependent in large part on complex impairment models.

In arriving at impairment loss allowances, accounting estimates which could change and have a material influence on the quantum of impairment loss allowance and net impairment charge within the next financial year include:
- generation of forward looking macroeconomic scenarios and their probability weightings which are used in both the assessment of 'significant increase in credit risk' and in the measurement of impairment loss allowances; and
- valuing property collateral (including residential property prices).

Accounting judgements which could change and have a material influence on the quantum of impairment loss allowance and net impairment charge within the next financial year include determining if Group management adjustments may be necessary to impairment model outputs to address impairment model limitations or late breaking events.

In the next financial year the Group will, subject to regulatory approval, implement a new definition of default to comply with EBA guidelines that are effective from no later than 1 January 2021. The introduction of a new definition of default policy may result in a change in the Group's classification of Stage 3 assets and / or the amount of impairment loss allowances.

Other key accounting estimates which are not expected to change and materially influence the quantum of impairment loss allowance and net impairment charge within the next financial year, include:
- determining the period over which to measure ECL for uncommitted revolving credit facilities; and
- determining timeframes to realisation and likely net sale proceeds.

Other key accounting judgements which are not expected to change and materially influence the quantum of impairment loss allowance and net impairment charge within the next financial year include:
- the Group's criteria for assessing if there has been a significant increase in credit risk since initial recognition such that a loss allowance for lifetime rather than 12 month ECL is required;
- the selection of appropriate methodologies and model factors for internal risk rating and impairment models;
- the approximation made at transition to IFRS 9 of the residual lifetime Probability of Default (PD) expectations for most exposures originated prior to adoption of IFRS 9; and
- selection of the most relevant macroeconomic variables for particular portfolios and determining associations between those variables and model components such as PD and Loss Given Default (LGD).

The Group's approach to measurement of impairment loss allowances and associated methodologies, including the key macroeconomic variables applied at 31 December 2019, is set out in the credit risk methodologies section on pages 172 to 177.

The quantum of impairment loss allowance is impacted by the application of three probability weighted future macroeconomic scenarios. The following table indicates the approximate extent to which the impairment loss allowance at 31 December 2019, excluding Group management adjustments, was increased by virtue of applying multiple scenarios rather than only a central scenario.

2019 **Impact of applying multiple scenarios rather than only a central scenario**	**Additional impairment loss allowance**		**Additional impairment loss allowance on Stage 1 and 2 financial instruments**	
	Impact €m	**% Impact**	**Impact €m**	**% Impact**
Residential Mortgages	14	4%	8	18%
- Retail Ireland	*12*	*4%*	*6*	*26%*
- Retail UK	*2*	*4%*	*2*	*9%*
Non-property SME and Corporate	4	1%	4	3%
Property and construction	5	2%	5	11%
Consumer	1	1%	1	1%
Total	**24**	**2%**	**18**	**6%**

2 Critical accounting estimates and judgements *(continued)*

The following table indicates the approximate extent to which impairment loss allowance, excluding Group management adjustments, would be higher or lower than reported were a 100% weighting applied to the upside and downside future macroeconomic scenarios respectively:

2019 **Impact of applying only an upside or downside scenario rather than applying multiple probability-weighted scenarios**	**Impact of applying a 100% weighting to the upside scenario**		**Impact of applying a 100% weighting to the downside scenario**	
	€m	**%**	**€m**	**%**
Residential Mortgages	(103)	(27%)	169	45%
- Retail Ireland	*(88)*	*(27%)*	*126*	*40%*
- Retail UK	*(15)*	*(26%)*	*43*	*75%*
Non-property SME and Corporate	(44)	(9%)	56	11%
Property and construction	(25)	(11%)	46	20%
Consumer	(12)	(8%)	16	10%
Total	**(184)**	**(15%)**	**287**	**23%**

The following table indicates the approximate extent to which impairment loss allowances for the residential mortgage portfolios, excluding Group management adjustments, would be higher or lower than the application of a central scenario if there was an immediate change in residential property prices:

2019 **Impact of an immediate change in residential property prices compared to central scenario impairment loss allowances**	**Impairment loss allowance - Central Scenario €m**	**Residential property price reduction of 10%**		**Residential property price reduction of 5%**		**Residential property price increase of 5%**		**Residential property price increase of 10%**	
		Impact €m	**Impact %**	**Impact €m**	**Impact %**	**Impact €m**	**Impact %**	**Impact €m**	**Impact %**
Residential mortgages	362	76	21%	36	10%	(32)	(9%)	(60)	(17%)
- Retail Ireland	*307*	*55*	*18%*	*26*	*9%*	*(24)*	*(8%)*	*(45)*	*(15%)*
- Retail UK	*55*	*21*	*37%*	*10*	*17%*	*(8)*	*(15%)*	*(15)*	*(27%)*

The sensitivity of impairment loss allowances to stage allocation is such that a transfer of 1% of Stage 1 balances at 31 December 2019 to Stage 2 would increase the Group's impairment loss allowance by approximately €24 million.

At 31 December 2019, the impairment loss allowance for residential mortgages of €432 million includes a management adjustment of €56 million (2018: €92 million), €50 million (2018: €75 million) of which relates to Retail Ireland and €6 million (2018: €17 million) to Retail UK.

The management adjustment for the Retail Ireland mortgage portfolio primarily reflects the concentration of Stage 3 assets which are longer in default, where utilisation of alternative recovery strategies to achieve realisation may require higher impairment coverage on disposal that currently cannot be reasonably be reflected in IFRS 9 impairment model methodology. The €50 million (2018: €75 million) management adjustment reflects the size and profile of Stage 3 population at 31 December 2019 and has been calculated and applied through increases to the LGD component of modelled impairment loss allowances for Stage 3 residential mortgages that have been in default for more than five years.

A €6 million (2018: €17 million) management adjustment for the Retail UK mortgage portfolio has been applied across all stages in the Retail UK mortgage portfolio pending further evolution of IFRS 9 impairment model methodology.

The requirement for the application of a management adjustment is reviewed at each financial reporting date to assess if the situation requiring an adjustment in the previous reporting date pertains and whether additional conditions have been identified that may require the application of a new management adjustment. At each financial reporting date, the adequacy of the Group's quantum of impairment loss allowance (including, if required, any Group management adjustment) is reviewed and considered by the GAC.

(b) Taxation

The taxation charge accounts for amounts due to fiscal authorities in the various territories in which the Group operates and includes estimates, based on a judgement of the application of law and practice in certain cases, to determine the quantification of any liabilities arising. At 31 December 2019, the net DTA was €1,016 million (2018: €1,123 million), of which €1,089 million (2018: €1,162 million) related to trading losses. The closing DTA includes €1,032 million of Irish trading losses, €50 million of UK trading losses, and €7 million of US trading losses.

2 Critical accounting estimates and judgements *(continued)*

A significant judgement relates to the Group's assessment of the recoverability of the portion of the DTA relating to trading losses.

The recognition of a DTA relies on management's estimate of the probability and sufficiency of future taxable profits, and the future reversals of existing taxable temporary differences against which the losses can be utilised. Under current UK and Irish legislation, there is no time limit on the utilisation of these losses.

RoI deferred tax assets

Judgement
The Group's judgement takes into consideration the impact of both positive and negative evidence, including historical financial performance, projections of future taxable income, the impact of tax legislation and future reversals of existing taxable temporary differences. Irish tax legislation does not currently contain any restriction on the use of carried forward tax losses.

Based on the Group's projections, the DTA in respect of tax losses is estimated to be recovered in full by the end of 2037 (2018: 2030). The increase in the recovery period is due to more challenging economic headwinds, including a lower for longer interest rate environment which was not previously anticipated.

Based on the Group's proven earnings history, its strong position within the Irish financial services market and its strategic priorities to deliver sustained future Irish profits, the Group continues to recognise the Irish DTA in full.

UK deferred tax asset

UK legislation restricts the proportion of a bank's annual taxable profit that can be offset by carried forward losses to 25%. This restriction significantly lengthens the period over which the Group could use its UK trading losses and has been considered in the context of the measurement and recognition of the DTA at 31 December 2019.

UK Branch

Judgement
Notwithstanding the absence of any expiry date for trading losses in the UK, the Group continues to conclude that, for the purpose of valuing its DTA, its brought forward trading losses within the Bank's UK branch (the 'UK branch') will be limited by reference to a ten year period of projected UK branch profits at the prevailing UK tax rates. Any remaining unutilised UK branch carried forward trading losses have been recognised for DTA purposes at the Irish tax rate, on the basis that it is expected that these will be utilised against future Bank profits in Ireland as permitted by current tax legislation. This ten year timescale is the period over which the Group believes it can conclude that it is probable that future taxable profits will be available in the UK branch.

The carrying value of the DTA relating to trading losses of the UK Branch has reduced by €2 million in the year ended 31 December 2019 (2018: €nil).

Bank of Ireland (UK) plc

Judgement
The Directors believe that Bank of Ireland (UK) plc will continue to be profitable for the foreseeable future but acknowledge the external challenges facing the banking industry. In particular, during 2019 the economic environment has become more challenging with residual Brexit uncertainty, forecast continuation of a lower for longer interest rate environment and accelerated transformation of banking business models. The risk and implications of these issues have heightened significantly in 2019.

Therefore, notwithstanding the absence of any expiry date for trading losses in the UK, but acknowledging the economic headwinds that have worsened during 2019 and that profit forecasts become increasingly uncertain as the forecast period extends into the future, the Directors have determined that for the purpose of valuing its DTA, the brought forward trading losses of Bank of Ireland (UK) plc will be limited by reference to a ten year period of projected profits.

This ten year timescale is supported by forecast taxable profits and takes into account the Group's long-term financial and strategic plans and reflects the period over which the Group believes it can conclude that it is probable that future taxable profits will be available in Bank of Ireland (UK) plc.

As a consequence, the carrying value of the DTA relating to trading losses of Bank of Ireland (UK) plc has been reduced by €45 million in the year ended 31 December 2019 (31 December 2018: €nil).

There is a risk that the final taxation outcome could be different to the amounts currently recorded. If future profits or subsequent forecasts differ from current forecasts, a further adjustment may be required to the DTA.

Sources of estimation uncertainty
To the extent that the recognition of a DTA is dependent on sufficient future profitability, a degree of estimation and the use of assumptions are required to support the conclusion that it is probable that future taxable profit will be available against which the unused tax losses can be utilised.

The Group's assessment of deferred tax recoverability is based on forecasts covering its five year initial planning period. The forecast for year five onwards is based on the projections within that fifth year of the initial planning period and the deferred tax recoverability is most sensitive to the forecast in the initial planning period. The Group's profitability projections are based on its strategic priorities where the focus will be to increase overall returns, improve cost efficiencies and grow sustainable profits. The projections also reflect the external challenges facing the banking industry including the lower for longer interest rate environment and the uncertainty around the impact of Brexit on the UK economy (note 35).

Liability management exercise

Judgement
Another significant judgement relates to a series of liability management exercises (LME) that the Group conducted between 2009 and 2011 in order to enhance its equity capital which involved the repurchase or exchange of certain of its external liabilities in the UK at less than par, thus generating gains. The Group determined, with the benefit of opinions from external tax advisors and legal counsel that these gains were not subject to taxation. The Group has proactively engaged with the UK tax authority, HM Revenue & Customs (HMRC), over the last number of years as it considers these

2 Critical accounting estimates and judgements *(continued)*

transactions. HMRC has concurred with the Group's tax assessment in respect of certain of the gains that arose and its review continues in respect of others. HMRC has challenged the tax treatment of gains in the amount of £168 million (€189 million) arising in respect of one transaction. The Group continues to believe that all of the gains arising from these transactions are not subject to tax and hence that it is not probable that a liability will arise. No provisions have therefore been made (note 19).

(c) Retirement benefit obligations

The Group sponsors a number of defined benefit pension schemes. In determining the actual pension cost, the actuarial values of the liabilities of the schemes are calculated by external actuaries. This involves modelling their future development and requires management to make assumptions as to discount rates, price inflation, salary and pensions increases, member mortality and other demographic assumptions.

Sources of estimation uncertainty
There are acceptable ranges in which these estimates can validly fall. The impact on the results for the period and financial position could be materially different if alternative assumptions were used. A quantitative analysis of the sensitivity of the defined benefit pension liability to changes in the key assumptions is set out in note 46.

(d) Life assurance operations

The Group accounts for the value of the shareholders' interest in its long-term assurance business using Market Consistent Embedded Value (MCEV) Principles and Guidelines. Embedded value is comprised of the net tangible assets of Bank of Ireland Wealth and Insurance and the ViF asset. The ViF asset represents the expected future profits on insurance contracts and this is calculated using an embedded value approach with market consistent assumptions. The ViF asset is measured by projecting expected future surpluses using best estimate and market consistent assumptions and a risk free interest rate curve.

Sources of estimation uncertainty
The estimation of future surpluses will depend on experience in a number of areas such as investment returns, lapse rates, mortality and investment expenses. Surpluses are projected by making assumptions about future experience, having regard to both actual experience and projected long-term economic trends.

Changes to these assumptions may cause the present value of future surpluses to differ from those assumed at the reporting date and could significantly affect the value attributed to the in force business. The ViF asset could also be affected by changes in the amounts and timing of other net cash flows (principally annual management charges and other fees levied upon the policyholders) or the rate at which the future surpluses and cash flows are discounted. In addition, the extent to which actual experience is different from that assumed will be recognised in the income statement for the period. A quantitative analysis of the sensitivity of profit to changes in the key life assurance assumptions is set out in note 37.

(e) IFRS 16 'Leases'

Judgement in determining the lease term
The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease (break option), if it is reasonably certain not to be exercised.

The Group has a number of leases which contain break options and applies judgement in evaluating whether it is reasonably certain not to exercise the option. That is, on commencement of a lease the Group considers all relevant factors that create an incentive for it to exercise the option. After the commencement date, the Group reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise (or not to exercise) the option.

Judgement in determining the incremental borrowing rate
The Group uses the IBR (note 60) at the lease commencement to calculate the present value of lease payments. The Group derives the IBR from its internal Funds Transfer Pricing mechanism, as adjusted to reflect the cost of wholesale funding for a similar term, with a similar security and in a similar economic environment to the RoU asset. The weighted average IBR rate applied to lease liabilities recognised on the balance sheet at the date of initial recognition was 2.7%.

(f) Tracker Mortgage Examination Review

At 31 December 2019 the Group holds a provision of €75 million (2018: €42 million) in respect of the industry wide Tracker Mortgage Examination. While the supervisory phase of the examination was concluded by the CBI in July 2019, the provision covers the estimated costs of remediation of any remaining impacted customers, addressing customer appeals and closing out all other outstanding costs of the exercise, in particular, any sanction that may be incurred as a result of Central Bank of Ireland enforcement actions.

Judgement
The Group has exercised judgement in particular in determining the level of potential appeals and the impact of any potential administrative sanction. With respect to the latter, the Group considers that there is a range of potential sanction outcomes based on general and specific circumstances and the amount of any sanction imposed may differ from the amount provided at 31 December 2019.

Sources of estimation uncertainty:
- the level of costs to be incurred by the Group in concluding the examination, in particular, any potential fine;
- estimates of the level of appeals; and
- appeal success rates.

3 Operating segments

The Group has five reportable operating segments which reflect the internal financial and management reporting structure and are organised as follows:

Retail Ireland
Retail Ireland is one of the largest providers of financial services in Ireland with a network of 264 branches, phone contact centre, c.1,550 self-serve devices, and online, smartphone and tablet banking applications. Retail Ireland offers a broad range of financial products and services including current accounts, savings, mortgages, credit cards, motor finance and loans to personal and business banking customers and is managed through a number of business units, namely Distribution Channels, Customer Segments and Propositions, Products (including Bank of Ireland Mortgage Bank (BoIMB)) and Business Banking (including Bank of Ireland Finance).

Wealth and Insurance
Wealth and Insurance includes the Group's life assurance subsidiary NIAC which distributes protection, investment and pension products to the Irish market, across three core channels made up of the Group's distribution channels, independent financial brokers and its own financial advisor network and corporate partners. It also includes Investment markets and the Group's general insurance brokerage Bank of Ireland Insurance Services, which offers home, car and travel insurance cover through its agency with insurance providers.

Retail UK
The Retail UK division incorporates the financial services partnership and FX joint venture with the UK Post Office, the financial services partnership with the AA, the UK residential mortgage business, the Group's branch network in Northern Ireland (NI), the Group's business banking business in NI and the Northridge Finance motor and asset finance, vehicle leasing and fleet management business. The Group also has a business banking business in GB which is being run down. The Retail UK division includes the activities of Bank of Ireland (UK) plc, the Group's wholly owned UK licenced banking subsidiary.

Corporate and Treasury
Corporate and Treasury incorporates the Group's corporate banking, wholesale financial markets, specialised acquisition finance and large transaction property lending business, across the RoI, UK and internationally, with offices in Ireland, the UK, the US, Germany, France and Spain.

Group Centre
Group Centre comprises Group Technology and Customer Solutions (formerly Group Manufacturing), Group Finance, Group Risk, Group Internal Audit, Group Marketing and Group People Services. These Group central functions establish and oversee policies and provide and manage certain processes and delivery platforms for the divisions.

Other reconciling items
Other reconciling items represent inter segment transactions which are eliminated upon consolidation and the application of hedge accounting at Group level.

Basis of preparation of segmental information
The analysis of results by operating segment is based on the information used by the chief operating decision maker to allocate resources and assess performance. The CEO and CFO are considered to be the chief operating decision maker for the Group. The Group's operating segments reflect its organisational and management structures. The CEO and CFO review the Group's internal reporting based around these segments to assess performance and allocate resources. Transactions between the business segments are on normal commercial terms and conditions. Internal charges and transfer pricing adjustments have been reflected in the performance of each business. Revenue sharing agreements are used to allocate external customer revenues to a business segment on a reasonable basis.

The measures of segmental assets and liabilities provided to the chief operating decision maker are not adjusted for transfer pricing adjustments or revenue sharing agreements as the impact on the measures of segmental assets and liabilities is not significant. They also do not include adjustments for the impact of the assets and liabilities of BOIG plc, the Bank's holding company.

Capital expenditure comprises additions to property, plant and equipment and intangible assets.

On an ongoing basis, the Group reviews the methodology for allocating funding and liquidity costs in order to ensure that the allocations continue to reflect each division's current funding requirement.

External revenue comprises interest income including that arising on finance leases and hire purchase receivables, net insurance premium income, fee and commission income, net trading income, life assurance investment income gains and losses, other operating income, other leasing income and share of results of associates and joint ventures.

There were no revenues deriving from transactions with a single external customer that amounted to 10% or more of the Group's revenues.

The Group measures the performance of its operating segments through a measure of segment profit or loss which is referred to as 'Underlying profit' in its internal management reporting systems. Underlying profit excludes:
- customer redress charges;
- cost of restructuring programme;
- gross-up for policyholder tax in the Wealth and Insurance business;
- UK portfolio divestments;
- loss on disposal / liquidation of business activities;
- investment return on treasury shares held for policyholders; and
- gain on disposal of property.

Underlying profit excludes any operating profit or loss attributable to BOIG plc.

3 Operating segments *(continued)*

Group 2019	Retail Ireland €m	Wealth and Insurance €m	Retail UK €m	Corporate and Treasury €m	Group Centre €m	Other reconciling items[1] €m	BOIG plc Group €m	BOIG plc €m	Group €m
Net interest income	990	(8)	563	609	(6)	2	2,150	(7)	2,143
Other income, net of insurance claims	268	312	(15)	123	1	(3)	686	-	686
Total operating income, net of insurance claims	**1,258**	**304**	**548**	**732**	**(5)**	**(1)**	**2,836**	**(7)**	**2,829**
Other operating expenses	(670)	(128)	(281)	(182)	(349)	1	(1,609)	1	(1,608)
- Other operating expenses (before Transformation Investment and levies and regulatory charges)	*(670)*	*(126)*	*(277)*	*(182)*	*(130)*	*1*	*(1,384)*	*1*	*(1,383)*
- Transformation Investment charge	*-*	*-*	*-*	*-*	*(108)*	*-*	*(108)*	*-*	*(108)*
- Levies and regulatory charges	*-*	*(2)*	*(4)*	*-*	*(111)*	*-*	*(117)*	*-*	*(117)*
Depreciation and amortisation	(75)	(7)	(48)	(13)	(151)	1	(293)	-	(293)
Total operating expenses	**(745)**	**(135)**	**(329)**	**(195)**	**(500)**	**2**	**(1,902)**	**1**	**(1,901)**
Underlying operating profit / (loss) before impairment charges on financial assets	**513**	**169**	**219**	**537**	**(505)**	**1**	**934**	**(6)**	**928**
Net impairment (losses) / gains on financial instruments	(50)	-	(82)	(82)	(1)	-	(215)	-	(215)
Share of results of associates and joint ventures	5	-	34	-	-	-	39	-	39
Underlying profit / (loss) before tax	**468**	**169**	**171**	**455**	**(506)**	**1**	**758**	**(6)**	**752**

2019 **Reconciliation of underlying profit before tax to profit before tax**	**Group €m**
Underlying profit before tax	752
Customer redress charges	(74)
Cost of restructuring programme	(59)
Gross-up for policyholder tax in the Wealth and Insurance business	35
(Loss) on disposal / liquidation of business activities	(25)
UK portfolio divestments	12
Investment return on treasury shares held for policyholders	(2)
Profit before tax	**639**

[1] *Other reconciling items represent inter segment transactions which are eliminated upon consolidation and the application of hedge accounting at Group level.*

3 Operating segments *(continued)*

Group 2018	Retail Ireland €m	Wealth and Insurance €m	Retail UK €m	Corporate and Treasury €m	Group Centre €m	Other reconciling items[1] €m	BOIG plc Group €m	BOIG plc €m	Group €m
Net interest income	**992**	**(9)**	**596**	**555**	**10**	**2**	**2,146**	**(3)**	**2,143**
Other income, net of insurance claims	272	203	21	166	14	(17)	659	1	660
Total operating income, net of insurance claims	**1,264**	**194**	**617**	**721**	**24**	**(15)**	**2,805**	**(2)**	**2,803**
Other operating expenses	(719)	(121)	(363)	(182)	(361)	5	(1,741)	1	(1,740)
- Other operating expenses (before Transformation Investment and levies and regulatory charges)	*(719)*	*(119)*	*(361)*	*(182)*	*(151)*	*5*	*(1,527)*	*1*	*(1,526)*
- Transformation Investment charge	*-*	*-*	*-*	*-*	*(113)*	*-*	*(113)*	*-*	*(113)*
- Levies and regulatory charges	*-*	*(2)*	*(2)*	*-*	*(97)*	*-*	*(101)*	*-*	*(101)*
Depreciation and amortisation	(57)	(6)	(35)	(12)	(103)	1	(212)	-	(212)
Total operating expenses	**(776)**	**(127)**	**(398)**	**(194)**	**(464)**	**6**	**(1,953)**	**1**	**(1,952)**
Underlying operating profit / (loss) before impairment charges on financial assets	**488**	**67**	**219**	**527**	**(440)**	**(9)**	**852**	**(1)**	**851**
Net impairment gains / (losses) on financial instruments	157	-	(74)	(41)	-	-	42	-	42
Share of results of associates and joint ventures	4	-	37	-	-	-	41	-	41
Underlying profit / (loss) before tax	**649**	**67**	**182**	**486**	**(440)**	**(9)**	**935**	**(1)**	**934**

2018 **Reconciliation of underlying profit before tax to profit before tax**	**Group €m**
Underlying profit before tax	934
Cost of restructuring programme	(111)
Gain on disposal of property	7
Gross-up for policyholder tax in the Wealth and Insurance business	(7)
Investment return on treasury shares held for policyholders	6
Gain on disposal / liquidation of business activities	5
Profit before tax	**834**

[1] *Other reconciling items represent inter segment transactions which are eliminated upon consolidation and the application of hedge accounting at Group level.*

3 Operating segments *(continued)*

Group 2019 Analysis by operating segment	Retail Ireland €m	Wealth and Insurance €m	Retail UK €m	Corporate and Treasury €m	Group Centre €m	Other reconciling items €m	Group €m
Investment in associates and joint ventures	**56**	**-**	**76**	**-**	**-**	**-**	**132**
External assets	34,873	19,532	35,608	34,355	7,519	(4)	131,883
Inter segment assets	69,738	696	2,046	90,488	24,893	(187,861)	-
Total assets	**104,611**	**20,228**	**37,654**	**124,843**	**32,412**	**(187,865)**	**131,883**
Other Bank assets							35
Group assets							**131,918**
External liabilities	55,579	19,240	27,061	13,858	5,716	(4)	121,450
Inter segment liabilities	46,957	252	7,880	109,956	22,842	(187,887)	-
Total liabilities	**102,536**	**19,492**	**34,941**	**123,814**	**28,558**	**(187,891)**	**121,450**
Other Bank liabilities							715
Group liabilities							**122,165**

Group 2018 Analysis by operating segment	Retail Ireland €m	Wealth and Insurance €m	Retail UK €m	Corporate and Treasury €m	Group Centre €m	Other reconciling items €m	Group €m
Investment in associates and joint ventures	**53**	**-**	**69**	**-**	**-**	**-**	**122**
External assets	35,507	17,062	33,755	32,643	4,705	(3)	123,669
Inter segment assets	63,747	727	2,580	86,609	25,316	(178,979)	-
Total segmental assets	**99,254**	**17,789**	**36,335**	**119,252**	**30,021**	**(178,982)**	**123,669**
Other Bank assets							27
Group assets							**123,696**
External liabilities	52,124	16,830	26,236	14,243	4,180	5	113,618
Inter segment liabilities	44,936	257	7,486	103,958	22,334	(178,971)	-
Total segmental liabilities	**97,060**	**17,087**	**33,722**	**118,201**	**26,514**	**(178,966)**	**113,618**
Other Bank liabilities							880
Group liabilities							**114,498**

3 Operating segments *(continued)*

Group 2019 Revenue by operating segments	Retail Ireland €m	Wealth and Insurance €m	Retail UK €m	Corporate and Treasury €m	Group Centre €m	Other reconciling items €m	BOIG plc Group €m	BOIG plc €m	Group €m
External revenue	1,360	2,965	1,164	733	17	(16)	6,223	-	6,223
Inter segment revenues	476	83	(14)	360	248	(1,153)	-	-	-
Revenue before claims paid	**1,836**	**3,048**	**1,150**	**1,093**	**265**	**(1,169)**	**6,223**	**-**	**6,223**
Insurance contract liabilities and claims paid	-	(2,642)	-	-	(5)	-	(2,647)	-	(2,647)
Revenue	**1,836**	**406**	**1,150**	**1,093**	**260**	**(1,169)**	**3,576**	**-**	**3,576**
Interest expense	**(78)**	**-**	**(239)**	**129**	**(189)**	**7**	**(370)**	**(7)**	**(377)**
Capital expenditure	**18**	**20**	**64**	**-**	**205**	**-**	**307**	**-**	**307**

Group 2018 Revenue by operating segments	Retail Ireland €m	Wealth and Insurance €m	Retail UK €m	Corporate and Treasury €m	Group Centre €m	Other reconciling items €m	BOIG plc Group €m	BOIG plc €m	Group €m
External revenue	1,359	1,253	1,097	677	61	(3)	4,444	1	4,445
Inter segment revenues	486	(38)	47	422	238	(1,155)	-	-	-
Revenue before claims paid	**1,845**	**1,215**	**1,144**	**1,099**	**299**	**(1,158)**	**4,444**	**1**	**4,445**
Insurance contract liabilities and claims paid	-	(951)	-	-	(4)	-	(955)	-	(955)
Revenue	**1,845**	**264**	**1,144**	**1,099**	**295**	**(1,158)**	**3,489**	**1**	**3,490**
Interest expense	**(92)**	**-**	**(199)**	**80**	**(175)**	**7**	**(379)**	**(3)**	**(382)**
Capital expenditure	**12**	**12**	**70**	**3**	**182**	**-**	**279**	**-**	**279**

Group 2019 Geographical analysis	Republic of Ireland €m	United Kingdom €m	Rest of World €m	Other reconciling items €m	BOIG plc Group €m	BOIG plc €m	Group €m
External revenue	4,924	1,192	107	-	6,223	-	6,223
Inter segment revenues	154	70	32	(256)	-	-	-
Revenue before claims paid	**5,078**	**1,262**	**139**	**(256)**	**6,223**	**-**	**6,223**
Insurance contract liabilities and claims paid	(2,642)	-	(5)	-	(2,647)	-	(2,647)
Revenue	**2,436**	**1,262**	**134**	**(256)**	**3,576**	**-**	**3,576**
Capital expenditure	**258**	**49**	**-**	**-**	**307**	**-**	**307**
External assets	93,285	37,025	1,573	-	131,883		
Inter segment assets	11,086	4,258	1,008	(16,352)	-		
Total assets	**104,371**	**41,283**	**2,581**	**(16,352)**	**131,883**		
Other Bank assets					35		
Group assets					**131,918**		
External liabilities	93,604	27,736	110	-	121,450		
Inter segment liabilities	3,119	10,941	2,294	(16,354)	-		
Total liabilities	**96,723**	**38,677**	**2,404**	**(16,354)**	**121,450**		
Other Bank liabilities					715		
Group liabilities					**122,165**		

3 Operating segments *(continued)*

Group 2018 Geographical analysis	Republic of Ireland €m	United Kingdom €m	Rest of World €m	Other reconciling items €m	BOIG plc Group €m	BOIG plc €m	Group €m
External revenue	3,196	1,148	101	(1)	4,444	1	4,445
Inter segment revenues	(94)	(115)	(25)	234	-	-	-
Revenue before claims paid	**3,102**	**1,033**	**76**	**233**	**4,444**	**1**	**4,445**
Insurance contract liabilities and claims paid	(951)	-	(4)	-	(955)	-	(955)
Revenue	**2,151**	**1,033**	**72**	**233**	**3,489**	**1**	**3,490**
Capital expenditure	**209**	**70**	**-**	**-**	**279**	**-**	**279**
External assets	86,915	35,458	1,296	-	123,669		
Inter segment assets	10,457	4,518	1,053	(16,028)	-		
Total assets	**97,372**	**39,976**	**2,349**	**(16,028)**	**123,669**		
Other Bank assets					27		
Group assets					**123,696**		
External liabilities	86,636	26,901	81	-	113,618		
Inter segment liabilities	3,419	10,508	2,101	(16,028)	-		
Total liabilities	**90,055**	**37,409**	**2,182**	**(16,028)**	**113,618**		
Other Bank liabilities					880		
Group liabilities					**114,498**		

4 Interest income

The Group presents interest resulting from negative effective interest rates on financial liabilities as interest income rather than as an offset against interest expense.

Interest income on loans and advances to customers is shown net of charge of €10 million arising from the Tracker Mortgage Examination Review. In 2018 the charge was €nil, however €12 million Tracker Mortgage Examination charge recognised in operating expenses was reallocated to interest income.

Interest income recognised on loans and advances to customers
In 2019, €68 million of interest was recognised on credit-impaired loans and advances to customers (2018: €86 million).

In 2019, €73 million of interest income was received on credit-impaired loans and advances to customers (2018: €93 million).

In 2019, interest income received on total forborne loans and advances to customers was €134 million (2018: €158 million).

In 2019, interest recognised on total forborne loans and advances to customers was €140 million (2018: €162 million).

Transferred from cash flow hedge reserve
Interest income includes a charge of €98 million (2018: €61 million charge) transferred from the cash flow hedge reserve (page 107).

Interest income recognised on debt securities at fair value through other comprehensive income
Interest income on FVOCI financial assets is recognised net of negative interest on derivatives which are in a hedge relationship with the relevant financial asset of €28 million (2018: €27 million).

	2019 €m	2018 €m
Financial assets measured at amortised cost		
Loans and advances to customers	2,261	2,249
Loans and advances to banks	31	28
Debt securities at amortised cost	9	12
Interest income on financial assets measured at amortised cost	**2,301**	**2,289**
Financial assets at FVOCI		
Debt securities at FVOCI	30	46
	2,331	**2,335**
Negative interest on financial liabilities	19	19
Interest income calculated using the effective interest method	**2,350**	**2,354**
Interest income on finance leases and hire purchase receivables	175	159
Interest income	**2,525**	**2,513**

5 Interest expense

The Group presents interest resulting from negative effective interest rates on financial assets as interest expense rather than as an offset against interest income.

Interest expense recognised on subordinated liabilities
Interest expense on subordinated liabilities is recognised on an effective interest rate basis, net of interest income of €16 million (2018: €19 million) on derivatives which are in a hedge relationship with the relevant liability.

Interest expense recognised on debt securities in issue
Interest expense on debt securities in issue is recognised on an effective interest rate basis net of interest income of €51 million (2018: €58 million) on derivatives which are in a hedge relationship with the relevant liability.

From 1 January 2019, the Group adopted IFRS 16 'Leases' and has recognised interest expense on lease liabilities of €15 million). The effect of the adoption of IFRS 16 is further explained in 60.

Group	2019 €m	2018 €m
Customer accounts	135	164
Debt securities in issue	108	79
Subordinated liabilities	92	102
Deposits from banks	20	24
Lease liabilities	15	-
Interest expense on financial liabilities	**370**	**369**
Negative interest on financial assets	7	13
Interest expense	**377**	**382**

6 Net insurance premium income

	2019 €m	2018 €m
Gross premiums written	1,704	1,807
Ceded reinsurance premiums	(186)	(311)
Net premium written	**1,518**	**1,496**

7 Fee and commission income and expense

2019 Income	Retail Ireland €m	Wealth and Insurance €m	Retail UK €m	Corporate and Treasury €m	Group Centre €m	Group €m
Retail banking customer fees	274	-	89	44	-	407
Credit related fees	8	-	4	17	-	29
Insurance commissions	-	12	1	-	-	13
Asset management fees	-	3	-	-	-	3
Brokerage fees	1	-	1	-	-	2
Other	11	5	16	24	-	56
Fee and commission income	**294**	**20**	**111**	**85**	**-**	**510**

2018 Income	Retail Ireland €m	Wealth and Insurance €m	Retail UK €m	Corporate and Treasury €m	Group Centre €m	Group €m
Retail banking customer fees	277	-	106	42	-	425
Credit related fees	8	-	6	16	-	30
Insurance commissions	-	13	2	-	-	15
Asset management fees	-	3	-	-	-	3
Brokerage fees	1	-	1	-	-	2
Other	11	7	5	23	-	46
Fee and commission income	**297**	**23**	**120**	**81**	**-**	**521**

Expense
Fee and commission expense of €205 million (2018: €224 million) primarily comprises brokerage fees, sales commissions and other fees paid to third parties.

8 Net trading income

Net trading income includes the gains and losses on financial instruments held for trading and those designated at FVTPL (other than unit linked life assurance assets and investment contract liabilities). It includes the gains and losses arising on the purchase and sale, the interest income receivable and expense payable and the fair value movement on these instruments, together with the funding cost of the trading instruments. It also includes €18 million in relation to a net gain arising from FX (2018: net gain €13 million).

Net fair value hedge ineffectiveness reflects a net charge from hedging instruments of €78 million (2018: net charge of €63 million) offsetting a net gain from hedged items of €76 million (2018: net gain of €63 million).

The total hedging ineffectiveness on cash flow hedges reflected in the income statement in 2019 amounted to €nil (2018: €nil).

	2019 €m	2018 €m
Financial liabilities designated at fair value	(159)	62
Related derivatives held for trading	156	(77)
	(3)	**(15)**
Net income from financial instruments mandatorily measured at fair value through profit or loss[1]		
Other financial instruments held for trading	88	28
Equities[2]	36	10
Loans and advances	11	14
Non-trading debt securities[2]	8	18
	140	**55**
Net fair value hedge ineffectiveness	(2)	-
Cash flow hedge ineffectiveness	-	-
Net trading income	**138**	**55**

9 Life assurance investment income, gains and losses

Life assurance investment income, gains and losses comprise the investment return, realised gains and losses and unrealised gains and losses which accrue to the Group on all investment assets held by the Wealth and Insurance division, other than those held for the benefit of policyholders whose contracts are considered to be investment contracts. These instruments are mandatorily measured at FVTPL.

Life assurance investment income and gains of €1,311 million for the year ended 31 December 2019 (2018: losses of €330 million) is consistent with favourable investment market performance. Movement in insurance contract liabilities (note 41) is consistent with the higher investment returns in the year.

	2019 €m	2018 €m
Gains / (losses) on other financial assets held on behalf of Wealth and Insurance policyholders	1,284	(341)
Gains on investment property held on behalf of Wealth and Insurance policyholders	27	11
Life assurance investment income, gains and losses	**1,311**	**(330)**

10 Other leasing income and expense

Other leasing income and expense relate to the business activities of Marshall Leasing Limited (MLL), a wholly owned subsidiary of the Group. MLL is a car and commercial leasing and fleet management company based in the UK. Other leasing income includes; €35 million (2018: €31 million) of operating lease payments received (note 34), €20 million arising from the sale of leased assets (2018: €14 million), and €7 million relating to other income (2018: €7 million). Other leasing expense includes; depreciation of €28 million related to rental vehicles (2018: €23 million) and other selling, and disposal costs of €24 million (2018: €18 million).

	2019 €m	2018 €m
Other leasing income	62	52
Other leasing expense	(52)	(41)
Net other leasing income	**10**	**11**

[1] Net income from other financial assets mandatorily measured at fair value through profit or loss includes interest income from debt instruments and dividend income from equities. It also includes realised and unrealised gains and losses.

[2] Non-trading equities and debt securities mandatorily measured at fair value through profit or loss are reported in the balance sheet under the caption ‘Other financial assets at fair value through profit or loss’. The income from life assurance investments which also comprise ‘Other financial assets at fair value through profit or loss is reported in note 9 Life assurance investment income, gains and losses.

11 Other operating income

	2019 €m	2018 €m
Movement in Value of in Force asset (note 37)	60	6
Other insurance income	52	53
Transfer from debt instruments at FVOCI reserve on asset disposal (note 24)	3	2
Dividend income	1	2
Elimination of investment return on treasury shares held for the benefit of policyholders in the Wealth and Insurance business	(1)	3
Other income	5	19
Other operating income	**120**	**85**

12 Insurance contract liabilities and claims paid

	2019 €m	2018 €m
Claims paid		
Policy surrenders	897	824
Death and critical illness claims	171	158
Annuity payments	90	83
Policy maturities	2	-
Other claims	79	70
Gross claims paid	**1,239**	**1,135**
Recovered from reinsurers	(116)	(103)
Net claims paid	**1,123**	**1,032**
Change in insurance contract liabilities		
Change in gross liabilities	1,690	125
Change in reinsured liabilities	(166)	(202)
Net change in insurance contract liabilities	**1,524**	**(77)**
Insurance contract liabilities and claims paid	**2,647**	**955**

13 Other operating expenses

Group **Administrative expenses and staff costs**	**2019** **€m**	**2018** **€m**
Staff costs excluding restructuring and Transformation Investment staff costs	855	867
Amortisation of intangible assets (note 32)	193	178
Levies and regulatory charges	117	101
- Irish bank levy	*34*	*29*
- Other	*83*	*72*
Transformation Investment charge	108	113
Depreciation of property, plant and equipment (note 34)	96	34
Lease expenses	11	-
- Variable lease payments (note 60)	*8*	-
- Short-term leases (note 60)	*3*	-
Reversal of impairment on property (note 34)	-	(4)
Other administrative expenses excluding cost of restructuring programme	625	651
Total	**2,005**	**1,940**
Total staff costs are analysed as follows:		
Wages and salaries	659	650
Retirement benefit costs (defined benefit plans) (note 46)	103	120
Social security costs	74	74
Retirement benefit costs (defined contribution plans)	31	27
Other staff expenses	8	9
	875	**880**
Staff costs capitalised	(20)	(13)
Staff costs excluding restructuring and Transformation Investment staff costs	**855**	**867**
Additional restructuring and Transformation Investment staff costs:		
Included in cost of restructuring programme (note 14)	34	74
Included in Transformation Investment charge	17	15
Total staff costs recognised in the income statement	**906**	**956**

The Group has incurred levies and regulatory charges of €117 million (2018: €101 million). The other levies and regulatory charges for 2019 primarily reflect the Group's contribution to the Single Resolution Fund (SRF) and the Deposit Guarantee Scheme (DGS) fund, along with the charges for the FSCS levy.

Transformation Investment income statement charge of €108 million (2018: €113 million) includes associated application and infrastructure costs which will be included as part of the Transformation Investment charge until it is customer supporting.

From 1 January 2019, the Group adopted IFRS 16 'Leases'. In 2019, there was €69 million depreciation of RoU assets under IFRS 16 included within depreciation of property, plant and equipment, a charge of €8 million relating to variable lease payments, and a charge of €3 million under the short-term lease exemption.

In 2018, other administrative expenses included an amount of €60 million relating to operating lease expenses under IAS 17 and €33 million relating to expenses on service contracts classified as leases under IFRS 16 from 1 January 2019. The effect of adoption of IFRS 16 is further explained in note 60.

During 2019, the Group incurred a charge of €57 million in other administrative expenses relating to the Tracker Mortgage Examination Review. In 2018, the charge was €nil, however €12 million Tracker Mortgage Examination charge recognised in operating expenses was reallocated to interest income (note 4).

Staff numbers
At 31 December 2019, the number of staff (full time equivalents) was 10,440 (2018: 10,367) (Bank 2019: 9,058, 2018: 8,933).

In addition to the reduction in the average number of staff employed by the Group, the table also reflects the ongoing restructuring of support functions. A number of customer delivery operations moved from Group Centre primarily to Retail Ireland to ensure a streamlined approach to customer service and maximise operating efficiencies.

Average number of staff **(full time equivalents)**	**2019**	**2018**
Retail Ireland	4,139	2,875
Retail UK	1,490	1,607
Wealth and Insurance	902	899
Corporate and Treasury	691	610
Group Centre	3,202	4,604
Total	**10,424**	**10,595**

13 Other operating expenses *(continued)*

Bank **Staff costs**	**2019** **€m**	**2018** **€m**
Total staff costs are analysed as follows:		
Wages and salaries	571	561
Retirement benefit costs (defined benefit plans) (note 46)	89	103
Social security costs	63	63
Retirement benefit costs (defined contribution plans)	27	24
Other staff expenses	5	6
	755	**757**
Staff costs capitalised	(13)	(10)
Staff costs excluding restructuring and platforms investment staff costs	**742**	**747**
Additional restructuring and platforms investment staff costs:		
Included in cost of restructuring programme	34	74
Included in Transformation Investment charge	17	15
Total staff costs recognised in the income statement	**793**	**836**
Average number of staff (full time equivalents)	9,049	9,137

14 Cost of restructuring programme

	2019 **€m**	**2018** **€m**
Transformation Investment costs	55	93
- Staff costs (note 13)	*34*	*74*
- Property related costs	*4*	*11*
- Programme management costs	*17*	*8*
Other restructuring charges	4	18
- Impairment of property, plant and equipment (note 34)	*4*	*9*
- Impairment of intangible assets (note 32)	*-*	*6*
- Other related costs	*-*	*3*
Total	**59**	**111**

During 2019, the Group recognised a charge of €59 million (2018: €111 million) of which €55 million relates to Transformation Investment costs (2018: €93 million) as set out in the table above.

15 Auditor's remuneration (excluding Value Added Tax)

	Note	RoI (i) €m	Overseas (ii) €m	2019 €m	2018 €m
Audit and assurance services					
Statutory audit		2.8	0.7	3.5	3.3
Assurance services	(iii)	1.0	0.1	1.1	0.6
Total Auditor's remuneration		**3.8**	**0.8**	**4.6**	**3.9**

Disclosure of Auditor's fees is made in accordance with Section 322 of the Companies Act which mandates the disclosure of fees in particular categories and that fees paid to the Group Auditor (KPMG) for services provided to the Group be disclosed in this format. All years presented are on that basis.

The GAC has reviewed the level of fees and is satisfied that it has not affected the independence of the auditors.

(i) Fees paid to the Statutory Auditor, KPMG.

(ii) Fees paid to overseas auditors consist of fees paid to KPMG UK in the UK; and

(iii) Assurance services consist primarily of review of the interim financial statements, fees in connection with reporting to regulators including the CBI, IT governance review with regards to Payment Services Directive 2, letters of comfort and review of compliance with the Government Guarantee Schemes.

16 Net impairment (losses) / gains on financial instruments

	2019 €m	2018 €m
Loans and advances to customers	(209)	36
- Cash recoveries	*48*	*49*
- Movement in impairment loss allowances (note 26)	*(257)*	*(13)*
Loan commitments	(5)	6
Net impairment (losses) / gains on financial instruments	**(214)**	**42**

Loans and advances to customers at amortised cost

Net impairment (losses) / gains

The Group's net impairment (losses) / gains on loans and advances to customers at amortised cost are set out in this table.

As outlined in note 26, in 2019, the Group completed three transactions whereby it derecognised or disposed of €479 million of loans and advances to customers (after impairment loss allowance). As outlined in the Group Accounting Policies on page 80, expected cash flows arising from the sale on default of a loan are included in the measurement of ECL under IFRS 9, where certain conditions are met. As each transaction satisfied these conditions, the cash flows have been included in the impairment calculation. As a result, net impairment (losses) / gains on financial instruments includes a net impairment loss of €23 million arising on these transactions.

	2019 €m	2018 €m
Residential mortgages	(52)	47
- Retail Ireland	*(60)*	*60*
- Retail UK	*8*	*(13)*
Non-property SME and corporate	(76)	14
- Republic of Ireland SME	*(18)*	*54*
- UK SME	*9*	*1*
- Corporate	*(67)*	*(41)*
Property and construction	(24)	12
- Investment	*(30)*	*17*
- Land and development	*6*	*(5)*
Consumer	(57)	(37)
Total	**(209)**	**36**

17 Share of results of associates and joint ventures (after tax)

	2019 €m	2018 €m
First Rate Exchange Services (note 31)	34	37
Associates (note 30)	5	4
Share of results of associates and joint ventures (after tax)	**39**	**41**

18 (Loss) / gain on disposal / liquidation of business activities

The loss on disposal of business activities reflects the sale of the Retail UK credit card portfolio. The assets were classified as assets held for sale up to the date of disposal (note 25). In July 2019, the portfolio was sold for total consideration of €580 million resulting in a net loss on disposal of €21 million. On the date of disposal, the assets had a gross carrying value of €587 million (gross of ECL allowance) and a net book value of €562 million (net of ECL allowance). The net loss on disposal also includes a provision of €39 million related to the costs of migration and other costs associated with the disposal.

In addition, as part of the Group's focus on simplifying its corporate structure, the Group has an ongoing programme of winding up a number of wholly owned, dormant and non-trading companies, a number of which are foreign operations. During 2019, the Group voluntarily appointed a liquidator to manage the winding up of a number of foreign operations. Upon appointment of the liquidator, the Group is considered to have lost control of the foreign operations and has accounted for this loss of control as a disposal. In accordance with IAS 21, the Group has reclassified net cumulative FX losses of €4 million relating to these foreign operations from the FX reserve to the income statement during 2019 (2018: gains of €4 million).

	2019 €m	2018 €m
Disposal of Retail UK credit card portfolio	(21)	-
Transfer of foreign exchange reserve to income statement on liquidation of non-trading entities	(4)	4
Other	-	1
(Loss) / gain on disposal / liquidation of business activities	**(25)**	**5**

19 Taxation

The effective taxation rate on a statutory profit basis for 2019 is 31% (2018: 19%).

The increased rate is primarily due to the re-assessment of the tax value of the UK tax losses carried forward and the tax impact of the gross-up for policyholder tax in the Wealth and Insurance business. Excluding both of these items, the effective taxation rate in 2019 was 17% (2018: 19%).

Between 2009 and 2011, the Group conducted a series of LME in order to enhance its equity capital which involved the repurchase or exchange of certain of its external liabilities in the UK at less than par, thus generating gains. The Group determined, with the benefit of opinions from external tax advisors and legal counsel that these gains were not subject to taxation. The Group has proactively engaged with the UK tax authority, HMRC, over the last number of years as it considers these transactions. HMRC has concurred with the Group's tax assessment in respect of certain gains that arose and its review continues in respect of others. HMRC has challenged the tax treatment of gains in the amount of £168 million (€189 million) arising in respect of one transaction. The Group continues to believe that all of the gains arising from these transactions are not subject to tax and hence that it is not probable that a liability will arise. No provisions have therefore been made.

Recognised in income statement	2019 €m	2018 €m
Current tax		
Irish Corporation Tax		
- Current year	47	23
- Adjustment in respect of prior year	(1)	3
Foreign tax		
- Current year	49	57
- Adjustments in respect of prior year	(5)	(5)
Current tax charge	**90**	**78**
Deferred tax		
Current year profits	33	91
Adjustments in respect of prior year	1	10
Origination and reversal of temporary differences	25	(19)
Reassessment of value of tax losses carried forward	47	-
Deferred tax charge	**106**	**82**
Taxation charge	**196**	**160**

19 Taxation *(continued)*

Reconciliation of tax on the profit before taxation at the standard Irish corporation tax rate to actual tax charge	2019 €m	2018 €m
Profit before tax multiplied by the standard rate of corporation tax in Ireland of 12.5% (2018: 12.5%)	80	104
Effects of:		
Reassessment of value of tax losses carried forward	47	-
Foreign earnings subject to different rates of tax	35	42
Wealth & Insurance companies - different basis of accounting	16	(15)
Adjustments in respect of prior year	(5)	8
Share of results of associates and joint ventures shown post tax in the income statement	(4)	(5)
Other adjustments for tax purposes	27	26
Taxation charge	**196**	**160**

	2019			Restated[1] 2018		
	Pre-tax €m	Tax €m	Net of Tax €m	Pre-tax €m	Tax €m	Net of Tax €m
Debt instruments at FVOCI reserve						
Changes in fair value	32	(4)	28	(157)	20	(137)
Transfer to income statement						
- Asset disposal	(3)	-	(3)	(2)	-	(2)
Net change in debt instruments at FVOCI reserve	**29**	**(4)**	**25**	**(159)**	**20**	**(139)**
Remeasurement of the net defined benefit pension liability	**44**	**(5)**	**39**	**156**	**(27)**	**129**
Cash flow hedge reserve						
Changes in fair value	(440)	50	(390)	(1)	-	(1)
Transfer to income statement	442	(56)	386	(56)	6	(50)
- Net trading income / (expense)	*344*	*(44)*	*300*	*(117)*	*13*	*(104)*
- Net interest income	*98*	*(12)*	*86*	*61*	*(7)*	*54*
Net change in cash flow hedge reserve	**2**	**(6)**	**(4)**	**(57)**	**6**	**(51)**
Net change in foreign exchange reserve	**130**	**-**	**130**	**10**	**-**	**10**
Net change in revaluation reserve	**3**	**-**	**3**	**11**	**(6)**	**5**
Liability credit reserve						
Changes in fair value of liabilities designated at fair value through profit or loss due to own credit risk	(22)	4	(18)	43	(6)	37
Other comprehensive income for the year	**186**	**(11)**	**175**	**4**	**(13)**	**(9)**

[1] *As outlined in the Group accounting policies on page 74, comparative figures have been restated to reflect a restatement of the pre-tax net change in the revaluation reserve for 2018.*

20 Derivative financial instruments

The Group's objectives and policies on managing the risks that arise in connection with derivatives, including the policies for hedging, are included in the Financial Risk Management note on pages 147 to 186. The notional amounts of certain types of derivatives do not necessarily indicate the amounts of future cash flows involved or the current fair value of the instruments and, therefore, do not indicate the Group's exposure to credit risk. The derivative instruments give rise to assets or liabilities as a result of fluctuations in market rates or prices relative to their terms.

The notional amounts and fair values of derivative instruments held by the Group are set out in the table on page 109.

Derivatives held for trading comprise derivatives entered into with trading intent as well as derivatives entered into with economic hedging intent to which the Group does not apply hedge accounting. Derivatives classified as held for hedging comprise only those derivatives to which the Group applies hedge accounting.

The Group uses netting arrangements and collateral agreements to reduce its exposure to credit losses. Of the derivative assets of €2.0 billion at 31 December 2019 (2018: €1.7 billion):
- €1.7 billion (2018: €1.3 billion) are available for offset against derivative liabilities under master netting arrangements. These transactions do not meet the criteria under IAS 32 to enable the assets to be presented net of the liabilities. At 31 December 2019, cash collateral of €0.2 billion (2018: €0.2 billion) was held against these assets and is reported within deposits from banks (note 38); and
- €0.3 billion (2018: €0.4 billion) are not covered by master netting arrangements or relate to counterparties covered by master netting arrangements with whom a net asset position was held at the reporting date.

At 31 December 2019, placements with other banks include cash collateral of €0.8 billion (2018: €0.4 billion) and loans and advances to customers include cash collateral of €0.1 billion placed with derivative counterparties in respect of a net derivative liability position of €0.9 billion (2018: €0.4 billion) and is reported within loans and advances to banks (note 22) and loans and advances to customers (note 26).

Interest rate benchmark reform
At 31 December 2019, Euro Inter Bank Offered Rate (EURIBOR), GBP London Inter Bank Offered Rate (LIBOR) and USD LIBOR represented the most significant IBOR interest rate benchmarks to which the Group and the Bank's fair value and cash flow hedge relationships of interest rate risk are exposed.

As EURIBOR has been reformed and complies with the EU Benchmarks Regulation under a new hybrid methodology, the Group and the Bank expect EURIBOR to continue as a benchmark interest rate for the foreseeable future and, therefore, does not consider interest rate hedge relationships of EURIBOR to be directly affected by IBOR reform as at 31 December 2019. It is currently expected that Sterling Overnight Index Average will replace GBP LIBOR and Secured Overnight Financing Rate will replace USD LIBOR.

The process being used by the Bank of Ireland Group to manage the transition to alternative benchmark rates is included in the Risk Management report on page 147.

The Group and the Bank have applied judgement in relation to market expectations when determining the fair value of the hedging instrument and the present value of the estimated cash flows of the hedged item. The key judgement is that the cash flows for contracts currently indexing IBOR are expected to be broadly equivalent to the cash flows when those contracts transition to IBOR replacement rates. However, as the date of the transition gets closer, this might no longer be the case. Hedge accounting relationships impacted by IBOR reform may experience increased ineffectiveness due to the following reasons:
- Market participants' expectations for when the transition from the existing IBOR benchmark rate to an alternative benchmark interest rate may occur. This could give rise to hedge ineffectiveness in the prospective assessment, in particular where the replacement of the benchmark rate is expected to occur at different times in the hedged item and the hedging instrument.
- Modification to the terms of the existing IBOR contracts that results in the derecognition of a hedged item or the hedging instrument. If a modification is deemed to substantial, the hedging instrument and / or hedged item will be required to be derecognised, which would imply discontinuation of the corresponding hedge accounting relationship. Any subsequent re-designation of such hedge relationships may increase hedge ineffectiveness.

20 Derivative financial instruments *(continued)*

Group	2019			2018		
	Contract notional amounts €m	Fair values Assets €m	Fair values Liabilities €m	Contract notional amounts €m	Fair values Assets €m	Fair values Liabilities €m
Derivatives held for trading						
Foreign exchange derivatives						
Currency swaps	3,427	21	22	4,027	38	34
Currency forwards	3,746	45	41	2,068	14	26
Over the counter currency options	370	1	1	356	3	3
Total foreign exchange derivatives held for trading	**7,543**	**67**	**64**	**6,451**	**55**	**63**
Interest rate derivatives						
Interest rate swaps	144,223	1,103	1,347	148,350	1,000	1,214
Cross currency interest rate swaps	2,349	84	132	1,185	106	95
Over the counter interest rate options	11,875	3	6	9,815	17	33
Interest rate futures	99	-	-	6,038	1	2
Forward rate agreements	4,020	1	1	10,575	2	2
Total interest rate derivatives held for trading	**162,566**	**1,191**	**1,486**	**175,963**	**1,126**	**1,346**
Equity contracts, commodity contracts and credit derivatives						
Equity index-linked contracts held	1,766	135	11	1,812	65	56
Commodity contracts	-	-	-	24	21	21
Credit derivatives	100	5	5	100	1	-
Total equity contracts and credit derivatives	**1,866**	**140**	**16**	**1,936**	**87**	**77**
Total derivative assets / liabilities held for trading	**171,975**	**1,398**	**1,566**	**184,350**	**1,268**	**1,486**
Derivatives held for hedging						
Derivatives designated as fair value hedges						
Interest rate swaps	47,165	572	560	44,205	361	306
Total designated as fair value hedges	**47,165**	**572**	**560**	**44,205**	**361**	**306**
Derivatives designated as cash flow hedges						
Cross currency interest rate swaps	9,933	3	346	8,136	81	15
Interest rate swaps	1,383	26	6	2,012	14	12
Total designated as cash flow hedges	**11,316**	**29**	**352**	**10,148**	**95**	**27**
Total derivative assets / liabilities held for hedging	**58,481**	**601**	**912**	**54,353**	**456**	**333**
Total derivative assets / liabilities	**230,456**	**1,999**	**2,478**	**238,703**	**1,724**	**1,819**

20 Derivative financial instruments *(continued)*

The Group designates certain derivatives as hedging instruments in either fair value or cash flow hedge relationships. The timing of the nominal amounts of hedging instruments (excluding those subject to a dynamic macro-hedging process) and the applicable average rates were as follows.

Group	2019				2018			
Hedging strategy	Up to 1 year €m	1-2 years €m	2-5 years €m	>5 years €m	Up to 1 year €m	1-2 years €m	2-5 years €m	>5 years €m
Fair value hedge								
Interest rate risk								
- Interest rate swap - notional amount	3,386	1,851	9,738	6,771	3,847	3,549	9,271	6,725
- Average fixed interest rate	0.92%	0.39%	0.58%	0.72%	0.76%	0.88%	0.69%	0.78%
Cash flow hedge								
Interest rate risk								
- Interest rate swap - notional amount	-	434	139	810	-	-	644	1,368
- Average fixed interest rate	-	0.86%	1.20%	1.18%	-	-	0.95%	1.21%
Foreign exchange risk								
- Cross currency interest rate swap - notional amount	5,297	4,631	5	-	3,157	4,974	5	-
- Average EUR - GBP foreign exchange rate	0.89	0.89	0.87	-	0.88	0.89	0.87	-

Fair value hedges
Certain interest rate and cross currency interest rate derivatives are designated as hedging instruments. These are primarily used to reduce the interest rate and FX exposure on the Group's fixed rate debt held, fixed rate mortgages, customer accounts and debt issued portfolios. The amounts relating to items designated as hedging instruments and hedge ineffectiveness for the year were as follows.

Items designated as hedging instruments and hedge ineffectiveness		Nominal amount of the hedging instrument	Carrying amount of the hedging instrument		Changes in value used to calculate hedge ineffectiveness[2,3]	Ineffectiveness recognised in profit or loss[2,3]	Nominal amount of the hedging instruments affected by IBOR reform
Group - 2019 Risk category	Hedging instrument[1]	€m	Assets €m	Liabilities €m	€m	€m	€m
Interest rate risk	Interest rate swaps	47,165	572	(560)	(78)	(2)	10,133
Total		**47,165**	**572**	**(560)**	**(78)**	**(2)**	**10,133**

Items designated as hedging instruments and hedge ineffectiveness		Nominal amount of the hedging instrument	Carrying amount of the hedging instrument		Changes in value used to calculate hedge ineffectiveness[2,4]	Ineffectiveness recognised in profit or loss[2,4]
Group - 2018 Risk category	Hedging instrument[1]	€m	Assets €m	Liabilities €m	€m	€m
Interest rate risk	Interest rate swaps	44,205	361	(306)	(63)	-
Total		**44,205**	**361**	**(306)**	**(63)**	**-**

[1] *All hedging instruments are included within derivative financial instruments on the balance sheet.*
[2] *Ineffectiveness is included within net trading income on the income statement.*
[3] *The main cause of ineffectiveness in the Group's fair value hedge relationships are differences in interest indices or maturities between certain interest rate swaps and their related hedged items.*
[4] *There are no material causes of ineffectiveness in the Group's fair value hedges.*

20 Derivative financial instruments *(continued)*

Group 2019 Line item on the balance sheet in which the hedged item is included	Carrying amount of the hedged item		Accumulated amount of fair value adjustments on the hedged item included in the carrying amount of the hedged item		Changes in value used for calculating hedge ineffectiveness €m	Remaining adjustments for discontinued hedges €m
	Assets €m	Liabilities €m	Assets €m	Liabilities €m		
Interest rate risk						
Debt instruments measured at FVOCI	10,571	-	232	-	116	61
Debt securities at amortised cost	4,144	-	160	-	121	-
Loans and advances to customers	8,807	-	30	-	46	(3)
Deposits from banks	-	-	-	-	-	-
Customer accounts	-	17,287	-	(244)	(156)	(28)
Debt securities in issue	-	8,438	-	(153)	(51)	(2)
Total	**23,522**	**25,725**	**422**	**(397)**	**76**	**28**

Group 2018 Line item on the balance sheet in which the hedged item is included	Carrying amount of the hedged item		Accumulated amount of fair value adjustments on the hedged item included in the carrying amount of the hedged item		Changes in value used for calculating hedge ineffectiveness €m	Remaining adjustments for discontinued hedges €m
	Assets €m	Liabilities €m	Assets €m	Liabilities €m		
Interest rate risk						
Debt instruments measured at FVOCI[1]	10,937	-	142	-	(53)	77
Debt securities at amortised cost	3,479	-	32	-	(37)	-
Loans and advances to customers	7,305	-	(14)	-	21	(4)
Deposits from banks	-	385	-	-	(1)	-
Customer accounts	-	13,837	-	(120)	143	(1)
Debt securities in issue	-	9,382	-	(107)	(10)	-
Total	**21,721**	**23,604**	**160**	**(227)**	**63**	**72**

[1] *In the table above the carrying amount of debt instruments measured at fair value through other comprehensive income that are designated as hedged items in fair value hedges have been restated as the fair value hedge adjustment was not separately disclosed as required by IFRS 7 in 2018. The carrying amount of the hedged item has reduced from €11,079 million by €142 million to €10,937 million and the accumulated amount of fair value adjustments on the hedged item included in the value of the hedged item has increased from €nil by €142 million to €142 million.*

20 Derivative financial instruments *(continued)*

Cash flow hedges
The Group designates certain interest rate and currency derivatives in cash flow hedge relationships in order to hedge the exposure to variability in future cash flows arising from floating rate assets and liabilities and from foreign currency assets. The amounts relating to items designated as hedging instruments and hedge ineffectiveness for the year were as follows.

Group 2019 Risk category and hedging instrument[1]	Nominal amount of the hedging instrument €m	Carrying amount of the hedging instrument		Changes in value used for calculating hedge ineffectiveness €m	Changes in the value of the hedging instrument recognised in other comprehensive income €m	Ineffectiveness recognised in profit or loss[2,3] €m	Amount reclassified from the cash flow hedge reserve to profit or loss[3,4] €m	Nominal amount of the hedging instruments affected by IBOR reform €m
		Assets €m	Liabilities €m					
Interest rate risk								
Interest rate swaps	1,383	26	(6)	(19)	19	-	(39)	950
Foreign exchange risk								
Cross currency interest rate swaps	9,933	3	(346)	4	(4)	-	481	9,933
Total	**11,316**	**29**	**(352)**	**(15)**	**15**	**-**	**442**	**10,883**

Group 2018 Risk category and hedging instrument[1]	Nominal amount of the hedging instrument €m	Carrying amount of the hedging instrument		Changes in value used for calculating hedge ineffectiveness €m	Changes in the value of the hedging instrument recognised in other comprehensive income €m	Ineffectiveness recognised in profit or loss[2,3] €m	Amount reclassified from the cash flow hedge reserve to profit or loss[3,4] €m
		Assets €m	Liabilities €m				
Interest rate risk							
Interest rate swaps	2,012	14	(12)	29	(29)	-	(67)
Foreign exchange risk							
Cross currency interest rate swaps	8,136	81	(15)	(3)	3	-	12
Total	**10,148**	**95**	**(27)**	**26**	**(26)**	**-**	**(55)**

[1] *All hedging instruments are included within derivative financial instruments on the balance sheet.*
[2] *Ineffectiveness is included within net trading income on the income statement.*
[3] *There are no material causes of ineffectiveness in the Group's cash flow hedges.*
[4] *Balances include €nil (2018: €nil) amounts transferred to profit or loss for which hedge accounting was previously applied but for which hedged future cash flows are not expected to occur. The line items affected in profit or loss because of the reclassification are net interest income and net trading income.*

20 Derivative financial instruments *(continued)*

Group 2019 Risk category	Changes in the hedged risk used for calculating hedge ineffectiveness €m	Cash flow hedge reserve €m	Remaining adjustments for discontinued hedges €m
Interest rate risk	19	(16)	31
Foreign exchange risk	(4)	3	-
Total	**15**	**(13)**	**31**

Group 2018 Risk category	Changes in the hedged risk used for calculating hedge ineffectiveness €m	Cash flow hedge reserve €m	Remaining adjustments for discontinued hedges €m
Interest rate risk	(30)	2	19
Foreign exchange risk	3	(1)	-
Total	**(27)**	**1**	**19**

In 2019 and 2018, there were no forecast transactions to which the Group had applied hedge accounting which were no longer expected to occur.

Movements in the cash flow hedge reserve are shown in the Consolidated statement of changes in equity (page 67).

Group Movement in cash flow hedge reserve	2019 €m	2018 €m
Changes in fair value		
- Interest rate risk	45	8
- Foreign exchange risk	(485)	(9)
Transfer to income statement		
Interest income		
- Interest rate risk	(7)	(25)
- Foreign exchange risk	105	86
Net trading income / (expense)		
- Interest rate risk	(32)	(43)
- Foreign exchange risk	376	(74)
Deferred tax on reserve movements	(6)	6
Net decrease in cash flow hedge reserve	**(4)**	**(51)**

20 Derivative financial instruments *(continued)*

The notional amounts and fair values of derivative instruments held by the Bank are set out in the table below.

Bank	2019			2018		
	Contract notional amounts €m	Fair values Assets €m	Fair values Liabilities €m	Contract notional amounts €m	Fair values Assets €m	Fair values Liabilities €m
Derivatives held for trading						
Foreign exchange derivatives						
Currency swaps	3,450	17	18	4,074	38	30
Currency forwards	3,769	49	45	2,089	14	30
Over the counter currency options	370	1	1	356	3	3
Total foreign exchange derivatives held for trading	**7,589**	**67**	**64**	**6,519**	**55**	**63**
Interest rate derivatives						
Interest rate swaps	199,659	1,323	1,539	202,032	1,202	1,376
Cross currency interest rate swaps	2,465	53	132	1,199	64	95
Over the counter interest rate options	11,865	3	3	9,805	17	30
Interest rate futures	99	-	-	6,038	1	2
Forward rate agreements	4,020	1	1	10,575	2	2
Total interest rate derivatives held for trading	**218,108**	**1,380**	**1,675**	**229,649**	**1,286**	**1,505**
Equity contracts, commodity contracts and credit derivatives						
Equity index-linked contracts held	1,766	135	11	1,812	65	56
Commodity contracts	-	-	-	24	21	21
Credit derivatives	530	28	5	466	15	-
Total designated as fair value hedges	**2,296**	**163**	**16**	**2,302**	**101**	**77**
Total derivative assets / liabilities held for trading	**227,993**	**1,610**	**1,755**	**238,470**	**1,442**	**1,645**
Derivatives held for hedging						
Derivatives designated as fair value hedges						
Interest rate swaps	34,231	446	515	31,802	238	286
Total designated as fair value hedges	**34,231**	**446**	**515**	**31,802**	**238**	**286**
Derivatives designated as cash flow hedges						
Cross currency interest rate swaps	9,933	3	346	8,136	81	15
Interest rate swaps	442	7	4	441	10	4
Total designated as cash flow hedges	**10,375**	**10**	**350**	**8,577**	**91**	**19**
Total derivative assets / liabilities held for hedging	**44,606**	**456**	**865**	**40,379**	**329**	**305**
Total derivative assets / liabilities	**272,599**	**2,066**	**2,620**	**278,849**	**1,771**	**1,950**
Amounts include:						
Due from / to Group undertakings	42,152	103	175	40,381	99	149

The Bank uses netting arrangements and collateral agreements to reduce its exposure to credit losses. Of the derivative assets of €2.0 billion at 31 December 2019 (2018: €1.7 billion):

- €1.7 billion (2018: €1.3 billion) are available for offset against derivative liabilities under master netting arrangements. These transactions do not meet the criteria under IAS 32 to enable the assets to be presented net of the liabilities. At 31 December 2019, cash collateral of €0.2 billion (2018: €0.2 billion) was held against these assets and is reported within deposits from banks (note 38); and
- €0.3 billion (2018: €0.4 billion) are not covered by master netting arrangements or relate to counterparties covered by master netting arrangements with whom a net asset position was held at the reporting date.

At 31 December 2019, placements with other banks include cash collateral of €0.8 billion (2018: €0.4 billion) and loans and advances to customers include cash collateral of €0.1 billion placed with derivative counterparties in respect of a net derivative liability position of €0.9 billion (2018: €0.4 billion) and is reported within loans and advances to banks (note 22) and loans and advances to customers (note 26).

20 Derivative financial instruments *(continued)*

The Bank designates certain derivatives as hedging instruments in either fair value or cash flow hedge relationships. At 31 December 2019, the Bank held the following instruments in either fair value or cash flow hedge relationships.

The timing of the nominal amounts of hedging instruments (excluding those subject to a dynamic macro-hedging process) and the applicable average rates were as follows:

Bank	**2019**				**2018**			
Hedging strategy	**Up to 1 year €m**	**1-2 years €m**	**2-5 years €m**	**>5 years €m**	**Up to 1 year €m**	**1-2 years €m**	**2-5 years €m**	**>5 years €m**
Fair value hedge								
Interest rate risk								
- Interest rate swap	2.093	948	8,567	5,801	2,793	2,256	7,267	5,750
- Average fixed interest rate (%)	1.03%	0.16%	0.59%	0.67%	0.56%	0.95%	0.74%	0.74%
Cash flow hedge								
Interest rate risk								
- Interest rate swap	-	434	-	8	-	-	434	8
- Average fixed interest rate (%)	-	0.86%	-	4.00%	-	-	0.86%	4.00%
Foreign exchange risk								
- Cross currency interest rate swap	5,297	4,631	5	-	3,157	4,974	5	-
- Average EUR - GBP foreign exchange rate	0.89	0.89	0.87	-	0.88	0.89	0.87	-

Fair value hedges
Certain interest rate and cross currency interest rate derivatives are designated as hedging instruments. These are primarily used to reduce the interest rate and FX exposure on the Bank's fixed rate debt held, fixed rate mortgages, customer accounts and debt issued portfolios. The amounts relating to items designated as hedging instruments and hedge ineffectiveness for the year were as follows.

Bank **Items designated as hedging instruments and hedge ineffectiveness** **2019** **Risk category**	**Hedging instrument[1]**	**Nominal amount of the hedging instrument €m**	**Carrying amount of the hedging instrument**		**Changes in value used to calculate hedge ineffectiveness[2,3] €m**	**Ineffectiveness recognised in profit or loss[2,3] €m**	**Nominal amount of the hedging instruments affected by IBOR reform €m**
			Assets €m	**Liabilities €m**			
Interest rate risk	Interest rate swaps	34,231	446	(515)	(69)	3	1,074
Total		**34,231**	**446**	**(515)**	**(69)**	**3**	**1,074**

Bank **Items designated as hedging instruments and hedge ineffectiveness** **2018** **Risk category**	**Hedging instrument[1]**	**Nominal amount of the hedging instrument €m**	**Carrying amount of the hedging instrument**		**Changes in value used to calculate hedge ineffectiveness[2,4] €m**	**Ineffectiveness recognised in profit or loss[2,4] €m**
			Assets €m	**Liabilities €m**		
Interest rate risk	Interest rate swaps	31,802	238	(286)	(36)	-
Total		**31,802**	**238**	**(286)**	**(36)**	**-**

[1] *All hedging instruments are included within derivative financial instruments on the balance sheet.*
[2] *Ineffectiveness is included within the Bank's net trading income on the income statement.*
[3] *The main cause of ineffectiveness in the Bank's fair value hedge relationships are differences in interest indices or maturities between certain interest rate swaps and their related hedged items.*
[4] *There are no material causes of ineffectiveness in the Bank's fair value hedges.*

20 Derivative financial instruments *(continued)*

Bank 2019 Line item on the balance sheet in which the hedged item is included	Carrying amount of the hedged item		Accumulated amount of fair value adjustments on the hedged item included in the carrying amount of the hedged item		Changes in value used for calculating hedge ineffectiveness €m	Remaining adjustments for discounted hedges €m
	Assets €m	Liabilities €m	Assets €m	Liabilities €m		
Interest rate risk						
Debt instruments measured at FVOCI	10,571	-	232	-	116	61
Debt securities at amortised cost	3,658	-	153	-	121	-
Loans and advances to customers	224	-	6	-	6	(1)
Deposits from banks	-	-	-	-	-	-
Customer accounts	-	17,287	-	(244)	(156)	(28)
Debt securities in issue	-	4,439	-	(49)	(22)	-
Total	**14,453**	**21,726**	**391**	**(293)**	**65**	**32**

Bank 2018 Line item on the balance sheet in which the hedged item is included	Carrying amount of the hedged item		Accumulated amount of fair value adjustments on the hedged item included in the carrying amount of the hedged item		Changes in value used for calculating hedge ineffectiveness €m	Remaining adjustments for discounted hedges €m
	Assets €m	Liabilities €m	Assets €m	Liabilities €m		
Interest rate risk						
Debt instruments measured at FVOCI[1]	10,937	-	142	-	(52)	81
Debt securities at amortised cost	2,889	-	32	-	(37)	-
Loans and advances to customers	187	-	(1)	-	-	(1)
Deposits from banks	-	385	-	-	(1)	-
Customer accounts	-	13,837	-	(120)	143	(1)
Debt securities in issue	-	3,339	-	(31)	(16)	-
Total	**14,013**	**17,561**	**173**	**(151)**	**37**	**79**

[1] *In the table above the carrying amount of debt instruments measured at fair value through other comprehensive income that are designated as hedged items in fair value hedges have been restated as the fair value hedge adjustment was not separately disclosed as required by IFRS 7 in 2018. The carrying amount of the hedged item has reduced from €11,079 million by €142 million to €10,937 million and the accumulated amount of fair value adjustments on the hedged item included in the value of the hedged item has increased from €nil by €142 million to €142 million.*

20 Derivative financial instruments *(continued)*

Cash flow hedges
The Bank designates certain interest rate and currency derivatives in cash flow hedge relationships in order to hedge the exposure to variability in future cash flows arising from floating rate assets and liabilities and from foreign currency assets. The amounts relating to items designated as hedging instruments and hedge ineffectiveness were as follows.

Bank 2019 Risk category and hedging instrument[1]	Nominal amount of the hedging instrument €m	Carrying amount of the hedging instrument		Changes in value used for calculating hedge ineffectiveness €m	Changes in the value of the hedging instrument recognised in other comprehensive income €m	Ineffectiveness recognised in profit or loss[2,3] €m	Amount reclassified from the cash flow hedge reserve to profit or loss[3,4] €m	Nominal amount of the hedging instruments affected by IBOR reform €m
		Assets €m	Liabilities €m					
Interest rate risk								
Interest rate swaps	442	7	(4)	2	(2)	-	(32)	8
Foreign exchange risk								
Cross currency interest rate swaps	9,933	3	(346)	4	(4)	-	482	9,933
Total	**10,375**	**10**	**(350)**	**6**	**(6)**	**-**	**450**	**9,941**

Bank 2018 Risk category and hedging instrument[1]	Nominal amount of the hedging instrument €m	Carrying amount of the hedging instrument		Changes in value used for calculating hedge ineffectiveness €m	Changes in the value of the hedging instrument recognised in other comprehensive income €m	Ineffectiveness recognised profit or loss[2,3] €m	Amount reclassified from the cash flow hedge reserve to profit or loss[3,4] €m
		Assets €m	Liabilities €m				
Interest rate risk							
Interest rate swaps	441	10	(4)	32	(32)	-	(61)
Foreign exchange risk							
Cross currency interest rate swaps	8,136	81	(15)	(3)	3	-	12
Total	**8,577**	**91**	**(19)**	**29**	**(29)**	**-**	**(49)**

Bank 2019 Risk category	Changes in the hedged risk used for calculating hedge ineffectiveness €m	Cash flow hedge reserve €m	Remaining adjustments for discounted hedges €m
Interest rate risk	(2)	4	44
Foreign exchange risk	(4)	3	-
Total	**(6)**	**7**	**44**

[1] *All hedging instruments are included within derivative financial instruments on the balance sheet.*
[2] *Ineffectiveness is included within net trading income / (expense) on the Bank's income statement.*
[3] *There are no material causes of ineffectiveness in the Bank's cash flow hedges.*
[4] *€nil relates to amounts transferred to profit or loss for which hedge accounting was previously applied but for which hedged future cash flows are not expected to occur. The line items affected in the Bank's profit or loss because of the reclassification are net interest income and net trading income.*

20 Derivative financial instruments *(continued)*

Bank **2018** **Risk category**	**Changes in the hedged risk used for calculating hedge ineffectiveness €m**	**Cash flow hedge reserve €m**	**Remaining adjustments for discounted hedges €m**
Interest rate risk	(33)	4	12
Foreign exchange risk	3	(1)	-
Total	**(30)**	**3**	**12**

In 2018 and 2019, there were no forecast transactions to which the Bank had applied hedge accounting which were no longer expected to occur.

Movements in the cash flow hedge reserve are shown in the Bank's statement of changes in equity (page 69).

Bank **Movement in cash flow hedge reserve**	**2019 €m**	**2018 €m**
Changes in fair value		
- Interest rate risk	1	9
- Foreign exchange risk	(485)	(9)
Transfer to income statement		
Interest income		
- Interest rate risk	(3)	(20)
- Foreign exchange risk	105	86
Net trading income / (expense)		
- Interest rate risk	(29)	(41)
- Foreign exchange risk	375	(74)
Deferred tax on reserve movements	3	4
Net decrease in cash flow hedge reserve	**(33)**	**(45)**

21 Other financial assets at fair value through profit or loss

Other financial assets at FVTPL include assets managed on a fair value basis by the life assurance business and those assets which do not meet the requirements in order to be measured at FVOCI or amortised cost.

A portion of the Group's life assurance business takes the legal form of investment contracts, under which legal title to the underlying investment is held by the Group, but the inherent risks and rewards in the investments are borne by the policyholders. Due to the nature of these contracts, the carrying value of the assets is always the same as the value of the liabilities due to policyholders and any change in the value of the assets results in an equal change in the value of the amounts due to policyholders. The associated liabilities are included in liabilities to customers under investment contracts and insurance contract liabilities on the balance sheet. At 31 December 2019, such assets were €14,425 million (2018: €12,314 million). Included in these assets are investments in unconsolidated structured entities which comprise investments in collective investment vehicles of €10,029 million (2018: €8,283 million) (note 55).

Group	**2019 €m**	**2018 €m**
Assets linked to policyholder liabilities		
Equity securities	10,792	9,244
Debt securities	1,543	1,089
Unit trusts	1,364	1,142
Government bonds	726	839
	14,425	**12,314**
Other financial assets		
Debt securities	916	844
Government bonds	854	804
Equity securities	170	110
Unit trusts	119	88
	2,059	**1,846**
Other financial assets at fair value through profit or loss	**16,484**	**14,160**

21 Other financial assets at fair value through profit or loss *(continued)*

Other financial assets of €2,059 million (2018: €1,846 million) of which €1,809 million (2018: €1,626 million) relates to assets held by the Group's life assurance business for solvency margin purposes or as backing for non-linked policyholder liabilities. Further details on financial assets mandatorily measured at FVTPL is set out in note 55. Included in these assets are investments in unconsolidated structured entities which comprise investments in collective investment vehicles of €147 million (2018: €116 million) (note 55).

At 31 December 2019, NIAC held ordinary shares of BOIG plc the Bank's ultimate Parent company, with a fair value of €24 million (2018: €16 million), for the benefit of life assurance policyholders. Included within other financial assets are subordinated bonds issued by National Asset Management Agency (NAMA) with a nominal value of €70 million (2018: €70 million) and a fair value of €73 million (2018: €76 million). These bonds represented 5% of the nominal consideration received for assets sold to NAMA in 2010, with the remaining 95% received in the form of NAMA senior bonds. The subordinated bonds are not guaranteed by the State and the payment of interest and repayment of capital is dependent on the performance of NAMA.

22 Loans and advances to banks

Loans and advances to banks are classified as financial assets at amortised cost or financial assets mandatorily at FVTPL. The associated impairment loss allowance on loans and advances to banks is measured on a 12-month or lifetime ECL approach.

Loans and advances to banks at FVTPL include assets managed on a fair value basis by the life assurance business and those assets which do not meet the requirements in order to be measured at FVOCI or amortised cost. At 31 December 2019, the Group's loans and advances to banks includes €198 million (2018: €213 million) of assets held on behalf of Wealth and Insurance life policyholders.

Mandatory deposits with central banks includes €1.4 billion relating to collateral in respect of the Group's issued bank notes in NI (2018: €1.4 billion).

Placements with other banks include cash collateral of €0.8 billion (2018: €0.4 billion) placed with derivative counterparties in relation to net derivative liability positions (note 21) (Bank 2019: €0.8 billion, 2018: €0.4 billion).

The Group has entered into transactions to purchase securities with agreement to resell and has accepted collateral that it is permitted to sell or repledge in the absence of default by the owner of the collateral. At 31 December 2019, the fair value of this collateral was €nil (2018: €16 million) and is included in the loans and advances to banks at FVTPL.

Further information on the credit risk of loans and advances to banks can be found in the financial risk management note on page 147.

There has been no significant change in the impairment loss allowance on loans and advances to banks held at amortised cost during the year. The composition of loans and advances to banks at amortised cost by stage is set out on page 155 and the asset quality of loans and advances to banks at amortised cost is set out on page 172.

Loans and advances to banks at FVTPL are not subject to impairment under IFRS 9.

	Group		Bank	
	2019 €m	2018 €m	2019 €m	2018 €m
Mandatory deposits with central banks	1,519	1,449	13	13
Placements with banks	1,474	831	14,276	12,278
Funds placed with the Central Bank of Ireland not on demand	30	28	-	-
	3,023	**2,308**	**14,289**	12,291
Less impairment loss allowance on loans and advances to banks	(1)	(1)	(13)	(12)
Loans and advances to banks at amortised cost	**3,022**	**2,307**	**14,276**	12,279
Loans and advances to banks at fair value through profit and loss	306	318	1	21
Loans and advances to banks	**3,328**	**2,625**	**14,277**	**12,300**
Amounts include:				
Due from Group undertakings	**-**	**-**	**13,324**	**11,741**

23 Debt securities at amortised cost

	Group		Bank	
	2019 €m	**2018 €m**	**2019 €m**	**2018 €m**
Government bonds	3,767	3,313	3,464	2,853
Other debt securities at amortised cost	687	559	3,200	3,200
Asset backed securities	58	57	15	-
Less impairment loss allowance	(1)	(1)	(4)	(3)
Debt securities at amortised cost	**4,511**	**3,928**	**6,675**	**6,050**
Amounts include				
Due from Group undertakings	-	-	3,197	3,200

The table above details the significant categories of debt securities at amortised cost.

At 31 December 2019, debt securities at amortised cost with a fair value of €18 million (2018: €nil) had been pledged to third parties in sale and repurchase agreements. The Group has not derecognised any securities delivered in such sale and repurchase agreements on the balance sheet.

There are no significant changes in the impairment loss allowance on debt securities at amortised cost, assets are Stage 1. The composition of debt securities at amortised cost by stage is set out on page 155 and the asset quality of debt securities at amortised cost is set out on page 170.

24 Financial assets at fair value through other comprehensive income

At 31 December 2019, debt instruments at FVOCI with a fair value of €17 million (2018: €67 million) had been pledged to third parties in sale and repurchase agreements. The Group has not derecognised any securities delivered in such sale and repurchase agreements on the balance sheet.

The impairment loss allowance for ECL on debt instruments at FVOCI does not reduce the carrying amount but an amount equal to the allowance is recognised in OCI as an accumulated impairment amount, with corresponding impairment gains or losses recognised in the income statement.

The impairment loss allowance on debt instruments at FVOCI was €3 million at 31 December 2019 (2018: €3 million). The composition of debt instruments at FVOCI by stage is set out on page 155 and the asset quality of debt instruments at FVOCI is set out on page 170.

In 2019, the Group disposed of debt instruments at FVOCI of €1,178 million (2018: €85 million) which resulted in a transfer of €3 million (2018: €2 million) from the debt instruments at FVOCI reserve to the income statement.

At 31 December 2019, financial assets at FVOCI included €664 million (2018: €543 million) placed with Monetary Authorities as contingency, to access intraday and other funding facilities.

	Group		Bank	
	2019 €m	**2018 €m**	**2019 €m**	**2018 €m**
Debt instruments at fair value through other comprehensive income				
Government bonds	5,849	6,074	5,849	6,074
Other debt securities				
- listed	4,948	5,974	4,948	5,974
Total debt instruments at fair value through other comprehensive income	**10,797**	**12,048**	**10,797**	**12,048**
Impairment loss allowance on debt instruments at fair value through other comprehensive income	**(3)**	**(3)**	**(3)**	**(3)**

24 Financial assets at fair value through other comprehensive income

Fair value	Group 2019 €m	Group 2018 €m	Bank 2019 €m	Bank 2018 €m
Opening balance	**12,048**	**10,118**	**12,048**	**10,118**
Additions	1,525	4,652	1,525	4,652
Redemptions and disposals	(2,827)	(2,541)	(2,827)	(2,541)
Revaluation, exchange and other adjustments	51	(181)	51	(181)
Closing balance	**10,797**	**12,048**	**10,797**	**12,048**

25 Assets classified as held for sale

Assets classified as held for sale in 2018 represented the gross carrying value of the Retail UK credit card portfolio net of related impairment loss allowance together with related accrued interest receivable of €2 million. This portfolio continued to be classified as such during 2019 up to its disposal in July 2019. See note 18 for further details.

Group	2019 €m	2018 €m
Retail UK credit card portfolio	-	602
At end of year	**-**	**602**

26 Loans and advances to customers

Loans and advances to customers includes cash collateral of €0.1 billion (2018: €0.1 billion) placed with derivative counterparties in relation to net derivative liability positions.

Of loans and advances to customers at FVTPL, €246 million (2018: €261 million) represent the Life Loan mortgage product, which was offered by the Group until November 2010. The cash flows of the Life Loans are not considered to consist solely of payments of principal and interest, and as such are classified as FVTPL.

During the year, the Group completed three transactions whereby it derecognised or disposed of €479 million of loans and advances to customers (after impairment loss allowance) as follows:

- In April 2019, the Group entered into a securitisation arrangement for a portfolio of residential mortgage NPEs through an unconsolidated special purpose vehicle named Mulcair Securities Designated Activity Company (DAC) ('Mulcair Securities') (note 55). The portfolio had a gross carrying value of €370 million (before impairment loss allowance) and a net carrying value of €326 million (after impairment loss allowance).

  The Group transferred the beneficial interest in the loans to Mulcair Securities. In accordance with IFRS 9, the residential mortgage assets have been derecognised from the balance sheet.
- In August 2019, the Group sold a portfolio of residential and commercial property NPEs to Promontoria 2019 DAC, a party unconnected to the Group. The portfolio had a gross carrying value of €239 million (before impairment loss allowance) and a net carrying value of €151 million (after impairment loss allowance). The Group has not retained any interest in the assets sold.
- In December 2019, the Group sold a portfolio of UK personal loan NPEs to Intrum Finance Limited, a party unconnected to the Group. The portfolio had a gross carrying value of €13 million (before impairment loss allowance) and a net carrying value of €2 million (after impairment loss allowance). The Group has not retained any interest in the assets sold.

The Group has recognised a net impairment loss of €23 million on these transactions which has been reported through net impairment (losses) / gains on financial instruments, as required by IFRS 9 (note 16).

In June 2019, the Group purchased a €265 million portfolio of commercial loans predominantly in RoI from KBC Ireland.

26 Loans and advances to customers *(continued)*

	Group		Bank	
	2019 €m	**2018 €m**	**2019 €m**	**2018 €m**
Loans and advances to customers at amortised cost	76,543	74,428	38,140	38,713
Finance leases and hire purchase receivables	4,000	3,372	1,146	1,172
	80,543	**77,800**	**39,286**	**39,885**
Less allowance for impairment charges on loans and advances to customers	(1,308)	(1,698)	(869)	(1,219)
Loans and advances to customers at amortised cost	**79,235**	**76,102**	**38,417**	**38,666**
Loans and advances to customers at fair value through profit or loss[1]	252	261	166	160
Total loans and advances to customers	**79,487**	**76,363**	**38,583**	**38,826**
Amounts include				
Due from joint ventures and associates	142	119	n/a	n/a
Due from Group undertakings	n/a	n/a	931	1,223

The Group's portfolios of loans and advances to customers at amortised cost are set out below. The 2018 comparative tables include loans and advances to customers held for sale at 31 December 2018:

Group	2019			2018		
	Gross carrying amount at amortised cost €m	**Impairment loss allowance €m**	**Total loans and advances to customers at amortised cost €m**	**Gross carrying amount at amortised cost €m**	**Impairment loss allowance €m**	**Total loans and advances to customers at amortised cost €m**
Loans and advances to customers at amortised cost	80,543	(1,308)	79,235	77,800	(1,698)	76,102
Loans and advances to customers classified as held for sale (note 25)	-	-	-	630	(30)	600
Total	**80,543**	**(1,308)**	**79,235**	**78,430**	**(1,728)**	**76,702**

[1] *Loans and advances to customers at fair value through profit or loss are not subject to impairment under IFRS 9.*

26 Loans and advances to customers *(continued)*

The following tables show the gross carrying amount and impairment loss allowances subject to 12 month and lifetime ECL on loans and advances to customers at amortised cost.

Group **2019** **Gross carrying amount at amortised cost** **(before impairment loss allowance)**	**Residential mortgages €m**	**Non-property SME and corporate €m**	**Property and construction €m**	**Consumer €m**	**Total €m**
Stage 1 - 12 month ECL (not credit impaired)	42,898	17,474	5,985	5,421	71,778
Stage 2 - Lifetime ECL (not credit impaired)	1,677	2,175	1,513	206	5,571
Stage 3 - Lifetime ECL (credit impaired)	1,693	757	549	100	3,099
Purchased / originated credit-impaired	3	27	65	-	95
Gross carrying amount at 31 December 2019	**46,271**	**20,433**	**8,112**	**5,727**	**80,543**

Group **2019** **Impairment loss allowance**	**Residential mortgages €m**	**Non-property SME and corporate €m**	**Property and construction €m**	**Consumer €m**	**Total €m**
Stage 1 - 12 month ECL (not credit impaired)	16	56	6	64	142
Stage 2 - Lifetime ECL not credit impaired	36	78	42	32	188
Stage 3 - Lifetime ECL credit impaired	380	353	180	63	976
Purchased / originated credit-impaired	-	-	2	-	2
Impairment loss allowance at 31 December 2019	**432**	**487**	**230**	**159**	**1,308**

Group **2018** **Gross carrying amount at amortised cost** **(before impairment loss allowance) including held for sale**	**Residential mortgages €m**	**Non-property SME and corporate €m**	**Property and construction €m**	**Consumer €m**	**Total €m**
Stage 1 - 12 month ECL (not credit impaired)	41,096	16,547	6,343	4,816	68,802
Stage 2 - Lifetime ECL (not credit impaired)	1,873	1,850	1,102	250	5,075
Stage 3 - Lifetime ECL (credit impaired)	2,465	1,067	843	108	4,483
Purchased / originated credit-impaired	3	1	66	-	70
Gross carrying amount at 31 December 2018	**45,437**	**19,465**	**8,354**	**5,174**	**78,430**

Group **2018** **Impairment loss allowance including held for sale**	**Residential mortgages €m**	**Non-property SME and corporate €m**	**Property and construction €m**	**Consumer €m**	**Total €m**
Stage 1 - 12 month ECL (not credit impaired)	14	50	4	52	120
Stage 2 - Lifetime ECL not credit impaired	31	74	38	33	176
Stage 3 - Lifetime ECL credit impaired	492	501	369	70	1,432
Purchased / originated credit-impaired	-	-	-	-	-
Impairment loss allowance at 31 December 2018	**537**	**625**	**411**	**155**	**1,728**

26 Loans and advances to customers *(continued)*

The following tables show the changes in gross carrying amount and impairment loss allowances of loans and advances to customers at amortised cost for the year ended 31 December 2019. The tables are prepared based on a combination of aggregation of monthly movements for material term loan portfolios (i.e. incorporating all movements a loan in these portfolios has made during the year) and full year movements for revolving-type facilities and less material (primarily Consumer) portfolios.

Transfers between stages represent the migration of loans from Stage 1 to Stage 2 following a 'significant increase in credit risk' or to Stage 3 as loans enter defaulted status. Conversely, improvement in credit quality and loans exiting default result in loans migrating in the opposite direction. The approach taken to identify a 'significant increase in credit risk' and identifying defaulted and credit-impaired assets is outlined in note 27.

Transfers between each stage reflect the balances and impairment loss allowances prior to transfer. The impact of re-measurement of impairment loss allowance on stage transfer is reported within 're-measurement' in the new stage that a loan has transferred into. For those tables based on an aggregation of the months transfers between stages, transfers may include loans which have subsequently transferred back to their original stage or migrated further to another stage.

'Net changes in exposure' comprise the movements in the gross carrying amount and impairment loss allowance as a result of new loans originated and repayments of outstanding balances throughout the reporting period.

'Net impairment (losses) / gains in income statement' does not include the impact of cash recoveries which are recognised directly in the income statement (note 16).

'Re-measurements' includes the impact of re-measurement on stage transfers noted above, changes in management adjustments and re-measurement due to changes in asset quality that did not result in a transfer to another stage.

'ECL model parameter changes' represents the impact on impairment loss allowances of semi-annual updates to the FLI, and other model and parameter updates used in the measurement of impairment loss allowances.

'Impairment loss allowances utilised' represents the reduction in the gross carrying amount and associated impairment loss allowance on loans where the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. The utilisation of an allowance does not, of itself, alter a customer's obligations nor does it impact on the Group's rights to take relevant enforcement action.

Group **2019** **Gross carrying amount (before impairment loss allowance) including held for sale**	**Stage 1 - 12 month ECL (not credit impaired) €m**	**Stage 2 - Lifetime ECL (not credit impaired) €m**	**Stage 3 - Lifetime ECL (credit impaired) €m**	**Purchased / originated credit impaired[1] €m**	**Total gross carrying amount €m**
Opening balance 1 January 2019	**68,802**	**5,075**	**4,483**	**70**	**78,430**
Total net transfers	(1,566)	1,169	397	-	-
- to 12-month ECL not credit-impaired	*3,132*	*(3,122)*	*(10)*	-	-
- to lifetime ECL not credit-impaired	*(4,544)*	*5,240*	*(696)*	-	-
- to lifetime ECL credit-impaired	*(154)*	*(949)*	*1,103*	-	-
Net changes in exposure	3,405	(705)	(1,118)	22	1,604
Impairment loss allowances utilised	-	-	(696)	-	(696)
Exchange adjustments	1,564	90	49	3	1,706
Measurement reclassification and other movements	(427)	(58)	(16)	-	(501)
Gross carrying amount at 31 December 2019	**71,778**	**5,571**	**3,099**	**95**	**80,543**

Impairment loss allowances utilised on loans and advances to customers at amortised cost during 2019 includes €297 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2019, Purchased or Originated Credit-impaired assets included €67 million of assets with an impairment loss allowance of €2 million which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

26 Loans and advances to customers *(continued)*

Group 2019 Impairment loss allowance including held for sale	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1,2] €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**120**	**176**	**1,432**	**-**	**1,728**
Total net transfers	52	(1)	(51)	-	-
- to 12-month ECL not credit-impaired	*79*	*(76)*	*(3)*	-	-
- to lifetime ECL not credit-impaired	*(19)*	*130*	*(111)*	-	-
- to lifetime ECL credit-impaired	*(8)*	*(55)*	*63*	-	-
Net impairment (losses) / gains in income statement	(29)	19	265	2	257
- Re-measurement	*(44)*	*7*	*361*	*2*	*326*
- Net changes in exposure	*10*	*(17)*	*(169)*	-	*(176)*
- ECL model parameter changes	*5*	*29*	*73*	-	*107*
Impairment loss allowances utilised	-	-	(696)	-	(696)
Exchange adjustments	3	2	11	-	16
Measurement reclassification and other movements	(4)	(8)	15	-	3
Impairment loss allowance at 31 December 2019	**142**	**188**	**976**	**2**	**1,308**
Impairment coverage at 31 December 2019 (%)	**0.20%**	**3.37%**	**31.49%**	**2.11%**	**1.62%**

Total gross loans and advances to customers increased during the period by €2.1 billion from €78.4 billion as at 31 December 2018 to €80.5 billion as at 31 December 2019.

Stage 1 loans have increased by €3.0 billion reflecting the impact of net new lending and FX movements with a corresponding increase in impairment loss allowances. Coverage on Stage 1 loans has remained consistent at 0.2% with the impact of transfers from Stage 2 at a higher coverage rate offset by re-measurement to 12-month ECL in Stage 1.

Stage 2 loans have increased by €0.5 billion with net repayments of €0.7 billion offset by net transfers from other stages of €1.2 billion. Stage 2 increases mainly reflect migration in the corporate and property and construction portfolios due to a combination of case specific credit events and the evolution of FLI / impairment model parameter updates. Coverage on Stage 2 loans has remained consistent at 3.4% with an increase in impairment loss allowances due to the impact of parameter changes offset by net repayments.

Stage 3 loans have decreased by €1.4 billion with the key drivers being a net reduction in exposures of €1.1 billion and the utilisation of impairment loss allowances of €0.7 billion, offset by net transfers from other stages of €0.4 billion. The reduction reflects ongoing resolution activity including the securitisation and disposal of non-performing portfolios (primarily buy to let (BTL) residential mortgages) during the year which contributed €0.6 billion of a decrease in gross carrying amount.

Stage 3 impairment losses have reduced by €0.5 billion primarily due to the utilisation of impairment loss allowances of €0.7 billion offset by the impact of updated FLI / impairment model parameters (including refreshed cure rates) and re-measurement primarily reflecting losses on a small number of large exposures. €0.1 billion of the reduction relates to the securitisation and disposal of non-performing portfolios (primarily BTL residential mortgages) during the year. Cover on Stage 3 loans has decreased slightly from 32% to 31%.

The impact of the disposal of the UK credit card portfolio during the year which was classified as held for sale is included within ‘Measurement reclassification and other movements’ and resulted in reductions in gross carrying amount of €587 million and impairment loss allowance of €25 million.

[1] *At 31 December 2019, Purchased or Originated Credit-impaired assets included €67 million of assets with an impairment loss allowance of €2 million which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2019 is €2 million.*

26 Loans and advances to customers *(continued)*

Group 2018 Gross carrying amount (before impairment loss allowance) including held for sale	Stage 1 - 12 month ECL (not credit impaired) €m	Stage 2 - Lifetime ECL (not credit impaired) €m	Stage 3 - Lifetime ECL (credit impaired) €m	Purchased / originated credit impaired[1] €m	Total gross carrying amount €m
Opening balance 1 January 2018	**66,175**	**5,814**	**5,923**	**118**	**78,030**
Total net transfers	(430)	143	287	-	-
- to 12-month ECL not credit-impaired	*3,119*	*(3,093)*	*(26)*	-	-
- to lifetime ECL not credit-impaired	*(3,301)*	*3,956*	*(655)*	-	-
- to lifetime ECL credit-impaired	*(248)*	*(720)*	*968*	-	-
Net changes in exposure	3,211	(875)	(984)	(7)	1,345
Impairment loss allowances utilised	-	-	(748)	(42)	(790)
Exchange adjustments	(191)	(12)	(6)	(1)	(210)
Measurement reclassification and other movements	37	5	11	2	55
Gross carrying amount at 31 December 2018	**68,802**	**5,075**	**4,483**	**70**	**78,430**

Group 2018 Impairment loss allowance cost including held for sale	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1,2] €m	Total impairment loss allowance €m
Opening balance 1 January 2018	**121**	**189**	**2,102**	**38**	**2,450**
Total net transfers	7	44	(51)	-	-
- to 12-month ECL not credit-impaired	*56*	*(46)*	*(10)*	-	-
- to lifetime ECL not credit-impaired	*(43)*	*125*	*(82)*	-	-
- to lifetime ECL credit-impaired	*(6)*	*(35)*	*41*	-	-
Net impairment (losses) / gains in income statement	1	(53)	61	4	13
- Re-measurement	*(1)*	*(38)*	*166*	*4*	*131*
- Net changes in exposure	*15*	*(25)*	*(138)*	-	*(148)*
- ECL model parameter and / or methodology changes	*(13)*	*10*	*33*	-	*30*
Impairment loss allowances utilised	-	-	(748)	(42)	(790)
Exchange adjustments	-	-	(2)	-	(2)
Measurement reclassification and other movements	(9)	(4)	70	-	57
Impairment loss allowance at 31 December 2018	**120**	**176**	**1,432**	**-**	**1,728**
Impairment coverage at 31 December 2018 (%)	**0.17%**	**3.47%**	**31.94%**	**-**	**2.20%**

Impairment loss allowances utilised on loans and advances to customers at amortised cost during 2018 includes €352 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2018, Purchased or Originated Credit-impaired assets included €68 million of assets with an impairment loss allowance of €nil which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2018 is €nil.*

26 Loans and advances to customers *(continued)*

Bank **2019** **Gross carrying amount at amortised cost (before impairment loss allowance)**	**Residential mortgages €m**	**Non-property SME and corporate €m**	**Property and construction €m**	**Consumer €m**	**Total €m**
Stage 1 - 12 month ECL (not credit impaired)	8,888	16,736	5,647	1,933	33,204
Stage 2 - Lifetime ECL (not credit impaired)	595	2,008	1,409	108	4,120
Stage 3 - Lifetime ECL (credit impaired)	611	698	506	53	1,868
Purchased / originated credit-impaired	3	26	65	-	94
Gross carrying amount at 31 December 2019	**10,097**	**19,468**	**7,627**	**2,094**	**39,286**

Bank **2019** **Impairment loss allowance**	**Residential mortgages €m**	**Non-property SME and corporate €m**	**Property and construction €m**	**Consumer €m**	**Total €m**
Stage 1 - 12 month ECL (not credit impaired)	8	53	5	16	82
Stage 2 - Lifetime ECL not credit impaired	15	74	40	12	141
Stage 3 - Lifetime ECL credit impaired	121	326	166	31	644
Purchased / originated credit-impaired	-	-	2	-	2
Impairment loss allowance at 31 December 2019	**144**	**453**	**213**	**59**	**869**

Bank **2018** **Gross carrying amount at amortised cost (before impairment loss allowance)**	**Residential mortgages €m**	**Non-property SME and corporate €m**	**Property and construction €m**	**Consumer €m**	**Total €m**
Stage 1 - 12 month ECL (not credit impaired)	9,604	16,244	5,977	1,878	33,703
Stage 2 - Lifetime ECL (not credit impaired)	661	1,633	995	98	3,387
Stage 3 - Lifetime ECL (credit impaired)	904	1,006	754	61	2,725
Purchased / originated credit-impaired	3	1	66	-	70
Gross carrying amount at 31 December 2018	**11,172**	**18,884**	**7,792**	**2,037**	**39,885**

Bank **2018** **Impairment loss allowance**	**Residential mortgages €m**	**Non-property SME and corporate €m**	**Property and construction €m**	**Consumer €m**	**Total €m**
Stage 1 - 12 month ECL (not credit impaired)	8	47	3	13	71
Stage 2 - Lifetime ECL not credit impaired	13	66	37	12	128
Stage 3 - Lifetime ECL credit impaired	160	478	344	37	1,019
Purchased / originated credit-impaired	-	1	-	-	1
Impairment loss allowance at 31 December 2018	**181**	**592**	**384**	**62**	**1,219**

26 Loans and advances to customers *(continued)*

Bank **2019** **Gross carrying amount (before impairment loss allowance)**	**Stage 1 - 12 month ECL (not credit impaired) €m**	**Stage 2 - Lifetime ECL (not credit impaired) €m**	**Stage 3 - Lifetime ECL (credit impaired) €m**	**Purchased / originated (credit impaired)[1] €m**	**Total gross carrying amount €m**
Opening balance 1 January 2019	**33,703**	**3,387**	**2,725**	**70**	**39,885**
Total net transfers	(1,460)	1,223	237	-	-
- to 12-month ECL not credit-impaired	*1,659*	*(1,656)*	*(3)*	-	-
- to lifetime ECL not credit-impaired	*(3,053)*	*3,469*	*(416)*	-	-
- to lifetime ECL credit-impaired	*(66)*	*(590)*	*656*	-	-
Net changes in exposure	751	(542)	(590)	21	(360)
Impairment loss allowances utilised	-	-	(533)	-	(533)
Exchange adjustments	400	55	29	3	487
Measurement reclassification and other movements	(190)	(3)	-	-	(193)
Gross carrying amount at 31 December 2019	**33,204**	**4,120**	**1,868**	**94**	**39,286**

Bank **2019** **Impairment loss allowance**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1,2] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2019	**71**	**128**	**1,019**	**1**	**1,219**
Total net transfers	38	10	(48)	-	-
- to 12-month ECL not credit-impaired	*52*	*(51)*	*(1)*	-	-
- to lifetime ECL not credit-impaired	*(14)*	*98*	*(84)*	-	-
- to lifetime ECL credit-impaired	-	*(37)*	*37*	-	-
Net impairment (losses) / gains in income statement	(28)	1	176	1	150
- Re-measurement	*(35)*	*(1)*	*244*	*1*	*209*
- Net changes in exposure	*2*	*(18)*	*(89)*	-	*(105)*
- ECL model parameter and / or methodology changes	*5*	*20*	*21*	-	*46*
Impairment loss allowances utilised	-	-	(533)	-	(533)
Exchange adjustments	-	2	5	-	7
Measurement reclassification and other movements	1	-	25	-	26
Impairment loss allowance at 31 December 2019	**82**	**141**	**644**	**2**	**869**
Impairment coverage at 31 December 2019 (%)	**0.25%**	**3.42%**	**34.48%**	**2.13%**	**2.21%**

Impairment loss allowances utilised on loans and advances to customers at amortised cost during 2019 includes €259 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2019, Purchased or Originated Credit-impaired assets included €67 million of assets with an impairment loss allowance of €2 million which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during the year is €2 million.*

26 Loans and advances to customers *(continued)*

Bank 2018 Gross carrying amount (before impairment loss allowance)	Stage 1 - (not credit impaired) €m	Stage 2 - (not credit impaired) €m	Stage 3 - (credit impaired) €m	Purchased / originated (credit impaired)[1] €m	Total carrying amount €m
Opening balance 1 January 2018	**32,958**	**3,638**	**3,696**	**118**	**40,410**
Total net transfers	(412)	263	149	-	-
- to 12-month ECL not credit-impaired	*1,411*	*(1,390)*	*(21)*	-	-
- to lifetime ECL not credit-impaired	*(1,672)*	*2,037*	*(365)*	-	-
- to lifetime ECL credit-impaired	*(151)*	*(384)*	*535*	-	-
Net changes in exposure	1,516	(596)	(591)	(7)	322
Impairment loss allowances utilised	-	-	(570)	(42)	(612)
Exchange adjustments	(18)	9	(3)	(1)	(13)
Measurement reclassification and other movements	(341)	73	44	2	(222)
Gross carrying amount at 31 December 2018	**33,703**	**3,387**	**2,725**	**70**	**39,885**

Bank 2018 Impairment loss allowance	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1,2] €m	Total impairment loss allowance €m
Opening balance 1 January 2018	**80**	**135**	**1,501**	**38**	**1,754**
Total net transfers	22	13	(35)	-	-
- to 12-month ECL not credit-impaired	*37*	*(29)*	*(8)*	-	-
- to lifetime ECL not credit-impaired	*(11)*	*64*	*(53)*	-	-
- to lifetime ECL credit-impaired	*(4)*	*(22)*	*26*	-	-
Net impairment (losses) / gains in income statement	(25)	(21)	38	3	(5)
- Re-measurement	*(25)*	*8*	*184*	*4*	*171*
- Net changes in exposure	*4*	*(40)*	*(155)*	*(1)*	*(192)*
- ECL model parameter and / or methodology changes	*(4)*	*11*	*9*	-	*16*
Impairment loss allowances utilised	-	-	(570)	(42)	(612)
Exchange adjustments	-	-	-	-	-
Measurement reclassification and other movements	(6)	1	85	2	82
Impairment loss allowance at 31 December 2018	**71**	**128**	**1,019**	**1**	**1,219**
Impairment coverage at 31 December 2018 (%)	**0.21%**	**3.78%**	**37.39%**	**1.43%**	**3.06%**

Impairment loss allowances utilised on loans and advances to customers at amortised cost during 2018 includes €288 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2018, Purchased or Originated Credit-impaired assets included €68 million of assets with an impairment loss allowance of €nil which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2018 is €nil.*

26 Loans and advances to customers *(continued)*

The movement in both the gross carrying amount and impairment loss allowances subject to 12 month and lifetime ECL on loans and advances to customers at amortised cost by portfolio asset class is set out in the following tables. These tables are prepared on the same basis as the total Group tables as set out above.

Residential Mortgages

Group 2019 Residential mortgages - Gross carrying amount (before impairment loss allowance)	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1] €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**41,096**	**1,873**	**2,465**	**3**	**45,437**
Total net transfers	(33)	(17)	50	-	-
- to 12-month ECL not credit-impaired	*1,699*	*(1,699)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(1,685)*	*2,133*	*(448)*	-	-
- to lifetime ECL credit-impaired	*(47)*	*(451)*	*498*	-	-
Net changes in exposure	734	(205)	(670)	-	(141)
Impairment loss allowances utilised	-	-	(176)	-	(176)
Exchange adjustments	1,080	27	23	-	1,130
Measurement reclassification and other movements	21	(1)	1	-	21
Gross carrying amount at 31 December 2019	**42,898**	**1,677**	**1,693**	**3**	**46,271**

Group 2019 Residential mortgages - Impairment loss allowance	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1,2] €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**14**	**31**	**492**	**-**	**537**
Total net transfers	25	1	(26)	-	-
- to 12-month ECL not credit-impaired	*29*	*(29)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(4)*	*45*	*(41)*	-	-
- to lifetime ECL credit-impaired	*-*	*(15)*	*15*	-	-
Net impairment (losses) / gains in income statement	(24)	4	78	-	58
- Re-measurement	*(12)*	*(7)*	*64*	-	*45*
- Net changes in exposure	*(16)*	*(3)*	*(50)*	-	*(69)*
- ECL model parameter changes	*4*	*14*	*64*	-	*82*
Impairment loss allowances utilised	-	-	(176)	-	(176)
Exchange adjustments	1	-	3	-	4
Measurement reclassification and other movements	-	-	9	-	9
Impairment loss allowance at 31 December 2019	**16**	**36**	**380**	**-**	**432**

Impairment loss allowances utilised on Residential mortgages at amortised cost during 2019 includes €27 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2019, Purchased or Originated Credit-impaired assets included €2 million of assets with an impairment loss allowance of €nil which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2019 is €nil.*

26 Loans and advances to customers *(continued)*

Group 2018 Residential mortgages - Gross carrying amount (before impairment loss allowance)	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2018	**41,168**	**2,319**	**2,875**	**3**	**46,365**
Total net transfers	158	(192)	34	-	-
- to 12-month ECL not credit-impaired	*2,388*	*(2,388)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(2,168)*	*2,643*	*(475)*	-	-
- to lifetime ECL credit-impaired	*(62)*	*(447)*	*509*	-	-
Net changes in exposure	(70)	(251)	(364)	-	(685)
Impairment loss allowances utilised	-	-	(76)	-	(76)
Exchange adjustments	(169)	(4)	(4)	-	(177)
Measurement reclassification and other movements	9	1	-	-	10
Gross carrying amount at 31 December 2018	**41,096**	**1,873**	**2,465**	**3**	**45,437**

Group 2018 Residential mortgages - Impairment loss allowance	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1,2] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2018	**13**	**30**	**599**	**-**	**642**
Total net transfers	(7)	32	(25)	-	-
- to 12-month ECL not credit-impaired	*28*	*(28)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(34)*	*75*	*(41)*	-	-
- to lifetime ECL credit-impaired	*(1)*	*(15)*	*16*	-	-
Net impairment (losses) / gains in income statement	8	(31)	(17)	-	(40)
- Re-measurement	*20*	*(29)*	*(36)*	-	*(45)*
- Net changes in exposure	*(12)*	*(7)*	*(14)*	-	*(33)*
- ECL model parameter and / or methodology changes	-	*5*	*33*	-	*38*
Impairment loss allowances utilised	-	-	(76)	-	(76)
Exchange adjustments	-	-	(1)	-	(1)
Measurement reclassification and other movements	-	-	12	-	12
Impairment loss allowance at 31 December 2018	**14**	**31**	**492**	**-**	**537**

Impairment loss allowances utilised on Residential mortgages at amortised cost during 2018 includes €69 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2018, Purchased or Originated Credit-impaired assets included €2 million of assets with an impairment loss allowance of €nil which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2018 is €nil.*

26 Loans and advances to customers *(continued)*

Bank **2019** **Residential mortgages -** **Gross carrying amount (before impairment loss allowance)**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2019	**9,604**	**661**	**904**	**3**	**11,172**
Total net transfers	(9)	2	7	-	-
- to 12-month ECL not credit-impaired	*585*	*(585)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(575)*	*768*	*(193)*	-	-
- to lifetime ECL credit-impaired	*(19)*	*(181)*	*200*	-	-
Net changes in exposure	(916)	(80)	(250)	-	(1,246)
Impairment loss allowances utilised	-	-	(60)	-	(60)
Exchange adjustments	157	12	10	-	179
Measurement reclassification and other movements	52	-	-	-	52
Gross carrying amount at 31 December 2019	**8,888**	**595**	**611**	**3**	**10,097**

Bank **2019** **Residential mortgages -** **Impairment loss allowance**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1,2] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2019	**8**	**13**	**160**	**-**	**181**
Total net transfers	11	-	(11)	-	-
- to 12-month ECL not credit-impaired	*13*	*(13)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(2)*	*20*	*(18)*	-	-
- to lifetime ECL credit-impaired	*-*	*(7)*	*7*	-	-
Net impairment (losses) / gains in income statement	(11)	1	27	-	17
- Re-measurement	*(11)*	*(3)*	*26*	-	*12*
- Net changes in exposure	*(1)*	*(1)*	*(15)*	-	*(17)*
- ECL model parameter and / or methodology changes	*1*	*5*	*16*	-	*22*
Impairment loss allowances utilised	-	-	(60)	-	(60)
Exchange adjustments	-	1	1	-	2
Measurement reclassification and other movements	-	-	4	-	4
Impairment loss allowance at 31 December 2019	**8**	**15**	**121**	**-**	**144**

Impairment loss allowances utilised on Residential mortgages at amortised cost during 2019 includes €8 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2019, Purchased or Originated Credit-impaired assets included €2 million of assets with an impairment loss allowance of €nil which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2019 is €nil.*

26 Loans and advances to customers *(continued)*

Bank **2018** **Residential mortgages -** **Gross carrying amount (before impairment loss allowance)**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2018	**10,642**	**745**	**1,052**	**3**	**12,442**
Total net transfers	-	(16)	16	-	-
- to 12-month ECL not credit-impaired	*736*	*(736)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(708)*	*913*	*(205)*	-	-
- to lifetime ECL credit-impaired	*(28)*	*(193)*	*221*	-	-
Net changes in exposure	(1,123)	(66)	(142)	-	(1,331)
Impairment loss allowances utilised	-	-	(20)	-	(20)
Exchange adjustments	(25)	(2)	(2)	-	(29)
Measurement reclassification and other movements	110	-	-	-	110
Gross carrying amount at 31 December 2018	**9,604**	**661**	**904**	**3**	**11,172**

Bank **2018** **Residential mortgages -** **Impairment loss allowance**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1,2] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2018	**5**	**12**	**185**	**-**	**202**
Total net transfers	11	(1)	(10)	-	-
- to 12-month ECL not credit-impaired	*13*	*(13)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(2)*	*18*	*(16)*	-	-
- to lifetime ECL credit-impaired	*-*	*(6)*	*6*	-	-
Net impairment (losses) / gains in income statement	(10)	1	1	-	(8)
- Re-measurement	*(9)*	*1*	*(14)*	-	*(22)*
- Net changes in exposure	*(1)*	*(1)*	*4*	-	*2*
- ECL model parameter and / or methodology changes	*-*	*1*	*11*	-	*12*
Impairment loss allowances utilised	-	-	(20)	-	(20)
Exchange adjustments	-	-	-	-	-
Measurement reclassification and other movements	2	1	4	-	7
Impairment loss allowance at 31 December 2018	**8**	**13**	**160**	**-**	**181**

Impairment loss allowances utilised on Residential mortgages at amortised cost during 2018 includes €18 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2018, Purchased or Originated Credit-impaired assets included €2 million of assets with an impairment loss allowance of €nil which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2018 is €nil.*

26 Loans and advances to customers *(continued)*

Non-property SME and corporate

Group 2019 Non-property SME and corporate - Gross carrying amount (before impairment loss allowance)	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**16,547**	**1,850**	**1,067**	**1**	**19,465**
Total net transfers	(771)	640	131	-	-
- to 12-month ECL not credit-impaired	*872*	*(870)*	*(2)*	-	-
- to lifetime ECL not credit-impaired	*(1,602)*	*1,780*	*(178)*	-	-
- to lifetime ECL credit-impaired	*(41)*	*(270)*	*311*	-	-
Net changes in exposure	1,354	(339)	(189)	26	852
Impairment loss allowances utilised	-	-	(260)	-	(260)
Exchange adjustments	256	24	9	-	289
Measurement reclassification and other movements	88	-	(1)	-	87
Gross carrying amount at 31 December 2019	**17,474**	**2,175**	**757**	**27**	**20,433**

Group 2019 Non-property SME and corporate - Impairment loss allowance	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1] €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**50**	**74**	**501**	**-**	**625**
Total net transfers	18	11	(29)	-	-
- to 12-month ECL not credit-impaired	*26*	*(25)*	*(1)*	-	-
- to lifetime ECL not credit-impaired	*(8)*	*61*	*(53)*	-	-
- to lifetime ECL credit-impaired	-	*(25)*	*25*	-	-
Net impairment (losses) / gains in income statement	(12)	(7)	122	-	103
- Re-measurement	*(7)*	*(5)*	*174*	-	*162*
- Net changes in exposure	*(6)*	*(8)*	*(62)*	-	*(76)*
- ECL model parameter changes	*1*	*6*	*10*	-	*17*
Impairment loss allowances utilised	-	-	(260)	-	(260)
Exchange adjustments	-	-	2	-	2
Measurement reclassification and other movements	-	-	17	-	17
Impairment loss allowance at 31 December 2019	**56**	**78**	**353**	**-**	**487**

Impairment loss allowances utilised on non-property SME and corporate during 2019 includes €182 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2019 is €2 million.*

26 Loans and advances to customers *(continued)*

Group 2018 Non-property SME and corporate - Gross carrying amount (before impairment loss allowance)	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired €m	Total impairment loss allowance €m
Opening balance 1 January 2018	**15,209**	**1,909**	**1,457**	**48**	**18,623**
Total net transfers	(485)	325	160	-	-
- to 12-month ECL not credit-impaired	*368*	*(350)*	*(18)*	-	-
- to lifetime ECL not credit-impaired	*(736)*	*806*	*(70)*	-	-
- to lifetime ECL credit-impaired	*(117)*	*(131)*	*248*	-	-
Net changes in exposure	1,792	(387)	(250)	(7)	1,148
Impairment loss allowances utilised	-	-	(287)	(42)	(329)
Exchange adjustments	4	(1)	(1)	-	2
Measurement reclassification and other movements	27	4	(12)	2	21
Gross carrying amount at 31 December 2018	**16,547**	**1,850**	**1,067**	**1**	**19,465**

Group 2018 Non-property SME and corporate - Impairment loss allowance	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1] €m	Total impairment loss allowance €m
Opening balance 1 January 2018	**60**	**84**	**754**	**37**	**935**
Total net transfers	8	1	(9)	-	-
- to 12-month ECL not credit-impaired	*17*	*(10)*	*(7)*	-	-
- to lifetime ECL not credit-impaired	*(6)*	*22*	*(16)*	-	-
- to lifetime ECL credit-impaired	*(3)*	*(11)*	*14*	-	-
Net impairment (losses) / gains in income statement	(11)	(9)	22	5	7
- Re-measurement	*(13)*	*(3)*	*94*	*4*	*82*
- Net changes in exposure	*4*	*(10)*	*(73)*	*1*	*(78)*
- ECL model parameter and / or methodology changes	*(2)*	*4*	*1*	-	*3*
Impairment loss allowances utilised	-	-	(287)	(42)	(329)
Exchange adjustments	-	-	-	-	-
Measurement reclassification and other movements	(7)	(2)	21	-	12
Impairment loss allowance at 31 December 2018	**50**	**74**	**501**	**-**	**625**

Impairment loss allowances utilised on non-property SME and corporate during 2018 includes €149 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2018 is €nil.*

26 Loans and advances to customers *(continued)*

Bank **2019** **Non-property SME and corporate - Gross carrying amount (before impairment loss allowance)**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2019	**16,244**	**1,633**	**1,006**	**1**	**18,884**
Total net transfers	(767)	698	69	-	-
- to 12-month ECL not credit-impaired	*713*	*(711)*	*(2)*	-	-
- to lifetime ECL not credit-impaired	*(1,453)*	*1,614*	*(161)*	-	-
- to lifetime ECL credit-impaired	*(27)*	*(205)*	*232*	-	-
Net changes in exposure	1,312	(338)	(135)	25	864
Impairment loss allowances utilised	-	-	(250)	-	(250)
Exchange adjustments	190	16	8	-	214
Measurement reclassification and other movements	(243)	(1)	-	-	(244)
Gross carrying amount at 31 December 2019	**16,736**	**2,008**	**698**	**26**	**19,468**

Bank **2019** **Non-property SME and corporate - Impairment loss allowance**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2019	**47**	**66**	**478**	**1**	**592**
Total net transfers	16	18	(34)	-	-
- to 12-month ECL not credit-impaired	*24*	*(24)*	-	-	-
- to lifetime ECL not credit-impaired	*(8)*	*60*	*(52)*	-	-
- to lifetime ECL credit-impaired	-	*(18)*	*18*	-	-
Net impairment (losses) / gains in income statement	(11)	(11)	115	(1)	92
- Re-measurement	*(9)*	*(7)*	*147*	*(1)*	*130*
- Net changes in exposure	*(3)*	*(10)*	*(38)*	-	*(51)*
- ECL model parameter and / or methodology changes	*1*	*6*	*6*	-	*13*
Impairment loss allowances utilised	-	-	(250)	-	(250)
Exchange adjustments	-	1	1	-	2
Measurement reclassification and other movements	1	-	16	-	17
Impairment loss allowance at 31 December 2019	**53**	**74**	**326**	**-**	**453**

Impairment loss allowances utilised on non-property SME and corporate during 2019 includes €182 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2019 is €2 million.*

26 Loans and advances to customers *(continued)*

Bank **2018** **Non-property SME and corporate - Gross carrying amount (before impairment loss allowance)**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2018	**15,189**	**1,630**	**1,265**	**48**	**18,132**
Total net transfers	(356)	241	115	-	-
- to 12-month ECL not credit-impaired	*351*	*(334)*	*(17)*	-	-
- to lifetime ECL not credit-impaired	*(619)*	*681*	*(62)*	-	-
- to lifetime ECL credit-impaired	*(88)*	*(106)*	*194*	-	-
Net changes in exposure	1,854	(324)	(163)	(7)	1,360
Impairment loss allowances utilised	-	-	(233)	(42)	(275)
Exchange adjustments	9	13	-	-	22
Measurement reclassification and other movements	(452)	73	22	2	(355)
Gross carrying amount at 31 December 2018	**16,244**	**1,633**	**1,006**	**1**	**18,884**

Bank **2018** **Non-property SME and corporate - Impairment loss allowance**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2018	**54**	**72**	**658**	**37**	**821**
Total net transfers	8	-	(8)	-	-
- to 12-month ECL not credit-impaired	*17*	*(10)*	*(7)*	-	-
- to lifetime ECL not credit-impaired	*(6)*	*21*	*(15)*	-	-
- to lifetime ECL credit-impaired	*(3)*	*(11)*	*14*	-	-
Net impairment (losses) / gains in income statement	(9)	(8)	11	4	(2)
- Re-measurement	*(12)*	*20*	*74*	*4*	*86*
- Net changes in exposure	*4*	*(34)*	*(65)*	-	*(95)*
- ECL model parameter and / or methodology changes	*(1)*	*6*	*2*	-	*7*
Impairment loss allowances utilised	-	-	(233)	(42)	(275)
Exchange adjustments	-	-	-	-	-
Measurement reclassification and other movements	(6)	2	50	2	48
Impairment loss allowance at 31 December 2018	**47**	**66**	**478**	**1**	**592**

Impairment loss allowances utilised on non-property SME and corporate during 2018 includes €149 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2018 is €nil.*

26 Loans and advances to customers *(continued)*

Property and construction

Group 2019 Property and construction - Gross carrying amount (before impairment loss allowance)	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1] €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**6,343**	**1,102**	**843**	**66**	**8,354**
Total net transfers	(651)	504	147	-	-
- to 12-month ECL not credit-impaired	*409*	*(408)*	*(1)*	-	-
- to lifetime ECL not credit-impaired	*(1,041)*	*1,108*	*(67)*	-	-
- to lifetime ECL credit-impaired	*(19)*	*(196)*	*215*	-	-
Net changes in exposure	222	(124)	(236)	(4)	(142)
Impairment loss allowances utilised	-	-	(219)	-	(219)
Exchange adjustments	71	33	14	3	121
Measurement reclassification and other movements	-	(2)	-	-	(2)
Gross carrying amount at 31 December 2019	**5,985**	**1,513**	**549**	**65**	**8,112**

Group 2019 Property and construction - Impairment loss allowance	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1,2] €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**4**	**38**	**369**	**-**	**411**
Total net transfers	5	1	(6)	-	-
- to 12-month ECL not credit-impaired	*8*	*(8)*	-	-	-
- to lifetime ECL not credit-impaired	*(3)*	*18*	*(15)*	-	-
- to lifetime ECL credit-impaired	-	*(9)*	*9*	-	-
Net impairment (losses) / gains in income statement	(3)	1	28	2	28
- Re-measurement	*(5)*	*(6)*	*69*	*2*	*60*
- Net changes in exposure	*1*	*(4)*	*(41)*	-	*(44)*
- ECL model parameter changes	*1*	*11*	-	-	*12*
Impairment loss allowances utilised	-	-	(219)	-	(219)
Exchange adjustments	-	1	4	-	5
Measurement reclassification and other movements	-	1	4	-	5
Impairment loss allowance at 31 December 2019	**6**	**42**	**180**	**2**	**230**

Impairment loss allowances utilised on Property and construction during 2019 includes €64 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2019, Purchased or Originated Credit-impaired assets included €65 million of assets with an impairment loss allowance of €2 million which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2019 is €nil.*

26 Loans and advances to customers *(continued)*

Group 2018 Property and construction - Gross carrying amount (before impairment loss allowance)	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1] €m	Total impairment loss allowance €m
Opening balance 1 January 2018	**5,850**	**1,313**	**1,494**	**67**	**8,724**
Total net transfers	(68)	29	39	-	-
- to 12-month ECL not credit-impaired	*313*	*(309)*	*(4)*	-	-
- to lifetime ECL not credit-impaired	*(340)*	*448*	*(108)*	-	-
- to lifetime ECL credit-impaired	*(41)*	*(110)*	*151*	-	-
Net changes in exposure	567	(234)	(361)	-	(28)
Impairment loss allowances utilised	-	-	(350)	-	(350)
Exchange adjustments	(1)	(6)	(1)	(1)	(9)
Measurement reclassification and other movements	(5)	-	22	-	17
Gross carrying amount at 31 December 2018	**6,343**	**1,102**	**843**	**66**	**8,354**

Group 2018 Property and construction - Impairment loss allowance	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1,2] €m	Total impairment loss allowance €m
Opening balance 1 January 2018	**7**	**42**	**685**	**1**	**735**
Total net transfers	2	18	(20)	-	-
- to 12-month ECL not credit-impaired	*5*	*(4)*	*(1)*	-	-
- to lifetime ECL not credit-impaired	*(2)*	*26*	*(24)*	-	-
- to lifetime ECL credit-impaired	*(1)*	*(4)*	*5*	-	-
Net impairment (losses) / gains in income statement	(3)	(21)	21	(1)	(4)
- Re-measurement	*(3)*	*(15)*	*67*	-	*49*
- Net changes in exposure	-	*(9)*	*(47)*	*(1)*	*(57)*
- ECL model parameter and / or methodology changes	-	*3*	*1*	-	*4*
Impairment loss allowances utilised	-	-	(350)	-	(350)
Exchange adjustments	-	-	(1)	-	(1)
Measurement reclassification and other movements	(2)	(1)	34	-	31
Impairment loss allowance at 31 December 2018	**4**	**38**	**369**	**-**	**411**

Impairment loss allowances utilised on Property and construction during 2018 includes €111 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2018, Purchased or Originated Credit-impaired assets included €66 million of assets with an impairment loss allowance of €nil which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2018 is €nil.*

26 Loans and advances to customers *(continued)*

Bank **2019** **Property and construction -** **Gross carrying amount (before impairment loss allowance)**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2019	**5,977**	**995**	**754**	**66**	**7,792**
Total net transfers	(622)	478	144	-	-
- to 12-month ECL not credit-impaired	*268*	*(268)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(871)*	*932*	*(61)*	-	-
- to lifetime ECL credit-impaired	*(19)*	*(186)*	*205*	-	-
Net changes in exposure	238	(89)	(195)	(4)	(50)
Impairment loss allowances utilised	-	-	(208)	-	(208)
Exchange adjustments	53	27	11	3	94
Measurement reclassification and other movements	1	(2)	-	-	(1)
Gross carrying amount at 31 December 2019	**5,647**	**1,409**	**506**	**65**	**7,627**

Bank **2019** **Property and construction -** **Impairment loss allowance**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1,2] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2019	**3**	**37**	**344**	**-**	**384**
Total net transfers	5	1	(6)	-	-
- to 12-month ECL not credit-impaired	*7*	*(6)*	*(1)*	-	-
- to lifetime ECL not credit-impaired	*(2)*	*15*	*(13)*	-	-
- to lifetime ECL credit-impaired	-	*(8)*	*8*	-	-
Net impairment (losses) / gains in income statement	(3)	2	30	2	31
- Re-measurement	*(6)*	*(4)*	*61*	*2*	*53*
- Net changes in exposure	*2*	*(4)*	*(31)*	-	*(33)*
- ECL model parameter and / or methodology changes	*1*	*10*	-	-	*11*
Impairment loss allowances utilised	-	-	(208)	-	(208)
Exchange adjustments	-	-	3	-	3
Measurement reclassification and other movements	-	-	3	-	3
Impairment loss allowance at 31 December 2019	**5**	**40**	**166**	**2**	**213**

Impairment loss allowances utilised on Property and construction during 2019 includes €63 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2019, Purchased or Originated Credit-impaired assets included €65 million of assets with an impairment loss allowance of €2 million which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2019 is €nil.*

26 Loans and advances to customers *(continued)*

Bank **2018** **Property and construction -** **Gross carrying amount (before impairment loss allowance)**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2018	**5,452**	**1,154**	**1,315**	**67**	**7,988**
Total net transfers	(49)	45	4	-	-
- to 12-month ECL not credit-impaired	*291*	*(287)*	*(4)*	-	-
- to lifetime ECL not credit-impaired	*(309)*	*406*	*(97)*	-	-
- to lifetime ECL credit-impaired	*(31)*	*(74)*	*105*	-	-
Net changes in exposure	581	(202)	(279)	-	100
Impairment loss allowances utilised	-	-	(307)	-	(307)
Exchange adjustments	(2)	(2)	(1)	(1)	(6)
Measurement reclassification and other movements	(5)	-	22	-	17
Gross carrying amount at 31 December 2018	**5,977**	**995**	**754**	**66**	**7,792**

Bank **2018** **Property and construction -** **Impairment loss allowance**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1,2] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2018	**7**	**39**	**616**	**1**	**663**
Total net transfers	1	18	(19)	-	-
- to 12-month ECL not credit-impaired	*4*	*(3)*	*(1)*	-	-
- to lifetime ECL not credit-impaired	*(2)*	*24*	*(22)*	-	-
- to lifetime ECL credit-impaired	*(1)*	*(3)*	*4*	-	-
Net impairment (losses) / gains in income statement	(3)	(18)	25	(1)	3
- Re-measurement	*(2)*	*(15)*	*114*	-	*97*
- Net changes in exposure	-	*(6)*	*(90)*	*(1)*	*(97)*
- ECL model parameter and / or methodology changes	*(1)*	*3*	*1*	-	*3*
Impairment loss allowances utilised	-	-	(307)	-	(307)
Exchange adjustments	-	-	-	-	-
Measurement reclassification and other movements	(2)	(2)	29	-	25
Impairment loss allowance at 31 December 2018	**3**	**37**	**344**	**-**	**384**

Impairment loss allowances utilised on Property and construction during 2018 includes €111 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *At 31 December 2018, Purchased or Originated Credit-impaired assets included €66 million of assets with an impairment loss allowance of €nil which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

[2] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2018 is €nil.*

26 Loans and advances to customers *(continued)*

Consumer

Group 2019 Consumer - Gross carrying amount including held for sale (before impairment loss allowance)	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**4,816**	**250**	**108**	**-**	**5,174**
Total net transfers	(111)	42	69	-	-
- to 12-month ECL not credit-impaired	*152*	*(145)*	*(7)*	-	-
- to lifetime ECL not credit-impaired	*(216)*	*219*	*(3)*	-	-
- to lifetime ECL credit-impaired	*(47)*	*(32)*	*79*	-	-
Net changes in exposure	1,095	(37)	(23)	-	1,035
Impairment loss allowances utilised	-	-	(41)	-	(41)
Exchange adjustments	157	6	3	-	166
Measurement reclassification and other movements	(536)	(55)	(16)	-	(607)
Gross carrying amount at 31 December 2019	**5,421**	**206**	**100**	**-**	**5,727**

Group 2019 Consumer - Impairment loss allowance including held for sale	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1] €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**52**	**33**	**70**	**-**	**155**
Total net transfers	4	(14)	10	-	-
- to 12-month ECL not credit-impaired	*16*	*(14)*	*(2)*	-	-
- to lifetime ECL not credit-impaired	*(4)*	*6*	*(2)*	-	-
- to lifetime ECL credit-impaired	*(8)*	*(6)*	*14*	-	-
Net impairment (losses) / gains in income statement	10	21	37	-	68
- Re-measurement	*(20)*	*25*	*54*	-	*59*
- Net changes in exposure	*31*	*(2)*	*(16)*	-	*13*
- ECL model parameter changes	*(1)*	*(2)*	*(1)*	-	*(4)*
Impairment loss allowances utilised	-	-	(41)	-	(41)
Exchange adjustments	2	1	2	-	5
Measurement reclassification and other movements	(4)	(9)	(15)	-	(28)
Impairment loss allowance at 31 December 2019	**64**	**32**	**63**	**-**	**159**

Impairment loss allowances utilised on consumer during 2019 includes €24 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2019 is €nil.*

26 Loans and advances to customers *(continued)*

Group **2018** **Consumer -** **Gross carrying amount including held for sale** **(before impairment loss allowance)**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2018	**3,948**	**273**	**97**	**-**	**4,318**
Total net transfers	(35)	(19)	54	-	-
- to 12-month ECL not credit-impaired	*50*	*(46)*	*(4)*	-	-
- to lifetime ECL not credit-impaired	*(57)*	*59*	*(2)*	-	-
- to lifetime ECL credit-impaired	*(28)*	*(32)*	*60*	-	-
Net changes in exposure	922	(3)	(9)	-	910
Impairment loss allowances utilised	-	-	(35)	-	(35)
Exchange adjustments	(25)	(1)	-	-	(26)
Measurement reclassification and other movements	6	-	1	-	7
Gross carrying amount at 31 December 2018	**4,816**	**250**	**108**	**-**	**5,174**

Group **2018** **Consumer -** **Impairment loss allowance including held for sale**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total impairment loss allowance €m**
Opening balance 1 January 2018	**41**	**33**	**64**	**-**	**138**
Total net transfers	4	(7)	3	-	-
- to 12-month ECL not credit-impaired	*6*	*(4)*	*(2)*	-	-
- to lifetime ECL not credit-impaired	*(1)*	*2*	*(1)*	-	-
- to lifetime ECL credit-impaired	*(1)*	*(5)*	*6*	-	-
Net impairment (losses) / gains in income statement	7	8	35	-	50
- Re-measurement	*(5)*	*9*	*41*	-	*45*
- Net changes in exposure	*23*	*1*	*(4)*	-	*20*
- ECL model parameter and / or methodology changes	*(11)*	*(2)*	*(2)*	-	*(15)*
Impairment loss allowances utilised	-	-	(35)	-	(35)
Exchange adjustments	-	-	-	-	-
Measurement reclassification and other movements	-	(1)	3	-	2
Impairment loss allowance at 31 December 2018	**52**	**33**	**70**	**-**	**155**

Impairment loss allowances utilised on consumer during 2018 includes €23 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *The total amount of undiscounted expected credit losses at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2018 is €nil.*

26 Loans and advances to customers *(continued)*

Bank 2019 Consumer - Gross carrying amount (before impairment loss allowance)	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**1,878**	**98**	**61**	**-**	**2,037**
Total net transfers	(62)	45	17	-	-
- to 12-month ECL not credit-impaired	*93*	*(92)*	*(1)*	-	-
- to lifetime ECL not credit-impaired	*(154)*	*155*	*(1)*	-	-
- to lifetime ECL credit-impaired	*(1)*	*(18)*	*19*	-	-
Net changes in exposure	117	(35)	(10)	-	72
Impairment loss allowances utilised	-	-	(15)	-	(15)
Exchange adjustments	-	-	-	-	-
Measurement reclassification and other movements	-	-	-	-	-
Gross carrying amount at 31 December 2019	**1,933**	**108**	**53**	**-**	**2,094**

Bank 2019 Consumer - Impairment loss allowance	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1] €m	Total impairment loss allowance €m
Opening balance 1 January 2019	**13**	**12**	**37**	**-**	**62**
Total net transfers	6	(9)	3	-	-
- to 12-month ECL not credit-impaired	*8*	*(8)*	-	-	-
- to lifetime ECL not credit-impaired	*(2)*	*3*	*(1)*	-	-
- to lifetime ECL credit-impaired	-	*(4)*	*4*	-	-
Net impairment (losses) / gains in income statement	(3)	9	4	-	10
- Re-measurement	*(9)*	*13*	*10*	-	*14*
- Net changes in exposure	*4*	*(3)*	*(5)*	-	*(4)*
- ECL model parameter and / or methodology changes	*2*	*(1)*	*(1)*	-	-
Impairment loss allowances utilised	-	-	(15)	-	(15)
Exchange adjustments	-	-	-	-	-
Measurement reclassification and other movements	-	-	2	-	2
Impairment loss allowance at 31 December 2019	**16**	**12**	**31**	**-**	**59**

Impairment loss allowances utilised on Consumer during 2019 includes €6 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *The total amount of undiscounted ECL at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2019 is €nil.*

26 Loans and advances to customers *(continued)*

Bank 2018 Consumer - Gross carrying amount (before impairment loss allowance)	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired €m	Total impairment loss allowance €m
Opening balance 1 January 2018	**1,675**	**109**	**64**	**-**	**1,848**
Total net transfers	(7)	(7)	14	-	-
- to 12-month ECL not credit-impaired	*33*	*(33)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(36)*	*37*	*(1)*	-	-
- to lifetime ECL credit-impaired	*(4)*	*(11)*	*15*	-	-
Net changes in exposure	204	(4)	(7)	-	193
Impairment loss allowances utilised	-	-	(10)	-	(10)
Exchange adjustments	-	-	-	-	-
Measurement reclassification and other movements	6	-	-	-	6
Gross carrying amount at 31 December 2018	**1,878**	**98**	**61**	**-**	**2,037**

Bank 2018 Consumer - Impairment loss allowance	Stage 1 - 12 month ECL (not credit-impaired) €m	Stage 2 - Lifetime ECL (not credit-impaired) €m	Stage 3 - Lifetime ECL (credit-impaired) €m	Purchased / originated credit-impaired[1] €m	Total impairment loss allowance €m
Opening balance 1 January 2018	**14**	**12**	**42**	**-**	**68**
Total net transfers	2	(4)	2	-	-
- to 12-month ECL not credit-impaired	*3*	*(3)*	*-*	-	-
- to lifetime ECL not credit-impaired	*(1)*	*1*	*-*	-	-
- to lifetime ECL credit-impaired	*-*	*(2)*	*2*	-	-
Net impairment (losses) / gains in income statement	(3)	4	1	-	2
- Re-measurement	*(2)*	*2*	*10*	-	*10*
- Net changes in exposure	*1*	*1*	*(4)*	-	*(2)*
- ECL model parameter and / or methodology changes	*(2)*	*1*	*(5)*	-	*(6)*
Impairment loss allowances utilised	-	-	(10)	-	(10)
Exchange adjustments	-	-	-	-	-
Measurement reclassification and other movements	-	-	2	-	2
Impairment loss allowance at 31 December 2018	**13**	**12**	**37**	**-**	**62**

Impairment loss allowances utilised on Consumer during 2018 includes €10 million of contractual amounts outstanding that are still subject to enforcement activity.

[1] *The total amount of undiscounted ECL at initial recognition on financial assets that were initially Purchased or Originated Credit-impaired during 2018 is €nil.*

26 Loans and advances to customers *(continued)*

Finance leases and hire purchase receivables

The Group's material leasing arrangements include the provision of instalment credit and leasing finance for both consumer and business customers. As outlined in the Group accounting polices note on page 75, from 1 January 2019, the Group adopted IFRS 16 'Leases'.

Loans and advances to customers include finance leases and hire purchase receivables, which are analysed in the table below. The net investment in finance leases at 31 December 2019 was €4 billion, an increase of €0.6 billion since 31 December 2018. This was primarily driven by volume increases in the Northridge business in Retail UK.

2019	Group €m	Bank €m
Gross investment in finance leases		
Not later than 1 year	1,289	395
1 to 2 years	1,085	263
2 to 3 years	984	247
3 to 4 years	743	192
4 to 5 years	209	114
Later than 5 years	20	10
	4,330	1,221
Unearned future finance income on finance leases	(330)	(75)
Net investment in finance leases	**4,000**	**1,146**
The net investment in finance leases is analysed as follows:		
Not later than 1 year	1,191	371
1 to 2 years	1,002	247
2 to 3 years	909	232
3 to 4 years	686	180
4 to 5 years	194	107
Later than 5 years	18	9
	4,000	**1,146**

Comparative figures for the prior year have not been restated and are set out on an IAS 17 classification and measurement basis.

2018	Group €m	Bank €m
Gross investment in finance leases		
Not later than 1 year	1,114	381
Later than 1 year and not later than 5 years	2,526	869
Later than 5 years	12	5
	3,652	**1,255**
Unearned future finance income on finance leases	(280)	(83)
Net investment in finance leases	**3,372**	**1,172**
The net investment in finance leases is analysed as follows:		
Not later than 1 year	1,029	356
Later than 1 year and not later than 5 years	2,332	812
Later than 5 years	11	4
	3,372	**1,172**

Securitisations

Loans and advances to customers include balances that have been securitised but not derecognised, comprising both residential mortgages and commercial loans. In general, the assets, or interests in the assets, are transferred to structured entities, which then issue securities to third party investors or to other entities within the Group. With the exception of Mulcair Securities, all of the Group's securitisation structured entities are consolidated. See note 55 for further details.

27 Financial risk management

Financial instruments are fundamental to the Group's activities and, as a consequence, the risks associated with financial instruments represent a significant component of the risks faced by the Group.

The primary risks affecting the Group and Bank through the use of financial instruments are: credit risk, liquidity risk and market risk. The Group is also exposed to life insurance risk. Information about the Group and Bank's management of these risks is given below.

The Group's approach to risk management including risk policies, risk appetite, measurement bases and sensitivities, in particular for credit risk, market risk and liquidity risk, is aligned to that of BOIG plc, the Bank's immediate and ultimate parent. Further information can be found in the BOIG plc Group Annual Report 2019.

The Group's approach to managing capital is also included in this note on page 186.

Credit risk

Credit risk is 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. This risk includes but is not limited to default risk, concentration risk, country risk, migration risk and collateral risk. At portfolio level, credit risk is assessed in relation to the degree of name, sector and geographic concentration to inform the setting of appropriate risk mitigation and transfer mechanisms, and to assess risk capital requirements. Risk appetite measures for credit risk are set by the Court.

Credit risk arises from loans and advances to customers and from certain other financial transactions such as those entered into by the Group with financial institutions, sovereigns and state institutions.

Credit facilities can be largely grouped into the following categories:
- cash advances (e.g. loans, overdrafts, revolving credit facilities (RCFs) and bonds), and associated commitments and letters of offer;
- credit related contingent facilities (issuing of guarantees / performance bonds / letters of credit);
- derivative instruments; and
- settlement lines.

The manner in which the Group's exposure to credit risk arises, its policies and processes for managing it and the methods used to measure and monitor it are set out below.

Default risk
Default risk is the risk that financial institutions, sovereigns, state institutions, companies or individuals will be unable to meet the required payments on their debt obligations. Default may be as a result of one or a number of factors including, but not limited to:
- deterioration in macroeconomic or general market conditions;
- deterioration in a borrower's capacity to service its credit obligation;
- a credit event (e.g. a corporate transaction);
- a natural or manmade disaster;
- regulatory change, or technological development that causes an abrupt deterioration in credit quality;
- a mismatch between the currency of a borrower's income and their borrowing / repayments; and
- environmental factors that impact on the credit quality of the counterparty.

Credit concentration risk
Credit concentration risk is the risk of loss due to exposures to a single entity or group of entities engaged in similar activities and having similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. Undue concentrations could lead to increased volatility in the Group's expected financial outcomes.

Country risk
Country risk is the risk that sovereign or other counterparties within a country may be unable, unwilling or precluded from fulfilling their cross-border obligations due to changing political, financial or economic circumstances such that a loss to the Group may arise.

Migration risk
Migration risk is the potential for loss due to an internal / external ratings downgrade which signals a change in the credit quality of the loan exposure.

Collateral risk
Collateral risk is the risk of loss arising from a change in the value or enforceability of security held due to errors in the nature, quantity, pricing, or characteristics of collateral security held in respect of a transaction with credit risk.

Credit risk management

Credit risk statement
The Group actively seeks opportunities to provide appropriately remunerated credit facilities to borrowers who are assessed as having the capacity to service and discharge their obligations and to allow growth in the volume of loan assets in line with the Group's risk appetite and to provide a solid foundation for sustained growth in earnings and stockholder value.

The Group's credit strategy is to underwrite credit risk within a clearly defined Court-approved risk appetite and risk governance framework through the extension of credit to customers and financial counterparties in a manner that results in an appropriate return for the risks taken and on the capital deployed while operating within prudent Court-approved risk parameters, and to maximise recoveries on loans that become distressed.

Credit risk management
The Group's approach to the management of credit risk is focused on a detailed credit analysis at origination followed by early intervention and active management of accounts where creditworthiness has deteriorated.

Through its ongoing credit review processes, the Group seeks early identification of deteriorating loans with a view to taking corrective action to prevent a loan becoming credit-impaired. Typically, loans that are at risk of becoming credit-impaired are managed by dedicated specialist units / debt collection teams

27 Financial risk management *(continued)*

focused on working-out loans. For loans that become credit-impaired, the focus is to minimise the loss that the Group will incur. This may involve implementing forbearance solutions, entering into restructuring arrangements or action to enforce security, asset / portfolio disposals or securitisations.

The Group credit risk function has responsibility for the independent oversight of credit risk, and for overall risk reporting to the GRPC, the Court Risk Committee and the Court on developments in credit risk and compliance with specific risk limits. It is led by the Chief Credit Officer who reports directly to the Group CRO. The function provides independent oversight and management of the Group's credit risk strategy, credit risk management information and credit risk underwriting. A separate Customer Loans Solutions function also reports to the Group CRO and provides experienced and dedicated management of challenged assets.

Credit policy
The core values and principles governing the provision of credit are contained in Group Credit Policy which is approved by the Court. Individual business unit credit policies (which include specific sectoral / product credit policies) define in greater detail the credit approach appropriate to the units concerned. These policies are aligned with, and have regard to, the Group's Risk Appetite Statement and applicable credit limits, the lessons learned from the Group's loss history, the markets in which the business units operate and the products which they provide.

Lending authorisation
The Group's credit risk management systems operate through a hierarchy of lending authorities which are related to internal loan ratings. All exposures above certain levels require approval by the Group Credit Committee. Other exposures are approved according to a system of tiered individual authorities which reflect credit competence, proven judgement and experience. Material lending proposals are referred to credit units for independent assessment / approval or formulation of a recommendation for subsequent adjudication by the applicable approval authority. Certain retail loan applications may be approved automatically where they meet both approved policy rules and minimum thresholds for the score produced by internal credit scoring tools.

Controls and limits
The Group imposes credit risk control limits and guide points to mitigate significant concentration risk. These limits and guide points are informed by the Group's Risk Appetite Statement which is approved annually by the Court.

It includes specific long term limits for each category and maximum exposure limits to a customer or a group of connected customers.

The Court approves a framework of country maximum exposure guide points which are used as benchmarks for the setting of country limits. A maximum exposure limit framework for exposures to banks is also approved by the GRPC for each rating category. Limits are set and monitored for countries, sovereign obligors and banks in accordance with these frameworks.

Credit risk measurement

All credit transactions are assessed at origination for credit quality and the borrower is assigned a credit grade based on a predefined credit rating scale. The risk, and consequently the credit grade, is reassessed periodically. The use of internal credit rating models and scoring tools, which measure the degree of risk inherent in lending to specific counterparties, is central to the credit risk assessment and ongoing management processes within the Group.

Loan impairment
Under IFRS 9, essentially all credit risk exposures not measured at FVTPL are subject to recognition of an impairment loss allowance for ECL. The Group's impairment modelling methodologies are approved by RMC and the quantum of the Group's impairment gain or loss, NPEs and impairment loss allowances are reviewed by the Impairment Committee and by the GRPC in advance of providing a recommendation to the CAC.

The Group's credit risk rating systems and impairment models and methodologies play a key role in quantifying the appropriate level of impairment loss allowance. Further details are provided in the section on credit risk methodologies on page 172.

An analysis of the Group's impairment loss allowances at 31 December 2019 is set out on page 155.

Credit risk mitigation

An assessment of the borrower's ability to service and repay the proposed level of debt (principal repayment source) is undertaken for credit requests and is a key element in the Group's approach to mitigating risk. In addition, the Group mitigates credit risk through the adoption of both proactive preventative measures (e.g. controls and limits) and the development and implementation of strategies to assess and reduce the impact of particular risks should these materialise, including hedging, securitisation and the taking of collateral (which acts as a secondary repayment source) and selective asset / portfolio disposals and securitisations.

Risk transfer
The objective of risk mitigation / transfer is to limit the risk impact to acceptable levels. At portfolio level, credit risk is assessed in relation to the degree of name, sector and geographic concentration. Where possible emergence of undue risk concentrations are identified, the risk capital implications are assessed and, where appropriate, risk transfer and mitigation options (e.g. disposals, securitisations, hedging strategies) are explored and recommended to the Portfolio Review Committee (PRC).

Collateral
Credit risk mitigation includes the requirement to obtain collateral, depending on the nature of the product and local market practice, as set out in the Group's policies and procedures. The Group takes collateral as a secondary repayment source, which

27 Financial risk management *(continued)*

can be called upon if the borrower is unable or unwilling to service and repay debt as originally envisaged. Various types of collateral are accepted, including property, securities, cash, guarantees and insurance.

The nature and level of collateral required depends on a number of factors including, but not limited to, the amount of the exposure, the type of facility made available, the term of the facility, the amount of the borrower's own cash input and an evaluation of the level of risk or PD.

The Group's requirements around completion, valuation and management of collateral are set out in appropriate Group or business unit policies and procedures. The extent to which collateral and other credit enhancements mitigate credit risk in respect of the Group's Residential mortgage portfolio is set out in the tables below.

Counterparty credit risk arising from derivatives
Trading in over-the-counter (OTC) derivatives is governed by the European Market Infrastructure Regulation (EMIR). The Group has executed standard internationally recognised documents such as International Swaps and Derivatives Association (ISDA) agreements and Credit Support Annexes (CSAs) with all of its derivative financial counterparties. In addition, the Group has Cleared Derivatives Execution Agreements (CDEAs) with its principal interbank derivative counterparties enabling the Group to clear eligible derivatives through an EU approved and regulated central counterparty. If a derivative contract cannot be cleared through a central counterparty, a CSA serves to limit the potential cost of replacing that contract at market price in the event of a default by the financial counterparty. All of the Group's interbank derivatives are covered by CDEAs or CSAs and are hence collateralised.

The following tables set out the weighted average indexed loan to value (LTV) for the total Retail Ireland mortgage loan book.

Group	Owner occupied			Buy to let			Total		
2019 Loan to value ratio of total Retail Ireland mortgages[1,2]	Not credit-impaired €m	Credit-impaired €m	Total €m	Not credit-impaired €m	Credit-impaired €m	Total €m	Not credit-impaired €m	Credit-impaired €m	Total €m
Less than 50%	7,362	148	7,510	997	30	1,027	8,359	178	8,537
51% to 70%	6,486	149	6,635	682	42	724	7,168	191	7,359
71% to 80%	2,913	80	2,993	148	29	177	3,061	109	3,170
81% to 90%	2,367	83	2,450	146	71	217	2,513	154	2,667
91% to 100%	406	80	486	36	32	68	442	112	554
Subtotal	**19,534**	**540**	**20,074**	**2,009**	**204**	**2,213**	**21,543**	**744**	**22,287**
101% to 120%	60	113	173	49	39	88	109	152	261
121% to 150%	18	87	105	20	45	65	38	132	170
Greater than 151%	23	134	157	30	127	157	53	261	314
Subtotal	**101**	**334**	**435**	**99**	**211**	**310**	**200**	**545**	**745**
Total	**19,635**	**874**	**20,509**	**2,108**	**415**	**2,523**	**21,743**	**1,289**	**23,032**
Weighted average LTV[3]:									
Stock of Retail Ireland mortgages at year end			58%			66%			59%
New Retail Ireland mortgages during the year			74%			54%			74%

Property values are determined by reference to the property valuations held, indexed to the Central Statistics Office (CSO) Residential Property Price Index (RPPI). The indexed LTV profile of the Retail Ireland mortgage loan book contained in the table above is based on the CSO RPPI at October 2019.

[1] *Excluded from the above table are Purchased or Originated Credit-impaired loans of €3 million, €2 million of which were no longer credit-impaired at 31 December 2019 due to improvement in credit risk since purchase of origination. These loans will remain classified as Purchased or Originated Credit-impaired loans until derecognition.*
[2] *Excluded from the above table are €0.2 billion of loans mandatorily held at fair value through profit or loss at 31 December 2019 which are not subject to impairment under IFRS 9.*
[3] *Weighted average loan to values are calculated at a property level and reflect the average property value in proportion to the outstanding mortgage.*

27 Financial risk management *(continued)*

Group	Owner occupied			Buy to let			Total		
2018 **Loan to value ratio of total Retail Ireland mortgages**[1,2]	**Not credit-impaired €m**	**Credit-impaired €m**	**Total €m**	**Not credit-impaired €m**	**Credit-impaired €m**	**Total €m**	**Not credit-impaired €m**	**Credit-impaired €m**	**Total €m**
Less than 50%	7,165	154	7,319	1,016	54	1,070	8,181	208	8,389
51% to 70%	6,660	168	6,828	797	86	883	7,457	254	7,711
71% to 80%	2,761	100	2,861	229	71	300	2,990	171	3,161
81% to 90%	1,986	105	2,091	205	195	400	2,191	300	2,491
91% to 100%	550	102	652	60	96	156	610	198	808
Subtotal	**19,122**	**629**	**19,751**	**2,307**	**502**	**2,809**	**21,429**	**1,131**	**22,560**
101% to 120%	108	143	251	47	138	185	155	281	436
121% to 150%	30	100	130	20	107	127	50	207	257
Greater than 151%	22	143	165	32	263	295	54	406	460
Subtotal	**160**	**386**	**546**	**99**	**508**	**607**	**259**	**894**	**1,153**
Total	**19,282**	**1,015**	**20,297**	**2,406**	**1,010**	**3,416**	**21,688**	**2,025**	**23,713**
Weighted average LTV[3]:									
Stock of Retail Ireland mortgages at year end			59%			76%			61%
New Retail Ireland mortgages during the year			72%			51%			71%

The indexed LTV profile of the Retail Ireland mortgage loan book contained in the table above is based on the CSO RPPI at October 2018.

[1] *Excluded from the above table are Purchased or Originated Credit-impaired loans of €3 million, €2 million of which were no longer credit-impaired at 31 December 2018 due to improvement in credit risk since purchase of origination. These loans will remain classified as Purchased or Originated Credit-impaired loans until derecognition.*

[2] *Excluded from the above tables are €0.3 billion of loans mandatorily held at fair value through profit or loss at 31 December 2018 which are not subject to impairment under IFRS 9.*

[3] *Weighted average loan to values are calculated at a property level and reflect the average property value in proportion to the outstanding mortgage.*

27 Financial risk management *(continued)*

Group 2019 Loan to value ratio of total Retail UK mortgages	Standard		Buy to let		Self certified		Total		
	Not credit-impaired £m	Credit-impaired £m	Not credit-impaired £m	Credit-impaired £m	Not credit-impaired £m	Credit-impaired £m	Not credit-impaired £m	Credit-impaired £m	Total £m
Less than 50%	2,132	28	2,090	20	484	26	4,706	74	4,780
51% to 70%	3,033	40	3,521	33	608	50	7,162	123	7,285
71% to 80%	2,080	19	1,270	19	192	23	3,542	61	3,603
81% to 90%	2,598	14	383	14	110	18	3,091	46	3,137
91% to 100%	815	11	27	5	15	6	857	22	879
Subtotal	**10,658**	**112**	**7,291**	**91**	**1,409**	**123**	**19,358**	**326**	**19,684**
101% to 120%	27	4	8	2	7	2	42	8	50
121% to 150%	16	3	2	-	5	3	23	6	29
Greater than 150%	3	2	-	-	-	1	3	3	6
Subtotal	**46**	**9**	**10**	**2**	**12**	**6**	**68**	**17**	**85**
Total	**10,704**	**121**	**7,301**	**93**	**1,421**	**129**	**19,426**	**343**	**19,769**
Weighted average LTV[1]:									
Stock of Retail UK mortgages at year end	67%	67%	58%	65%	57%	67%	63%	67%	63%
New Retail UK mortgages during year	76%	87%	61%	53%	n/a	n/a	73%	68%	73%

Group 2018 Loan to value ratio of total Retail UK mortgages	Standard		Buy to let		Self certified		Total		
	Not credit-impaired £m	Credit-impaired £m	Not credit-impaired £m	Credit-impaired £m	Not credit-impaired £m	Credit-impaired £m	Not credit-impaired £m	Credit-impaired £m	Total £m
Less than 50%	2,125	33	2,192	24	525	30	4,842	87	4,929
51% to 70%	3,210	44	3,464	38	677	56	7,351	138	7,489
71% to 80%	1,896	21	1,174	20	221	29	3,291	70	3,361
81% to 90%	2,096	14	456	19	128	19	2,680	52	2,732
91% to 100%	698	14	59	6	29	8	786	28	814
Subtotal	**10,025**	**126**	**7,345**	**107**	**1,580**	**142**	**18,950**	**375**	**19,325**
101% to 120%	39	5	9	2	7	5	55	12	67
121% to 150%	20	2	2	-	6	1	28	3	31
Greater than 150%	5	3	-	1	1	1	6	5	11
Subtotal	**64**	**10**	**11**	**3**	**14**	**7**	**89**	**20**	**109**
Total	**10,089**	**136**	**7,356**	**110**	**1,594**	**149**	**19,039**	**395**	**19,434**
Weighted average LTV[1]:									
Stock of Retail UK mortgages at year end	66%	67%	58%	66%	58%	67%	62%	67%	62%
New Retail UK mortgages during year	76%	-	60%	-	n/a	-	72%	-	72%

The tables above set out the weighted average indexed LTV for the total Retail UK mortgage loan book.

Property values are determined by reference to the original or latest property valuations held, indexed to the published ‘Nationwide UK House Price Index’.

[1] *Weighted average loan to values are calculated at a property level and reflect the average property value in proportion to the outstanding mortgage.*

27 Financial risk management *(continued)*

Credit risk reporting / monitoring

Credit risk at a Group, divisional and significant operating unit / product type level is reported on a monthly basis to senior management. This monthly reporting includes information and detailed commentary on loan book growth, quality of the loan book (credit grade and PD profiles and RWAs), impairment loss allowances, and individual large credit-impaired exposures.

Credit risk, including compliance with key credit risk limits, is monitored and reported monthly in the Court Risk Report. This report is presented to and discussed by the GRPC and the Court. The quarterly Court Risk Report is also presented to and discussed by the Court Risk Committee. A report on exceptions to credit policy is presented to and reviewed by the GRPC, the Court Risk Committee and the Court on a quarterly basis.

The PRC considers and recommends to the GRPC, on a quarterly basis, credit concentration reports which track changes in sectoral and single name concentrations measured under agreed parameters.

In addition other reports are submitted to senior management and the Court as required.

Group Credit Review (GCR), an independent function within GIA, reviews the quality and management of credit risk assets across the Group. Using a risk based approach, GCR carries out periodic reviews of Group lending portfolios, lending units and credit units.

Management of challenged assets

The Group has in place a range of initiatives to manage challenged and vulnerable credit. These include:

- enhanced collections and recoveries processes;
- specialist work-out teams to ensure early intervention in vulnerable cases;
- intensive review cycles for ‘at risk’ exposures and the management of excess positions; and
- support from central teams in managing ‘at risk’ portfolios at a business unit level.

Group forbearance strategies

Forbearance occurs when a borrower is granted a concession or agreed change to a loan (‘forbearance measure’) for reasons relating to the actual or apparent financial stress or distress of that borrower. If the concession or agreed change to a loan granted to a borrower is not related to the actual or apparent financial stress or distress of that borrower, forbearance has not occurred.

The forbearance strategies adopted by the Group seek to maximise recoveries and minimise losses arising from non-repayment of debt, while providing suitable and sustainable restructure options that are supportive of customers in challenged circumstances. Such strategies may include, where appropriate, one or a combination of measures such as a temporary reduction in contractual payments, a term extension, capitalisation of arrears, adjustment or non-enforcement of covenants and / or more permanent restructuring measures. Forbearance requests are assessed on a case by case basis, taking due consideration of the individual circumstances and risk profile of the borrower.

A request for forbearance will always be a trigger event for the Group to undertake an assessment of the customer’s financial circumstances and ability to repay prior to any decision to grant a forbearance treatment. This assessment may result in a deterioration in the credit grade assigned to the loan, potentially impacting how frequently the loan must be formally reviewed. This assessment may also result in a loan being considered to have experienced a ‘significant increase in credit risk’ or becoming classified as credit-impaired.

The Group Credit Policy and Group Credit Framework outlines the core principles and parameters underpinning the Group’s approach to forbearance with individual business unit policies and procedures defining in greater detail the forbearance strategies appropriate to each unit.

Borrower compliance with revised terms and conditions may not be achieved in all cases. Non-compliance could for example arise because the individual circumstances and risk profile of the borrower continue to deteriorate, or fail to show an expected improvement, to the extent that an agreed reduced level of repayment can no longer be met. In the event of non-compliance, a request for further forbearance may be considered. It is possible that the Group, by virtue of having granted forbearance to a borrower, could suffer a loss that might otherwise have been avoided had enforcement action instead been taken - this could for example arise where the value of security held in respect of a loan diminishes over the period of a forbearance arrangement which ultimately proves unsustainable.

It is the Group’s policy to measure the effectiveness of forbearance arrangements over the lifetime of those arrangements. A forbearance arrangement is considered to be effective where the risk profile of the affected borrower stabilises or improves over the measured time period, resulting in an improved outcome for the Group and the borrower. The measurement of effectiveness takes account of the nature and intended outcome of the forbearance arrangement and the period over which it applies.

Asset quality - Loans and advances to customers

Asset quality methodology

The Group has allocated financial instruments into one of the following categories at the reporting date:

- **Stage 1 - 12 month expected credit losses (not credit-impaired)**
  Financial instruments which have not experienced a significant increase in credit risk since initial recognition and are not credit-impaired. An impairment loss allowance equal to 12-month ECL is recognised, which is the portion of lifetime ECL resulting from default events that are possible within the next 12 months.

27 Financial risk management *(continued)*

- **Stage 2 - Lifetime expected credit losses (not credit-impaired)**
  Financial instruments which have experienced a 'significant increase in credit risk since initial recognition' and are not credit-impaired. An impairment loss allowance equal to lifetime ECL is recognised, being the ECL resulting from all possible default events over the expected life of the financial instrument. 'Credit risk' in this context refers to the change in the risk of a default occurring over the expected life of the financial instrument.

- **Stage 3 - Lifetime expected credit losses (credit-impaired)**
  Credit-impaired financial instruments, other than POCI financial assets. An impairment loss allowance equal to lifetime ECL is recognised. The manner in which the Group identifies financial assets as credit-impaired results in the Group's population of credit-impaired financial assets being consistent with its population of defaulted financial assets (in accordance with Article 178 of the CRR) in scope for the impairment requirements of IFRS 9. This encompasses loans where: (i) the borrower is considered unlikely to pay in full without recourse by the Group to actions such as realising security (including 'forborne collateral realisation' (FCR) loans); and / or (ii) the borrower is greater than 90 days past due and the arrears amount is material.

- **Purchased or Originated Credit-impaired financial asset**
  Financial assets that were credit-impaired at initial recognition. A POCI is not subject to any initial impairment loss allowance but an impairment loss allowance is subsequently recognised for the cumulative changes in lifetime ECL since initial recognition. A POCI remains classified as such until it is derecognised, even if assessed as no longer credit-impaired at a subsequent reporting date.

Further information on the approach to identifying a 'significant increase in credit risk since initial recognition' and in identifying credit-impaired assets is outlined in the Credit risk methodologies section on pages 172 to 177.

The Group continued to apply the following classifications at the reporting date.

Forborne loans
Loans where a forbearance measure has been granted and where the criteria to exit a forborne classification, in line with EBA guidance[1], are not yet met. Loans that have never been forborne or loans that are no longer required to be reported as 'forborne' are classified as 'non-forborne'.

Forborne collateral realisation loans
Loans (primarily Residential mortgages) which meet both of the following criteria: (i) not greater than 90 days past due; and (ii) forbearance is in place and future reliance on the realisation of collateral is expected for the repayment in full of the loan when such reliance was not originally envisaged. Such loans are considered credit-impaired and include Split Mortgages and certain 'Interest Only' / 'Interest Only plus' arrangements.

Non-performing exposures
These are:
(i) **credit-impaired loans** which includes loans where the borrower is considered unlikely to pay in full without recourse by the Group to actions such as realising security, including FCR cases, and loans where the borrower is greater than 90 days past due and the arrears amount is material; and
(ii) **other / probationary loans** that have yet to satisfy exit criteria in line with EBA guidance[1] to return to performing.

Non-performing exposures
The following tables provide an analysis of loans and advances to customers that are non-performing by asset classification. 2018 comparatives include loans classified as held for sale.

Group 2019 Risk profile of loans and advances to customers - NPEs	Residential mortgages €m	Non-property SME and corporate €m	Property and construction €m	Consumer €m	Total €m
Credit-impaired[2]	1,694	784	549	100	3,127
Not credit-impaired[3]	245	104	43	-	392
Total	**1,939**	**888**	**592**	**100**	**3,519**

[1] *In particular the European Banking Authority's 'Implementing Technical Standards on supervisory reporting on forbearance and non-performing exposures'.*
[2] *Includes Stage 3 and Purchased or Originated Credit-impaired assets which remain credit-impaired at the reporting date.*
[3] *Other / probationary loans, including forborne loans that have yet to satisfy exit criteria in line with European Banking Authority guidance to return to performing.*

27 Financial risk management *(continued)*

Group 2018 Risk profile of loans and advances to customers including held for sale - NPEs	Residential mortgages €m	Non-property SME and corporate €m	Property and construction €m	Consumer €m	Total €m
Credit-impaired[1]	2,466	1,068	843	108	4,485
Not credit-impaired[2]	277	144	75	3	499
Total	**2,743**	**1,212**	**918**	**111**	**4,984**

In addition to the NPEs on loans and advances to customers shown above, the Group has total non-performing off-balance sheet exposures amounting to €0.1 billion (2018: €0.1 billion).

NPEs decreased to €3.5 billion at 31 December 2019 from €5.0 billion at 31 December 2018, with reductions evident across all portfolios with elevated levels of NPEs including the impact of the disposal / securitisation of non-performing portfolios (primarily comprised of buy to let residential mortgages in Retail Ireland). NPEs at 31 December 2019 comprise credit-impaired loans of €3.1 billion and other NPEs[2] of €0.4 billion.

Bank 2019 Risk profile of loans and advances to customers - NPEs	Residential mortgages €m	Non-property SME and corporate €m	Property and construction €m	Consumer €m	Total €m
Credit-impaired[1]	612	724	506	53	1,895
Not credit-impaired[2]	100	91	37	3	231
Total	**712**	**815**	**543**	**56**	**2,126**

Bank 2018 Risk profile of loans and advances to customers - NPEs	Residential mortgages €m	Non-property SME and corporate €m	Property and construction €m	Consumer €m	Total €m
Credit-impaired[1]	905	1,007	754	61	2,727
Not credit-impaired[2]	104	121	57	-	282
Total	**1,009**	**1,128**	**811**	**61**	**3,009**

In addition to the NPEs on loans and advances to customers shown above, the Bank has total non-performing off-balance sheet exposures amounting to less than €0.1 billion (2018: €0.1 billion).

[1] *Includes Stage 3 and Purchased or Originated Credit-impaired assets which remain credit-impaired at the reporting date.*
[2] *Other / probationary loans, including forborne loans that have yet to satisfy exit criteria in line with European Banking Authority guidance to return to performing.*

27 Financial risk management *(continued)*

The table below illustrates the relationship between the Group's internal credit risk rating grades as used for credit risk management purposes and PD percentages, and further illustrates the indicative relationship with credit risk ratings used by external rating agencies.

Internal credit risk ratings		
PD Grade	**PD %**	**Indicative S&P type external ratings**
1-4	0% ≤ PD < 0.26%	AAA, AA+, AA, AA-, A+, A, A-, BBB+, BBB
5-7	0.26% ≤ PD < 1.45%	BBB-, BB+, BB, BB-
8-9	1.45% ≤ PD < 3.60%	B+
10-11	3.60% ≤ PD < 100%	B, Below B
12 (credit-impaired)	100%	n/a

Financial assets

Composition and risk profile

The tables below summarises the composition and risk profile of the Group and Bank's financial assets subject to impairment and the impairment loss allowances on these financial assets. 2018 comparatives include loans and advances to customers held for sale.

Group **2019** **Financial assets exposure by stage (before impairment loss allowance)**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total €m**
Financial assets measured at amortised cost					
Loans and advances to customers	71,778	5,571	3,099	95	80,543
Loans and advances to banks	3,017	6	-	-	3,023
Debt securities	4,512	-	-	-	4,512
Other financial assets	8,550	-	-	-	8,550
Total financial assets measured at amortised cost	**87,857**	**5,577**	**3,099**	**95**	**96,628**
Debt instruments at FVOCI	10,797	-	-	-	10,797
Total	**98,654**	**5,577**	**3,099**	**95**	**107,425**

Group **2019** **Impairment loss allowance on financial assets**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total €m**
Financial assets measured at amortised cost					
Loans and advances to customers	142	188	976	2	1,308
Loans and advances to banks	1	-	-	-	1
Debt securities	1	-	-	-	1
Other financial assets	2	-	-	-	2
Total financial assets measured at amortised cost	**146**	**188**	**976**	**2**	**1,312**
Debt instruments at FVOCI	3	-	-	-	3
Total	**149**	**188**	**976**	**2**	**1,315**

[1] *At 31 December 2019, Purchased or Originated Credit-impaired assets included €67 million of assets with an impairment loss allowance of €2 million which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

27 Financial risk management *(continued)*

Group **2018** **Financial assets exposure by stage (before impairment loss allowance) including held for sale**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total €m**
Financial assets measured at amortised cost					
Loans and advances to customers	68,802	5,075	4,483	70	78,430
Loans and advances to banks	2,302	6	-	-	2,308
Debt securities	3,929	-	-	-	3,929
Other financial assets	6,294	-	-	-	6,294
Total financial assets measured at amortised cost	**81,327**	**5,081**	**4,483**	**70**	**90,961**
Debt instruments at FVOCI	12,048	-	-	-	12,048
Total	**93,375**	**5,081**	**4,483**	**70**	**103,009**

Group **2018** **Impairment loss allowance on financial assets including held for sale**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total €m**
Financial assets measured at amortised cost					
Loans and advances to customers	120	176	1,432	-	1,728
Loans and advances to banks	1	-	-	-	1
Debt securities	1	-	-	-	1
Other financial assets	2	-	-	-	2
Total financial assets measured at amortised cost	**124**	**176**	**1,432**	**-**	**1,732**
Debt instruments at FVOCI	3	-	-	-	3
Total	**127**	**176**	**1,432**	**-**	**1,735**

At 31 December 2019, POCI assets included €67 million (Bank 2019: €67 million) of assets which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk (Group 2018: €68 million, Bank 2018: €68 million). These assets will remain classified as POCI until derecognition.

Loans and advances to customers excludes €252 million (Bank 2019: €166 million) of loans mandatorily at FVTPL at 31 December 2019 which are not subject to impairment under IFRS 9 and are therefore excluded from impairment related tables (Group 2018: €261 million, Bank 2018: €160 million) (note 26).

At 31 December 2019, other financial assets includes: cash and balances at central banks of €7,646 million (2018: €6,035 million) and items in the course of collection from other banks of €223 million (2018: €259 million). At 31 December 2019, the Bank's other financial assets includes: cash and balances at central banks of €5,819 million (2018: €3,164 million) and items in the course of collection from other banks of €54 million (2018: €71 million).

The above tables exclude loan commitments, guarantees and letters of credit of €14,671 million at 31 December 2019 (2018: €15,505 million) (Bank 2019: €12,010 million, 2018: €10,406 million) that are subject to impairment (note 45).

[1] *At 31 December 2018, Purchased or Originated Credit-impaired assets included €68 million of assets with an impairment loss allowance of €nil which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

27 Financial risk management *(continued)*

Bank 2019 Financial assets exposure by stage (before impairment loss allowance)	Stage 1 - 12 month ECL (not credit- impaired) €m	Stage 2 - Lifetime ECL (not credit- impaired) €m	Stage 3 - Lifetime ECL (credit- impaired) €m	Purchased / originated credit- impaired[1] €m	Total €m
Financial assets measured at amortised cost					
Loans and advances to customers	33,204	4,120	1,868	94	39,286
Loans and advances to banks	14,284	5	-	-	14,289
Debt securities	6,679	-	-	-	6,679
Other financial assets	5,873	-	-	-	5,873
Total financial assets measured at amortised cost	**60,040**	**4,125**	**1,868**	**94**	**66,127**
Debt instruments at FVOCI	10,797	-	-	-	10,797
Total	**70,837**	**4,125**	**1,868**	**94**	**76,924**

Bank 2019 Impairment loss allowance on financial assets	Stage 1 - 12 month ECL (not credit- impaired) €m	Stage 2 - Lifetime ECL (not credit- impaired) €m	Stage 3 - Lifetime ECL (credit- impaired) €m	Purchased / originated credit- impaired[1] €m	Total €m
Financial assets measured at amortised cost					
Loans and advances to customers	82	141	644	2	869
Loans and advances to banks	13	-	-	-	13
Debt securities	4	-	-	-	4
Other financial assets	2	-	-	-	2
Total financial assets measured at amortised cost	**101**	**141**	**644**	**2**	**888**
Debt instruments at FVOCI	3	-	-	-	3
Total	**104**	**141**	**644**	**2**	**891**

[1] *At 31 December 2019, Purchased or Originated Credit-impaired assets included €67 million of assets with an impairment loss allowance of €2 million which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

27 Financial risk management *(continued)*

Bank **2018** **Financial assets exposure by stage** **(before impairment loss allowance)**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total €m**
Financial assets measured at amortised cost					
Loans and advances to customers	33,703	3,387	2,725	70	39,885
Loans and advances to banks	12,285	6	-	-	12,291
Debt securities	6,053	-	-	-	6,053
Other financial assets	3,235	-	-	-	3,235
Total financial assets measured at amortised cost	**55,276**	**3,393**	**2,725**	**70**	**61,464**
Debt instruments at FVOCI	12,048	-	-	-	12,048
Total	**67,324**	**3,393**	**2,725**	**70**	**73,512**

Bank **2018** **Impairment loss allowance** **on financial assets including held for sale**	**Stage 1 - 12 month ECL (not credit-impaired) €m**	**Stage 2 - Lifetime ECL (not credit-impaired) €m**	**Stage 3 - Lifetime ECL (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total €m**
Financial assets measured at amortised cost					
Loans and advances to customers	71	128	1,019	1	1,219
Loans and advances to banks	12	-	-	-	12
Debt securities	3	-	-	-	3
Other financial assets	1	-	-	-	1
Total financial assets measured at amortised cost	**87**	**128**	**1,019**	**1**	**1,235**
Debt instruments at FVOCI	3	-	-	-	3
Total	**90**	**128**	**1,019**	**1**	**1,238**

[1] *At 31 December 2018, Purchased or Originated Credit-impaired assets included €68 million of assets with an impairment loss allowance of €nil which, while credit-impaired upon purchase or origination were no longer credit-impaired at the reporting date due to improvements in credit risk. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

27 Financial risk management *(continued)*

Loans and advances to customers at amortised cost

Composition and risk profile

The tables below summarise the composition and risk profile of the Group and Bank's loans and advances to customers at amortised cost.

Group Loans and advances to customers Composition and risk profile (before impairment loss allowance)[2]	2019 Not credit-impaired €m	2019 Credit-impaired €m	2019 Total €m	2019 Total %	2018[1] Not credit-impaired €m	2018[1] Credit-impaired €m	2018[1] Total €m	2018[1] Total %
Residential mortgages	44,575	1,693	46,268	58%	42,969	2,465	45,434	58%
- Retail Ireland	*21,743*	*1,289*	*23,032*	*29%*	*21,688*	*2,025*	*23,713*	*30%*
- Retail UK	*22,832*	*404*	*23,236*	*29%*	*21,281*	*440*	*21,721*	*28%*
Non-property SME and corporate	19,649	757	20,406	25%	18,397	1,067	19,464	25%
- Republic of Ireland SME	*6,810*	*495*	*7,305*	*9%*	*6,871*	*729*	*7,600*	*10%*
- UK SME	*1,607*	*78*	*1,685*	*2%*	*1,491*	*79*	*1,570*	*2%*
- Corporate	*11,232*	*184*	*11,416*	*14%*	*10,035*	*259*	*10,294*	*13%*
Property and construction	7,498	549	8,047	10%	7,445	843	8,288	11%
- Investment	*6,669*	*519*	*7,188*	*9%*	*6,892*	*760*	*7,652*	*10%*
- Land and development	*829*	*30*	*859*	*1%*	*553*	*83*	*636*	*1%*
Consumer	5,627	100	5,727	7%	5,066	108	5,174	6%
Total	**77,349**	**3,099**	**80,448**	**100%**	**73,877**	**4,483**	**78,360**	**100%**
Impairment loss allowance on loans and advances to customers	**330**	**976**	**1,306**	**2%**	**296**	**1,432**	**1,728**	**2%**

Bank Loans and advances to customers Composition and risk profile (before impairment loss allowance)[2]	2019 Not credit-impaired €m	2019 Credit-impaired €m	2019 Total €m	2019 Total %	2018 Not credit-impaired €m	2018 Credit-impaired €m	2018 Total €m	2018 Total %
Residential mortgages	9,483	611	10,094	26%	10,265	904	11,169	28%
- Retail Ireland	*6,187*	*405*	*6,592*	*17%*	*6,772*	*675*	*7,447*	*19%*
- Retail UK	*3,296*	*206*	*3,502*	*9%*	*3,493*	*229*	*3,722*	*9%*
Non-property SME and corporate	18,744	698	19,442	50%	17,877	1,006	18,883	48%
- Republic of Ireland SME	*7,023*	*494*	*7,517*	*19%*	*7,087*	*727*	*7,814*	*20%*
- UK SME	*191*	*33*	*224*	*1%*	*202*	*33*	*235*	*1%*
- Corporate	*11,530*	*171*	*11,701*	*30%*	*10,588*	*246*	*10,834*	*27%*
Property and construction	7,056	506	7,562	19%	6,972	754	7,726	19%
- Investment	*6,280*	*487*	*6,767*	*17%*	*6,456*	*686*	*7,142*	*18%*
- Land and development	*776*	*19*	*795*	*2%*	*516*	*68*	*584*	*1%*
Consumer	2,041	53	2,094	5%	1,976	61	2,037	5%
Total	**37,324**	**1,868**	**39,192**	**100%**	**37,090**	**2,725**	**39,815**	**100%**
Impairment loss allowance on loans and advances to customers	**223**	**644**	**867**	**2%**	**199**	**1,019**	**1,218**	**3%**

[1] *Including held for sale.*

[2] *Excluded from the table above are Purchased or Originated Credit-impaired assets of €95 million (2018: €70 million) (Bank 2019: €94 million, 2018: €70 million), €67 million (2018: €68 million) (Bank 2019: €67 million, 2018: €68 million) of which were no longer credit-impaired at the reporting date due to improvement in credit risk since purchase or origination. These assets will remain classified as Purchased or Originated Credit-impaired until derecognition.*

27 Financial risk management *(continued)*

Asset quality - not credit-impaired

The tables below summarise the composition and impairment loss allowance of loans and advances to customers at amortised cost that are not credit-impaired.

Group	Stage 1				Stage 2			
2019 Not credit-impaired loans and advances to customers Composition and impairment loss allowance	**Loans €m**	**Loans as % of total advances %**	**Impairment loss allowance €m**	**Impairment loss allowance as % of loans %**	**Loans €m**	**Loans as % of total advances %**	**Impairment loss allowance €m**	**Impairment loss allowance as % of loans %**
Residential mortgages	42,898	53%	16	0.04%	1,677	2%	36	2.15%
- Retail Ireland	*20,610*	*26%*	*7*	*0.03%*	*1,133*	*1%*	*22*	*1.94%*
- Retail UK	*22,288*	*27%*	*9*	*0.04%*	*544*	*1%*	*14*	*2.57%*
Non-property SME and corporate	17,474	22%	56	0.32%	2,175	3%	78	3.59%
- Republic of Ireland SME	*5,799*	*7%*	*33*	*0.57%*	*1,011*	*2%*	*39*	*3.86%*
- UK SME	*1,382*	*2%*	*3*	*0.22%*	*225*	*-*	*8*	*3.56%*
- Corporate	10,293	13%	20	0.19%	939	1%	31	3.30%
Property and construction	5,985	7%	6	0.10%	1,513	2%	42	2.78%
- Investment	*5,418*	*6%*	*5*	*0.09%*	*1,251*	*2%*	*40*	*3.20%*
- Land and development	*567*	*1%*	*1*	*0.18%*	*262*	*-*	*2*	*0.76%*
Consumer	5,421	7%	64	1.18%	206	-	32	15.53%
Total	**71,778**	**89%**	**142**	**0.20%**	**5,571**	**7%**	**188**	**3.37%**

Group	Stage 1				Stage 2			
2018 Not credit-impaired loans and advances to customers including held for sale Composition and impairment loss allowance	**Loans €m**	**Loans as % of total advances %**	**Impairment loss allowance €m**	**Impairment loss allowance as % of loans %**	**Loans €m**	**Loans as % of total advances %**	**Impairment loss allowance €m**	**Impairment loss allowance as % of loans %**
Residential mortgages	41,096	52%	14	0.03%	1,873	2%	31	1.66%
- Retail Ireland	*20,403*	*26%*	*5*	*0.02%*	*1,285*	*1%*	*15*	*1.17%*
- Retail UK	*20,693*	*26%*	*9*	*0.04%*	*588*	*1%*	*16*	*2.72%*
Non-property SME and corporate	16,547	22%	50	0.30%	1,850	2%	74	4.00%
- RoI SME	*5,890*	*8%*	*29*	*0.49%*	*981*	*1%*	*43*	*4.38%*
- UK SME	*1,232*	*2%*	*3*	*0.24%*	*259*	*-*	*11*	*4.25%*
- Corporate	*9,425*	*12%*	*18*	*0.19%*	*610*	*1%*	*20*	*3.28%*
Property and construction	6,343	8%	4	0.06%	1,102	1%	38	3.45%
- Investment	*5,820*	*7%*	*4*	*0.07%*	*1,072*	*1%*	*38*	*3.54%*
- Land and development	*523*	*1%*	*-*	*-*	*30*	*-*	*-*	*-*
Consumer	4,816	6%	52	1.08%	250	-	33	13.20%
Total	**68,802**	**88%**	**120**	**0.17%**	**5,075**	**5%**	**176**	**3.47%**

27 Financial risk management *(continued)*

Bank	Stage 1				Stage 2			
2019 Not credit-impaired loans and advances to customers Composition and impairment loss allowance	**Loans €m**	**Loans as % of total advances %**	**Impairment loss allowance €m**	**Impairment loss allowance as % of loans %**	**Loans €m**	**Loans as % of total advances %**	**Impairment loss allowance €m**	**Impairment loss allowance as % of loans %**
Residential mortgages	8,888	23%	8	0.09%	595	2%	15	2.52%
- Retail Ireland	*5,816*	*15%*	*5*	*0.09%*	*371*	*1%*	*7*	*1.89%*
- Retail UK	*3,072*	*8%*	*3*	*0.10%*	*224*	*1%*	*8*	*3.57%*
Non-property SME and corporate	16,736	42%	53	0.32%	2,008	5%	74	3.69%
- RoI SME	*6,013*	*15%*	*33*	*0.55%*	*1,010*	*3%*	*39*	*3.86%*
- UK SME	*119*	*-*	*-*	*0.00%*	*72*	*-*	*5*	*6.94%*
- Corporate	*10,604*	*27%*	*20*	*0.19%*	*926*	*2%*	*30*	*3.24%*
Property and construction	5,647	14%	5	0.09%	1,409	4%	40	2.84%
- Investment	*5,118*	*13%*	*4*	*0.08%*	*1,162*	*3%*	*38*	*3.27%*
- Land and development	*529*	*1%*	*1*	*0.19%*	*247*	*1%*	*2*	*0.81%*
Consumer	1,933	5%	16	0.83%	108	-	12	11.11%
Total	**33,204**	**84%**	**82**	**0.25%**	**4,120**	**11%**	**141**	**3.42%**

Bank	Stage 1				Stage 2			
2018 Not credit-impaired loans and advances to customers Composition and impairment loss allowance	**Loans €m**	**Loans as % of total advances %**	**Impairment loss allowance €m**	**Impairment loss allowance as % of loans %**	**Loans €m**	**Loans as % of total advances %**	**Impairment loss allowance €m**	**Impairment loss allowance as % of loans %**
Residential mortgages	9,604	24%	8	0.08%	661	2%	13	1.97%
- Retail Ireland	*6,364*	*16%*	*5*	*0.08%*	*408*	*1%*	*5*	*1.23%*
- Retail UK	*3,240*	*8%*	*3*	*0.09%*	*253*	*1%*	*8*	*3.16%*
Non-property SME and corporate	16,244	40%	47	0.29%	1,633	3%	66	4.04%
- RoI SME	*6,106*	*15%*	*29*	*0.48%*	*981*	*2%*	*41*	*4.18%*
- UK SME	*129*	*-*	*-*	*-*	*73*	*-*	*6*	*8.22%*
- Corporate	*10,009*	*25%*	*18*	*0.18%*	*579*	*1%*	*19*	*3.28%*
Property and construction	5,977	15%	3	0.05%	995	2%	37	3.72%
- Investment	*5,484*	*14%*	*3*	*0.05%*	*972*	*2%*	*37*	*3.81%*
- Land and development	*493*	*1%*	*-*	*-*	*23*	*-*	*-*	*-*
Consumer	1,878	5%	13	0.69%	98	-	12	12.24%
Total	**33,703**	**84%**	**71**	**0.21%**	**3,387**	**7%**	**128**	**3.78%**

27 Financial risk management *(continued)*

The table below provides analysis of the asset quality of loans and advances to customers at amortised cost that are not credit-impaired based on mapping the IFRS 9 twelve month PD of each loan to a PD grade based on the table provided on page 155.

Group 2019 Not credit-impaired loans and advances to customers Asset quality[1] - PD grade	Residential mortgages		Non-property SME and corporate		Property and construction		Consumer		Total	
	€m	%	€m	%	€m	%	€m	%	€m	%
Stage 1										
1-4	24,895	56%	5,804	30%	3,888	52%	19	-	34,606	45%
5-7	15,699	35%	6,670	34%	2,028	27%	472	8%	24,869	32%
8-9	1,592	3%	4,413	22%	42	1%	3,520	63%	9,567	12%
10-11	712	2%	587	3%	27	-	1,410	25%	2,736	4%
Total Stage 1	**42,898**	**96%**	**17,474**	**89%**	**5,985**	**80%**	**5,421**	**96%**	**71,778**	**93%**
Stage 2										
1-4	90	-	170	1%	151	2%	-	-	411	1%
5-7	218	1%	565	3%	894	12%	2	-	1,679	2%
8-9	304	1%	679	3%	65	1%	41	1%	1,089	1%
10-11	1,065	2%	761	4%	403	5%	163	3%	2,392	3%
Total Stage 2	**1,677**	**4%**	**2,175**	**11%**	**1,513**	**20%**	**206**	**4%**	**5,571**	**7%**
Not credit-impaired										
1-4	24,985	56%	5,974	31%	4,039	54%	19	-	35,017	46%
5-7	15,917	36%	7,235	37%	2,922	39%	474	8%	26,548	34%
8-9	1,896	4%	5,092	25%	107	2%	3,561	64%	10,656	13%
10-11	1,777	4%	1,348	7%	430	5%	1,573	28%	5,128	7%
Total not credit-impaired	**44,575**	**100%**	**19,649**	**100%**	**7,498**	**100%**	**5,627**	**100%**	**77,349**	**100%**

Group 2018 Not credit-impaired loans and advances to customers including held for sale Asset quality[1] - PD grade	Residential mortgages		Non-property SME and corporate		Property and construction		Consumer		Total	
	€m	%	€m	%	€m	%	€m	%	€m	%
Stage 1										
1-4	22,622	52%	5,421	30%	5,244	70%	84	2%	33,371	45%
5-7	16,185	38%	6,505	35%	1,038	14%	2,208	44%	25,936	35%
8-9	1,535	4%	4,076	22%	56	1%	1,590	31%	7,257	10%
10-11	754	2%	545	3%	5	-	934	18%	2,238	3%
Total Stage 1	**41,096**	**96%**	**16,547**	**90%**	**6,343**	**85%**	**4,816**	**95%**	**68,802**	**93%**
Stage 2										
1-4	96	-	191	1%	69	1%	-	-	356	1%
5-7	227	-	356	2%	696	10%	7	-	1,286	2%
8-9	377	1%	521	3%	157	2%	22	1%	1,077	1%
10-11	1,173	3%	782	4%	180	2%	221	4%	2,356	3%
Total Stage 2	**1,873**	**4%**	**1,850**	**10%**	**1,102**	**15%**	**250**	**5%**	**5,075**	**7%**
Not credit-impaired										
1-4	22,718	52%	5,612	31%	5,313	71%	84	2%	33,727	46%
5-7	16,412	38%	6,861	37%	1,734	24%	2,215	44%	27,222	37%
8-9	1,912	5%	4,597	25%	213	3%	1,612	32%	8,334	11%
10-11	1,927	5%	1,327	7%	185	2%	1,155	22%	4,594	6%
Total not credit-impaired	**42,969**	**100%**	**18,397**	**100%**	**7,445**	**100%**	**5,066**	**100%**	**73,877**	**100%**

[1] *Excluded from the table above are Purchased or Originated Credit-impaired assets of €95 million (2018: €70 million), €67 million (2018: €68 million) of which were no longer credit-impaired at the reporting date due to improvement in credit risk since purchase or origination. These loans will remain classified as Purchased or Originated Credit-impaired loans until derecognition.*

27 Financial risk management *(continued)*

Bank 2019 Not credit-impaired loans and advances to customers Asset quality[1] - PD grade	Residential mortgages		Non-property SME and corporate		Property and construction		Consumer		Total	
	€m	%	€m	%	€m	%	€m	%	€m	%
Stage 1										
1-4	4,000	42%	6,219	33%	3,752	54%	10	1%	13,981	38%
5-7	3,940	41%	6,219	33%	1,842	26%	472	23%	12,473	33%
8-9	628	7%	3,726	20%	26	-	1,274	62%	5,654	15%
10-11	320	3%	572	3%	27	-	177	9%	1,096	3%
Total Stage 1	**8,888**	**93%**	**16,736**	**89%**	**5,647**	**80%**	**1,933**	**95%**	**33,204**	**89%**
Stage 2										
1-4	20	-	166	1%	146	2%	-	-	332	1%
5-7	70	1%	494	3%	851	12%	2	-	1,417	4%
8-9	98	1%	633	3%	43	1%	41	2%	815	2%
10-11	407	5%	715	4%	369	5%	65	3%	1,556	4%
Total Stage 2	**595**	**7%**	**2,008**	**11%**	**1,409**	**20%**	**108**	**5%**	**4,120**	**11%**
Not credit-impaired										
1-4	4,020	42%	6,385	34%	3,898	56%	10	1%	14,313	39%
5-7	4,010	42%	6,713	36%	2,693	38%	474	23%	13,890	37%
8-9	726	8%	4,359	23%	69	1%	1,315	64%	6,469	17%
10-11	727	8%	1,287	7%	396	5%	242	12%	2,652	7%
Total not credit-impaired	**9,483**	**100%**	**18,744**	**100%**	**7,056**	**100%**	**2,041**	**100%**	**37,324**	**100%**

Bank 2018 Not credit-impaired loans and advances to customers Asset quality[1] - PD grade	Residential mortgages		Non-property SME and corporate		Property and construction		Consumer		Total	
	€m	%	€m	%	€m	%	€m	%	€m	%
Stage 1										
1-4	4,176	41%	6,209	35%	5,037	72%	16	1%	15,438	41%
5-7	4,462	44%	6,025	34%	904	13%	618	31%	12,009	32%
8-9	617	6%	3,473	19%	31	1%	1,116	57%	5,237	14%
10-11	349	3%	537	3%	5	-	128	6%	1,019	3%
Total Stage 1	**9,604**	**94%**	**16,244**	**91%**	**5,977**	**86%**	**1,878**	**95%**	**33,703**	**90%**
Stage 2										
1-4	20	-	129	-	55	1%	-	-	204	1%
5-7	74	1%	316	2%	649	9%	6	-	1,045	3%
8-9	114	1%	463	3%	135	2%	14	1%	726	2%
10-11	453	4%	725	4%	156	2%	78	4%	1,412	4%
Total Stage 2	**661**	**6%**	**1,633**	**9%**	**995**	**14%**	**98**	**5%**	**3,387**	**10%**
Not credit-impaired										
1-4	4,196	41%	6,338	35%	5,092	73%	16	1%	15,642	42%
5-7	4,536	45%	6,341	36%	1,553	22%	624	31%	13,054	35%
8-9	731	7%	3,936	22%	166	3%	1,130	58%	5,963	16%
10-11	802	7%	1,262	7%	161	2%	206	10%	2,431	7%
Total not credit-impaired	**10,265**	**100%**	**17,877**	**100%**	**6,972**	**100%**	**1,976**	**100%**	**37,090**	**100%**

[1] *Excluded from the table above are Purchased or Originated Credit-impaired assets of €94 million (2018: €70 million), €67 million (2018: €68 million) of which were no longer credit-impaired at the reporting date due to improvement in credit risk since purchase or origination. These loans will remain classified as Purchased or Originated Credit-impaired loans until derecognition.*

27 Financial risk management *(continued)*

The tables below summarise the composition and impairment loss allowance of the Group and Bank's loans and advances to customers at amortised cost that are credit-impaired (i.e. Stage 3).

Group	**2019**				**2018**[1]			
Credit-impaired loans and advances to customers Composition and impairment loss allowance[2]	**Credit-impaired loans €m**	**CI loans as % of total advances %**	**Impairment loss allowance €m**	**ILA as % of loans %**	**Credit-impaired loans €m**	**CI loans as % of total advances %**	**Impairment loss allowance €m**	**ILA as % of loans %**
Residential mortgages	1,693	2%	380	22%	2,465	3%	492	20%
- Retail Ireland	*1,289*	*2%*	*340*	*26%*	*2,025*	*2%*	*444*	*22%*
- Retail UK	*404*	*-*	*40*	*10%*	*440*	*1%*	*48*	*11%*
Non-property SME and corporate	757	1%	353	47%	1,067	1%	501	47%
- Republic of Ireland SME	*495*	*1%*	*225*	*45%*	*729*	*1%*	*340*	*47%*
- UK SME	*78*	*-*	*38*	*49%*	*79*	*-*	*37*	*47%*
- Corporate	*184*	*-*	*90*	*49%*	*259*	*-*	*124*	*48%*
Property and construction	549	1%	180	33%	843	1%	369	44%
- Investment	*519*	*1%*	*162*	*31%*	*760*	*1%*	*321*	*42%*
- Land and development	*30*	*-*	*18*	*60%*	*83*	*-*	*48*	*58%*
Consumer	100	-	63	63%	108	-	70	65%
Total credit-impaired	**3,099**	**4%**	**976**	**31%**	**4,483**	**5%**	**1,432**	**32%**

Bank	**2019**				**2018**			
Credit-impaired loans and advances to customers Composition and impairment loss allowance[2]	**Credit-impaired loans €m**	**CI loans as % of total advances %**	**Impairment loss allowance €m**	**ILA as % of loans %**	**Credit-impaired loans €m**	**CI loans as % of total advances %**	**Impairment loss allowance €m**	**ILA as % of loans %**
Residential mortgages	611	2%	121	20%	904	2%	160	18%
- Retail Ireland	*405*	*1%*	*97*	*24%*	*675*	*2%*	*133*	*20%*
- Retail UK	206	1%	24	12%	229	-	27	12%
Non-property SME and corporate	698	2%	326	47%	1,006	3%	478	48%
- Republic of Ireland SME	*494*	*1%*	*225*	*46%*	*727*	*2%*	*340*	*47%*
- UK SME	*33*	*-*	*16*	*48%*	*33*	*-*	*19*	*58%*
- Corporate	*171*	*1%*	*85*	*50%*	*246*	*1%*	*119*	*48%*
Property and construction	506	1%	166	33%	754	2%	344	46%
- Investment	*487*	*1%*	*156*	*32%*	*686*	*2%*	*304*	*44%*
- Land and development	*19*	*-*	*10*	*53%*	*68*	*-*	*40*	*59%*
Consumer	53	-	31	58%	61	-	37	61%
Total credit-impaired	**1,868**	**5%**	**644**	**34%**	**2,725**	**7%**	**1,019**	**37%**

All loans and advances to customers that are greater than 90 days past due are classified as being credit-impaired. All credit-impaired loans and advances to customers are risk rated PD grade 12.

[1] *Comparatives include held for sale.*
[2] *Excluded from the table above are Purchased or Originated Credit-impaired assets of €95 million (2018: €70 million) (Bank 2019: €94 million, 2018: €70 million), €67 million (2018: €68 million) (Bank 2019: €67 million, 2018: €68 million) of which were no longer credit-impaired at the reporting date due to improvement in credit risk since purchase or origination. These loans will remain classified as Purchased or Originated Credit-impaired loans until derecognition.*

27 Financial risk management *(continued)*

Segmental analysis
The tables below provide an analysis of the risk profile of loans and advances to customers at amortised cost by division.

Group 2019 Risk profile of loans and advances to customers (before impairment loss allowance)	Retail Ireland €m	Retail UK €m	Corporate & Treasury €m	Total Group €m
Stage 1 - 12 month ECL (not credit impaired)	29,654	27,514	14,610	71,778
Stage 2 - Lifetime ECL (not credit impaired)	2,653	1,146	1,772	5,571
Stage 3 - Lifetime ECL (credit impaired)	2,141	765	193	3,099
Purchased / originated credit-impaired	3	67	25	95
Gross carrying amount at 31 December 2019	**34,451**	**29,492**	**16,600**	**80,543**

Group 2018 Risk profile of loans and advances to customers including held for sale (before impairment loss allowance)	Retail Ireland €m	Retail UK €m	Corporate & Treasury €m	Total Group €m
Stage 1 - 12 month ECL (not credit impaired)	29,482	25,337	13,983	68,802
Stage 2 - Lifetime ECL (not credit impaired)	2,753	1,378	944	5,075
Stage 3 - Lifetime ECL (credit impaired)	3,430	781	272	4,483
Purchased / originated credit-impaired	4	66	-	70
Gross carrying amount at 31 December 2018	**35,669**	**27,562**	**15,199**	**78,430**

Group 2019 Risk profile of loans and advances to customers - non-performing exposures	Retail Ireland €m	Retail UK €m	Corporate & Treasury €m	Total Group €m
Credit-impaired[1]	2,143	766	218	3,127
Not credit-impaired[2]	259	106	27	392
Total	**2,402**	**872**	**245**	**3,519**

Group 2018 Risk profile of loans and advances to customers including held for sale - non-performing exposures	Retail Ireland €m	Retail UK €m	Corporate & Treasury €m	Total Group €m
Credit-impaired[1]	3,432	781	272	4,485
Not credit-impaired[2]	407	80	12	499
Total	**3,839**	**861**	**284**	**4,984**

[1] *Credit-impaired loans include Stage 3 and Purchased or Originated Credit-impaired assets which remain credit-impaired at the reporting date.*
[2] *Other / probationary loans, including forborne loans that have yet to satisfy exit criteria in line with EBA guidance to return to performing.*

27 Financial risk management *(continued)*

Geographical and industry analysis of loans and advances to customers
The following table provides a geographical and industry breakdown of total loans including loans held for sale (before impairment loss allowances).

Group	2019				2018[1]			
Geographical / industry analysis[2]	RoI €m	UK €m	RoW €m	Total €m	RoI €m	UK €m	RoW €m	Total €m
Personal	25,240	26,758	-	51,998	25,875	24,736	-	50,611
- Residential mortgages	*23,035*	*23,236*	-	*46,271*	*23,716*	*21,721*	-	*45,437*
- Other consumer lending	*2,205*	*3,522*	-	*5,727*	*2,159*	*3,015*	-	*5,174*
Property and construction	7,065	1,047	-	8,112	7,099	1,255	-	8,354
- Investment	*6,269*	*984*	-	*7,253*	*6,518*	*1,200*	-	*7,718*
- Land and development	*796*	*63*	-	*859*	*581*	*55*	-	*636*
Business and other services	6,888	1,310	499	8,697	6,191	1,487	413	8,091
Manufacturing	4,263	363	577	5,203	3,935	415	458	4,808
Distribution	2,213	246	53	2,512	2,234	195	51	2,480
Agriculture	1,641	237	-	1,878	1,653	233	-	1,886
Transport	938	110	55	1,103	891	129	61	1,081
Financial	580	55	-	635	498	59	22	579
Energy	345	60	-	405	467	58	15	540
Total	**49,173**	**30,186**	**1,184**	**80,543**	**48,843**	**28,567**	**1,020**	**78,430**

Repossessed collateral
At December 2019, the Group and Bank had collateral held as security, as set out in the table below. Repossessed collateral is sold as soon as practicable, with the proceeds applied against outstanding indebtedness.

	Group		Bank	
Repossessed collateral	2019 €m	2018 €m	2019 €m	2018 €m
Residential properties				
Ireland	10	19	5	7
UK and other	11	7	6	4
	21	**26**	**11**	**11**
Other	1	1	-	-
Total	**22**	**27**	**11**	**11**

[1] *Comparatives include held for sale.*
[2] *The geographical breakdown is primarily based on the location of the business unit where the asset is booked.*

27 Financial risk management *(continued)*

Group forbearance disclosures

The Group's total risk profile of loans and advances to customers at amortised cost at 31 December 2019 of €80.5 billion (2018: €78.4 billion) is available on page 155. Exposures are before impairment loss allowance.

Group **2019** **Loans and advances to customers including held for sale at amortised cost - Composition**	**Stage 1 (not credit-impaired) €m**	**Stage 2 (not credit-impaired) €m**	**Stage 3 (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total €m**
Non-forborne loans and advances to customers					
Residential mortgages	42,884	822	560	2	44,268
- Retail Ireland	*20,598*	*413*	*251*	*2*	*21,264*
- Retail UK	*22,286*	*409*	*309*	*-*	*23,004*
Non-property SME and corporate	17,473	1,121	172	-	18,766
- Republic of Ireland SME	*5,798*	*597*	*164*	*-*	*6,559*
- UK SME	*1,382*	*133*	*8*	*-*	*1,523*
- Corporate	*10,293*	*391*	*-*	*-*	*10,684*
Property and construction	5,985	818	10	-	6,813
- Investment	*5,418*	*572*	*9*	*-*	*5,999*
- Land and development	567	246	1	-	814
Consumer	5,421	202	88	-	5,711
Total non-forborne loans and advances to customers	**71,763**	**2,963**	**830**	**2**	**75,558**
Forborne loans and advances to customers					
Residential mortgages	14	855	1,133	1	2,003
- Retail Ireland	*12*	*720*	*1,038*	*1*	*1,771*
- Retail UK	*2*	*135*	*95*	*-*	*232*
Non-property SME and corporate	1	1,054	585	27	1,667
- Republic of Ireland SME	*1*	*414*	*331*	*-*	*746*
- UK SME	*-*	*92*	*70*	*2*	*164*
- Corporate	*-*	*548*	*184*	*25*	*757*
Property and construction	-	695	539	65	1,299
- Investment	*-*	*679*	*510*	*65*	*1,254*
- Land and development	*-*	*16*	*29*	*-*	*45*
Consumer	-	4	12	-	16
Total forborne loans and advances to customers	**15**	**2,608**	**2,269**	**93**	**4,985**

[1] *At 31 December 2019, forborne Purchased or Originated Credit-impaired loans included €65 million of loans which, while credit-impaired upon purchase or origination, were no longer credit-impaired at the reporting date due to improvement in credit risk. These loans will remain classified as Purchased or Originated Credit-impaired loans until derecognition.*

27 Financial risk management *(continued)*

Group

2018 **Loans and advances to customers including held for sale at amortised cost - Composition**	**Stage 1 (not credit-impaired) €m**	**Stage 2 (not credit-impaired) €m**	**Stage 3 (credit-impaired) €m**	**Purchased / originated credit-impaired[1] €m**	**Total €m**
Non-forborne loans and advances to customers					
Residential mortgages	41,088	828	675	1	42,592
- Retail Ireland	*20,396*	*363*	*336*	*1*	*21,096*
- Retail UK	*20,692*	*465*	*339*	*-*	*21,496*
Non-property SME and corporate	16,543	975	296	1	17,815
- RoI SME	*5,886*	*517*	*208*	*1*	*6,612*
- UK SME	*1,232*	*203*	*20*	*-*	*1,455*
- Corporate	*9,425*	*255*	*68*	*-*	*9,748*
Property and construction	6,330	239	45	66	6,680
- Investment	*5,808*	*236*	*26*	*66*	*6,136*
- Land and development	*522*	*3*	*19*	*-*	*544*
Consumer	4,816	244	89	-	5,149
Total non-forborne loans and advances to customers	**68,777**	**2,286**	**1,105**	**68**	**72,236**
Forborne loans and advances to customers					
Residential mortgages	8	1,045	1,790	2	2,845
- Retail Ireland	*7*	*922*	*1,689*	*2*	*2,620*
- Retail UK	*1*	*123*	*101*	*-*	*225*
Non-property SME and corporate	4	875	771	-	1,650
- RoI SME	*4*	*464*	*521*	*-*	*989*
- UK SME	*-*	*56*	*59*	*-*	*115*
- Corporate	*-*	*355*	*191*	*-*	*546*
Property and construction	13	863	798	-	1,674
- Investment	*12*	*836*	*734*	*-*	*1,582*
- Land and development	*1*	*27*	*64*	*-*	*92*
Consumer	-	6	19	-	25
Total forborne loans and advances to customers	**25**	**2,789**	**3,378**	**2**	**6,194**

[1] *At 31 December 2018, forborne Purchased or Originated Credit-impaired loans included €2 million of loans which, while credit-impaired upon purchase or origination, were no longer credit-impaired at the reporting date due to improvement in credit risk. These loans will remain classified as Purchased or Originated Credit-impaired loans until derecognition.*

27 Financial risk management *(continued)*

Group 2019 Risk profile of loans and advances to customers at amortised cost - NPEs	Residential mortgages €m	Non-property SME and corporate €m	Property and construction €m	Consumer €m	Total €m
Non-forborne loans and advances to customers					
Credit-impaired	560	172	10	88	830
Not credit-impaired	47	28	4	-	79
Total non-forborne loans and advances to customers	**607**	**200**	**14**	**88**	**909**
Forborne loans and advances to customers					
Credit-impaired	1,134	612	539	12	2,297
Not credit-impaired	198	76	39	-	313
Total forborne loans and advances to customers	**1,332**	**688**	**578**	**12**	**2,610**

Group 2018 Risk profile of loans and advances to customers at amortised cost including held for sale - NPEs	Residential mortgages €m	Non-property SME and corporate €m	Property and construction €m	Consumer €m	Total €m
Non-forborne loans and advances to customers					
Credit-impaired	676	297	45	89	1,107
Not credit-impaired	28	16	13	3	60
Total non-forborne loans and advances to customers	**704**	**313**	**58**	**92**	**1,167**
Forborne loans and advances to customers					
Credit-impaired	1,790	771	798	19	3,378
Not credit-impaired	249	128	62	-	439
Total forborne loans and advances to customers	**2,039**	**899**	**860**	**19**	**3,817**

27 Financial risk management *(continued)*

Asset quality: Other financial instruments
The tables below summarise the asset quality of debt instruments at FVOCI by IFRS 9 12 month PD grade for Group and Bank.

2019	**Group**				**Bank**			
	Stage 1		**Total**		**Stage 1**		**Total**	
Debt instruments at FVOCI - Asset quality	**€m**	**%**	**€m**	**%**	**€m**	**%**	**€m**	**%**
PD Grade								
1-4	9,987	92%	9,987	92%	9,987	92%	9,987	92%
5-7	810	8%	810	8%	810	8%	810	8%
8-9	-	-	-	-	-	-	-	-
10-11	-	-	-	-	-	-	-	-
Total	**10,797**	**100%**	**10,797**	**100%**	**10,797**	**100%**	**10,797**	**100%**

2018	**Group**				**Bank**			
	Stage 1		**Total**		**Stage 1**		**Total**	
Debt instruments at FVOCI - Asset quality	**€m**	**%**	**€m**	**%**	**€m**	**%**	**€m**	**%**
PD Grade								
1-4	11,115	92%	11,115	92%	11,115	92%	11,115	92%
5-7	933	8%	933	8%	933	8%	933	8%
8-9	-	-	-	-	-	-	-	-
10-11	-	-	-	-	-	-	-	-
Total	**12,048**	**100%**	**12,048**	**100%**	**12,048**	**100%**	**12,048**	**100%**

The tables below summarise the asset quality of debt securities at amortised cost by IFRS 9 twelve month PD grade for Group and Bank.

2019	**Group**				**Bank**			
	Stage 1		**Total**		**Stage 1**		**Total**	
Debt securities at amortised cost (before impairment loss allowance) - Asset quality	**€m**	**%**	**€m**	**%**	**€m**	**%**	**€m**	**%**
PD Grade								
1-4	4,499	100%	4,499	100%	6,679	100%	6,679	100%
5-7	2	-	2	-	-	-	-	-
8-9	-	-	-	-	-	-	-	-
10-11	11	-	11	-	-	-	-	-
Total	**4,512**	**100%**	**4,512**	**100%**	**6,679**	**100%**	**6,679**	**100%**

27 Financial risk management *(continued)*

2018 Debt securities at amortised cost (before impairment loss allowance) - Asset quality	Group				Bank			
	Stage 1		Total		Stage 1		Total	
	€m	%	€m	%	€m	%	€m	%
PD Grade								
1-4	3,917	100%	3,917	100%	6,053	100%	6,053	100%
5-7	12	-	12	-	-	-	-	-
8-9	-	-	-	-	-	-	-	-
10-11	-	-	-	-	-	-	-	-
Total	**3,929**	**100%**	**3,929**	**100%**	**6,053**	**100%**	**6,053**	**100%**

The tables below summarise the asset quality of loans and advances to banks at amortised cost by IFRS 9 twelve month PD grade for Group and Bank.

2019 Loans and advances to banks at amortised cost (before impairment loss allowance) Asset quality	Group						Bank					
	Stage 1		Stage 2		Total		Stage 1		Stage 2		Total	
	€m	%	€m	%	€m	%	€m	%	€m	%	€m	%
PD Grade												
1-4	2,948	98%	-	-	2,948	98%	14,217	100%	-	-	14,217	100%
5-7	3	-	5	83%	8	-	1	-	5	100%	6	-
8-9	66	2%	1	17%	67	2%	66	-	-	-	66	-
10-11	-	-	-	-	-	-	-	-	-	-	-	-
Total	**3,017**	**100%**	**6**	**100%**	**3,023**	**100%**	**14,284**	**100%**	**5**	**100%**	**14,289**	**100%**

2018 Loans and advances to banks at amortised cost (before impairment loss allowance) Asset quality	Group						Bank					
	Stage 1		Stage 2		Total		Stage 1		Stage 2		Total	
	€m	%	€m	%	€m	%	€m	%	€m	%	€m	%
PD Grade												
1-4	2,244	97%	-	-	2,244	97%	12,227	100%	-	-	12,227	99%
5-7	1	-	-	-	1	-	1	-	-	-	1	-
8-9	57	3%	6	100%	63	3%	57	-	6	100%	63	1%
10-11	-	-	-	-	-	-	-	-	-	-	-	-
Total	**2,302**	**100%**	**6**	**100%**	**2,308**	**100%**	**12,285**	**100%**	**6**	**100%**	**12,291**	**100%**

27 Financial risk management *(continued)*

Asset quality: Other financial instruments not within the scope of IFRS 9
Other financial instruments as set out in the table include instruments that are not within the scope of IFRS 9 or are not subject to impairment under IFRS 9. These include trading securities, derivative financial instruments, loans and advances to banks at fair value, other financial instruments at FVTPL (excluding equity instruments) and any reinsurance assets. The table summarises the asset quality of these financial instruments by equivalent external risk ratings.

	Group				Bank			
	2019		2018		2019		2018	
Other financial instruments with ratings equivalent to:	€m	%	€m	%	€m	%	€m	%
AAA to AA-	4,619	50%	3,693	46%	137	5%	126	7%
A+ to A-	2,943	32%	2,773	34%	1,513	56%	1,147	60%
BBB+ to BBB-	1,070	11%	1,077	13%	730	27%	355	19%
BB+ to BB-	259	3%	203	3%	231	9%	195	10%
B+ to B-	323	4%	313	4%	80	3%	58	3%
Lower than B-	5	-	23	-	2	-	16	1%
Total	**9,219**	**100%**	**8,082**	**100%**	**2,693**	**100%**	**1,897**	**100%**
Amounts include:								
Due from Group undertakings					616		90	

Credit risk methodologies

The Group's credit risk methodologies encompass internal credit rating models and scoring tools and impairment models and are set out below.

Internal credit rating models
The use of internal credit rating models and scoring tools, which measure the degree of risk inherent in lending to specific counterparties, is central to the credit risk assessment and ongoing management processes within the Group.

The primary model measures used are:
- PD: the probability of a given counterparty defaulting on any of its borrowings from the Group within the next twelve months;
- Exposure at Default (EAD): the exposure the Group has to a defaulting borrower at the time of default; and
- LGD: the loss incurred (after the realisation of any collateral) on a specific transaction should the borrower default, expressed as a percentage of EAD.

These measures are used to calculate regulatory expected loss and are fully embedded in, and form an essential component of, the Group's operational and strategic credit risk management and credit pricing practices.

The structure of internal rating systems
The Group divides its internal rating systems into non-retail and retail approaches.

For the Group's retail consumer and smaller business portfolios, the credit risk assessment is grounded on application and behavioural scoring tools. For larger commercial and corporate customers, the risk assessment is underpinned by statistical risk rating models which incorporate quantitative information from the customer (e.g. financial statements) together with a qualitative assessment of non-financial risk factors such as management quality and market / trading outlook. Lending to financial institutions is assigned an internal rating supported by external ratings of the major rating agencies.

PD calculation
For the purposes of internal credit rating models, the Group produces estimates of PD on either or both of the following bases:
- Through-the-Cycle (TtC) estimates are estimates of default over an entire economic cycle, averaged to a twelve month basis. These are in effect averaged expectations of PD for a borrower over the economic cycle; and
- Cyclical estimates are estimates of default applicable to the next immediate twelve months. These cyclical estimates partially capture the economic cycle in that they typically rise in an economic downturn and decline in an economic upturn but not necessarily to the same degree as default rates change in the economy.

Non-retail internal rating systems
The Group has adopted the Foundation Internal Ratings Based (FIRB) approach for most of its non-retail portfolios. Under this approach, the Group calculates its own estimates for PD and uses supervisory estimates of LGD and credit conversion factors.

To calculate PD under the FIRB approach, the Group assesses the credit quality of borrowers based on transaction and borrower specific characteristics. Scorecards are developed for each significant portfolio or type of lending, with outputs used to assign a PD grade to each borrower.

In the case of financial institutions, external credit agency ratings are used to provide a significant challenge within the Group's ratings approach. For exposures other than financial institutions, external ratings, when available for borrowers, play a role in the independent validation of internal estimates.

27 Financial risk management *(continued)*

For non-retail exposures, the Group calculates its own estimates of PD on a TtC basis and on a cyclical basis. The TtC PD estimates are based on internal default experience, or where default data is limited, statistical model estimates combined with available data to reflect the average default rate over the course of an economic cycle. The TtC PDs do not vary with the economic cycle and are used to calculate risk weighted exposure amounts and to determine minimum regulatory capital requirements. The cyclical PD estimates which capture a change in borrower risk over the economic cycle are used for internal credit management purposes. Both measures are estimated from the same borrower risk factors.

Retail internal rating systems
The Group has adopted the Retail Internal Rating Based (IRB) approach for the majority of its retail exposures. Under this approach, the Group calculates its own estimates for PD, LGD and credit conversion factors. External ratings do not play a role within the Group's retail internal rating systems, however, external credit bureau data can play a role in assessing certain borrowers.

Under the Retail IRB approach, scorecards based on internal behavioural data and, where relevant, transaction specific characteristics are developed for specific portfolios or product types, the output from the scorecard is used to determine the PD estimate.

The Group calculates retail PDs on a TtC or cyclical basis depending on the portfolio. The TtC estimates are calibrated based on long run average default rates over the course of an economic cycle (based on internal default experience) within identified discrete risk pools. The cyclical estimates are calibrated based on a weighted average of the expected long-run default rate over the course of an economic cycle and the most recently observed annual default rate. These retail PDs are used for both the calculation of risk weighted exposure amounts and for internal credit management purposes.

LGD estimates are based on historic loss experience and associated costs for all observed defaults for a defined time period. The time period is set for each model to ensure LGD estimates are representative of economic downturn conditions. Estimates of credit conversion factors (which determine the extent to which a currently undrawn amount is assumed to be drawn and outstanding at point of default) are similarly derived based on historic experience from observed defaults, and are calibrated to produce estimates of behaviour characteristic of an economic downturn.

The assumption that the time periods and data used for the estimation of LGD and credit conversion factors remain representative of economic downturn conditions is subject to review and challenge on an ongoing basis.

Other uses of internal estimates
Internal estimates play an essential role in risk management and decision making processes as well as the credit approval functions, the internal capital allocation function and the corporate governance functions of the Group. The specific uses of internal estimates differ from portfolio to portfolio, and for retail and non-retail approaches, but typically include:

- credit decisioning / automated credit decisioning and borrower credit approval;
- credit management;
- calculation of Risk Adjusted Return on Capital (RAROC);
- internal reporting; and
- internal capital allocation between businesses of the Group.

For other purposes, the cyclical PD estimates typically are used. Both estimates feature within internal management reporting.

Impairment models are described further below.

Control mechanisms for credit rating and impairment models
The Group Model Risk Policy and Group Model Risk Standards, as approved by the Court Risk Committee and GRPC respectively, set out the Group's overall approach to model risk management. The Group also sets out more detailed requirements with respect to development, monitoring and validation of credit rating and impairment models. These standards are approved by the RMC. Model development and redevelopment for credit rating and impairment models are approved by the RMC and the results of model performance monitoring are reported to the RMC on a regular basis.

The Group mitigates model risk for credit rating and impairment models as follows:

- **model development standards:** the Group adopts centralised standards and methodologies over the operation and development of models. This ensures a common approach in key areas such as documentation, data quality and management and model testing;
- **model governance:** the Group adopts a uniform approach to the governance of all risk rating model related activities and impairment model related activities, ensuring the appropriate involvement of relevant stakeholders;
- **model performance monitoring:** credit risk rating and impairment models are subject to testing on a quarterly basis which is reported to the RMC. This includes assessment of model performance against observed outcomes, including:
  - rank order of borrowers;
  - accuracy of parameter estimates;
  - the stability of the rating;
  - the quality of data; and
  - the appropriate of model use.
- **independent validation:** all models are subject to in-depth analysis on a periodic basis, which includes an assessment of model performance against observed outcomes, including: rank order of borrowers; accuracy of parameter estimates; the stability of the rating population; the quality of data; and the appropriateness of model use. This analysis is carried out by a dedicated unit (the 'Independent Validation Unit' (IVU)) which is independent of credit origination and management functions.

When issues are raised on risk rating or impairment models, plans are developed to remediate or replace such models within an agreed timeframe.

In addition, GIA regularly reviews the risk control framework, including policies and standards, to ensure that these are being adhered to, meet industry good practices and are compliant with regulatory requirements.

Methodology for loan loss provisioning under IFRS 9

Approach to measurement of impairment loss allowances
Impairment is measured in a way that reflects: (a) an unbiased and probability-weighted amount that is determined by evaluating

27 Financial risk management *(continued)*

a range of possible outcomes; (b) the time value of money; and (c) reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions. Impairment is measured through the use of impairment models, individual DCF analysis and modelled loss rates; supplemented where necessary by Group management adjustments.

In general, a loss allowance is recognised for all financial instruments in scope for the impairment requirements of IFRS 9. However this may not be the case for very highly collateralised loans, such as residential mortgages at low LTV ratios. There have been no significant changes in the quality of collateral or credit enhancements as a result of changes in the Group's collateral policies during the year. The Group's methodologies for valuation of property collateral are set out on page 176, noting further that FLI (page 176) is applied as appropriate to RoI and UK property collateral values in measuring impairment loss allowances under IFRS 9. The Group's critical accounting estimates and judgements, including those with respect to impairment of financial instruments, are set out in note 2 to the consolidated financial statements.

An analysis of the Group's net impairment gains / (losses) on financial instruments and impairment loss allowances is set out in notes 16 and 27 of the consolidated financial statements.

Impairment models
The Group has in place a suite of IFRS 9 compliant impairment models which are executed on a monthly basis and which allocate financial instruments to Stage 1, 2 or 3 and measure the appropriate 12 month or lifetime ECL. The characteristics of an exposure determine which impairment model is used, with influencing factors including product type (e.g. Residential Mortgage, unsecured personal loan, business loan) and market segment (e.g. owner occupier, BTL, general corporate lending, general business lending).

ECLs are calculated as the sum of the marginal losses for each time period from the reporting date. The key components of the ECL calculation are PD, EAD and LGD (which is expressed as a percentage of EAD) and are described below. Other components include discount rate and maturity. The current contractual rate is generally used as the discount rate as it is considered a suitable approximation of the effective interest rate determined at initial recognition. For term lending including committed revolving credit facilities, contractual maturity is used in the ECL calculation. For other revolving facilities, behavioural life is generally used.

IFRS 9 PD
Where available, the ratings or underlying scores from internal credit rating models are used as a starting point for IFRS 9 PD calibration. While calibration techniques are similar to those used for regulatory purposes, the IFRS 9 PD differs from through-the-cycle or cyclical estimate PDs as it is an unbiased point-in-time PD based on current conditions and adjusted to reflect FLI.

A current point-in-time IFRS 9 PD is calculated as the expected default rate over the next 12 months. This PD is used in the calculation of 12-month ECL and as a starting point in the calculation of lifetime PD. Future point-in-time IFRS 9 PDs are also calculated, being the expected default rates for each year from the start of year 2 to maturity of the financial instrument.

Transition matrices are used to determine how an exposure moves between different PD bands over time.

Together, the current point-in-time IFRS 9 PD and future point-in-time IFRS 9 PDs are used to generate an IFRS 9 lifetime PD expectation for each FLI scenario. The scenario weighted averages are used to generate an overall IFRS 9 lifetime PD expectation. At origination of a new financial instrument, these expectations are stored, together with prepayment estimates where relevant, and allow for comparison at future reporting dates as one of the key determinants as to whether a 'significant increase in credit risk' has occurred. As lifetime PD was not calculated historically, the Group used reasonable and supportable information available without undue cost or effort to approximate the residual IFRS 9 lifetime PD expectations at initial recognition for most financial instruments originated prior to the adoption of IFRS 9 on 1 January 2018.

IFRS 9 EAD
Current point-in-time EAD is the expected EAD were the borrower to default within the next 12 months. Future point-in-time EAD also incorporates expected contractual cash flows. IFRS 9 EAD differs from regulatory EAD in that it incorporates expected contractual cash flows and caps the exposure at the contractual limit.

IFRS 9 LGD
Current point-in-time LGD is the loss that would be incurred should default occur in the next 12 months. To facilitate the calculation of lifetime ECL, future point-in-time LGDs are calculated for each year from the start of year 2 to maturity of the exposure. The starting point for individual components of the calculation is historical data. Cure rate is incorporated as appropriate into the calculation and represents the expected propensity of borrowers to return to the non-defaulted book without a loss having been realised. FLI is also incorporated into LGD as appropriate where RoI or UK property collateral is held. IFRS 9 LGD may differ from regulatory LGD as conservatism and downward assumptions are generally removed.

Individual DCF analysis
For credit-impaired financial instruments in Business Banking, Corporate Banking and certain other relationship-managed portfolios, the impairment loss allowance is primarily determined by an individual DCF analysis completed by lenders in business units and subject to review, challenge and, potentially, revision by independent credit professionals in underwriting units within Group Risk. The expected future cash flows are based on an assessment of future recoveries and include forecasted principal and interest payments (not necessarily contractual amounts due) and expected cash flows, if any, from the realisation of collateral / security held, less realisation costs.

Modelled loss rates
For some smaller and / or lower risk portfolios, impairment loss allowances are measured by applying modelled loss rates to exposure amounts. Modelled loss rates are generally determined on a component basis taking into account factors such as the nature and credit quality of the exposures and past default and recovery experience on the portfolio or on portfolios with similar risk characteristics. Generally a number of different loss rates will be set for a portfolio to allow differentiation of individual financial instruments within the portfolio based on their credit quality.

27 Financial risk management *(continued)*

Identifying a significant increase in credit risk
The Group's standard criteria to identify financial instruments which have had a 'significant increase in credit risk since initial recognition' are applied to the vast majority of loans and advances to customers. 'Credit risk' in this context refers to the change in the risk of a default occurring over the expected life of the financial instrument. Unless credit-impaired or a POCI, a financial instrument is generally allocated to Stage 2 if any of the following criteria are met at the reporting date:
- remaining lifetime PD is more than double and more than 50 basis points higher than the remaining lifetime PD at the reporting date as estimated based on facts and circumstances as at initial recognition (adjusted where relevant for changes in prepayment expectations);
- a contractual payment is greater than 30 days past due; and / or
- the exposure is a forborne loan or a NPE.

The above criteria are automatically applied as part of the monthly execution of the Group's impairment models. In addition, management considers whether there is reasonable and supportable information that would not otherwise be taken into account that would indicate that a significant increase in credit risk had occurred.

Where a financial asset has been modified but not derecognised, the quantitative assessment of 'significant increase in credit risk' continues to be based on the remaining lifetime PD at the reporting date as estimated based on facts and circumstances as at initial recognition (adjusted where relevant for changes in prepayment expectations).

The Group assesses the effectiveness of its staging criteria semi-annually, taking into account considerations such as the extent to which: (i) exposures have moved directly from Stage 1 to Stage 3; (ii) exposures have moved to Stage 3, having spent only a short period in Stage 2; (iii) exposures have moved frequently between Stages 1 and 2; and (iv) there is potential over-reliance on backstop or qualitative criteria in identifying Stage 2 exposures.

The Group applies the low credit risk expedient to most debt securities in scope for the impairment requirements of IFRS 9 and similarly to loans and advances to banks, central banks and investment firms. 'Low credit risk' encompasses PD grades 1 to 5 on the Group's internal PD rating system, which broadly aligns with ratings of AAA to BBB- for the external major rating agencies. Such financial instruments are allocated to Stage 1.

For some smaller and / or low risk portfolios, the Group identifies a 'significant increase in credit risk since initial recognition' solely by reference to whether a contractual payment is greater than 30 days past due.

Identifying defaulted assets and credit-impaired assets
The Group's definition of default for impairment purposes (i.e. for the purposes of allocating financial instruments to 'stages' and for measuring impairment loss allowances under IFRS 9) is consistent with its application of the definition of default in Article 178 of the CRR noting that IFRS 9 requires the Group to use a definition which is consistent with that used for internal credit risk management purposes. The manner in which the Group identifies financial assets as credit-impaired results in the Group's population of credit-impaired financial assets being consistent with its population of defaulted financial assets in scope for the impairment requirements of IFRS 9.

In the next financial year the Group will, subject to regulatory approval, implement a new definition of default to comply with EBA guidelines that are effective from no later than 1 January 2021.

The Group considers certain events as resulting in mandatory default and credit-impaired classification without further assessment. These include:
- greater than 90 days past due and the past due amount is material;
- a forbearance arrangement is put in place where future reliance on realisation of collateral is expected for repayment in full when this was not originally envisaged;
- legal action is underway by the Group to enforce repayment or realise security;
- the Group or a receiver takes security into possession; and
- the Group has formally sought an insolvency arrangement in respect of the borrower.

Certain other events necessitate a lender assessment and, if the outcome of the lender assessment is that the contractual amount of principal and interest will not be fully repaid in what is assessed to be the most likely cash flow scenario, default and credit-impaired classification is mandatory. For larger value commercial lending cases (typically greater than €1 million or £850,000), the lender assessment involves production of an individual DCF analysis. The events differ by portfolio and include those set out below.

All portfolios:
- a forbearance measure has been requested by a borrower and formally assessed;
- the non-payment of interest (e.g. via interest roll-up, arrears capitalisation etc.) as a result of the terms of modification of loans, including refinancing and renegotiation of facilities where during the renegotiation process, the lender becomes aware that the borrower is under actual or apparent financial distress;
- evidence of fraudulent activity by the borrower or another party connected with the loan;
- the contractual maturity date has passed without repayment in full; or
- it becomes known that the borrower has formally sought an insolvency arrangement.

Residential mortgage portfolios:
- offer of voluntary surrender of security or sale of security at a possible shortfall; or
- it becomes known that the borrower has become unemployed with no comparable new employment secured.

Larger SME / corporate and property loans:
- internal credit risk rating, or external credit rating, has been downgraded below a certain level;
- financial statements or financial assessment indicates inability of the borrower to meet debt service obligations and / or a negative net assets position;
- the borrower has ceased trading;
- a fall in the assessed current value of security such that the LTV ratio is greater than or equal to 120% (Property and construction only);
- a fall in net rent such that it is inadequate to cover interest with little / no other income to support debt service capacity (investment property exposures only); or

27 Financial risk management *(continued)*

- a fall in the assessed gross development value such that sale proceeds are no longer expected to fully repay debt (development exposures only).

Review of credit-impaired loans
It is Group policy to review credit-impaired loans above agreed thresholds semi-annually or on receipt of material new information, with the review including a reassessment of the recovery strategy and the continued appropriateness of a credit-impaired classification. The minimum requirements for a credit-impaired loan to return to non credit-impaired status are that the borrower must not be greater than 90 days past due on a material amount, the borrower must be considered likely to pay in full without recourse by the Group to actions such as realising security and there must be no forbearance arrangement in place where future reliance on realisation of collateral is expected for repayment in full when this was not originally envisaged. Typically, an updated assessment of the borrower's current financial condition and prospects for repayment is required with the borrower to have satisfactorily met repayments required under the original or modified agreement regularly for a reasonable period of time.

Methodologies for valuation of property collateral
The Group's approach to the determination of the market value of property collateral is set out in a Court-approved Group Property Collateral Valuation Policy, supported by GRPC-approved Group Property Collateral Valuation Guidelines, and is summarised below. The Group's approach to applying FLI to those values for the purposes of measuring impairment loss allowance for the year ended 31 December 2019 is set out in the Court-approved Group Impairment Policy and is described below.

Retail Ireland mortgage loan book property values are determined by reference to the original or latest property valuations held indexed to the Central Statistics Office (CSO) Residential Property Price Index (RPPI). Retail UK mortgage loan book property values are determined by reference to the original or latest property valuations held indexed to the Nationwide UK house price index.

Commercial property valuations may include formal written valuations from external or internal professionals, or 'internally assessed valuations' completed by business units. Internally assessed valuations are informed by the most appropriate sources available for the assets in question. This may include property specific information / characteristics, local market knowledge, comparable transactions, professional advice (e.g. asset management reports) or a combination thereof, in line with more detailed guidance approved at least annually by the GRPC. This guidance is informed by both internal and externally sourced market data / valuation information, including input from the Group's Real Estate Advisory Unit.

Internally assessed valuations are subject to review, challenge and, potentially, revision by independent credit professionals in underwriting units within the Group Risk function and are approved as part of the normal credit process.

Typically, more frequent valuations are required for properties held as security for NPEs with an annual valuation required for NPEs in excess of €300,000.

Forward Looking Information
FLI refers to probability-weighted future macroeconomic scenarios approved semi-annually by the GRPC and used in the assessment of 'significant increase in credit risk' and in the measurement of impairment loss allowances under IFRS 9. The Group generally uses three RoI FLI scenarios and three UK FLI scenarios, being a central scenario, an upside scenario and a downside scenario, all extending over a five year forecast period. In each case the central scenario is based on internal and external information and management judgement. The Group keeps under review the need for FLI for other economies.

The Group's FLI model uses the central scenario, recent actual observed values and historical data to generate many scenarios distributed around the central scenario. The central scenario is at the 50th percentile of the distribution of scenarios (meaning that there is a 50% likelihood of the expected ECL outcome being better and a 50% likelihood of it being worse) and the upside and downside scenarios are those scenarios at chosen lower and higher percentiles respectively. The probability weightings attached to the scenarios are a function of the chosen percentiles, with lower probability weightings attached to scenarios which are at percentiles more distant from the central scenario.

Typically, one or two macroeconomic variables are incorporated into each impairment model, being those determined through macro regression techniques to be most relevant to forecasting default of the credit risk exposures flowing through that model.

The lifetime PD expectation for an exposure generated under each of the scenarios, weighted by the probability of each scenario occurring, is used to generate the lifetime PD expectations used for the assessment of 'significant increase in credit risk'.

Forecasts of residential and commercial property price growth are incorporated as appropriate into the LGD component of the ECL calculation.

The overall ECL for an exposure is determined as a probability-weighted average of the ECL calculated for each scenario, weighted by the probability of each scenario occurring.

Beyond the forecast period, default rates are assumed to revert over time to an observed long run average and the value of property collateral for LGD purposes is assumed to grow at an observed long-run rate.

The following table shows the mean average forecast values for some of the key macroeconomic variables under each scenario for the five year forecast period 2020 to 2024 together with the associated percentiles and probability weightings.

FLI is generally not applied to exposures to which the low credit risk expedient has been applied given factors such as a lack of internal default history to inform macro regression and that applying FLI would be unlikely to have a material impact given low PDs and that exposures are subject to 12-month rather than lifetime ECL.

27 Financial risk management *(continued)*

2019	Republic of Ireland			United Kingdom		
	Downside	Central	Upside	Downside	Central	Upside
Percentile	85th	50th	15th	85th	50th	15th
Scenario probability weighting	30%	39%	31%	29%	40%	31%
GDP growth	1.0%	2.7%	5.0%	0.9%	1.5%	2.1%
GNP growth	0.4%	2.2%	4.6%	n/a	n/a	n/a
Unemployment rate	6.7%	5.3%	4.5%	5.1%	4.2%	4.0%
Residential property price growth	(4.3%)	1.3%	6.8%	(2.0%)	0.7%	3.4%
Commercial property price growth	(7.3%)	0.6%	8.1%	(3.7%)	(0.1%)	2.6%

2018	Republic of Ireland			United Kingdom		
	Downside	Central	Upside	Downside	Central	Upside
Percentile	85th	50th	15th	85th	50th	15th
Scenario probability weighting	30%	39%	31%	29%	40%	31%
GDP growth	1.6%	3.1%	5.6%	0.5%	1.5%	1.8%
GNP growth	1.1%	2.8%	5.2%	n/a	n/a	n/a
Unemployment rate	6.4%	5.0%	4.3%	5.5%	4.5%	4.5%
Residential property price growth	(3.0%)	2.1%	8.1%	(0.4%)	0.4%	5.0%
Commercial property price growth	(7.6%)	1.4%	7.8%	(5.5%)	0.2%	0.8%

Group management adjustment

To ensure that the measurement of impairment reflects reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions, the need for a 'Group management adjustment' to the outputs of the Group's staging and impairment measurement methodologies is considered at each reporting date in arriving at the final impairment loss allowance. Such a need may arise, for example, due to a model limitation or late-breaking event. A Group management adjustment was applied at 31 December 2019 and is detailed in note 2 on page 91 to the consolidated financial statements.

Funding and liquidity risk

Definition of funding and liquidity risk

Funding and liquidity risk is the risk that the Group will experience difficulty in financing its assets and / or meeting its contractual payment obligations as they fall due, or will only be able to do so at substantially above the prevailing market cost of funds.

Liquidity risk arises from differences in timing between cash inflows and outflows. Liquidity risk can increase due to the unexpected lengthening of maturities or non-repayment of assets, a sudden withdrawal of deposits or the inability to refinance maturing debt. These factors are often associated with times of distress or adverse events such as a credit rating downgrade(s) or economic or financial turmoil.

Funding risk can occur where there is an over-reliance on a particular type of funding, a funding gap or a concentration of wholesale funding maturities. The Group's ability to access funding markets at a sustainable cost and in a sufficient volume can be negatively impacted by a credit rating downgrade(s) or deterioration in market sentiment which in turn could impact the financial position of the Group.

Liquidity risk statement

Funding and liquidity risk arises from a fundamental part of the Group's business model; the maturity transformation of primarily short term deposits into longer term loans. The Group's funding and liquidity strategy is to maintain a stable funding base with loan portfolios substantially funded by retail originated customer deposit portfolios.

Liquidity risk framework

The Group has established a liquidity risk management framework which encompasses the liquidity policies, systems and controls in place to ensure that the Group is positioned to address its daily liquidity obligations and to withstand a period of liquidity stress. Principal components of this framework are the Group's Risk Appetite Statement and associated limits and the Group's Funding and Liquidity Policy, both of which are approved by the Court on the recommendation of ALCO.

The Group Funding and Liquidity Policy outlines the Group's governance process with respect to funding and liquidity risk, and sets out the core principles that govern the manner in which the risk is mitigated, monitored and managed. The operation of this policy is delegated to the Group's ALCO.

These principal components are supported by further liquidity policies, systems and controls which the Group has to manage funding and liquidity risk.

27 Financial risk management *(continued)*

Liquidity risk management
Liquidity risk management within the Group focuses on the control, within prudent limits, of risk arising from the mismatch in contracted maturities of assets and liabilities and the risks arising from undrawn commitments and other contingent liabilities. The Group manages its liquidity by jurisdiction with liquid assets predominantly held in the currency of each jurisdiction.

The Group's treasury function within Markets and Treasury provides top-down centralised management of the Group's funding and liquidity position including overall responsibility for the management of the Group's liquidity position and funding strategy. This ensures a co-ordinated approach to balance sheet management and is accomplished through the incorporation of funding and liquidity risk appetite metrics into risk appetite at a consolidated level, monitoring liquidity metrics for each jurisdiction and compliance by the business units with the Group's funds transfer pricing policy.

The Group's Market and Liquidity Risk function provides independent oversight of funding and liquidity risk and is responsible for proposing and maintaining the Group's funding and liquidity risk management framework and associated risk appetite metrics.

Liquidity risk management consists of two main activities:
- structural liquidity management focuses on the balance sheet structure, the funding mix, the expected maturity profile of assets and liabilities and the Group's debt issuance strategy; and
- tactical liquidity management focuses on monitoring current and expected daily cash flows to ensure that the Group's liquidity needs can be met.

The Group is required to comply with the regulatory liquidity requirements of the SSM and the requirements of local regulators in those jurisdictions where such requirements apply to the Group. SSM requirements include compliance with CRR / CRD IV and associated Delegated Acts. The Group has remained in full compliance with the regulatory liquidity requirements throughout 2019, and as at 31 December 2019 maintained a buffer significantly in excess of regulatory liquidity requirements.

Bank of Ireland (UK) plc is authorised by the PRA and is subject to the regulatory liquidity regime of the PRA. Bank of Ireland (UK) plc has remained in full compliance with the regulatory liquidity regime in the UK throughout 2019, and as at 31 December 2019 maintained a buffer significantly in excess of regulatory liquidity requirements.

The annual ILAAP enables the Court to assess the adequacy of the Group's funding and liquidity risk management framework, to assess the key liquidity and funding risks to which it is exposed; and details the Group's approach to determining the level of liquid assets and contingent liquidity that is required to be maintained under both business as usual and severe stress scenarios.

A key part of this assessment is cash flow forecasting that includes assumptions on the likely behavioural cash flows of certain customer products. Estimating these behavioural cash flows allows the Group assess the stability of its funding sources

Group Customer deposits by division	2019 €bn	2018 €bn
Retail Ireland	52	48
- Deposits	*22*	*22*
- Current account credit balances	*30*	*26*
Retail UK	22	22
Retail UK (Stg£bn equivalent)	*19*	*20*
- UK Post Office	*13*	*14*
- Other Retail UK	*6*	*6*
Corporate and Treasury	10	9
Total customer deposits	**84**	**79**
Loan to deposit ratio	**95%**	**97%**

and potential liquidity requirements in both business as usual and stressed scenarios. The stressed scenarios incorporate Group specific and systemic risks and are run at different levels of possible, even if unlikely, severity. Actions and strategies available to mitigate the impacts of the stress scenarios are evaluated as to their appropriateness. Stress test results are reported to ALCO, the Court Risk Committee and the Court.

The Group also monitors a suite of Recovery Indicators and Early Warning Signals in order to identify the potential emergence of a liquidity stress. As part of its contingency and recovery planning the Group has identified a suite of potential funding and liquidity options which could be exercised to help the Group to restore its liquidity position on the occurrence of a major stress event.

Liquidity risk reporting
The Group's liquidity risk appetite is defined by the Court to ensure that funding and liquidity are managed in a prudent manner. The Court monitors adherence to the liquidity risk appetite through the monthly Court Risk Report.

Management informs the Court in the monthly Court Risk Report of any significant changes in the Group's funding or liquidity position. The Court Risk Report includes the results of the Group's liquidity stress testing. This estimates the potential impact of a range of stress scenarios on the Group's liquidity position including its available liquid assets and contingent liquidity.

Management reviews funding and liquidity reports and stress testing results on a daily, weekly and monthly basis against the Group's Risk Appetite Statement. It is the responsibility of ALCO to ensure that the measuring, monitoring and reporting of funding and liquidity is adequately performed and complies with the governance framework.

Liquidity risk measurement
The Group's cash flow and liquidity reporting processes provide management with daily liquidity risk information by designated cash flow categories. These processes capture the cash flows from both on-balance sheet and off-balance sheet transactions.

The following tables summarise the maturity profile of the Group's financial assets and liabilities, excluding those arising from insurance and participating investment contracts at 31 December 2019 and 31 December 2018. These maturity profiles are based

27 Financial risk management *(continued)*

on the remaining contractual maturity period at the reporting date (discounted). The Group measures liquidity risk by adjusting the contractual cash flows on deposit books to reflect their behavioural stability.

Unit linked investment liabilities and unit linked insurance liabilities with a carrying value of €5,890 million and €12,694 million respectively (2018: €5,239 million and €11,003 million respectively) are excluded from this analysis as their repayment is linked directly to the financial assets backing these contracts. Customer accounts include a number of term accounts that contain access features. These allow the customer to access a portion or all of their deposits notwithstanding that this withdrawal could result in a financial penalty being paid by the customer. For such accounts, the portion subject to the potential early access has been classified in the 'demand' category in the following table.

Group 2019 Maturities of financial assets and liabilities	**Demand €m**	**Up to 3 months €m**	**3-12 months €m**	**1-5 years €m**	**Over 5 years €m**	**Total €m**
Assets						
Cash and balances at central banks	8,325	-	-	-	-	8,325
Trading securities	-	-	-	-	32	32
Derivative financial instruments	184	102	122	654	937	1,999
Other financial assets at fair value through profit or loss[1]	1,483	103	115	262	3,559	5,522
Loans and advances to banks	426	2,744	158	-	-	3,328
Debt securities at amortised cost	-	47	49	1,590	2,825	4,511
Financial assets at fair value through other comprehensive income	-	86	1,665	4,893	4,153	10,797
Loans and advances to customers including held for sale (before impairment provisions)	1,503	4,568	7,072	31,719	35,933	80,795
Total	**11,921**	**7,650**	**9,181**	**39,118**	**47,439**	**115,309**
Liabilities						
Deposits from banks	94	349	-	-	-	443
Monetary Authorities secured funding	-	-	1,117	619	-	1,736
Customer accounts	70,457	6,686	4,585	2,224	91	84,043
Derivative financial instruments	194	147	253	760	1,124	2,478
Debt securities in issue	-	971	870	5,075	1,899	8,815
Lease liabilities	-	17	47	168	333	565
Subordinated liabilities	-	209	-	263	1,221	1,693
Dividend payable to parent	627	-	-	-	-	627
Short positions in trading securities	-	-	-	-	-	-
Total	**71,372**	**8,379**	**6,872**	**9,109**	**4,668**	**100,400**

[1] *Excluding equity shares which have no contractual maturity.*

27 Financial risk management *(continued)*

Group 2018 Maturities of financial assets and liabilities	Demand €m	Up to 3 months €m	3-12 months €m	1-5 years €m	Over 5 years €m	Total €m
Assets						
Cash and balances at central banks	6,033	-	-	-	-	6,033
Trading securities	-	-	-	6	23	29
Derivative financial instruments	195	19	176	664	670	1,724
Other financial assets at fair value through profit or loss[1]	1,204	23	30	1,623	1,913	4,793
Loans and advances to banks	237	2,250	138	-	-	2,625
Debt securities at amortised cost	-	61	274	1,386	2,207	3,928
Financial assets at fair value through other comprehensive income	-	469	913	5,748	4,918	12,048
Loans and advances to customers including held for sale (before impairment provisions)	2,217	4,179	7,048	28,949	36,298	78,691
Total	**9,886**	**7,001**	**8,579**	**38,376**	**46,029**	**109,871**
Liabilities						
Deposits from banks	78	367	-	-	-	445
Monetary Authorities secured funding	-	251	224	2,179	-	2,654
Customer accounts	65,517	6,189	4,137	2,923	205	78,971
Derivative financial instruments	205	31	102	617	864	1,819
Debt securities in issue	-	1,176	230	4,802	2,082	8,290
Subordinated liabilities	-	-	-	464	1,643	2,107
Short positions in trading securities	16	-	-	-	-	16
Dividend payable to parent	800	-	-	-	-	800
Total	**66,616**	**8,014**	**4,693**	**10,985**	**4,794**	**95,102**

The tables below summarise the maturity profile of the Group's financial liabilities (excluding those arising from insurance and investment contracts in Bank of Ireland Life) at 31 December 2019 and 2018 based on contractual undiscounted repayment obligations. The Group does not manage liquidity risk on the basis of contractual maturity. Instead the Group manages liquidity risk based on expected cash flows.

The balances will not agree directly to the consolidated balance sheet as the table incorporates all cash flows, on an undiscounted basis, related to both principal and interest payments.

Group 2019 Contractual maturity	Demand €m	Up to 3 months €m	3-12 months €m	1-5 years €m	Over 5 years €m	Total €m
Deposits from banks	94	349	-	-	-	443
Monetary Authorities secured funding	-	4	1,131	623	-	1,758
Customer accounts	70,018	6,791	4,710	2,307	87	83,913
Debt securities in issue	-	1,036	992	4,363	3,222	9,613
Subordinated liabilities	-	239	66	502	1,374	2,181
Lease liabilities	-	20	57	213	390	680
Dividend payable to parent	627	-	-	-	-	627
Contingent liabilities	444	17	109	115	15	700
Commitments	13,008	47	1,118	70	-	14,243
Total	**84,191**	**8,503**	**8,183**	**8,193**	**5,088**	**114,158**

[1] *Excluding equity shares which have no contractual maturity.*

27 Financial risk management *(continued)*

Group 2018 Contractual maturity	Demand €m	Up to 3 months €m	3-12 months €m	1-5 years €m	Over 5 years €m	Total €m
Deposits from banks	78	367	-	-	-	445
Monetary Authorities secured funding	-	254	234	2,197	-	2,685
Customer accounts	65,369	6,207	4,306	2,919	215	79,016
Debt securities in issue	-	1,234	158	5,238	2,370	9,000
Subordinated liabilities	-	31	88	844	1,810	2,773
Dividend payable to parent	800	-	-	-	-	800
Contingent liabilities	364	49	70	109	15	607
Commitments	14,206	36	852	57	-	15,151
Total	**80,817**	**8,178**	**5,708**	**11,364**	**4,410**	**110,477**

As set out in note 20, derivatives held for trading comprise derivatives entered into with trading intent as well as derivatives entered with economic hedging intent to which the Bank does not apply hedge accounting. Derivatives held with hedging intent also include all derivatives to which the Bank applies hedge accounting.

The following tables summarise the maturity profile of the Bank's derivative liabilities. The Bank manages liquidity risk based on expected cash flows, therefore the undiscounted cash flows payable on derivatives liabilities held with hedging intent are classified according to their contractual maturity, while derivatives held with trading intent have been included at fair value in the 'demand' time bucket.

Group 2019 Derivative financial instruments	Demand €m	Up to 3 months €m	3-12 months €m	1-5 years €m	Over 5 years €m	Total €m
Derivatives held with hedging intent						
Gross settled derivative liabilities - outflows	-	3,331	5,096	4,310	-	12,737
Gross settled derivative liabilities - inflows	-	(3,286)	(4,833)	(4,078)	-	(12,197)
Gross settled derivative liabilities - net flows	**-**	**45**	**263**	**232**	**-**	**540**
Net settled derivative liabilities	-	91	262	836	278	1,467
Total derivatives held with hedging intent	**-**	**136**	**525**	**1,068**	**278**	**2,007**
Derivative liabilities held with trading intent	626	-	-	-	-	626
Total derivative cash flows	**626**	**136**	**525**	**1,068**	**278**	**2,633**

Group 2018 Derivative financial instruments	Demand €m	Up to 3 months €m	3-12 months €m	1-5 years €m	Over 5 years €m	Total €m
Derivatives held with hedging intent						
Gross settled derivative liabilities - outflows	-	124	589	1,830	-	2,543
Gross settled derivative liabilities - inflows	-	(108)	(523)	(1,802)	-	(2,433)
Gross settled derivative liabilities - net flows	**-**	**16**	**66**	**28**	**-**	**110**
Net settled derivative liabilities	-	113	265	733	121	1,232
Total derivatives held with hedging intent	**-**	**129**	**331**	**761**	**121**	**1,342**
Derivative liabilities held with trading intent	627	-	-	-	-	627
Total derivative cash flows	**627**	**129**	**331**	**761**	**121**	**1,969**

27 Financial risk management *(continued)*

The following tables summarise the maturity profile of the Bank's financial liabilities (excluding those arising on derivative financial instruments) at 31 December 2019 and 2018 based on contractual undiscounted repayment obligations. The Bank does not manage liquidity risk on the basis of contractual maturity. Instead the Bank manages liquidity risk based on expected cash flows.

Customer accounts include a number of term accounts that contain easy access features. These allow the customer to access a portion or all of their deposit notwithstanding that this repayment could result in financial penalty being paid by the customer. For such accounts, the portion subject to the potential early access has been classified in the 'demand' category in the table below.

The balances will not agree directly to the consolidated balance sheet as the table incorporates all cash flows, on an undiscounted basis, related to both principal and interest payments.

Bank 2019 Contractual maturity	**Demand €m**	**Up to 3 months €m**	**3-12 months €m**	**1-5 years €m**	**Over 5 years €m**	**Total €m**
Deposits from banks	63	3,127	458	352	441	4,441
Monetary Authorities secured funding	-	-	-	-	-	-
Customer accounts	55,254	5,470	1,835	1,168	465	64,192
Debt securities in issue	-	-	423	2,021	684	3,128
Subordinated liabilities	-	239	62	489	1,320	2,110
Lease liabilities	-	19	55	200	391	665
Dividend payable to parent	627	-	-	-	-	627
Contingent liabilities	408	17	109	49	15	598
Commitments	11,606	-	-	-	-	11,606
Total	**67,958**	**8,872**	**2,942**	**4,279**	**3,316**	**87,367**

Bank 2018 Contractual maturity	**Demand €m**	**Up to 3 months €m**	**3-12 months €m**	**1-5 years €m**	**Over 5 years €m**	**Total €m**
Deposits from banks	108	3,605	364	441	563	5,081
Monetary Authorities secured funding	-	250	-	750	-	1,000
Customer accounts	51,969	4,294	1,741	1,399	215	59,618
Debt securities in issue	-	402	45	1,720	154	2,321
Subordinated liabilities	-	31	85	832	1,759	2,707
Lease liabilities	-	-	-	-	-	-
Dividend payable to parent	800	-	-	-	-	800
Contingent liabilities	345	49	70	49	15	528
Commitments	10,064	-	-	-	-	10,064
Total	**63,286**	**8,631**	**2,305**	**5,191**	**2,706**	**82,119**

27 Financial risk management *(continued)*

The following tables summarise the maturity profile of the Bank's derivative liabilities. The Bank manages liquidity risk based on expected cash flows, therefore the undiscounted cash flows payable on derivatives liabilities held with hedging intent are classified according to their contractual maturity, while derivatives held with trading intent have been included at fair value in the 'demand' time bucket.

Bank 2019 Derivative financial instruments	Demand €m	Up to 3 months €m	3-12 months €m	1-5 years €m	Over 5 years €m	Total €m
Derivatives held with hedging intent						
Gross settled derivative liabilities - outflows	-	3,329	5,095	4,309	-	12,733
Gross settled derivative liabilities - inflows	-	(3,286)	(4,833)	(4,078)	-	(12,197)
Gross settled derivative liabilities - net flows	**-**	**43**	**262**	**231**	**-**	**536**
Net settled derivative liabilities	-	91	263	832	273	1,459
Total derivatives held with hedging intent	**-**	**134**	**525**	**1,063**	**273**	**1,995**
Derivative liabilities held with trading intent	626	-	-	-	-	626
Total derivative cash flows	**626**	**134**	**525**	**1,063**	**273**	**2,621**

Bank 2018 Derivative financial instruments	Demand €m	Up to 3 months €m	3-12 months €m	1-5 years €m	Over 5 years €m	Total €m
Derivatives held with hedging intent						
Gross settled derivative liabilities - outflows	-	118	586	1,829	-	2,533
Gross settled derivative liabilities - inflows	-	(109)	(524)	(1,801)	-	(2,434)
Gross settled derivative liabilities - net flows	**-**	**9**	**62**	**28**	**-**	**99**
Net settled derivative liabilities	-	113	265	731	117	1,226
Total derivatives held with hedging intent	**-**	**122**	**327**	**759**	**117**	**1,325**
Derivative liabilities held with trading intent	627	-	-	-	-	627
Total derivative cash flows	**627**	**122**	**327**	**759**	**117**	**1,952**

Market risk *(Group only)*

Definition and background
Market risk is the risk of loss arising from movements in interest rates, FX rates or other market prices. Market risk arises from the structure of the balance sheet, the Group's business mix and discretionary risk-taking. The Group recognises that the effective management of market risk is essential to the maintenance of stable earnings, the preservation of shareholder value and the achievement of the Group's strategic objectives.

Risk management, measurement and reporting
The management of market risk in the Group is governed by the Group's Risk Appetite Statement and by the Group Policy on Market Risk, both of which are approved by the Court. These are supplemented by a range of ALCO approved limits and controls. The Group has an established governance structure for market risk that involves the Court, the Court Risk Committee, the GRPC and the ALCO, which has primary responsibility for the oversight of market risk in the Group.

The Court monitors adherence to market risk appetite through the monthly Court Risk Report.

GM&LR provides second-line oversight of the Group's exposure to market risk, ensuring that the Group correctly identifies and assesses the market risks to which it is exposed. GM&LR is a part of the Group Risk Function reporting to the GCRO.

It is Group policy to minimise exposure to market risk, subject to defined limits for discretionary risk. Nonetheless, certain structural market risks remain and, in some cases, are difficult to eliminate fully. In addition, the Group bears economic exposure to adverse movements in the credit spreads of bonds held as liquid assets, or held as matching assets in NIAC. This is the predominant economic exposure arising on the NIAC fixed interest portfolio.

Market risks that arise are transferred to and managed by Bank of Ireland Global Markets, the treasury execution arm of the Group. These market risks are hedged by Bank of Ireland Global Markets as a matter of course with the external market or, in the case of a small quantum of the risks concerned, are run as short-term discretionary risk positions subject to policy and limits. Discretionary risk-taking is confined to interest rate, FX and traded credit risk.

27 Financial risk management *(continued)*

Similarly, market risks in the Group's life assurance business, NIAC, are managed within defined tolerances. However, certain residual risks are inherent in this business, notably exposure to credit spreads on assets held to match policyholder liabilities, and indirect exposure to equity markets through changes in the discounted value of fees applied to equity assets held by policyholders in insurance contracts. This is outlined in greater detail below.

Balance sheet linkage
The table below classifies the balance sheet in terms of Banking Book, Trading Book (as defined above) and Insurance assets and liabilities. The principal risk factors which drive changes in earnings or value in relation to each line item are also outlined. Trading Book assets and liabilities were a small proportion of the balance sheet at 31 December 2019 and this is representative of the position throughout the year. Interest rates are the most significant risk factor.

Market risk linkage to the balance sheet 2019	Total €m	Trading €m	Non-trading €m	Insurance €m	Primary Risk Sensitivity
Assets					
Cash and balances at central banks	8,325	-	8,325	-	Interest Rate
Derivative financial instruments	1,999	1,387	612	-	Interest Rate, FX, Credit Spread
Trading and other financial assets at FVTPL	16,516	32	250	16,234	Interest Rate, FX, Credit Spread
Loans and advances to banks	3,328	-	3,021	307	Interest Rate
Loans and advances to customers	79,487	-	79,487	-	Interest Rate
Debt securities at amortised cost	4,511	-	4,511	-	Interest Rate
Financial assets at FVOCI	10,797	-	10,797	-	Interest Rate, FX, Credit Spread
ViF asset	631	-	-	631	Equity
Other assets	6,324	-	3,963	2,361	Interest Rate
Total assets	**131,918**	**1,419**	**110,966**	**19,533**	
Liabilities					
Deposits from banks	2,179	-	2,179	-	Interest Rate
Customer deposits	84,043	-	84,043	-	Interest Rate
Derivative financial instruments	2,478	1,602	876	-	Interest Rate, FX, Credit Spread
Debt securities in issue	8,815	-	8,815	-	Interest Rate
Liabilities arising from insurance and investment contracts	18,584	-	-	18,584	Interest Rate, FX, Credit Spread, Equity
Loss allowance provision on loan commitments and financial guarantees	30	-	30	-	Interest Rate
Lease Liabilities	565		565	-	Interest Rate, FX
Other liabilities	3,778	-	3,170	608	Interest Rate, FX
Subordinated liabilities	1,693	-	1,693	-	Interest Rate
Total liabilities	**122,165**	**1,602**	**101,371**	**19,192**	

Discretionary market risk
Discretionary risk is a risk that is carried in the expectation of gain from near-term movements in liquid financial markets. BoIGM is the sole Group business unit permitted to run discretionary market risk.

Discretionary risk can be taken by leaving naturally arising retail or wholesale generated risks unhedged for a period (discretionary IRRBB) or by taking proprietary positions in the market (Trading Book risk). In conformity with the CRR, customer derivatives are booked in the Trading Book and can be a source of trading risk if not fully closed out.

Discretionary market risk is subject to strict controls which set out the markets and instruments in which risk can be assumed, the types of positions which can be taken and the limits which must be complied with. BoIGM's discretionary market risk is confined to interest rate risk (including inflation exposure), FX risk and credit spread exposure to sovereigns, banks and credit default swap (CDS) indices. A limit on discretionary risk and a high-level stop loss are set in the Risk Appetite Statement approved by the Court. These are supplemented by an ALCO approved framework of limits and controls, based on VaR (see below), scenario stress tests and sensitivities. The Group does not seek to generate a material proportion of its earnings through discretionary risk-taking and it has a low tolerance for earnings volatility arising from this activity which is reflected in policy, limits and other controls applied.

The Group employs a VaR approach to measure, and set limits on, discretionary market risk whether taken in the Banking Book (discretionary IRRBB risk) or pro-actively assumed in the Trading Book. The Group measures VaR for a one-day horizon at a confidence level of 99% (two-tailed). The volatilities and correlations which are used to generate VaR numbers are estimated using the exponentially weighted moving average (EWMA) approach which gives more weight to recent data and responds quickly to changes in market volatility. VaR is backtested and reported on a daily basis with all exceptions subject to review and explanation.

27 Financial risk management *(continued)*

For the nature of risks assumed by the Group, VaR remains a reliable basis of risk measurement, supplemented by stress testing.

The Group uses VaR to allocate capital to discretionary risk in its ICAAP but uses the standardised approach (TSA) for Pillar 1 Trading Book capital.

The Group recognises that VaR is subject to certain inherent limitations and therefore VaR limits are supplemented by scenario-based stress tests. These are particularly important in periods of low market volatility when VaR numbers can understate the risks of loss from large adverse market moves. Position limits and 'stop losses' are also a central element of the control environment.

The table below shows total VaR at 31 December 2019 was €0.5 million (2018: €1.1 million). Total VaR is the sum of overall interest rate, FX and traded credit VaR. Overall Interest Rate VaR is a correlated measure of trading book interest rate and discretionary Interest Rate Risk in The Banking Book (IRRBB).

Group and Bank Total VaR	2019 €m	2018 €m
Total	0.5	1.1

Structural and other risks

Notwithstanding the overriding objective of running minimal levels of market risk, certain structural market risks remain and are managed centrally as part of the Group's asset and liability management process.

The structural FX positions at 31 December 2019 and the preceding year end were as follows:

Group Structural FX position	2019 €m	2018 €m
Sterling - net asset position	2,394	2,365
US dollar - net asset position	426	577
Total structural FX position	**2,820**	**2,942**

Use of derivatives in the management of market risk

The activities set out above involve, in many instances, transactions in a range of derivative instruments. The Group makes extensive use of derivatives to hedge its balance sheet, service its customer needs and, to a lesser extent, assume discretionary risk. The Group's participation in derivatives markets is subject to policy approved by the CRC. The Group makes a clear distinction between derivatives which must be transacted on a perfectly hedged basis and those whose risks can be managed within broader interest rate or FX books.

Discretionary market risk can only be assumed in clearly defined categories of derivatives which are traded in well-established liquid markets, supported by industry standard conventions and documentation and valued in accordance with generally accepted methods.

The approach to hedging and managing market risk is governed by policies explicitly designed to ensure that all hedging activities are risk reducing. Interest rate risk arising on customer lending and term deposit-taking is centralised by way of internal hedging transactions with BoIGM. This exposure is, in turn, substantially eliminated by BoIGM through external hedges.

Structural risk is managed by way of selective and strategic hedging initiatives which are executed under hedging authority delegated by ALCO to the CEO Markets and Treasury.

Policy requires that, where behavioural optionality hedging relies on assumptions about uncertain customer behaviour and where material, it is subject to limits or other controls.

Life insurance risk *(Group only)*

Definition

Life insurance risk is the risk of unexpected variation in the amount and timing of claims associated with insurance benefits. This variation, arising from changing customer mortality, life expectancy, health or behaviour characteristics, may be short or long term in nature. The sub-categories of life insurance risk such as mortality, longevity and persistency risk each relate to different sources of loss which arise as a result of writing life insurance business.

Risk management

Life insurance risk is underwritten and managed by NIAC, a wholly owned subsidiary of the Group. The management of insurance risk is the responsibility of the board of NIAC which is delegated through internal governance structures. Aggregate life insurance risk exposure and exposure to the sub-categories of life insurance risk are monitored through a suite of management reporting metrics.

The risks that arise as a result of writing life insurance business are also managed by a number of governance fora as well as senior management. The minimum standards required when managing these risks are set out in a suite of NIAC board approved policies.

NIAC transfers some life insurance risk to reinsurance companies who then meet an agreed share of the claims that arise on a book of business in return for a premium. This creates a credit exposure to these reinsurance companies which is managed within the NIAC risk management framework with responsibilities delegated through the Reinsurance Risk Policy. A review of the panel of reinsurers that may be used and the structure of reinsurance arrangements is carried out at least annually. Senior members of the management team with actuarial and underwriting expertise contribute to the effective oversight of this risk.

Risk measurement

Risk experience is monitored regularly with actual claims experience being compared to the underlying risk assumptions. The results of this analysis are used to inform management of the appropriateness of those assumptions for use in pricing, capital management and new product design.

Exposure to life insurance risk is measured by means of sensitivity and scenario testing. Risk capital is calculated for each individual risk type by stressing the best estimate assumptions of future

27 Financial risk management *(continued)*

experience by extreme, but plausible, factors. The stress factors are pre-defined by regulation and are set at a level with an expected frequency of occurrence of one year in every 200. NIAC also carries out an ORSA annually which is overseen by the NIAC board. Within the ORSA, NIAC's risk profile is considered, both quantitatively and qualitatively, in a holistic manner with potential areas of risk identified along with conclusions in respect of how those risks will be mitigated. Further details can be found in note 37 on page 200.

Risk mitigation
NIAC mitigates the potential impact of insurance risk through a number of measures. Capital is held against exposure to life insurance risk. Exposure to risk is also managed and controlled by the use of medical and financial underwriting, risk mitigating contract design features and reinsurance, as detailed in risk management policies.

Risk reporting
An update on the status of life insurance risk is included in the Court Risk Report on a quarterly basis. NIAC's ORSA report in respect of the NIAC annual assessment is also presented to the GRPC on an annual basis.

Capital management

Capital management objectives and policies
The objectives of the Group's capital management policy are to ensure that the Group has sufficient capital to cover the risks of its business and support its strategy and at all times to comply with regulatory capital requirements. It seeks to minimise refinancing risk by managing the maturity profile of non-equity capital whilst the currency mix of capital is managed to ensure that the sensitivity of capital ratios to currency movements is minimised. The capital adequacy requirements set by the SSM / ECB and economic capital based on internal models are used by the Group as the basis for its capital management. The Group seeks to maintain sufficient capital to ensure that these requirements are met.

The current status of capital adequacy, including risk dashboards and risk appetite compliance, is reported to Senior Executives and the Court through the Court Risk Report on a monthly basis.

Group **Capital resources**	**2019** **€m**	**2018** **€m**
Stockholders' equity	9,011	8,456
Other equity instruments	740	740
Non-controlling interests - equity	2	2
Total equity	**9,753**	**9,198**
Undated subordinated loan capital	127	121
Dated subordinated loan capital	1,566	1,986
Total capital resources	**11,446**	**11,305**

28 Modified financial assets

The following table provides analysis of financial assets for which the contractual cash flows have been modified while they had an impairment loss allowance measured at an amount equal to lifetime ECL, and where the modification did not result in derecognition.

	Group		**Bank**	
	2019 **€m**	**2018** **€m**	**2019** **€m**	**2018** **€m**
Financial assets modified during the year				
Amortised cost before modification	387	923	282	776
Net modification gains (i.e. net of impairment gains impact)	-	6	-	6
Financial assets modified since initial recognition				
Gross carrying amount of financial assets for which impairment loss allowance has changed fromlifetime to 12 month ECL during the year	608	894	328	480

29 Shares in Group undertakings

The Bank's Shares in Group Undertakings are reviewed if events or circumstances indicate that impairment may have occurred, by comparing the carrying value of each investment to its recoverable amount. An impairment charge arises if the carrying value exceeds the recoverable amount. No impairment charge was recognised in 2019 (2018: €nil).

The recoverable amount of an asset is the higher of its fair value less costs to sell and its VIU, where the VIU is the present value of the future cash flows expected to be derived from the asset. The calculation of the recoverable amount for each cash generating unit is based upon a VIU calculation that discounts expected pre-tax cash flows at an interest rate appropriate to the cash generating unit. The determination of both requires the exercise of judgement. The estimation of pre-tax cash flows is sensitive to the periods for which forecasted cash flows are available and to assumptions underpinning the sustainability of those cash flows. While forecasts are compared with actual performance and external economic data, expected cash flows reflect management's view of future performance. The values assigned to key assumptions reflect past experience, performance of the business to date and management judgement.

The recoverable amount calculations performed for the significant amount of shares in Group undertakings are sensitive to changes in the following key assumptions:

Cash flow forecasts
Cash flow forecasts are based on internal management information for a period of up to five years, after which a long-term growth rate appropriate for the business is applied (see below). The next five years' cash flows are consistent with approved plans for each business.

Growth rates
Growth rates beyond five years are determined by reference to long-term economic growth rates.

Discount rate
The discount rate applied is the pre-tax weighted average cost of capital for the Bank increased to include a risk premium to reflect the specific risk profile of the cash generating unit to the extent that such risk is not already reflected in the forecast cash flows.

The forecast cash flows reflect management's view of future business prospects. The impact of changes in these cash flows, growth rate and discount rate assumptions has been assessed in the review.

Bank	**2019 €m**	**2018 €m**
At beginning of year	4,161	4,177
Exchange adjustments	95	(15)
Repayment of investments	-	(1)
At end of year	**4,256**	**4,161**
Group undertakings		
of which:		
- Credit Institutions	3,543	3,453
- Others	713	708
	4,256	**4,161**

30 Interest in associates

The Group has availed of the venture capital exemption in accounting for its interests in associates. In line with the accounting policy set out on page 82, these interests have been designated at initial recognition at FVTPL. Changes in the fair value of these interests are included in the share of results of associates (after tax) line on the income statement.

In presenting details of the associates of the Group, the exemption permitted by Section 316 of the Companies Act 2014 has been availed of and the Group will annex a full listing of associates to its annual return to the Companies Registration Office.

Group	**2019 €m**	**2018 €m**
At beginning of year	53	59
Decrease in investments	(10)	(15)
Increase in investments	8	5
Share of results after tax (note 17)	5	4
At end of year	**56**	**53**

31 Interest in joint ventures

Group	2019 €m	2018 €m
At beginning of year	69	69
Share of results after tax (note 17)	34	37
- First Rate Exchange Services	*34*	*37*
Dividends received	(31)	(36)
Exchange adjustments	4	(1)
At end of year	**76**	**69**

For further information on joint ventures refer to note 55 Interests in other entities.

32 Intangible assets and goodwill

Group	2019					2018				
	Goodwill €m	Computer software externally purchased €m	Computer software internally generated €m	Other externally purchased intangible assets €m	Total €m	Goodwill €m	Computer software externally purchased €m	Computer software internally generated €m	Other externally purchased intangible assets €m	Total €m
Cost										
At 1 January	**34**	**71**	**1,768**	**204**	**2,077**	**31**	**71**	**1,560**	**208**	**1,870**
Additions	-	-	223	-	223	-	-	207	-	207
Acquisitions	-	-	-	-	-	-	-	-	-	-
Disposals / write-offs	-	-	-	-	-	-	-	-	(1)	(1)
Reclassifications	-	-	-	-	-	3	-	-	(3)	-
Exchange adjustments	2	1	12	7	22	-	-	1	-	1
At 31 December	**36**	**72**	**2,003**	**211**	**2,322**	**34**	**71**	**1,768**	**204**	**2,077**
Accumulated amortisation										
At 1 January	**-**	**(71)**	**(1,060)**	**(144)**	**(1,275)**	**-**	**(70)**	**(893)**	**(128)**	**(1,091)**
Disposals / write-offs	-	-	-	-	-	-	(1)	-	2	1
Impairment (note 14)	-	-	-	-	-	-	-	(6)	-	(6)
Amortisation charge for the year (note 13)	-	-	(173)	(20)	(193)	-	-	(158)	(20)	(178)
Exchange adjustments	-	(1)	(10)	(5)	(16)	-	-	(3)	2	(1)
At 31 December	**-**	**(72)**	**(1,243)**	**(169)**	**(1,484)**	**-**	**(71)**	**(1,060)**	**(144)**	**(1,275)**
Net book value	**36**	**-**	**760**	**42**	**838**	**34**	**-**	**708**	**60**	**802**

The category ‘computer software internally generated’ includes the Transformation Investment asset with a carrying value of €331 million (2018: €253 million). This asset reflects investment in technical infrastructure, applications and software licences. €173 million (2018: €183 million) of this is an amortising asset with amortisation periods ranging from five to ten years with the majority being amortised over ten years. At 31 December 2019, the remaining amortisation period for these assets ranges between 1 and 9.5 years. The remaining €158 million (2018: €70 million) represents assets under construction on which amortisation will commence once the assets are put into use.

The useful lives of intangible assets were reviewed by management at 31 December 2019 following which the useful lives of a number of intangible were revised from five to ten years. In accordance with IAS 8, the change in the useful lives of the intangible assets is treated as a change in accounting estimate and recognised prospectively from the date of change. There was no impact on the amortisation charge for the year.

Goodwill

Goodwill was recognised on the acquisition of MLL; a car commercial leasing and fleet management company in the UK.

Impairment Review - Goodwill

Goodwill is reviewed annually for impairment or more frequently if events or circumstances indicate that impairment may have occurred, by comparing the carrying value of goodwill to its

32 Intangible assets and goodwill *(continued)*

recoverable amount. An impairment charge arises if the carrying value exceeds the recoverable amount.

The recoverable amount of an asset is the higher of its fair value less costs to sell and its VIU, where the VIU is the present value of the future cash flows expected to be derived from the asset.

Impairment testing of goodwill
Goodwill is allocated to CGU at a level which represents the smallest identifiable group of assets that generate largely independent cash flows.

The calculation of the recoverable amount of goodwill for each of these CGU is based upon a VIU calculation that discounts expected pre-tax cash flows at an interest rate appropriate to the CGU. The determination of both requires the exercise of judgement. The estimation of pre-tax cash flows is sensitive to the periods for which forecasted cash flows are available and to assumptions underpinning the sustainability of those cash flows. While forecasts are compared with actual performance and external economic data, expected cash flows reflect management's view of future performance.

The values assigned to key assumptions reflect past experience, performance of the business to date and management judgement. The recoverable amount calculations performed for the significant amounts of goodwill are sensitive to changes in the following key assumptions:

Cash flow forecasts
Cash flow forecasts are based on internal management information for a period of up to five years, after which a growth factor appropriate for the business is applied. Initial cash flows are based on performance in the twelve month period ended 31 December 2019 and the next four years' cash flows are consistent with approved plans for each business.

Growth rates
Growth rates beyond five years are determined by reference to local economic growth, inflation projections or long term bond yields. The assumed long term growth rate for MLL is 0%.

Discount rate
The discount rate applied to MLL is the pre-tax weighted average cost of capital for the Group increased to include a risk premium to reflect the specific risk profile of the CGU to the extent that such risk is not already reflected in the forecast cash flows. A rate of 12% has been used in the model.

Certain elements within these cash flow forecasts are critical to the performance of the business. The impact of changes in these cash flows, growth rate and discount rate assumptions has been assessed by the Directors in the review. The Directors consider that reasonably possible changes in key assumptions used to determine the recoverable amount of MLL would not result in any impairment of goodwill. No impairment has been identified as at 31 December 2019 (2018: €nil).

Impairment review - intangible assets
Intangible assets have been reviewed for any indication that impairment may have occurred. Where any such indication exists impairment has been measured by comparing the carrying value of the intangible asset to its recoverable amount.

There was €nil impairment identified in the year ended 31 December 2019 (2018: €6 million).

32 Intangible assets and goodwill *(continued)*

Bank	2019				2018			
	Computer software externally purchased €m	Computer software internally generated €m	Other externally purchased intangible assets €m	Total €m	Computer software externally purchased €m	Computer software internally generated €m	Other externally purchased intangible assets €m	Total €m
Cost								
At 1 January	**49**	**1,637**	**106**	**1,792**	**49**	**1,441**	**107**	**1,597**
Additions	-	202	-	202	-	195	-	195
Disposals / write-offs	-	-	-	-	-	-	(1)	(1)
Exchange adjustments	-	9	3	12	-	1	-	1
At 31 December	**49**	**1,848**	**109**	**2,006**	**49**	**1,637**	**106**	**1,792**
Accumulated amortisation								
At 1 January	**(49)**	**(950)**	**(72)**	**(1,071)**	**(49)**	**(787)**	**(61)**	**(897)**
Disposals / write-offs	-	-	-	-	-	-	2	2
Impairment	-	-	-	-	-	(6)	-	(6)
Amortisation charge for the year	-	(169)	(12)	(181)	-	(155)	(13)	(168)
Exchange adjustments	-	(7)	(3)	(10)	-	(2)	-	(2)
At 31 December	**(49)**	**(1,126)**	**(87)**	**(1,262)**	**(49)**	**(950)**	**(72)**	**(1,071)**
Net book value	**-**	**722**	**22**	**744**	**-**	**687**	**34**	**721**

Impairment review - intangible assets
Intangible assets have been reviewed for any indication that impairment may have occurred. Where any such indication exists impairment has been measured by comparing the carrying value of the intangible asset to its recoverable amount.

There was €nil impairment identified in the Bank's intangible assets in 2019 (2018: €6 million).

33 Investment properties

In 2019, rental income from investment property amounted to €52 million (2018: €48 million). Expenses directly attributable to investment property generating rental income was €6 million (2018: €5 million). There were no expenses directly attributable to investment properties which are not generating rental income for 2019 or 2018.

In 2019, the Group reclassified €21 million from investment properties to property, plant and equipment (note 34). In 2018, a number of real estate funds totalling €15 million were reclassified from investment properties to other financial assets at FVTPL.

At 31 December 2019, the Group held investment property of €999 million (2018: €1,037 million) on behalf of Wealth and Insurance policyholders.

Group	2019 €m	2018 €m
At beginning of year	1,037	912
Disposals	(39)	(13)
Reclassifications	(21)	(15)
Exchange adjustment	14	(3)
Additions	11	123
Revaluation	(3)	33
At end of year	**999**	**1,037**

34 Property, plant and equipment

Group	Freehold land & buildings & long leaseholds (FV)		Adaptations (at cost)		Computer & other equipment (at cost)					Right of Use assets, excluding investment property			
2019	of which; own-use €m	of which; subject to operating lease €m	of which; own-use €m	of which; subject to operating lease €m	of which; own-use €m	of which; subject to operating lease €m	Finance lease assets (at cost) €m	Payments on accounts & assets in the course of construction (at cost) €m	Total owned assets €m	Buildings €m	Computer & other equipment €m	Total right of use assets €m	Total property plant and equipment €m
Cost or valuation at 31 December 2018	156	14	158	6	260	126	17	13	750	-	-	-	750
Impact of adopting IFRS 16 at 1 January 2019 (note 60)	-	-	-	-	-	-	(17)	-	(17)	555	78	633	616
Opening balance at 1 January 2019	**156**	**14**	**158**	**6**	**260**	**126**	**-**	**13**	**733**	**555**	**78**	**633**	**1,366**
Exchange Adjustments	2	-	2	-	3	6	-	-	13	-	-	-	13
Additions	-	-	-	-	1	53	-	27	81	1	2	3	84
Disposals/ write offs	-	-	(5)	-	(4)	(40)	-	-	(49)	-	(1)	(1)	(50)
Revaluation recognised in OCI	2	1	-	-	-	-	-	-	3	-	-	-	3
Reclassifications	21	-	10	-	9	-	-	(19)	21	(5)	-	(5)	16
Adjustment of lease liability	-	-	-	-	-	-	-	-	-	(4)	(1)	(5)	(5)
As at 31 December 2019	**181**	**15**	**165**	**6**	**269**	**145**	**-**	**21**	**802**	**547**	**78**	**625**	**1,427**
Accumulated Depreciation at 31 December 2018	**-**	**-**	**(94)**	**(2)**	**(181)**	**(23)**	**(12)**	**-**	**(312)**	**-**	**-**	**-**	**(312)**
Impact of adopting IFRS 16 at 1 January 2019 (note 60)	-	-	-	-	-	-	12	-	12	-	(12)	(12)	-
Accumulated Depreciation at 1January 2019	**-**	**-**	**(94)**	**(2)**	**(181)**	**(23)**	**-**	**-**	**(300)**	**-**	**(12)**	**(12)**	**(312)**
Exchange Adjustments	-	-	(1)	-	(3)	(1)	-	-	(5)	(1)	-	(1)	(6)
Impairment (note 14)	-	-	-	-	(2)	-	-	-	(2)	(2)	-	(2)	(4)
Disposals / Write-offs	-	-	4	-	2	21	-	-	27	-	1	1	28
Charge for the year (notes 10,13)	-	-	(11)	-	(16)	(28)	-	-	(55)	(40)	(29)	(69)	(124)
As at 31 December 2019	**-**	**-**	**(102)**	**(2)**	**(200)**	**(31)**	**-**	**-**	**(335)**	**(43)**	**(40)**	**(83)**	**(418)**
Net Book Value at 31 December 2019	**181**	**15**	**63**	**4**	**69**	**114**	**-**	**21**	**467**	**504**	**38**	**542**	**1,009**

At 31 December 2019, property, plant and equipment held at fair value was €196 million (2018: €170 million). A revaluation of Group property was carried out as at 31 December 2019 by an independent external valuer. The historical cost of property, plant and equipment held at fair value was €78 million (2018: €76 million). The net book value of property, plant and equipment held at cost less accumulated depreciation and impairment (excluding RoU assets) was €271 million (2018: €268 million). As outlined in the Group accounting policies note on page 75, the Group adopted IFRS 16 'Leases' from 1 January 2019. On transition to IFRS 16, the Group recognised €621 million RoU assets on 1 January 2019 which have a net book value of €542 million at 31 December 2019. The effect of adoption of IFRS 16 is further explained in note 60.

34 Property, plant and equipment *(continued)*

Future capital expenditure
This table shows future capital expenditure in relation to both property, plant and equipment and intangible assets.

Group as lessor
Computer and other equipment of which subject to an operating lease, relates to the business activities of MLL. MLL enters into non-cancellable operating leases, as lessor, through its car and commercial leasing activities. The terms of the leases vary but the majority of the leases typically run for a non-cancellable period of two to four years through which MLL is exposed to residual value risk on the vehicles leased.

MLL ensures that residual value risk is effectively managed to minimise exposure. The residual values used mirror those utilised in the creation of the original client contract. Residual values for MLL's fleet of vehicles are benchmarked against industry standards using third party valuation tools. The residual values for the entire portfolio are reassessed using an independent valuation tool on a monthly basis throughout the life of the underlying contracts to determine if impairment is required. The process of realising asset values at the end of lease contracts is effectively managed to maximise net sale proceeds. MLL received operating lease income of €35 million in 2019 (note 10).

The Group has also entered into a small number of operating leases and operating sub-leases as lessor which represent properties and components of properties surplus to the Group's own requirements. The Group received operating lease income on these leases of €1 million in 2019.

The table sets out the future undiscounted operating lease payments receivable.

Future capital expenditure	2019 €m	2018 €m
Contracted but not provided for in the financial statements	10	11
Authorised by the Directors but not contracted	236	199

Operating lease receivables	2019 €m
Not later than 1 year	27
1 to 2 years	18
2 to 3 years	9
3 to 4 years	3
4 to 5 year	1
Later than 5 years	-
Total operating lease receivables	**58**

Group 2018	Freehold land and buildings and long leaseholds (held at fair value) €m	Adaptations (at cost) €m	Computer and other equipment (at cost) €m	Finance lease assets (at cost) €m	Payments on accounts and assets in the course of construction (at cost) €m	Total €m
Cost or valuation						
At 1 January 2018	**155**	**156**	**385**	**15**	**11**	**722**
Exchange adjustments	-	-	-	-	-	-
Acquisitions	-	-	-	-	-	-
Additions	-	-	50	2	20	72
Disposals / write-offs	-	(2)	(57)	-	-	(59)
Reversal of impairment (note 13)	4	-	-	-	-	4
Revaluation recognised in other comprehensive income	11	-	-	-	-	11
Reclassifications	-	10	8	-	(18)	-
At 31 December 2018	**170**	**164**	**386**	**17**	**13**	**750**
Accumulated depreciation						
At 1 January 2018	**-**	**(88)**	**(192)**	**(8)**	**-**	**(288)**
Exchange adjustments	-	-	(3)	-	-	(3)
Impairment	-	-	(9)	-	-	(9)
Disposals / write-offs	-	2	43	-	-	45
Charge for the year (notes 10,13)	-	(10)	(43)	(4)	-	(57)
At 31 December 2018	**-**	**(96)**	**(204)**	**(12)**	**-**	**(312)**
Net book value at 31 December 2018	**170**	**68**	**182**	**5**	**13**	**438**

34 Property, plant and equipment *(continued)*

Until 31 December 2018 the Group's leases under IAS 17 were as follows:

Operating leases
The Group leases a number of branch and office premises to carry out its business. The commercial leases typically are 25 to 35 year operating leases with five-yearly rent reviews. The majority of the rent reviews are on an upwards only basis. Some leases also include break options. The Group also holds a number of short-term leases for less than ten years and a number of long-term leases at market rent with less than 135 years unexpired.

Minimum future rentals are the rentals payable under operating leases up to the next available break option where this exists or to expiry date of the lease. Both the required break option notice period and the amount of any penalty rent have been included in the amounts payable below.

The Group has entered into a small number of sub-leases as lessor which represent properties and components of properties surplus to the Group's own requirements.

Minimum future rentals under non-cancellable operating leases
Included in receivable, for 2018, is an amount of €8 million in relation to sub-lease rental.

Also included in receivable for 2018 is €49 million for future income receivable from existing car rental contracts relating to MLL.

2018	Payable €m	Receivable €m
Not later than 1 year	63	28
Later than 1 year (not later than 5 years)	223	32
Later than 5 years	394	1

Finance leases
The Group leases computer equipment under finance lease agreements. The leases range from one to five years, contain no material contingent rents or restrictions imposed by lease agreements and contain standard terms of renewal. At 31 December 2018, the net carrying amount of the assets held under finance leases was €5 million.

2018	Total minimum future payments €m	Future finance charges €m	Present value of finance lease commitments €m
Not later than 1 year	4	-	4
Later than 1 year not later than 5 years	1	-	1

34 Property, plant and equipment *(continued)*

Bank	Freehold land & buildings & long leaseholds (FV)		Adaptations (at cost)		Computer & other equipment (at cost)					Right of Use assets, excluding investment property			
2019	of which; own-use €m	of which; subject to operating lease €m	of which; own-use €m	of which; subject to operating lease €m	of which; own-use €m	of which; subject to operating lease €m	Finance lease assets (at cost) €m	Payments on accounts & assets in the course of construction (at cost) €m	Total owned assets €m	Buildings €m	Computer & other equipment €m	Total right of use assets €m	Total property plant and equipment €m
Cost or valuation at 31 December 2018	131	10	155	6	257	-	17	13	589	-	-	-	589
Impact of adopting IFRS 16 at 1 January 2019 (note 61)	-	-	-	-	-	-	(17)	-	(17)	530	78	608	591
Opening balance at 1 January 2019	**131**	**10**	**155**	**6**	**257**	**-**	**-**	**13**	**572**	**530**	**78**	**608**	**1,180**
Exchange Adjustments	1	-	2	-	4	-	-	-	7	-	-	-	7
Additions	-	-	-	-	1	-	-	27	28	2	2	4	32
Disposals/ write offs	-	-	(4)	-	(4)	-	-	-	(8)	-	(1)	(1)	(9)
Revaluation recognised in OCI	1	-	-	-	-	-	-	-	1	-	-	-	1
Reclassifications	-	-	10	-	9	-	-	(19)	-	(1)	-	(1)	(1)
Adjustment of lease liability	-	-	-	-	-	-	-	-	-	3	(1)	2	2
As at 31 December 2019	**133**	**10**	**163**	**6**	**267**	**-**	**-**	**21**	**600**	**534**	**78**	**612**	**1,212**
Accumulated Depreciation at 31 December 2018	**-**	**-**	**(95)**	**(2)**	**(176)**	**-**	**(12)**	**-**	**(285)**	**-**	**-**	**-**	**(285)**
Impact of adopting IFRS 16 at 1 January 2019 (note 61)	-	-	-	-	-	-	12	-	12	-	(12)	(12)	-
Accumulated Depreciation at 1January 2019	**-**	**-**	**(95)**	**(2)**	**(176)**	**-**	**-**	**-**	**(273)**	**-**	**(12)**	**(12)**	**(285)**
Exchange Adjustments	-	-	(1)	-	(4)	-	-	-	(5)	(1)	-	(1)	(6)
Impairment	-	-	-	-	(2)	-	-	-	(2)	(1)	-	(1)	(3)
Disposals / Write-offs	-	-	4	-	3	-	-	-	7	-	1	1	8
Charge for the year	-	-	(9)	-	(18)	-	-	-	(27)	(38)	(29)	(67)	(94)
As at 31 December 2019	**-**	**-**	**(101)**	**(2)**	**(197)**	**-**	**-**	**-**	**(300)**	**(40)**	**(40)**	**(80)**	**(380)**
Net Book Value at 31 December 2019	**133**	**10**	**62**	**4**	**70**	**-**	**-**	**21**	**300**	**494**	**38**	**532**	**832**

At 31 December 2019, property, plant and equipment held at fair value was €143 million (2018: €141 million). A revaluation of Group property was carried out as at 31 December 2019 by an independent external valuer. The historical cost of property, plant and equipment held at fair value was €51 million (2018: €50 million). The net book value of property, plant and equipment held at cost less accumulated depreciation and impairment (excluding RoU assets) was €157 million (2018: €163 million). As outlined in the Group accounting policies note on page 75, the Group adopted IFRS 16 'Leases' from 1 January 2019. On transition to IFRS 16, the Group recognised €596 million RoU assets on 1 January 2019 which have a net book value of €532 million at 31 December 2019. The effect of adoption of IFRS 16 is further explained in note 61.

34 Property, plant and equipment *(continued)*

Future capital expenditure
This table shows future capital expenditure in relation to both property, plant and equipment and intangible assets.

Future capital expenditure	2019 €m	2018 €m
Contracted but not provided for in the financial statements	7	9
Authorised by the Directors but not contracted	227	193

Bank as lessor
The Bank has also entered into a small number of sub-leases as lessor which represent properties and components of properties surplus to the Bank's own requirements. The table sets out the future undiscounted operating lease payments receivable.

Operating lease receivables	2019 €m
Not later than 1 year	1
1 to 2 years	1
2 to 3 years	1
3 to 4 years	1
4 to 5 year	-
Later than 5 years	-
Total operating lease receivables	**4**

Bank 2018	Freehold land and buildings and long leaseholds (held at fair value) €m	Adaptations (at cost) €m	Computer and other equipment (at cost) €m	Finance lease assets (at cost) €m	Payments on accounts and assets in the course of construction (at cost) €m	Total €m
Cost or valuation						
At 1 January 2018	**128**	**153**	**291**	**16**	**12**	**600**
Exchange adjustments	-	-	-	-	-	-
Acquisitions	-	-	-	-	-	-
Additions	-	-	2	2	19	23
Disposals / write-offs	-	(2)	(44)	-	-	(46)
Reversal of impairment	2	-	-	-	-	2
Revaluation recognised in other comprehensive income	11	-	-	-	-	11
Reclassifications	-	10	8	-	(18)	-
At 31 December 2018	**141**	**161**	**257**	**18**	**13**	**590**
Accumulated depreciation						
At 1 January 2018	**-**	**(89)**	**(189)**	**(9)**	**-**	**(287)**
Exchange adjustments	-	-	2	-	-	2
Impairment	-	-	(9)	-	-	(9)
Disposals / write-offs	-	2	41	-	-	43
Charge for the year	-	(10)	(21)	(4)	-	(35)
At 31 December 2018	**-**	**(97)**	**(176)**	**(13)**	**-**	**(286)**
Net book value at 31 December 2018	**141**	**64**	**81**	**5**	**13**	**304**

34 Property, plant and equipment *(continued)*

Until 31 December 2018 the Bank's policies for leases under IAS 17 was as follows:

Operating leases
The Bank leases a number of branch and office premises to carry out its business. The commercial leases typically are 25 to 35 year operating leases with five-yearly rent reviews. The majority of the rent reviews are on an upwards only basis. Some leases also include break options. The Bank also holds a number of short-term leases for less than ten years and a number of long-term leases at market rent with less than 135 years unexpired.

Minimum future rentals are the rentals payable under operating leases up to the next available break option where this exists or to expiry date of the lease. Both the required break option notice period and the amount of any penalty rent have been included in the amounts payable below.

The Bank has entered into a small number of sub-leases as lessor which represent properties and components of properties surplus to the Bank's own requirements.

Minimum future rentals under non-cancellable operating leases
Included in this table, for 2018, is an amount of €6 million in relation to sub-lease rental.

2018	Payable €m	Receivable €m
Not later than 1 year	57	2
Later than 1 year (not later than 5 years)	203	5
Later than 5 years	373	-

Finance leases
The Bank leases computer equipment under finance lease agreements. The leases range from one to five years, contain no material contingent rents or restrictions imposed by lease agreements and contain standard terms of renewal. At 31 December 2018, the net carrying amount of the assets held under finance leases was €5 million (2017: €7 million).

2018	Total minimum future payments €m	Future finance charges €m	Present value of finance lease commitments €m
Not later than 1 year	4	-	4
Later than 1 year not later than 5 years	1	-	1

35 Deferred tax

	Group		Bank	
	2019 €m	**2018 €m**	**2019 €m**	**2018 €m**
The movement on the deferred tax account is as follows:				
At beginning of year	1,123	1,184	1,090	1,143
Impact of adopting IFRS 9 at 1 January 2018	-	33	-	24
Income statement charge (note 19)	**(106)**	**(82)**	**(35)**	**(76)**
Credit recognised in equity				
Additional tier 1 (note 49)	-	7	-	7
Credit / (charge) recognised in other comprehensive income				
Cash flow hedges	(6)	6	3	4
Pensions and other retirement benefits	(5)	(27)	(8)	(29)
Debt instruments at FVOCI	(4)	20	(4)	20
Liability credit reserve	4	(6)	4	(6)
Revaluation of property	-	(6)	-	(6)
Other movements (including foreign exchange)	10	(6)	5	9
At end of year	**1,016**	**1,123**	**1,055**	**1,090**
Deferred tax assets and liabilities are attributable to the following items:				
Deferred tax assets				
Unutilised tax losses	1,089	1,162	1,054	1,082
Accelerated capital allowances on equipment used by the Group / Bank	30	26	20	17
Impact of adopting IFRS 9	18	19	10	12
Pensions and other post retirement benefits	14	28	-	15
Cash flow hedge reserve	5	11	13	10
Liability credit reserve	1	-	1	-
Other temporary differences	26	21	14	12
Deferred tax assets	**1,183**	**1,267**	**1,112**	**1,148**
Deferred tax liabilities				
Wealth and Insurance	(59)	(35)	-	-
Debt instruments at FVOCI	(23)	(20)	(23)	(19)
Property revaluation surplus	(21)	(20)	(19)	(19)
Liability credit reserve	-	(6)	-	(6)
Other temporary differences	(64)	(63)	(15)	(14)
Deferred tax liabilities	**(167)**	**(144)**	**(57)**	**(58)**
Represented on the balance sheet as follows:				
Deferred tax assets	1,088	1,165	1,055	1,090
Deferred tax liabilities	(72)	(42)	-	-
	1,016	**1,123**	**1,055**	**1,090**

In accordance with IAS 12, when presenting the deferred tax balances, the Group offsets DTAs and deferred tax liabilities where:

- an entity has a legally enforceable right to set off current tax assets against current tax liabilities; and
- the DTAs and the deferred tax liabilities relate to income taxes levied by the same taxation authority on the same taxable entity.

The DTAs of €1,088 million (2018: €1,165 million) shown on the balance sheet is after netting by jurisdiction. The total DTAs before netting by jurisdiction is €1,183 million (2018: €1,267 million). This includes an amount of €1,089 million (2018: €1,162 million) in respect of operating losses which are available to shelter future profits from tax, of which €1,032 million relates to Irish tax losses carried forward by the Bank, €50 million relates to UK tax losses carried forward by Bank of Ireland (UK) plc and the UK branch of the Bank, and €7 million relates to US tax losses carried forward by the US branch of the Bank.

The recognition of a DTA in respect of tax losses carried forward requires the Directors to be satisfied that it is probable that the Group will have sufficient future taxable profits against which the losses can be utilised. In that regard, the Group estimates the period over which it will utilise its tax losses carried forward. These estimates are based on the Group's profitability projections which cover a five year planning period. These profitability projections are based on its strategic priorities where the focus

35 Deferred tax *(continued)*

will be to increase overall returns, improve cost efficiencies and grow sustainable profits and incorporates estimates and assumptions on economic factors such as employment levels and interest rates as well as other measures such as loan volumes, margins, costs and impairment losses. For the purposes of estimating when its tax losses will be utilised, the Group does not assume any annual growth in profits after the Group's five year planning period.

Based on the Group's projections, the DTA in respect of Irish tax losses, is estimated to be recovered in full by the end of 2037 (2018: 2030). The increase in the recovery period is due to more challenging economic headwinds, including a lower for longer interest rate environment. Based on the Group's proven earnings history, its strong position within the Irish financial services market and its strategic priorities to deliver sustained future Irish profits, the Group continues to recognise the Irish DTA in full. The use of alternative assumptions representing reasonably possible alternative outcomes could increase or decrease the estimated recovery period.

The Group believe that Bank of Ireland (UK) plc will continue to be profitable for the foreseeable future but acknowledge the external challenges facing the banking industry including the lower for longer interest rate environment and residual Brexit uncertainty. Therefore, notwithstanding the absence of any expiry date for trading losses in the UK, but acknowledging the economic headwinds that have worsened during 2019 and that profit forecasts become increasingly uncertain as the forecast period extends into the future, the Group have determined that, at 31 December 2019, the recognition of DTAs in respect of tax losses of Bank of Ireland (UK) plc will be limited by reference to the amount of losses that are expected to be utilised within a ten year period of projected profits. This ten year timescale is supported by forecast taxable profits and takes into account the Group's long-term financial and strategic plans and reflects the period over which the Group believes it can conclude that it is probable that future taxable profits will be available in Bank of Ireland (UK) plc.

As a consequence, the carrying value of the DTA relating to trading losses of Bank of Ireland (UK) plc and the UK branch of the Bank have reduced by €45 million and €2 million respectively in the year ended 31 December 2019 (2018: €nil).

The Group has not recognised a DTA of €136 million (2018: €96 million) in respect of temporary differences, unused tax losses and tax credits of which €47 million (2018: €46 million) relates to US losses which are subject to a 20 year life and are scheduled to expire unused in the period 2026 to 2029 due to an annual limitation of use. The balance relates to UK losses which have no expiry date but are currently not projected to be recovered within ten years.

Net DTAs at 31 December 2019 of €1.0 billion (2018: €1.1 billion) are expected to be recovered after more than one year.

Deferred tax liabilities have not been recognised for tax that may be payable if distributable reserves of certain overseas subsidiaries and joint ventures were remitted to Ireland as the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future. Distributable reserves for overseas subsidiaries and joint ventures totalled €1.5 billion at 31 December 2019 (2018: €0.5 billion).

36 Other assets

	Group		Bank	
	2019 €m	**2018 €m**	**2019 €m**	**2018 €m**
Reinsurance asset	1,108	942	-	-
ViF asset (note 37)	631	571	-	-
Sundry and other debtors	349	333	91	66
Interest receivable[1]	280	278	249	246
Accounts receivable and prepayments	88	52	53	40
Trade receivables and contract assets	45	106	34	73
Other assets	**2,501**	**2,282**	**427**	**425**
Trade receivables and contract assets				
Trade receivables	40	48	29	36
Contract assets	5	4	5	4
Less: impairment loss allowance on trade receivables and contract assets	-	-	-	-
Total trade receivable and contract assets	**45**	**52**	**34**	**40**
Other assets are analysed as follows:				
Within 1 year	726	707	408	384
After 1 year	1,775	1,575	19	41
	2,501	**2,282**	**427**	**425**
The movement in the reinsurance asset is noted below:				
At beginning of year	942	740	-	-
New business	108	217	-	-
Changes in business	58	(15)	-	-
At end of year	**1,108**	**942**	**-**	**-**

For the purpose of disclosure of credit risk exposures, the reinsurance asset is included within other financial instruments of €9.2 billion (2018: €8.1 billion) in note 27 on page 172.

[1] *Interest receivable is subject to impairment under IFRS 9; the impairment loss allowance on interest receivable is presented in the balance sheet along with the financial asset to which it relates.*

37 Life assurance business

The Group recognises the ViF life assurance business asset as the present value of future profits expected to arise from contracts classified as insurance contracts under IFRS 4. The ViF asset, which is presented gross of attributable tax, represents the present value of future profits, less an allowance for the cost of required capital, expected to arise from insurance contracts written by the reporting date. It is determined by projecting the future surpluses and other cash flows attributable to the shareholder arising from these contracts and discounting using risk free interest rates as specified under the Solvency II directive.

The process used in determining the key economic and experience assumptions is as follows:

Interest rates and unit growth rate
Interest rates and unit-growth rates are based on a range of duration specific rates determined by a risk free yield curve. This yield curve is provided by the EIOPA.

Shareholder tax rate
The current rate of corporation tax is assumed to be maintained over the term of the business. Deferred tax has been allowed for on future surpluses attributable to shareholders estimated to arise from insurance contracts.

Mortality and morbidity
The mortality and morbidity assumptions, which include an allowance for improvements in longevity for annuitants, are set with regard to the Group's actual experience and / or relevant market data.

Persistency rate
Persistency rates refer to the rate of policy termination for insurance policies. Best estimate policy lapse rate assumptions are set with regard to the Group's actual experience and other relevant market data.

Maintenance expenses
Allowance is made for future policy costs and expense inflation explicitly.

Sensitivities
This table indicates the standalone impact of changes in the key assumptions on profit.

Group Value of in Force asset	2019 €m	2018 €m
At beginning of year	571	565
Income statement movement in Value of in Force asset (gross of tax)	60	6
At end of year	**631**	**571**

Group Sensitivities: impact on annual profit before tax	2019 €m	2018 €m
1% increase in interest rates and unit growth rates	(19)	(26)
1% decrease in interest rates and unit growth rates	3	18
10% improvement in mortality	22	25
10% improvement in longevity[1]	(37)	(31)
10% improvement in morbidity	12	10
10% deterioration in persistency	(16)	(21)
10% increase in equity and property markets	35	35
5% improvement in maintenance expenses	19	19
0.5% widening in bond spreads[2]	(61)	(51)

While this table shows the impact of an individual assumption change, a change in one assumption could impact on other assumptions due to the relationship between assumptions.

Volatility Adjustment
The Volatility Adjustment (VA) is an addition to the risk-free curve under the Solvency II regulations which is designed to protect insurers with long-term liabilities from the impact of volatility on the insurers' solvency position. The VA is based on a risk-corrected spread on the assets in a reference portfolio.

[1] *Impact on Annuity book of business.*
[2] *Includes impact of Volatility Adjustment.*

38 Deposits from banks

	Group		Bank	
	2019 €m	2018 €m	2019 €m	2018 €m
Monetary Authority secured funding	1,736	2,037	-	386
Deposits from banks	443	445	4,526	5,013
Deposits from banks	**2,179**	**2,482**	**4,526**	**5,399**
Amounts include:				
Due to Group undertakings	-	-	4,166	4,627

Deposits from banks include cash collateral of €0.2 billion (2018: €0.2 billion) received from derivative counterparties in relation to net derivative asset positions (note 20) (Bank 2019: €0.2 billion, 2018: €0.2 billion).

Group	2019				2018			
Monetary Authority secured funding	TLTRO €m	TFS €m	ILTR €m	Total €m	TLTRO €m	TFS €m	ILTR €m	Total €m
Deposits from banks	-	1,501	235	1,736	386	1,427	224	2,037
Debt securities in issue (note 40)	-	-	-	-	617	-	-	617
Total	**-**	**1,501**	**235**	**1,736**	**1,003**	**1,427**	**224**	**2,654**

Bank	2019				2018			
Monetary Authority secured funding	TLTRO €m	TFS €m	ILTR €m	Total €m	TLTRO €m	TFS €m	ILTR €m	Total €m
Deposits from banks	-	-	-	-	386	-	-	386
Debt securities in issue (note 40)	-	-	-	-	617	-	-	617
Total	**-**	**-**	**-**	**-**	**1,003**	**-**	**-**	**1,003**

On 25 September 2019, the Group and the Bank repaid its Targeted Longer-Term Refinancing Operation (TLTRO) borrowings secured funding in line with the conditions of the TLTRO facility. As at 31 December 2019, the Group had no secured funding from the ECB.

Drawings under the Term Funding Scheme (TFS) from the BoE will be repaid between October 2020 and February 2022.

Index Long Term Repo (ILTR) funding from the BoE has a maturity of less than one year.

The Group and the Bank's Monetary Authority funding is secured by loans and advances to customers.

39 Customer accounts

	Group		Bank	
	2019 €m	**2018 €m**	**2019 €m**	**2018 €m**
Current accounts	37,426	33,199	36,752	32,705
Demand deposits	27,736	26,828	17,045	15,819
Term deposits and other products	17,951	18,057	9,074	9,618
Customer accounts at amortised cost	**83,113**	**78,084**	**62,871**	**58,142**
Term deposits at fair value through profit or loss	930	887	1,546	1,507
Total customer accounts	**84,043**	**78,971**	**64,417**	**59,649**
Amounts include:				
Due to BOIG plc	75	72	75	72
Due to associates and joint ventures	3	10	n/a	n/a
Due to Group undertakings	n/a	n/a	2,793	2,845

The movement in own credit risk related to the Group's customer accounts designated at fair value through profit and loss for the year is shown below.

There were no amounts presented in OCI relating to liabilities that the Group designated at fair value through profit and loss which were derecognised during the year.

The carrying amount of the customer accounts designated at FVTPL as at 31 December 2019 is equivalent to the contractual amount due at maturity for Group and Bank (2018: €31 million lower, Bank: €36 million). This is set out in note 56.

At 31 December 2019, the Group's largest 20 customer deposits amounted to 4% (2018: 3%) of customer accounts. Deposit accounts where a period of notice is required to make a withdrawal are classified within term deposits and other products. Information on the contractual maturities of customer accounts is set out on page 180 in the Financial risk management note.

Term deposits and other products include a number of term accounts that contain easy access features. These allow the customer to access a portion or all of their deposit notwithstanding that this repayment could result in financial penalty being paid by the customer. For such accounts, the portion subject to the potential early access has been classified in the 'demand' category in the liquidity risk and profile analysis (page 180).

Term deposits and other products include €35 million (2018: €67 million) relating to sale and repurchase agreements with financial institutions who do not hold a banking licence.

Under the European Communities Deposit Guarantee Schemes (DGS) Regulations 2015, eligible deposits of up to €100,000 per depositor per credit institution are covered. Eligible deposits include credit balances in current accounts, demand deposit accounts and term deposit accounts. The scheme is administered by the CBI and is funded by the credit institutions covered by the scheme.

On 24 November 2015, the European Commission (EC) released a proposal, European Deposit Insurance Scheme (EDIS), designed to achieve a common European deposit protection scheme by 2024.

The EU (Bank Recovery and Resolution) Regulations 2015, which transposed the BRRD into Irish Law, provides that covered deposits (i.e. eligible deposits up to €100,000) are excluded from the scope of the bail-in tool. The bail-in tool enables a resolution authority to write down the value of certain liabilities or convert them into equity, to the extent necessary to absorb losses and recapitalise an institution. It also introduces 'depositor preference', where shareholders' equity and other unsecured creditors (including senior bondholders) will have to be fully written down before losses are imposed on preferred depositors. The bail-in rules allow in exceptional circumstances for the exclusion or partial exclusion of certain liabilities (with a key focus being eligible deposits) from the application of the write down or conversion powers.

In addition to the deposits covered by these Regulations, certain other Group deposits are covered by the deposit protection schemes in other jurisdictions, chiefly the UK FSCS (in respect of eligible deposits with Bank of Ireland (UK) plc).

	Group		Bank	
Movement in own credit risk on deposits at FVTPL	**2019 €m**	**2018 €m**	**2019 €m**	**2018 €m**
Balance at beginning of the year	(18)	12	(14)	24
Recognised in other comprehensive income	18	(30)	17	(38)
Balance at end of the year	**-**	**(18)**	**3**	**(14)**

40 Debt securities in issue

As set out in note 38, the Group has repaid all of its TLTRO borrowings in line with the terms and conditions of the TLTRO facility and there were no such debt securities outstanding at the end of 2019 (2018: €615 million).

During the year, the Group repurchased and derecognised debt securities in issue held at fair value through profit and loss in the amount of €122 million (2018: €nil). This resulted in €9 million (2018: €nil) being transferred from the liability credit reserve to retained earnings, being the cumulative gain recognised through OCI relating to these liabilities.

The carrying amount of the debt securities in issue designated at FVTPL at 31 December 2019 was €35 million higher than the contractual amount due at maturity (2018: €19 million higher). The carrying amount in Bank was €2 million higher in 2019 (2018: €10 million lower).This is set out in note 56 on page 232.

	Group		Bank	
	2019 €m	**2018 €m**	**2019 €m**	**2018 €m**
Bonds and medium term notes	6,892	6,795	2,865	1,985
Monetary Authorities secured funding (note 38)	-	617	-	617
Other debt securities in issue	1,559	973	-	-
Debt securities in issue at amortised cost	**8,451**	**8,385**	**2,865**	**2,602**
Debt securities in issue at fair value through profit or loss	364	522	48	161
Total debt securities in issue	**8,815**	**8,907**	**2,913**	**2,763**
Amounts include:				
Due to BOIG plc[1]	2,441	1,185	2,441	1,185

The movement on debt securities in issue is analysed as follows:

	Group		Bank	
	2019 €m	**2018 €m**	**2019 €m**	**2018 €m**
Opening balance	8,907	8,390	2,763	2,476
Issued during the year	1,935	2,056	1,256	1,184
Redemptions	(1,938)	(1,501)	(1,016)	(846)
Repurchases	(194)	(42)	(112)	(42)
Other movements[2]	105	4	22	(9)
Closing balance	**8,815**	**8,907**	**2,913**	**2,763**

	Group		Bank	
Movement in own credit risk on debt securities in issue at FVTPL	**2019 €m**	**2018 €m**	**2019 €m**	**2018 €m**
Balance at beginning of the year	(10)	3	(10)	3
Transferred to retained earnings	9	-	9	-
Recognised in other comprehensive income	4	(13)	4	(13)
Balance at end of the year	**3**	**(10)**	**3**	**(10)**

[1] 2018 Group amounts due to BOIG plc have been restated to €1,185 million to correctly reflect the amounts owed to BOIG plc.

[2] Other movements primarily relates to fair value hedge adjustments in respect of debt securities in issue held at amortised cost, exchange adjustments and changes in fair value of debt securities in issue held at fair value.

41 Liabilities to customers under investment and insurance contracts

Wealth and Insurance writes the following life assurance contracts that contain insurance risk:

Non-unit linked life assurance contracts
These contracts provide the policyholder with insurance in the event of death, critical illness or permanent disability (principally mortality and morbidity risk).

Non-unit linked annuity contracts
These contracts provide the policyholder with an income until death (principally longevity and market risk).

Unit linked insurance contracts
These contracts include both policies primarily providing life assurance protection and policies providing investment but with a level of insurance risk deemed to be significant (principally mortality and market risk).

Insurance contract liabilities, which consist of both unit linked and non-unit linked liabilities, are calculated based on recognised actuarial methods with due regard to the applicable actuarial principles recognised in the European framework for the prudential and financial monitoring of direct life assurance business.

Unit linked liabilities reflect the value of the underlying funds in which the policyholder is invested. Non-unit linked liabilities are calculated using a gross premium method of valuation.

The key assumptions used in the valuation of insurance contract liabilities are:

Interest rate:
The interest rates used are based on risk free rates published by EIOPA in line with the Solvency II Directive.

Mortality and morbidity:
The mortality and morbidity assumptions, which include an allowance for improvements in longevity for annuitants, are set with regard to the Group's actual experience and / or relevant industry data.

Maintenance expenses:
Allowance is made for future policy costs and expense inflation explicitly.

Options and guarantees
The Group has a very limited range of options and guarantees in its business portfolio as the bulk of the business is unit linked without investment guarantees. Where investment guarantees do exist they are either hedged with an outside party or matched through appropriate investment assets.

Uncertainties associated with insurance contract cash flows and risk management activities
For life assurance contracts where death is the insured risk, the most significant factors that could adversely affect the frequency and severity of claims are the incidence of disease and general changes in lifestyle. Where the insured risk is longevity, advances in medical care is the key factor that increases longevity. The Group manages its exposures to insurance risks through a combination of applying strict underwriting criteria, asset and liability matching, transferring risk to reinsurers and the establishment of insurance contract liabilities.

Credit risk
Reinsurance programmes are in place to restrict the amount of exposure on any single life. The Group uses a panel of highly rated reinsurance companies to diversify credit risk.

Capital management and available resources
The Solvency II framework came into full effect from 1 January 2016 and introduced new capital, risk management, governance and reporting requirements for all European insurance entities. Under Solvency II, insurance entities are required to hold technical provisions to meet liabilities to policyholders using best estimate assumptions plus a risk margin. In addition, entities are required to hold a risk based Solvency Capital Requirement (SCR) which is calculated by considering the capital required to withstand a number of shock scenarios.

As part of the disclosure requirements, the Group's life assurance entity, NIAC, annually publishes a public document called the Solvency and Financial Condition Report setting out more detail on its solvency and capital management.

Group **Investment contract liabilities**	**2019** **€m**	**2018** **€m**
Liabilities to customers under investment contracts, at fair value	**5,890**	**5,239**

The movement in gross life insurance contract liabilities can be analysed as follows:

Group **Insurance contract liabilities**	**2019** **€m**	**2018** **€m**
At beginning of year	11,003	10,878
New business	1,524	1,496
Changes in existing business	167	(1,371)
At end of year	**12,694**	**11,003**

42 Other liabilities

	Group		Bank	
	2019 €m	**2018 €m**	**2019 €m**	**2018 €m**
Notes in circulation	1,261	1,278	-	-
Dividend payable to parent	627	800	627	800
Sundry creditors	322	285	62	56
Accrued interest payable	199	230	66	105
Accruals and deferred income	52	33	2	10
Short position in trading securities	-	16	-	16
Finance lease obligations	-	4	-	5
Other	582	616	254	289
Other liabilities	**3,043**	**3,262**	**1,011**	**1,281**
Other liabilities are analysed as follows:				
Within 1 year	3,027	3,219	997	1,246
After 1 year	16	43	14	35
	3,043	**3,262**	**1,011**	**1,281**

43 Provisions

Group **2019**	**Restructuring €m**	**Onerous contracts €m**	**Legal and other €m**	**Total €m**
Closing balance 31 December 2018	**20**	**2**	**62**	**84**
Impact of adopting IFRS 16 on 1 January 2019 (note 60)	(4)	(1)	(1)	(6)
Opening balance as at 1 January 2019	16	1	61	**78**
Exchange adjustment	-	-	3	3
Charge to income statement	73	(1)	78	150
Utilised during the year	(39)	-	(40)	(79)
Unused amounts reversed during the year	(4)	-	(5)	(9)
As at 31 December 2019	**46**	**-**	**97**	**143**

Of the €46 million (2018: €20 million) closing provision for restructuring, €34 million (2018: €nil) relates to the disposal of the UK credit card portfolio, see page 256 for further information, €10 million (2018: €14 million) relates to staff exits and €2 million (2018: €6 million) relates to other costs.

Group **2019** **Expected utilisation**	**Restructuring €m**	**Onerous contracts €m**	**Legal and other €m**	**Total €m**
Less than 1 year	44	-	90	134
1 to 2 years	1	-	4	5
2 to 5 years	-	-	2	2
5 to 10 years	1	-	1	2
Total	**46**	**-**	**97**	**143**

43 Provisions *(continued)*

Bank 2019	Restructuring €m	Onerous contracts €m	Legal and other €m	Total €m
Opening balance 31 December 2018	**20**	**2**	**16**	**38**
Impact of adopting IFRS 16 on 1 January 2019	(4)	(1)	(1)	(6)
Opening balance as at 1 January 2019	16	1	15	32
Exchange adjustment	-	-	-	-
Charge to income statement	28	(1)	32	59
Utilised during the year	(32)	-	(10)	(42)
Unused amounts reversed during the year	-	-	(3)	(3)
As at 31 December 2019	**12**	**-**	**34**	**46**

Bank 2019 Expected utilisation	Restructuring €m	Onerous contracts €m	Legal and other €m	Total €m
Less than 1 year	11	-	27	38
1 to 2 years	1	-	4	5
2 to 5 years	-	-	2	2
5 to 10 years	-	-	1	1
Total	**12**	**-**	**34**	**46**

The Group has recognised provisions in relation to restructuring costs, onerous contracts, legal and other. Such provisions are sensitive to a variety of factors, which vary depending on their nature. The estimation of the amounts of such provisions is judgemental because the relevant payments are due in the future and the quantity and probability of such payments is uncertain. The methodology and the assumptions used in the calculation of provisions are reviewed regularly and, at a minimum, at each reporting date.

In July 2019, the Group disposed of its UK credit card portfolio and recognised a net loss on disposal of €21 million (note 18). The net loss on disposal included a charge for a provision of €39 million related to the costs of migration and other costs associated with the disposal, of which €34 million is remaining as at 31 December 2019 and is included in the restructuring provision.

At 31 December 2018, the Group held a provision of €42 million in respect of the industry wide Tracker Mortgage Examination.

The Group has determined in 2019 that a further €67 million provision is required to cover the additional redress and compensation costs, operational costs and estimated costs of closing out the Tracker Mortgage Examination review. €55 million was provided at 30 June 2019 with the remaining €12 million charged to the income statement at 31 December 2019.

Considerable progress has been made in 2019 in contacting and remediating remaining impacted customers. Since 31 December 2018, €34 million of the provision has been utilised covering redress, compensation and related costs leaving a residual provision of €75 million at 31 December 2019.

While the redress and compensation element of the provision is largely known, there are still a number of uncertainties as to the eventual total cost of the examination and in particular, the administrative sanctions proceedings. Management has therefore exercised judgement to determine the appropriate provision in respect of certain key items in addition to the core elements of the redress and compensation to be paid to customers. These key judgemental items principally comprise the following:

- **appeals:** customers can pursue certain other options in respect of the determination as to whether they are impacted and the quantum of redress and compensation offered by the Group including lodging appeals to an independent appeals panel in the 12 months after receiving their letter offering redress and compensation. In arriving at the provision, management has made estimates of the level of appeals and the associated costs of processing and settling such appeals;
- **programme costs:** in determining the provision in respect of the examination, management has had to consider a range of costs associated with bringing the examination to an ultimate conclusion. This includes costs associated with various oversight and governance processes, in particular any potential fine relating to the conclusion of the ongoing CBI administrative sanctions proceedings and the running of the appeals panel, tax liabilities that the Bank will settle on behalf of customers, data system costs and tracing agents.

44 Contingent liabilities and commitments

	Group		Bank	
	2019 €m	2018 €m	2019 €m	2018 €m
Contingent liabilities				
Guarantees and irrevocable letters of credit	428	354	404	342
Acceptances and endorsements	5	6	5	6
Other contingent liabilities	267	247	189	180
	700	**607**	**598**	**528**
Commitments				
Documentary credits and short-term trade related transactions	46	59	46	59
Undrawn formal standby facilities, credit lines and other commitments to lend:				
- revocable or irrevocable with original maturity of 1 year or less	9,315	11,569	6,753	6,566
- irrevocable with original maturity of over 1 year	4,882	3,523	4,807	3,439
	14,243	**15,151**	**11,606**	**10,064**

The table above gives the contract amounts of contingent liabilities and commitments. The maximum exposure to credit loss under contingent liabilities and commitments is the contractual amount of the instrument in the event of non-performance by the other party where all counter claims, collateral or security prove worthless.

Loss allowance provisions of €30 million (Bank: €28 million) recognised on loan commitments and guarantees and irrevocable letters of credit are shown in note 45 (Group 2018: €29 million, Bank 2018: €23 million). Provisions on all other contingent liabilities and commitments are shown in note 42.

In common with other banks, the Group conducts business involving acceptances, performance bonds and indemnities. The majority of these facilities are offset by corresponding obligations of third parties.

Guarantees and letters of credit are given as security to support the performance of a customer to third parties. As the Group will only be required to meet these obligations in the event of the customer's default, the cash requirements of these instruments are expected to be considerably below their nominal amounts.

An **acceptance** is an undertaking by a bank to pay a bill of exchange drawn on a customer. The Group expects most acceptances to be presented, but reimbursement by the customer is normally immediate. **Endorsements** are residual liabilities of the Group in respect of bills of exchange, which have been paid and subsequently rediscounted.

Other contingent liabilities primarily include performance bonds and are generally short-term commitments to third parties which are not directly dependent on the customers' credit worthiness. The Group is also party to legal, regulatory, taxation and other actions arising out of its normal business operations.

In February 2019, the Group received a letter before claim from investors in Eclipse film finance schemes asserting various claims in connection with the design, promotion and operation of such schemes. The Group's involvement in these schemes was limited to the provision of commercial finance. The Group was not the designer, promoter or operator in respect of any of the schemes.

Documentary credits commit the Group to make payments to third parties, on production of documents, which are usually reimbursed immediately by customers.

Commitments to lend are agreements to lend to a customer in the future, subject to certain conditions. Included within total commitments above is an amount of €22 million of undrawn loan commitments to the Group's joint ventures (2018: €57 million).

45 Loss allowance provision on loan commitments and financial guarantees

Group	2019		2018	
	Amount €m	Loss allowance €m	Amount €m	Loss allowance €m
Loan commitments (note 44)	14,243	29	15,151	28
Guarantees and irrevocable letters of credit (note 44)	428	1	354	1
	14,671	**30**	**15,505**	**29**

Bank	2019		2018	
	Amount €m	Loss allowance €m	Amount €m	Loss allowance €m
Loan commitments (note 44)	11,606	23	10,064	19
Guarantees and irrevocable letters of credit (note 44)	404	5	342	4
	12,010	**28**	**10,406**	**23**

The loss allowance on loan commitments are presented as a provision in the balance sheet (i.e. as a liability under IFRS 9) and separate from the impairment loss allowance. To the extent a facility includes both a loan and an undrawn commitment; it is only the impairment attributable to the undrawn commitment that is presented in this table. The impairment loss allowance attributable to the loan is shown as part of the financial asset to which the loan commitment relates.

At 31 December 2019, the Group held an impairment loss allowance of €30 million (2018: €29 million) on loan commitments and financial guarantees, of which €18 million (2018: €18 million) are classified as Stage 1, €10 million (2018: €9 million) as Stage 2, €2 million (2018: €2 million) as Stage 3.

At 31 December 2019, the Bank held an impairment loss allowance of €28 million (2018: €23 million) on loan commitments and financial guarantees, of which €18 million (2018: €16 million) are classified as Stage 1, €9 million (2018: €5 million) as Stage 2, €1 million (2018: €2 million) as Stage 3.

The following tables summarise the asset quality of loan commitments and financial guarantees by IFRS 9 twelve month PD grade which are not credit-impaired.

At 31 December 2019, the Group's credit-impaired loan commitments are €50 million (2018: €61 million) while credit-impaired guarantees and irrevocable letters of credit are €8 million (2018: €8 million).

Group 2019 Loan commitments and financial guarantees - Contract amount	Loan commitments						Guarantees and irrevocable letters of credit					
	Stage 1		Stage 2		Total		Stage 1		Stage 2		Total	
	€m	%	€m	%	€m	%	€m	%	€m	%	€m	%
PD Grade												
1-4	6,097	45%	212	34%	6,309	44%	108	27%	2	8%	110	26%
5-7	5,192	38%	208	34%	5,400	38%	268	68%	1	4%	269	64%
8-9	2,116	16%	114	18%	2,230	16%	16	4%	6	23%	22	5%
10-11	168	1%	86	14%	254	2%	2	1%	17	65%	19	5%
Total	**13,573**	**100%**	**620**	**100%**	**14,193**	**100%**	**394**	**100%**	**26**	**100%**	**420**	**100%**

45 Loss allowance provision on loan commitments and financial guarantees *(continued)*

Group 2018 Loan commitments and financial guarantees - Contract amount	Loan commitments						Guarantees and irrevocable letters of credit					
	Stage 1		Stage 2		Total		Stage 1		Stage 2		Total	
	€m	%	€m	%	€m	%	€m	%	€m	%	€m	%
PD Grade												
1-4	7,034	48%	187	42%	7,221	48%	81	27%	19	44%	100	29%
5-7	5,539	38%	39	9%	5,578	37%	198	65%	3	7%	201	58%
8-9	1,888	13%	122	27%	2,010	13%	19	6%	4	9%	23	7%
10-11	184	1%	97	22%	281	2%	5	2%	17	40%	22	6%
Total	**14,645**	**100%**	**445**	**100%**	**15,090**	**100%**	**303**	**100%**	**43**	**100%**	**346**	**100%**

At 31 December 2019, the Bank's credit-impaired loan commitments are €36 million (2018: €55 million) while credit-impaired guarantees and irrevocable letters of credit are €8 million (2018: €8 million).

Bank 2019 Loan commitments and financial guarantees - Contract amount	Loan commitments						Guarantees and irrevocable letters of credit					
	Stage 1		Stage 2		Total		Stage 1		Stage 2		Total	
	€m	%	€m	%	€m	%	€m	%	€m	%	€m	%
PD Grade												
1-4	5,092	46%	210	36%	5,302	46%	87	23%	2	8%	89	23%
5-7	3,886	35%	179	31%	4,065	35%	266	72%	1	4%	267	67%
8-9	1,850	17%	110	19%	1,960	17%	14	4%	6	23%	20	5%
10-11	161	2%	82	14%	243	2%	3	1%	17	65%	20	5%
Total	**10,989**	**100%**	**581**	**100%**	**11,570**	**100%**	**370**	**100%**	**26**	**100%**	**396**	**100%**

Bank 2018 Loan commitments and financial guarantees - Contract amount	Loan commitments						Guarantees and irrevocable letters of credit					
	Stage 1		Stage 2		Total		Stage 1		Stage 2		Total	
	€m	%	€m	%	€m	%	€m	%	€m	%	€m	%
PD Grade												
1-4	3,919	41%	165	47%	4,084	41%	74	25%	19	44%	93	28%
5-7	3,889	40%	26	7%	3,915	39%	195	67%	3	7%	198	59%
8-9	1,705	18%	108	31%	1,813	18%	17	6%	4	9%	21	6%
10-11	144	1%	53	15%	197	2%	5	2%	17	40%	22	7%
Total	**9,657**	**100%**	**352**	**100%**	**10,009**	**100%**	**291**	**100%**	**43**	**100%**	**334**	**100%**

46 Retirement benefit obligations

The Group and Bank sponsor a number of defined benefit and defined contribution schemes in Ireland and overseas. The defined benefit schemes are funded and the assets of the schemes are held in separate trustee administered funds. In determining the level of contributions required to be made to each scheme and the relevant charge to the income statement the Group has been advised by independent actuaries, which in the case of the majority of the Group's schemes is Willis Towers Watson.

The most significant defined benefit scheme in the Group is the Bank of Ireland Staff Pensions Fund (BSPF) which accounts for approximately 74% of the total liabilities across all Group sponsored defined benefit schemes (79% of the total liabilities across all of the Bank defined benefit schemes) at 31 December 2019. The BSPF and all of the Group's other RoI and UK defined benefit schemes were closed to new members during 2007, and a new hybrid scheme (which included elements of defined benefit and defined contribution) was introduced for new entrants to the Group. The hybrid scheme was subsequently closed to new entrants in late 2014 and a new defined contribution scheme, RetireWell, was introduced for new entrants to the Group from that date.

Retirement benefits under the BSPF and a majority of the other defined benefit plans are calculated by reference to pensionable service and pensionable salary at normal retirement date.

Regulatory Framework
The Group operates the defined benefit plans under broadly similar regulatory frameworks. Benefits under the BSPF are paid to members from a fund administered by Trustees, who are responsible for ensuring compliance with the Pensions Act 1990 and other relevant legislation. These responsibilities include ensuring that contributions are received, investing the scheme assets and making arrangements to pay the benefits. Plan assets are held in trusts and are governed by local regulations and practice in each country.

In order to assess the level of contributions required, triennial valuations are carried out with plan obligations generally measured using prudent assumptions and discounted based on the return expected from assets held in accordance with the actual scheme investment policy.

The BSPF is also subject to an annual valuation under the Irish Pensions Authority Minimum Funding Standard (MFS). The MFS valuation is designed to assess whether the scheme has sufficient funds to provide a minimum level of benefits in a wind-up scenario. If the MFS valuation indicates a funding level of below 100%, action would be required. This generally takes the form of agreeing a 'Funding Proposal' with the Trustees with the aim of meeting the MFS by a specified future point in time.

The responsibilities of the Trustees, and the regulatory framework, are broadly similar for the Group's other defined benefit schemes and take account of pension regulations in each specific jurisdiction. The Group works closely with the Trustees of each scheme to manage the plans.

The nature of the relationship between the Group and the Trustees is governed by local regulations and practice in each country and by the respective legal documents underpinning each plan.

Plan details
The following table sets out details of the membership of the BSPF.

BSPF plan details at last valuation date (31 December 2018)	Number of members	Proportion of funding liability
Active members	4,535	31.9%
Deferred members	8,077	26.4%
Pensioner members	4,646	41.7%
Total	**17,258**	**100%**

Actuarial Valuation of the BSPF
The last formal valuation of BSPF was carried out as at 31 December 2018.

The triennial valuation disclosed the fair value of the scheme assets represented 97% of the benefits that had accrued to members, after allowing for expected future increases in earnings and pensions.

As a result of the valuation discussions with the Trustees, the Group agreed to pay €19.4 million per annum in contributions over the three years to the next triennial valuation date, plus a contribution to the annual scheme expenses. The total of these payments will equate to the remaining committed contributions arising from the 2013 Group Pensions Review.

In respect of future service, the actuary recommended an employer contribution of €59.5 million per annum over the period to the next valuation (decreased from €63.6 million at the last valuation).

The next formal triennial valuation of the BSPF will be carried out during 2022 based on the position at 31 December 2021.

The actuarial valuations are available for inspection by members but are not available for public inspection.

Guaranteed Minimum Pensions
Included in past service cost is an amount €nil (2018: €4 million) related to Guaranteed Minimum Pensions equalisation which impacts certain of the Group's and Bank's UK pension schemes.

Financial and Demographic assumptions
The assumptions used in calculating the accounting costs and obligations of the Group's defined benefit pension plans, as detailed below, are set by the Directors after consultation with independent actuaries.

Discount rates are determined in consultation with the Group's independent actuary, with reference to market yields at the reporting date on high quality corporate bonds (AA rated or equivalent) with a term corresponding to the term of the benefit payments.

The assumption for RoI price inflation is set by reference to the long-term expectation for eurozone inflation as implied by the difference between eurozone fixed interest and index-linked bonds. The assumptions for UK price inflation are determined

46 Retirement benefit obligations *(continued)*

with reference to the Group's independent actuary's standard cash flow matching inflation assumption methodology, except for UK Consumer Price Index (CPI) inflation, which is set by reference to Retail Price Index (RPI) inflation, with an adjustment applied, as there are insufficient CPI-linked bonds from which to derive an assumption.

The salary assumption takes into account inflation, promotion and current employment markets relevant to the Group. Other financial assumptions are reviewed in line with changing market conditions to determine best estimate assumptions. Demographic assumptions are reviewed periodically in line with the actual experience of the Group's schemes.

The significant financial assumptions used in measuring the Group's and Bank's defined benefit pension liability under IAS 19 are set out in the table below.

Financial assumptions	2019 % p.a.	2018 % p.a.
Irish schemes		
Discount rate	1.30	2.00
Inflation rate	1.25	1.35
Rate of general increase in salaries[1]	1.75	1.85
Rate of increase in pensions in payment[1]	0.73	0.78
Rate of increase to deferred pensions	1.25	1.30
UK schemes		
Discount rate	2.10	2.95
Consumer Price Inflation	1.95	2.20
Retail Price Inflation	2.95	3.20
Rate of general increase in salaries[1]	3.45	3.70
Rate of increase in pensions in payment[1]	2.04	2.16
Rate of increase to deferred pensions	1.95	2.20

Mortality assumptions

The mortality assumptions adopted for Irish pension arrangements reflect both a base table and projected table developed from various Society of Actuaries in Ireland mortality investigations that are considered a best fit for the Group's expected future mortality experience.

Mortality assumptions	2019 years	2018 years
Longevity at age 70 for current pensioners		
Males	18.0	17.8
Females	19.4	19.3
Longevity at age 60 for active members currently aged 60 years		
Males	27.5	27.3
Females	29.2	29.1
Longevity at age 60 for active members currently aged 40 years		
Males	29.8	29.7
Females	31.3	31.2

[1] *Weighted average increase across all Group schemes in the relevant jurisdiction*

46 Retirement benefit obligations *(continued)*

Amounts recognised in financial statements
The table below outlines where the Group's defined benefit plans are recognised in the financial statements:

Group	2019			2018		
	Irish Pension Plans €m	UK Pension Plans[1] €m	Total €m	Irish Pension Plans €m	UK Pension Plans[1] €m	Total €m
Income statement credit / (charge)						
Other operating expenses	(88)	(15)	(103)	(99)	(21)	(120)
Cost of restructuring programme	1	1	2	1	1	2
Statement of OCI						
Impact of remeasurement	54	(10)	44	155	1	156
Balance sheet obligations	**(171)**	**32**	**(139)**	**(252)**	**24**	**(228)**
This is shown on the balance sheet as:						
Retirement benefit obligation			(268)			(274)
Retirement benefit asset			129			46
Total net liability			**(139)**			**(228)**

Bank	2019			2018		
	Irish Pension Plans €m	UK Pension Plans[1] €m	Total €m	Irish Pension Plans €m	UK Pension Plans[1] €m	Total €m
Balance sheet obligations	**(45)**	**22**	**(23)**	**(145)**	**12**	**(133)**
This is shown on the balance sheet as:						
Retirement benefit obligation			(142)			(167)
Retirement benefit asset			119			34
Total net liability			**(23)**			**(133)**

[1] *The UK Pension Plans include a portion of the Bank of Ireland Staff Pension Fund which relates to UK members.*

46 Retirement benefit obligations *(continued)*

The movement in the net defined benefit obligation over the year in respect of the Group's defined benefit plans is as follows:

Group	2019			2018		
	Present value of obligation €m	Fair value of plan assets €m	Surplus/ (deficit) of plans €m	Present value of obligation €m	Fair value of plan assets €m	Surplus/ (deficit) of plans €m
At 1 January	**(7,475)**	**7,247**	**(228)**	**(7,726)**	**7,248**	**(478)**
Cost of restructuring programme						
- Negative past service cost	2	-	2	2	-	2
Other operating expenses	(238)	135	(103)	(277)	157	(120)
- Current service cost	*(100)*	*-*	*(100)*	*(109)*	*-*	*(109)*
- Past service cost	*-*	*-*	*-*	*(4)*	*-*	*(4)*
- Interest (expense) / income	*(138)*	*135*	*(3)*	*(164)*	*157*	*(7)*
- Impact of settlements	*-*	*-*	*-*	*-*	*-*	*-*
Return on plan assets not included in income statement	-	1,032	1,032	-	(101)	(101)
Change in demographic assumptions	1	-	1	-	-	-
Change in financial assumptions	(1,035)	-	(1,035)	202	-	202
Experience gains	65	-	65	53	-	53
Employer contributions	-	146	146	-	212	212
- Deficit reducing[1]	-	51	51	-	*117*	*117*
- Other	-	95	95	-	*95*	*95*
Employee contributions	(9)	9	-	(10)	10	-
Benefit payments	275	(275)	-	271	(271)	-
Changes in exchange rates	(81)	62	(19)	10	(8)	2
At 31 December	**(8,495)**	**8,356**	**(139)**	**(7,475)**	**7,247**	**(228)**
The above amounts are recognised in the financial statements as follows: (charge) / credit						
Other operating expenses	(238)	135	(103)	(277)	157	(120)
Cost of restructuring programme	2	-	2	2	-	2
Total amount recognised in income statement	**(236)**	**135**	**(101)**	**(275)**	**157**	**(118)**
Changes in financial assumptions	(1,035)	-	(1,035)	202	-	202
Return on plan assets not included in income statement	-	1,032	1,032	-	(101)	(101)
Change in demographic assumptions	1	-	1	-	-	-
Changes in exchange rates	(81)	62	(19)	10	(8)	2
Experience gains	65	-	65	53	-	53
Total remeasurements in OCI	**(1,050)**	**1,094**	**44**	**265**	**(109)**	**156**
Total past service cost comprises						
Cost of restructuring programme	2	-	2	2	-	2
Other operating expenses	-	-	-	(4)	-	(4)
Total	**2**	**-**	**2**	**(2)**	**-**	**(2)**

[1] *Deficit-reducing contributions consist principally of additional contributions related to the Group's Pensions Reviews.*

46 Retirement benefit obligations *(continued)*

The movement in the net defined benefit obligation over the year in respect of the Bank's defined benefit plans is as follows:

Bank	2019			2018		
	Present value of obligation €m	Fair value of plan assets €m	Surplus / (deficit) of plans €m	Present value of obligation €m	Fair value of plan assets €m	Surplus / (deficit) of plans €m
At 1 January	**(7,019)**	**6,886**	**(133)**	**(7,257)**	**6,861**	**(396)**
Cost of restructuring programme						
- Negative past service cost	2	-	2	2	-	2
Other operating expenses	(219)	127	(92)	(257)	148	(109)
- Current service cost	*(91)*	-	*(91)*	*(99)*	-	*(99)*
- Negative past service cost	-	-	-	*(4)*	-	*(4)*
- Interest (expense) / income	*(128)*	*127*	*(1)*	*(154)*	*148*	*(6)*
- Impact of settlements	-	-	-	-	-	-
Return on plan assets not included in income statement	-	1,008	1,008	-	(66)	(66)
Change in demographic assumptions	(1)	-	(1)	-	-	-
Change in financial assumptions	(966)	-	(966)	187	-	187
Experience gains / (losses)	50	-	50	49	-	49
Employer contributions	-	128	128	-	197	197
- Deficit-reducing[1]	-	39	39	-	*108*	*108*
- Other	-	89	89	-	*89*	*89*
Employee contributions	(8)	8	-	(8)	8	-
Benefit payments	263	(263)	-	255	(255)	-
Changes in exchange rates	(78)	59	(19)	10	(7)	3
At 31 December	**(7,976)**	**7,953**	**(23)**	**(7,019)**	**6,886**	**(133)**
The above amounts are recognised in the financial statements as follows: (charge) / credit						
Other operating expenses	(219)	127	(92)	(257)	148	(109)
Cost of restructuring programme	2	-	2	2	-	2
Total amount recognised in income statement	**(217)**	**127**	**(90)**	**(255)**	**148**	**(107)**
Changes in financial assumptions	(966)	-	(966)	187	-	187
Return on plan assets not included in income statement	-	1,008	1,008	-	(66)	(66)
Change in demographic assumptions	(1)	-	(1)	-	-	-
Changes in exchange rates	(78)	59	(19)	10	(7)	3
Experience gains / (losses)	50	-	50	49	-	49
Total remeasurements in other comprehensive income	**(995)**	**1,067**	**72**	**246**	**(73)**	**173**
Total past service cost comprises						
Cost of restructuring programme	2	-	2	2	-	2
Other operating expenses	-	-	-	(4)	-	(4)
Total	**2**	**-**	**2**	**(2)**	**-**	**(2)**

[1] *Deficit-reducing contributions are additional contributions related to the Group's Pensions Reviews.*

46 Retirement benefit obligations *(continued)*

The retirement benefit schemes' assets in Group and the Bank include BOIG plc shares amounting to €5 million (2018: €5 million) and one property occupied by Group companies to the value of €40 million (2018: €41 million).

	Group		Bank	
Asset breakdown	**2019 €m**	**2018 €m**	**2019 €m**	**2018 €m**
Liability Driven Investment (unquoted)	3,119	2,280	3,061	2,280
Cash and other (quoted)	835	1,016	776	993
Equities (quoted)	1,005	896	843	695
Property (unquoted)	810	724	781	696
Corporate bonds (quoted)	561	457	491	447
Private equities (unquoted)	402	357	402	357
Government bonds (quoted)	308	354	288	256
Property and infrastructure (quoted)	428	331	428	331
Senior secured loans (unquoted)	310	292	310	292
Hedge funds (unquoted)	300	279	300	279
Reinsurance (unquoted)	278	261	273	261
Total fair value of assets	**8,356**	**7,247**	**7,953**	**6,887**

Sensitivity of defined benefit obligation to key assumptions
The following tables set out how the defined benefit obligation would have been affected by changes in the significant actuarial assumptions that were reasonably possible.

	Group		Bank	
Impact on defined benefit obligations	**Impact on defined benefit obligation Increase / (decrease) 2019 €m**	**Impact on defined benefit obligation Increase / (decrease) 2018 €m**	**Impact on defined benefit obligation Increase / (decrease) 2019 €m**	**Impact on defined benefit obligation Increase / (decrease) 2018 €m**
RoI schemes				
Discount rate				
- Increase of 0.25%	(337)	(288)	(312)	(267)
- Decrease of 0.25%	363	310	336	287
Inflation rate				
- Increase of 0.10%	96	80	89	74
- Decrease of 0.10%	(94)	(70)	(87)	(64)
Salary growth				
- Increase of 0.10%	33	27	30	24
- Decrease of 0.10%	(33)	(26)	(29)	(23)
Life expectancy				
- Increase of 1 year	218	183	203	170
- Decrease of 1 year	(216)	(182)	(202)	(169)

46 Retirement benefit obligations *(continued)*

Impact on defined benefit obligations	Group		Bank	
	Impact on defined benefit obligation increase / (decrease) 2019 €m	Impact on defined benefit obligation increase / (decrease) 2018 €m	Impact on defined benefit obligation increase / (decrease) 2019 €m	Impact on defined benefit obligation increase / (decrease) 2018 €m
UK schemes				
Discount rate				
- Increase of 0.25%	(83)	(67)	(80)	(65)
- Decrease of 0.25%	90	72	86	70
RPI inflation				
- Increase of 0.10%	24	19	23	19
- Decrease of 0.10%	(21)	(17)	(20)	(16)
Salary growth				
- Increase of 0.10%	5	3	5	3
- Decrease of 0.10%	(5)	(5)	(5)	(4)
Life expectancy				
- Increase of 1 year	54	42	52	41
- Decrease of 1 year	(53)	(42)	(51)	(41)

While the defined benefit obligation sensitivity tables above shows the estimated impact of an individual assumption change, a change in one assumption could impact on other assumptions due to the relationship between assumptions.

Some of the reasonably possible changes in defined benefit obligation assumptions may have an impact on the value of the schemes' investment holdings. For example, the plans hold a proportion of their assets in corporate bonds. A fall in the discount rate as a result of lower corporate bond yields would be expected to lead to an increase in the value of these assets, thus partly offsetting the increase in the defined benefit obligation. The extent to which these sensitivities are managed is discussed further below.

Impact on plan assets	Group		Bank	
	Impact on plan assets increase / (decrease) 2019 €m	Impact on plan assets increase / (decrease) 2018 €m	Impact on plan assets increase / (decrease) 2019 €m	Impact on plan assets increase / (decrease) 2018 €m
All schemes				
Sensitivity of plan assets to a movement in global equity markets with allowance for other correlated diversified asset classes				
- Increase of 5.00%	102	90	93	79
- Decrease of 5.00%	(102)	(90)	(93)	(79)
Sensitivity of liability-matching assets to a 25bps movement in interest rates				
- Increase of 0.25%	(325)	(264)	(311)	(260)
- Decrease of 0.25%	344	280	330	276
Sensitivity of liability-matching assets to a 10bps movement in inflation rates				
- Increase of 0.10%	82	71	80	71
- Decrease of 0.10%	(80)	(70)	(78)	(69)

The table above sets out the estimated sensitivity of plan assets to changes in equity markets, interest rates and inflation rates. The sensitivity analysis is prepared by the independent actuaries calculating the defined benefit obligation under the alternative assumptions and the fair value of plan assets using alternative asset prices.

46 Retirement benefit obligations *(continued)*

Future cash flows
The plans' liabilities represent a long-term obligation and most of the payments due under the plans will occur several decades into the future.

The duration or average term to payment for the benefits due, weighted by liability for both the Group and Bank, is c.21 years for the Irish plans and c.21 years for the UK plans.

Expected employer contributions for 2020 are €127 million for the Group and €121 million for the Bank in respect of future service. This excludes any additional contributions arising from the 2013 Group Pensions Review. The remaining committed contributions from this Review are estimated to be €38.8 million for the BSPF and are payable before the end of 2020 in the form of cash and other suitable assets. Expected employee contributions for 2020 are €9 million for the Group and €8 million for the Bank.

Risks and risk management
The Group's defined benefit pension plans have a number of areas of risk.

The risks are considered from both a funding perspective, which drives the cash commitments of the Group, and from an accounting perspective, i.e. the extent to which such risks affect the amounts recorded in the Group's financial statements.

Changes in bond yields, interest rate and inflation risks, along with equity risk, are the defined benefit schemes' largest risks. From an accounting liability perspective, the schemes are also exposed to movements in corporate bond spreads. As part of its risk management, the largest Group sponsored pension scheme, the BSPF has invested 47% of its assets in a Liability Driven Investment (LDI) approach to help manage its interest rate and inflation risk.

The key areas of risk, and the ways in which the Group has sought to manage them, are set out below:

Asset volatility
The defined benefit pension plans hold a proportion of their assets in equities and other return-seeking assets. The returns on such assets tend to be volatile. For the purposes of the triennial valuation, the defined benefit liabilities are calculated using a discount rate set with reference to government bond yields, with allowance for additional return to be generated from the investment portfolio.

For measurement of the obligation in the financial statements under IAS 19, however, the defined benefit obligation is calculated using a discount rate set with reference to high-quality corporate bond yields.

The movement in the asset portfolio is not fully correlated with the movement in the two liability measures and this means that the funding level is likely to be volatile in the short-term, potentially resulting in short-term cash requirements and an increase in the net defined benefit deficit recorded on the balance sheet.

In order to limit the volatility in asset returns, the schemes' assets are well-diversified by investing in a range of asset classes, including listed equity, private equity, hedge funds, infrastructure, reinsurance, property, government bonds and corporate bonds.

The investment in bonds is discussed further below.

Changes in bond yields
The LDI approach invests in cash, government bonds, interest rate and inflation swaps, and other financial derivatives to create a portfolio which is both inflation-linked and of significantly longer duration than possible in the physical bond market. It also provides a closer match to the expected timing of cash flow / pension payments. The portfolio broadly hedges against movements in long-term interest rates although it only hedges a portion of the BSPF's interest rate risks. Furthermore, the portfolio does not hedge against changes in the credit spread on corporate bonds used to derive the accounting liabilities. However, the investment in corporate and government bonds offers a further degree of matching, i.e. the movement in assets arising from changes in bond yields partially matches the movement in the funding or accounting liabilities. In this way, the exposure to movements in bond yields is further reduced.

Inflation risk
The majority of the plans' benefit obligations are linked to inflation and higher inflation will lead to higher liabilities, although in most cases caps on the level of inflationary increases are in place to protect the plans against high inflation and the 2013 Group Pensions Review changes have further limited this exposure. The LDI portfolio broadly hedges against movements in inflation expectations although it only hedges a portion of the BSPF's inflation risks.

Furthermore, the portfolio does not protect against differences between expectations for eurozone average inflation and the fund's Irish inflation exposure.

Life expectancy
The majority of the plans' obligations are to provide a pension for the life of the member, which means that increases in life expectancy will result in an increase in the plans' liabilities.

Investment decisions are the responsibility of the Trustees and the Group supports the efficient management of risk including through the appointment of a Group Pensions Chief Investment Officer. The role of Group Pensions Chief Investment Officer is to advise and support the Trustees of the Group sponsored pension schemes in the design, implementation and management of investment strategy to meet the various scheme liabilities. The duties include, but are not limited to, the identification and management of risks such as the risk of insufficient asset returns, changing interest rates, inflation, FX risk, counterparty exposures, geographical risk, asset concentration risk, liquidity risk, regulatory risk, manager risk and longevity risk.

47 Subordinated liabilities

	Note	Group 2019 €m	Group 2018 €m	Bank 2019 €m	Bank 2018 €m
Undated loan capital					
The Governor and Company of the Bank of Ireland					
Stg£75 million 13⅜% Perpetual Subordinated Bonds	(a)	89	85	89	85
Bristol & West plc					
Stg£32.6 million 8⅛% Non-Cumulative Preference Shares	(b)	38	36	-	-
		127	**121**	**89**	**85**
Dated loan capital					
The Governor and Company of the Bank of Ireland					
€1,002 million 10% Fixed Rate Subordinated Notes 2020	(c)	207	214	207	214
Stg£197 million 10% Fixed Rate Subordinated Notes 2020	(c)	2	2	2	2
€250 million 10% Fixed Rate Subordinated Notes 2022	(d)	263	264	263	264
€750 million 4.25% Fixed Rate Reset Callable Subordinated Notes 2024	(e)	-	753	-	753
Stg£300 million 3.425% Fixed Rate Reset Callable Subordinated Notes 2027	(f)	352	330	352	330
US$500 million 4.425% Fixed Rate Reset Callable Subordinated Notes 2027	(f)	446	423	446	423
€300 million 2.775% Fixed Rate Reset Callable Subordinated Notes 2029	(f)	296	-	296	-
		1,566	**1,986**	**1,566**	**1,986**
Total subordinated liabilities		**1,693**	**2,107**	**1,655**	**2,071**
of which:					
Due to BOIG plc		1,094	753	1,094	753

Subordinated liabilities in issue at 31 December 2019

Undated loan capital
The principal terms and conditions of the subordinated liabilities which were in issue by the Group and the Bank in 2019 are set out below:

(a) The 13³/8% Perpetual Subordinated Bonds were revalued as part of the fair value adjustments on the acquisition by Bristol & West plc of the business of Bristol & West Building Society in July 1997. The Bank became the issuer of these bonds in 2007 in connection with the transfer of the business of Bristol & West plc to the Bank.

(b) These preference shares, which are non-redeemable, non-equity shares, rank equally amongst themselves as regards participation in profits and in priority to the ordinary shares of Bristol & West plc. Holders of the preference shares are entitled to receive, in priority to the holders of any other class of shares in Bristol & West plc, a non-cumulative preference dividend at a fixed rate per annum payable in equal half yearly instalments in arrears on 15 May and 15 November each year. This preference dividend will only be payable to the extent that payment can be made out of profits available for distribution as at each dividend payment date in accordance with the provisions of the UK Companies Acts.

On 1 October 2007 in connection with the transfer of the business of Bristol & West plc to the Bank, the Bank entered into a Guarantee and Capital Maintenance Commitment (the Guarantee) with respect to the preference shares. Under the terms of the Guarantee, the liability of Bristol & West plc in relation to the ongoing payment of dividends and any repayment of capital in relation to the preference shares that remained following the transfer of business would be protected. Under the Guarantee, the Bank agreed, subject to certain conditions, to (i) contribute capital to Bristol & West plc to the extent required to ensure that Bristol & West plc has sufficient distributable reserves to pay the dividends on the preference shares and to the extent required, repay the preference share capital and (ii) guarantee Bristol & West plc's obligations to make repayment of the dividends and preference share capital.

The Guarantee contains provisions to the effect that the rights of the Bank's creditors under the Guarantee are subordinated to (i) unsubordinated creditors and debtors of the Bank and (ii) subordinated creditors of the Bank other than those whose claims rank, or are expressed to rank, pari passu or junior to the payments under the Guarantee.

Dated loan capital
Dated loan capital instruments, which includes bonds and notes, constitute unsecured obligations of the Bank subordinated in right of payments to the claims of depositors and other unsubordinated creditors of the Bank and rank pari passu without any preference among themselves.

47 Subordinated liabilities *(continued)*

The table on the previous page provides a description of the dated loan capital, including:

- the currency of the issue;
- if the issue is fixed, floating or a combination of both; and
- maturity.

All of the dated notes in issue in 2019 were issued under the Bank's Euro Note Programme.

(c) €1,002 million 10% Fixed Rate Subordinated Notes 2020 and Stg£197 million 10% Fixed Rate Subordinated Notes 2020

On 12 February 2010, the Bank issued Euro and Sterling 10 year fixed rate subordinated notes with a coupon rate of 10%. The notes matured on 12 February 2020.

(d) €250 million 10% Subordinated Notes 2022

On 18 December 2012, the Bank issued ten year fixed rate notes with a coupon rate of 10% and a maturity date of December 2022. The notes rank pari passu with all other dated Bank subordinated debt.

(e) Fixed Rate Reset Callable Subordinated Notes 2024

On 11 June 2014, the Bank issued a €750 million 10 year (callable at the end of year five) Tier 2 capital instrument. The bond carried a coupon of 4.25%.

The debt was redeemed at par on the call date of 11 June 2019.

(f) Fixed rate reset callable subordinated notes issued to Bank of Ireland Group plc

On 19 September 2017, the Bank completed a dual tranche issuance of Stg£300 million and US$500 million 10 year (callable at the end of year five) Tier 2 capital instruments to its parent company, BOIG plc. The sterling bond has a coupon of 3.425% and the US dollar bond has a coupon of 4.425%.

On 14 October 2019, the Bank issued a €300 million 10 year (callable at the end of year five) Tier 2 capital instrument to its parent company, BOIG plc. The bond carries a coupon of 2.775%.

Following the implementation in Ireland of the EU (Bank Recovery and Resolution) Regulations 2015, these instruments are loss absorbing at the point of non-viability and Noteholders acknowledge that the notes may be subject to the exercise of Irish statutory loss absorption powers by the relevant resolution authority. Redemption in whole but not in part is at the option of the Bank upon (i) regulatory reasons (capital event), or (ii) tax reasons (additional amounts payable on the notes). Any redemption before the maturity date is subject to such approval by the Competent Authority, namely ECB or SRB as may be required by the CRR and / or such other laws and regulations which are applicable to the Bank.

48 Capital stock

Ordinary Stock

At 31 December 2019 and 2018, all of the Bank's 32,363,275,074 units of ordinary stock of nominal value of €0.05 each were held by BOIG plc.

All units of ordinary stock carry the same voting rights.

There were no outstanding options on units of ordinary stock under employee schemes as at 31 December 2019 or 2018.

Preference stock - Stg£1 each and €1.27 each

As at 31 December 2019 and 2018, 1,876,090 units of sterling preference stock and 3,026,598 units of euro preference stock were in issue.

The preference stock is non-redeemable. The holders of preference stock are entitled to receive at the discretion of the Bank a non-cumulative preferential dividend, which in the case of the sterling preference stock is payable in sterling, in a gross amount of Stg£1.2625 per unit per annum and in the case of euro preference stock is payable in euro in a gross amount of €1.523686 per unit per annum, in equal semi-annual instalments, in arrears, on 20 February and 20 August in each year.

On a winding up of, or other return of capital, by the Bank (other than on a redemption of stock of any class in the capital of the Bank) the holders of preference stock will be entitled to receive

Group and Bank Authorised	2019	2018
Eur€	**€m**	**€m**
90 billion units of ordinary stock of €0.05 each	4,500	4,500
228 billion units of deferred stock of €0.01 each	2,280	2,280
100 million units of non-cumulative preference stock of €1.27 each	127	127
100 million units of undesignated preference stock of €0.25 each	25	25
3.5 billion units of non-cumulative 2009 Preference Stock of €0.01 each	35	35
Stg£	**£m**	**£m**
100 million units of non-cumulative preference stock of Stg£1 each	100	100
100 million units of undesignated preference stock of Stg£0.25 each	25	25
US$	**$m**	**$m**
8 million units of non-cumulative preference stock of US$25 each	200	200
100 million units of undesignated preference stock of US$0.25 each	25	25

48 Capital stock *(continued)*

an amount equal to the amount paid up or credited as paid up on each unit of the preference stock held (including the premium) out of the surplus assets available for distribution to the Bank's members. Subject to the Bank's Bye-Laws, the preference stockholders may also be entitled to receive a sum in respect of dividends payable.

The preference stockholders are not entitled to vote at any General Court except in certain exceptional circumstances. Such circumstances did not arise during 2019 and consequently the preference stockholders were not entitled to vote at the AGC held on 14 May 2019.

Group and Bank Allotted and fully paid	2019	2018
Eur€	**€m**	**€m**
32.363 billion units of ordinary stock of €0.05 each (2018: 32.363 billion units)	1,618	1,618
1.9 million units of non-cumulative preference stock of Stg£1 each	3	3
3.0 million units of non-cumulative preference stock of €1.27 each	4	4
	1,625	**1,625**

49 Other equity instruments - Additional tier 1

	Group		Bank	
	2019 €m	**2018 €m**	**2019 €m**	**2018 €m**
Balance at the beginning and at the end of the year	740	740	740	740

In June 2015, the Bank issued AT1 securities with a par value of €750 million at an issue price of 99.874%.

From 1 January 2019, any coupons paid on the Bank's AT1 securities are recognised directly in equity with the income tax credit effect recognised in the income statement. In 2018, the coupon paid was recognised directly in equity together with the related income tax credit, see page 70 for further information.

The principal terms of the AT1 securities are as follows:

- the securities constitute direct, unsecured and subordinated obligations of the Bank, rank behind Tier 2 instruments, pari passu with preference shareholders and in priority to ordinary shareholders;
- the securities bear a fixed rate of interest of 7.375% until the first call date (on 18 June 2020). After the initial call date, in the event that they are not redeemed, the AT1 securities will bear interest at rates fixed periodically in advance for five-year periods based on market rates at that time;
- the Bank may elect at its sole and full discretion to cancel (in whole or in part) the interest otherwise scheduled to be paid on any interest payment date;
- the securities have no fixed redemption date, and the security holders will have no right to require the Bank to redeem or purchase the securities at any time;
- the Bank may, in its sole and full discretion but subject to the satisfaction of certain conditions elect to redeem all (but not some only) of the securities on the initial call date or semi-annually on any interest payment date thereafter. In addition, the AT1 securities are repayable, at the option of the Bank, due to certain regulatory or tax reasons. Any repayments require the prior consent of the regulatory authorities;
- the securities will be written down together with any accrued but unpaid interest if the Group's CET1 ratio or the Bank's CET1 ratio (calculated on an individual consolidated basis) falls below 5.125%; and
- subsequent to any write-down event the Bank may, at its sole discretion, write-up some or all of the written-down principal amount of the AT1 instrument provided regulatory capital requirements and certain conditions are met.

50 Cash and cash equivalents

Cash and cash equivalents are classified as amortised cost financial assets, and measuring the impairment loss allowance on cash and cash equivalents at amortised cost on a 12 month or lifetime ECL approach as appropriate.

Cash and cash equivalents comprise cash in hand and balances with central banks and banks which can be withdrawn on demand. It also comprises balances with an original maturity of less than three months.

The Group is required to hold an average balance with the Central bank over the published ECB reserve maintenance (six weeks) periods in order to meet its minimum reserve requirement, which at December 2019 was €681 million (2018: €621 million).

Cash and cash equivalents for the Group in 2019 increased by €2,977 million during the year including an increase of €250 million due to the effect of foreign currency exchange translation (2018: reduced by €1,850 million including a decrease of €27 million due to the effect of foreign currency translation).

There has been no significant change in the impairment loss allowance on cash and balances at central banks during the year. The composition of cash and balances at central banks is included in other financial assets set out in note 27 on page 155.

For the purposes of the cash flow statement, cash and cash equivalents comprise the following balances:

	2019 €m	2018 €m
Cash and balances at central banks	8,327	6,035
Less impairment loss allowance on cash and balances at central banks	(2)	(2)
Cash and balances at central banks net of impairment loss allowance	**8,325**	**6,033**
Loans and advances to banks (with an original maturity of less than 3 months)	3,001	2,316
Cash and cash equivalents at amortised cost	**11,326**	**8,349**

Cash and balances at central banks (net of impairment loss allowance) is made up as follows:

	2019 €m	2018 €m
Republic of Ireland (Central Bank of Ireland)	5,096	2,582
United Kingdom (Bank of England)	2,526	2,872
United States (Federal Reserve)	264	143
Other (cash holdings)	439	436
Total	**8,325**	**6,033**

51 Changes in liabilities arising from financing activities

Group **2019**	Subordinated liabilities €m	Interest on subordinated liabilities €m	Lease liabilities €m	Interest on lease liabilities €m	Dividend payable €m
At beginning of year	2,107	53	-	-	800
Impact of adopting IFRS 16 on 1 January 2019 (note 60)	-	-	637	-	-
Cash flows	(450)	(109)	(69)	(15)	(173)
- Proceeds from issue of subordinated liabilities	*300*	-	-	-	-
- Repayment of subordinated liabilities	*(750)*	-	-	-	-
- Interest paid on subordinated liabilities	-	*(109)*	-	-	-
- Payment of lease liability	-	-	*(69)*	-	-
- Interest paid on lease liabilities	-	-	-	*(15)*	-
- Partial remittance of dividend payable to Parent	-	-	-	-	*(173)*
Non-cash changes	36	108	(3)	15	-
- Charge to income statement	-	*108*	-	*15*	-
- Exchange adjustments	*32*	-	*(1)*	-	-
- Lease liability adjustment	-	-	*(5)*	-	-
- Additions to lease liabilities	-	-	*3*	-	-
- Fair value hedge adjustments	*3*	-	-	-	-
- Other movements	*1*	-	-	-	-
At end of year	**1,693**	**52**	**565**	**-**	**627**

51 Changes in liabilities arising from financing activities *(continued)*

Group 2018	Subordinated liabilities €m	Interest on subordinated liabilities €m	Lease liabilities €m	Interest on lease liabilities €m	Dividend on ordinary stock €m
At beginning of year	2,110	49	-	-	800
Cash flows					
- Proceeds from issue of subordinated liabilities	-	-	-	-	-
- Repayment of subordinated liabilities	-	-	-	-	-
- Interest paid on subordinated liabilities	-	(117)	-	-	-
Non-cash changes					
- Charge to income statement	-	121	-	-	-
- Fair value hedge adjustments	(21)	-	-	-	-
- Exchange adjustments	18	-	-	-	-
- Other movements	-	-	-	-	-
At end of year	**2,107**	**53**	**-**	**-**	**800**

This table above sets out the changes in liabilities arising from financing activities between cash and non-cash items. For more information on subordinated liabilities, see note 47. Interest accrued on subordinated liabilities is included within other liabilities. For more information on lease liabilities, see note 61.

52 Related party transactions

Related parties in the Group include the parent company, subsidiary undertakings, associated undertakings, joint arrangements, post-employment benefits, the State, KMP and connected parties. A number of banking transactions are entered into by the Bank with its subsidiaries and parent in the normal course of business. These include extending secured and unsecured loans, investing in debt securities issued by subsidiaries, taking of deposits and undertaking foreign currency transactions.

(a) Bank of Ireland (UK) plc

The Bank guarantees amounts owing by Bank of Ireland (UK) plc to the BoE and its subsidiary, The BoE Asset Purchase Facility Fund Limited.

(b) Associates, joint ventures and joint operations

The Group provides to and receives from its associates, joint ventures and joint operations certain banking and financial services, which are not material to the Group, on similar terms to third party transactions. These include loans, deposits and foreign currency transactions. The amounts outstanding during 2019 are set out in notes 26 and 39.

(c) Pension funds

The Group provides a range of normal banking and financial services, which are not material to the Group, to various pension funds operated by the Group for the benefit of its employees (principally to the BSPF), which are conducted on similar terms to third party transactions. Details on the Group's contributions to the pension funds are set out in note 46.

The Group occupies one property owned by the BSPF. At 31 December 2019, the total value of this property was €40 million (2018: €41 million). In 2019, the rental income paid to BSPF was €2 million (2018: €2 million).

At 31 December 2019, the BSPF assets included BOIG plc shares amounting to €5 million (2018: €5 million).

(d) Transactions with the State

The Group considers that the State is a related party under IAS 24 as it is in a position to exercise significant influence over the Group.

Details of individually or collectively significant transactions with the State and entities under its control or joint control are set out in note 53.

(e) Transactions with Directors and Key Management Personnel

(i) Loans to Directors

The following information is presented in accordance with the Companies Act 2014. For the purposes of the Companies Acts disclosures, Directors means the Court of Directors, any past Directors who were Directors during the relevant period and Directors of the parent company, BOIG plc.

Directors' emoluments are provided within this note.

Where no amount is shown in the tables below, this indicates either a credit balance, a balance of €nil, or a balance of less than €500. The value of arrangements at the beginning and end of the financial year as stated below in accordance with Section 307 of the Companies Act 2014, expressed as a percentage of the net assets of the Group at the beginning and end of the financial year, is less than 1%.

52 Related party transactions *(continued)*

Group Companies Acts disclosure Loans	Balance as at 1 January 2019[1] €'000	Balance as at 31 December 2019[1] €'000	Aggregate maximum amount outstanding during the year ended 31 December 2019[2] €'000	Repayments during the year ended 31 December 2019[3] €'000
Directors at 31 December 2019				
E Bourke				
Credit card total	3	6	5	-
Current account total	-	-	-	-
Total	**3**	**6**	**5**	**-**
P Kennedy				
Credit card total	2	5	5	-
Current account total	-	-	-	-
Total	**2**	**5**	**5**	**-**
F McDonagh				
Mortgage total	981	953	980	56
Credit card total	-	2	4	-
Total	**981**	**955**	**984**	**56**
F Muldoon				
Mortgage total	103	82	103	24
Credit card total	4	7	8	-
Current account total	-	-	-	-
Total	**107**	**89**	**111**	**24**
E Fitzpatrick				
Loan total	28	20	28	8
Total	**28**	**20**	**28**	**8**
M Greene				
Mortgage total	29	24	29	7
Total	**29**	**24**	**29**	**7**
P Mulvihill				
Credit card total	-	-	-	-
Current account total	-	-	-	-
Total	**-**	**-**	**-**	**-**
Directors no longer in service at 31 December 2019				
A Keating				
Credit card total[4]	2	5	12	-
Total	**2**	**5**	**12**	**-**

P Haren, K Atkinson (resigned 14 May 2019), R Goulding, I Buchanan and S Pateman had no loans from the Group in 2019. No advances were made during the year. No amounts were waived during 2019.

None of the loans were credit impaired as at 31 December 2019 or at 31 December 2018. There is no interest which having fallen due on the above loans has not been paid in 2019 (2018: €nil).

All Directors have other transactions with the Bank. The nature of these transactions includes investments, pension funds, deposits, general insurance, life assurance and current accounts with credit balances. The relevant balances on these accounts are included in the aggregate figure for deposits on page 226.

Other than as indicated, all loans to Directors are made in the ordinary course of business on substantially the same terms, including interest rates and collateral, as those prevailing at the time for similar transactions with other persons unconnected with the Group and of similar financial standing and do not involve more than normal risk of collectability.

[1] *Balances include principal and interest.*
[2] *These figures include credit card exposures at the maximum statement balance. While the closing balance includes interest accrued and interest paid, the maximum balance includes interest paid only.*
[3] *Repayments include principal and interest; Revolving Credit Facilities are not included.*
[4] *On terms, including interest rates and collateral, similar to those available to staff generally.*

52 Related party transactions *(continued)*

Group Companies Acts disclosure Loans	Balance as at 1 January 2018[1] €'000	Balance as at 31 December 2018[1] €'000	Aggregate maximum amount outstanding during the year ended 31 December 2018[2] €'000	Repayments during the year ended 31 December 2018[3] €'000
Directors at 31 December 2018				
E Bourke				
Credit card total	2	3	6	-
Current account total	-	-	-	-
Total	**2**	**3**	**6**	**-**
A Keating				
Credit card total[4]	-	2	6	-
Total	**-**	**2**	**6**	**-**
P Kennedy				
Mortgages total	2,981	-	2,980	2,988
Credit card total	1	2	14	-
Current account total	-	-	-	-
Total	**2,982**	**2**	**2,994**	**2,988**
F McDonagh				
Mortgage total	-	981	986	14
Total	**-**	**981**	**986**	**14**
F Muldoon				
Mortgage total	135	103	134	36
Credit card total	9	4	15	-
Total	**144**	**107**	**149**	**36**
P Mulvihill				
Credit card total	-	-	-	-
Current account total	-	-	-	-
Total	**-**	**-**	**-**	**-**

[1] *Balances include principal and interest.*
[2] *These figures include credit card exposures at the maximum statement balance. While the closing balance includes interest accrued and interest paid, the maximum balance includes interest paid only.*
[3] *Repayments include principal and interest; Revolving Credit Facilities are not included.*
[4] *On terms, including interest rates and collateral, similar to those available to staff generally.*

52 Related party transactions *(continued)*

(ii) Loans to connected persons on favourable terms

Group 2019 Loans to connected persons[1] on favourable terms[2]	Balance as at 31 December 2019[3] €'000	Maximum amounts outstanding during 2019[4] €'000	Number of persons as at 31 December 2019	Maximum number of persons during 2019
E Bourke	2	6	2	2

Group 2018 Loans to connected persons[1] on favourable terms[2]	Balance as at 31 December 2018[3] €'000	Maximum amounts outstanding during 2018[4] €'000	Number of persons as at 31 December 2018	Maximum number of persons during 2018
E Bourke	1	4	2	2

(iii) Loans to connected persons - Central Bank licence condition disclosures

Under its banking licence, the Bank is required to disclose in its annual audited financial statements details of:

- the aggregate amount of lending to all connected persons, as defined in Section 220 of the Companies Act 2014; and
- the aggregate maximum amount outstanding during the year for which those financial statements are being prepared.

Disclosure is subject to certain de minimis exemptions and to exemptions for loans relating to principal private residences where the total of such loans to an individual connected person does not exceed €1 million.

The following information is presented in accordance with this licence condition.

Group 2019 Connected persons[1] of the following Directors	Balance as at 31 December 2019[3] €'000	Maximum amounts outstanding during 2019[4] €'000	Number of persons as at 31 December 2019	Maximum number of persons during 2019
Persons connected to P Kennedy	2,256	3,531	1	1
Persons connected to E Bourke[5]	-	355	2	2

Group 2018 Connected persons[1] of the following Directors	Balance as at 31 December 2018[3] €'000	Maximum amounts outstanding during 2018[4] €'000	Number of persons as at 31 December 2018	Maximum number of persons during 2018
Persons connected to P Kennedy	1,574	1,656	1	1
Persons connected to F Muldoon	-	-	-	-
Persons connected to E Bourke[5]	508	594	2	2

[1] *Connected persons of Directors are defined by Section 220 of the Companies Act 2014.*
[2] *Terms similar to those available to staff generally.*
[3] *Balance includes principal and interest.*
[4] *These figures include credit card exposures at the maximum statement balance. While the closing balance includes interest accrued and interest paid, the maximum balance includes interest paid.*
[5] *All loans to person connected to E Bourke were below disclosure thresholds.*

52 Related party transactions *(continued)*

(iv) Key management personnel - loans and deposits (IAS 24)
For the purposes of IAS 24 'Related party disclosures', the Group has 30 KMPs (2018: 28) which comprise the Directors, the members of the GEC, the Group Secretary and any past KMP who was a KMP during the relevant period. In addition to Executive Directors, the GEC comprises Chief Executive Markets and Treasury, Chief Executive - Retail (UK), Chief Marketing Officer, Chief People Officer, Chief Executive - Corporate Banking, Chief Executive - Retail Ireland, Group Chief Financial Officer, Group Chief Risk Officer, Chief Operating Officer, Chief Strategy Officer. KMP, including Directors, hold products with Group companies in the ordinary course of business.

Other than as indicated, all loans to NEDs are made in the ordinary course of business on substantially the same terms, including interest rates and collateral, as those prevailing at the time for similar transactions with other persons, and do not involve more than the normal risk of collectability. Loans to KMP other than NEDs are made on terms similar to those available to staff generally and / or in the ordinary course of business on normal commercial terms.

The aggregate amounts outstanding, in respect of all loans, quasi-loans and credit transactions between the Bank and its KMP, as defined above, together with members of their close families and entities influenced by them are shown in the following table.

Group IAS 24 Disclosures Key management personnel	Balance as at 1 January 2019[1,2] €'000	Balance as at 31 December 2019[1] €'000	Maximum amounts outstanding during 2019[3] €'000	Total number of relevant KMP as at 1 January 2019	Total number of relevant KMP as at 31 December 2019
Loans	4,635	3,381	3,963	21	21
Deposits	11,479	6,736	11,027	28	27

Group IAS 24 Disclosures Key management personnel	Balance as at 1 January 2018[1,2] €'000	Balance as at 31 December 2018[1] €'000	Maximum amounts outstanding during 2018[3] €'000	Total number of relevant KMP as at 1 January 2018	Total number of relevant KMP as at 31 December 2018
Loans	6,031	4,635	8,076	16	21
Deposits	6,421	11,479	19,956	23	28

KMP have other protection products with the Bank. The nature of these products includes mortgage protection, life assurance and critical illness cover. It also includes general insurance products which are underwritten by a number of external insurance companies and for which the Bank acts as an intermediary only. None of these products has any encashment value at 31 December 2019 or 31 December 2018.

Included in the above IAS 24 loan disclosure figures are loans to KMP and close family members of KMP on preferential staff rates, amounting to €24,938 (2018: €47,785).

None of the loans were credit-impaired at 31 December 2019 or at 31 December 2018. There was no interest which having fallen due on the above loans has not been paid (2018: €nil).

There are no guarantees entered into by the Bank in favour of KMP of the Bank and no guarantees in favour of the Bank have been entered into by the KMP of the Bank.

(v) Compensation of KMP
Details of compensation paid to KMP are provided below:

Group Remuneration	2019 €'000	2018 €'000
Salaries and other short-term benefits[4]	8,275	8,936
Post employment benefits[5]	796	767
Termination benefits[6]	596	1,065
Total	**9,667**	**10,768**
Number of key management personnel	30	28

[1] *Balance includes principal and interest.*
[2] *The opening balance includes balances and transactions with KMP who retired during 2018 and are not related parties during 2019. Therefore these key management personnel are not included in the maximum amounts outstanding.*
[3] *These figures include credit card exposures at the maximum statement balance. In all cases key management personnel have not exceeded their approved limits. The maximum approved credit limit on any credit card held by key management personnel is €25,400 (2018: €30,000). The maximum amount outstanding was calculated using the maximum balance on each account. The highest maximum outstanding liability for any member of key management personnel, close family and entities influenced by them did not exceed €3.5 million during 2019 (2018: €2.9 million). In some cases with investment type products (i.e. funds based products, life assurance and other policies) the maximum balance amounts were not available, in which case the greater of the balance at the start of the year and the balance at the end of the year has been included as the maximum balance amount. While the closing balance includes interest accrued and interest paid, the maximum balance includes interest paid.*
[4] *Comprises gross salary, Employer Pay Related Social Insurance contributions, fees, cash in lieu of pension, car allowance and other short-term benefits paid in the year.*
[5] *This comprises Employer contributions paid to pension funds.*
[6] *These include, inter alia, contractual payments due in lieu of notice periods.*

52 Related party transactions *(continued)*

(vi) Directors' remuneration

Details of Directors' remuneration are provided in this table. No other fees or bonuses were paid to Directors during 2019 (2018: €nil). No stock options were granted or exercised during 2019 (2018: €nil).

The NEDs fees are paid by or receivable from BOIG plc.

Group	2019 €'000	2018 €'000
Fees	673	651
Other emoluments	1,976	1,999
Post employment benefits[1]		
- Defined benefit plans	53	45
- Defined contribution plans	8	8
Total Directors' remuneration	**2,710**	**2,703**

53 Summary of relations with the State

The Group considers that the State is a related party under IAS 24 as it is in a position to exercise significant influence over the Group.

A relationship framework between the Minister for Finance and the Bank has been in place since 30 March 2012. The purpose of this framework is to provide the basis on which the relationship shall be governed. This framework is available on the Department of Finance website.

(a) Guarantee schemes

Credit Institutions (Eligible Liabilities Guarantee) Scheme 2009

Although the Group no longer has any guaranteed liabilities under the Eligible Liabilities Guarantee (ELG) Scheme, the ELG Scheme shall continue to exist until terminated by the Minister for Finance. Pending that termination, the Bank, BoIMB and Bank of Ireland (UK) plc continue to be bound by the terms of the ELG Scheme including the provision of certain covenants and an indemnity for the costs of the ELG Scheme in favour of the Minister pursuant to the Scheme documents of the ELG Scheme. No fees were payable in respect of the year ended 2019 (2018: €nil)

European Communities Deposit Guarantee Schemes Regulations 2015

Details of the deposits protected by these schemes are set out in note 39.

(b) National Asset Management Agency Investment DAC

The Group, through its wholly-owned subsidiary NIAC, holds 17 million B shares in National Asset Management Agency Investment DAC (NAMAID), corresponding to one-third of the 51 million B shares issued by NAMAID, acquired at a cost of €17 million. NAMAID also issued 49 million A shares to NAMA. As a result the Group holds 17% of the total ordinary share capital of NAMAID.

NAMAID is a holding company and its subsidiaries include the entities to which NAMA Participating Institutions transferred eligible bank assets and which issued the NAMA senior bonds and NAMA subordinated debt as consideration for those assets. The A shares and B shares generally rank equally, except as otherwise provided in the Articles of Association of NAMAID. As holder of the A shares, NAMA has veto rights in relation to: the declaration of dividends; the appointment or removal of Directors; the exercise of voting rights in respect of any subsidiary of NAMAID and the appointment of a Chairman. A holder of the B shares may not sell the shares without the consent of NAMA.

On a winding-up, the return on B shares is capped at 110% of the capital invested, (€19 million in the case of the Group), and the maximum loss that may be suffered is limited to the original amount invested (€17 million in the case of the Group). A discretionary non-cumulative dividend on the capital invested may be paid on an annual basis and is limited to the yield on ten year State bonds. A dividend of €90,780 was received by the Group on 31 March 2019 (31 March 2018: €151,470).

(c) Other transactions with the State and entities under its control or joint control

In addition to the matters set out above, the Group enters into other transactions in the normal course of business with the State, its agencies and entities under its control or joint control. This includes transactions with AIB, Permanent TSB Group Holdings plc, Government departments, local

Group	2019 €m	2018 €m
Assets		
Unguaranteed senior bonds issued by AIB	196	232
Unguaranteed subordinated bonds issued by AIB	11	15
NAMA subordinated bonds (note 21)	73	76
Bonds issued by the State	5,790	5,472
Other financial assets at fair value through the profit and loss		
Bonds issued by the State	263	245
Loans and advances to banks		
AIB	3	17
Liabilities		
Customer Accounts		
State (including agencies & entities under its control or joint control)	932	1,070
Debt securities in issue		
State (including agencies & entities under its control or joint control)	25	134

[1] *The amounts shown relate to post employment benefits accrued for one Director during 2019 (2018: two).*

53 Summary of relations with the State *(continued)*

authorities, county councils, embassies, NAMA, NAMAID and the NTMA which are all considered to be 'controlled' by the Government. These transactions include the provision of banking services, including money market transactions, dealing in government securities and trading in financial instruments issued by certain banks. The amounts outstanding at 31 December 2019 and 2018 in respect of these transactions, which are considered individually significant, are set out above.

The Group did not dispose of any NAMA subordinated bonds during the year (2018: €211 million).

(d) Irish bank levy

The Finance Act (No 2) 2013 introduced a bank levy on certain financial institutions, including the Group. An income statement charge is recognised annually on the date on which all of the criteria set out in the legislation are met. The Finance Act 2019, enacted in December 2019, revised the basis on which the levy would be calculated for the years 2019 to 2021. The revised levy currently equals 170% of each financial institution's Deposit Interest Retention Tax (DIRT) payments in a particular year with the revised levy for 2019 and 2020 to be based on the DIRT payments made in 2017 and the revised levy for 2021 to be based on the DIRT payments made in 2019. The annual levy paid by the Group in October 2019 was €35 million (October 2018: €29 million).

54 Principal undertakings

The Parent company of the Group is The Governor and Company of the Bank of Ireland (the 'Bank').

The principal Group undertakings for 2019 were:

Group Name	Principal activity	Registered office	Country of incorporation	Statutory year end
Bank of Ireland (UK) plc[1]	Retail financial services	Bow Bells House, 1 Bread Street, London, EC4M 9BE	England and Wales	31 December
New Ireland Assurance Company plc	Life assurance business	5-9 Frederick Street South, Dublin 2	Ireland	31 December
Bank of Ireland Mortgage Bank[1]	Mortgage lending and mortgage covered securities	40 Mespil Road, Dublin 4	Ireland	31 December
First Rate Exchange Services Limited[2]	Foreign exchange	Great West House, Great West road, Brentford, London, TW8 9DF	England and Wales	31 March
N.I.I.B. Group Limited	Personal finance and leasing	1 Donegall Square South, Belfast, BT1 5LR	Northern Ireland	31 December

All the Group undertakings are included in the consolidated financial statements. Unless stated otherwise, the Group owns 100% of the equity of the principal Group undertakings and 100% of the voting shares of all these undertakings.

In presenting details of the principal subsidiary undertakings, the exemption permitted by Section 316 of the Companies Act 2014 has been availed of and the Bank will annex a full listing of Group undertakings to its annual return to the Companies Registration Office.

Bank of Ireland Mortgage Bank

BoIMB's principal activities are the issuance of Irish Residential mortgages and mortgage covered securities in accordance with the Asset Covered Securities Act 2001 and the Asset Covered Securities (Amendment) Act 2007. BoIMB asset covered securities may be purchased by the Bank and other members of the Group or third parties.

In 2019, the total amount outstanding in respect of mortgage covered securities issued was €7.4 billion (2018: €8.3 billion).

In 2019, the total amount of principal outstanding in the mortgage covered pool including mortgage assets and cash was €11.5 billion (2018: €12.8 billion).

BoIMB issues other debt securities under BoIMB's obligation to the CBI within the terms of the Special Mortgage Backed Promissory Note programme. At 31 December 2019, BoIMB had no such debt securities in issue (2018: €nil).

[1] *Direct subsidiary of The Governor and Company of the Bank of Ireland.*
[2] *This entity is a subsidiary of First Rate Exchange Services Holdings Limited, a joint venture with the UK Post Office, in which the Group holds 50% of the equity of the business.*

55 Interests in other entities

(a) General

The Group holds ordinary shares and voting rights in a significant number of entities. Management has assessed its involvement in all such entities in accordance with the definitions and guidance in:
- IFRS 10 'Consolidated financial statements';
- IFRS 11'Joint arrangements';
- IAS 28 'Investments in associates and joint ventures'; and
- IFRS 12 'Disclosure of interests in other entities'.

See Group accounting policies on page 82.

(b) Significant restrictions on the Group's ability to access or use the assets and settle the liabilities of the Group

Regulated banking and insurance subsidiaries are required to maintain minimum regulatory liquidity and solvency ratios and are subject to other regulatory restrictions that may impact on transactions between these subsidiaries and the Company, including on the subsidiaries' ability to make distributions.

Certain transactions between Bank of Ireland (UK) plc and the Bank are subject to regulatory limits and approvals agreed with the PRA. Total assets of Bank of Ireland (UK) plc at 31 December 2019 were €31.7 billion (2018: €29.9 billion) and liabilities were €29.3 billion (2018: €27.6 billion).

The activities of BoIMB are subject to the Asset Covered Securities Act 2001 to 2007 which imposes certain restrictions over the assets of BoIMB. Total assets of BoIMB at 31 December 2019 were €19.8 billion (2018: €19.6 billion) and liabilities were €18.3 billion (2018: €18.0 billion).

The Group's life assurance entity, NIAC, is required to hold shareholder equity that exceeds a SCR, see note 41 for details. In addition, the Group's Isle of Man insurance entity is required to hold shareholder equity that exceeds the solvency requirements specified by the Isle of Man Financial Services Authority.

Under Section 357 (1)(b) of the Companies Act 2014, the Bank has given an irrevocable guarantee to meet the liabilities, commitments and contingent liabilities entered into by certain Group undertakings. At 31 December 2019, the commitments of these undertakings amounted to €62 million (2018: €132 million).

(c) Consolidated structured entities

In the case of structured entities, in considering whether it controls the investee, the Group applies judgement around whether it has the ability to direct the relevant activities, has exposure or rights to variable returns from its involvement with the investee and has the ability to use its power to affect the amount of its returns. The Group considers it has control over the investee in the following situations:
- securitisation vehicles whose purpose is to finance specific loans and advances to customers; or
- defeasance companies set up to facilitate big-ticket leasing transactions.

In the case of some venture capital investments, in considering whether it controls the investee the Group applies judgement around whether it has the ability to direct the relevant activities, has exposure or rights to variable returns from its involvement with the investee and has the ability to use its power to affect the amount of its returns. The Group may hold 50% or more of the voting power of an entity, but has been considered to have significant influence, rather than control of the entity because the Group is not involved in directing the relevant activities of the entity and does not have the right to remove the manager of the entity.

In each case the Group considers that it has power over the entity, is exposed or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity, even though the Group normally owns less than half of the voting rights of those entities.

The Group does not consider it controls an investee when:
- the Group's only involvement in the arrangement is to administer transactions, for which the Group receives a fixed fee, on the basis that the Group is acting as an agent for the investors; or
- an entity is in the process of being liquidated, on the basis that the entity is controlled by the liquidator.

The Group holds interests in a number of structured entities (Brunel Residential Mortgage Securitisation No. 1 plc, Bowbell No. 1 plc, Bowbell No 2 plc) whose purpose is to acquire mortgage loans and other financial assets and issue mortgage backed securities. Bowbell No 1 plc redeemed its outstanding debt securities in November 2018. Bowbell No 2 plc issued new debt securities in June 2019. All of the assets and liabilities of these entities are restricted. Total assets amounted to €3.5 billion (2018: €1.1 billion) and liabilities amounted to €3.5 billion (2018: €1.0 billion).

In 2016, the Group entered into a credit default swap (CDS) transaction transferring a portion of the credit risk on a reference portfolio of performing Irish SME and corporate exposures to Grattan Securities DAC (Grattan). The Group delivered notice of its intention to call the transaction during December 2019 and the transaction was terminated during January 2020.

During 2017, the Group entered into a further CDS transaction transferring a portion of the credit risk on a reference portfolio of performing leveraged acquisition finance exposures to Mespil Securities DAC (Mespil). During 2019, the Group transferred an additional portion of the credit risk on the portfolio to Mespil.

In 2019, the Group entered into a credit protection deed (CPD) transaction transferring a portion of the credit risk on a reference portfolio of performing loans originated by the Group's Corporate Banking team to Vale Securities Finance DAC (Vale).

No assets or liabilities were transferred to Grattan, Mespil or Vale as part of the transactions. Grattan, Mespil and Vale each cash collateralised their exposure under the respective transactions through the issue of credit linked notes to third party investors. The protection provided by Grattan matured in 2020, while that provided by Mespil matures in 2025 and Vale matures in 2029.

In relation to these entities, there are no contractual arrangements that require the Group to provide financial support. In 2019 and 2018 the Group did not provide financial or other support, nor does it expect or intend to do so.

55 Interests in other entities *(continued)*

All of these entities are consolidated in the Group's financial statements.

(d) Treatment of changes in control of a subsidiary during the reporting period

From time to time, the Group may wind up a wholly owned company. During this process, the Group voluntarily appoints a liquidator to manage the winding up of relevant entities. Upon appointment of the liquidator, the Group is considered to have lost control of the companies and accounts for this loss of control as a disposal. In accordance with IAS 21, the Group must reclassify net cumulative FX gains / losses relating to these companies from the FX reserve to the income statement. In 2019, €4 million loss was transferred (2018: €4 million gain) (note 18).

(e) Joint arrangements

A joint arrangement is an arrangement of which two or more parties have joint control i.e. contractually agreed sharing of control of an arrangement where decisions about the relevant activities require the unanimous consent of the parties sharing control. These arrangements are identified by reference to the power sharing agreements, ensuring that unanimous consent of all parties is a requirement. Where the arrangement has been structured through a separate vehicle, the Group has accounted for it as a joint venture.

The table below shows the Group's principal joint arrangements for the year ended 31 December 2019.

All joint ventures investments are unquoted and are measured using the equity method of accounting. All income from these investments has been included in profit or loss from continuing operations. There are no significant restrictions on the ability of these entities to transfer funds to the Group in the form of cash dividends, or to repay loans or advances made by the Group. Nor is there any unrecognised share of losses either for 2019 or cumulatively in respect of these entities. Other than disclosed in note 44, the Group does not have any further commitments or contingent liabilities in respect of these entities other than its investment to date.

Joint arrangement	Holding	Classification	Country of operation	Nature of activities
First Rate Exchange Services Holdings Limited	50%	Joint venture	UK	Sale of financial products through the UK Post Office relationship
Enterprise 2000 Fund	50%	Joint venture	Ireland	Investment in venture capital companies

(f) Associates

An associated undertaking is an entity over which the Group has significant influence, but not control, over the entity's operating and financial policy decisions. If the Group holds 20% or more of the voting power of an entity, it is presumed that the Group has significant influence, unless it could be clearly demonstrated that this was not the case. There are no such cases where the Group holds 20% or more of the voting power of an entity, and is not considered to have significant influence over that entity.

The Group holds a number of investments in associates, none of which is individually material. All income from these investments has been included in profit or loss from continuing operations. There are no significant restrictions on the ability of these entities to transfer funds to the Group in the form of cash dividends, or to repay loans or advances made by the Group. Nor is there any unrecognised share of losses either for 2019 or cumulatively in respect of these entities. The Group does not have any contingent liabilities in respect of these entities other than its investment to date.

(g) Unconsolidated structured entities

Unconsolidated collective investment vehicles

The company holds investments in unconsolidated structured entities arising from investments in collective investment undertakings, carried at fair value of €10,176 million (2018: €8,399 million). The value included in assets held to cover unit linked policyholder liabilities is €10,029 million (2018: €8,283 million) and €147 million (2018: €116 million) is held for non-unit linked liabilities.

At 31 December 2019, the total asset value of these unconsolidated structured entities, including the portion in which the Group has no interest, was €56.7 billion (2018: €64.7 billion).

The Group's maximum exposure to loss is equal to the carrying value of the investment. However, the Group's investments in these entities are primarily held to match policyholder liabilities in the Group's life assurance business and the majority of the risk from a change in the value of the Group's investment is matched by a change in policyholder liabilities. The collective investment vehicles are primarily financed by investments from investors in the vehicles.

During the year the Group has not provided any non-contractual financial or other support to these entities and has no current intention of providing any financial or other support. The Group does not sponsor any of these unconsolidated structured entities.

Mulcair Securities DAC

In April 2019, the Group entered into a securitisation arrangement for a portfolio of residential mortgage NPEs, through an unconsolidated special purpose vehicle, Mulcair

55 Interests in other entities *(continued)*

Securities. The portfolio transferred had a gross carrying value of €370 million (before ECL allowance) and a net carrying value of €326 million (after ECL allowance). The Group transferred the beneficial interest in the loans to Mulcair Securities which in turn issued notes backed by these loans. The Group considers that it sponsors this company as it continues to be involved with it as Servicer of the transferred assets and as it is in receipt of income from the provision of these services. The total asset value of Mulcair Securities at 31 December 2019 was €339 million.

The Group holds 5% of each class of notes issued by Mulcair securities as a retained issuance, these notes are held as debt securities at amortised cost with the exception of notes with a nominal value of €2 million which are held as at FVTPL.

Mulcair Securities is not consolidated but the associated income in relation to the services provided to the company is recognised in the Group's financial statements as follows:

	2019 €m
Interest income	-
Trading income	1
Fee and commission income	1
Total income related to Mulcair Securities	**2**

The carrying amount of assets and liabilities in relation to this entity are listed as:

	2019 €m
Debt securities at amortised cost	15
Other financial assets held at fair value through profit or loss	2
Total carrying value of assets held related to Mulcair Securities	**17**

The Group's maximum exposure to loss in respect of Mulcair Securities is equal to the carrying value of the retained issuance which is €17 million at 31 December 2019. There are no contractual arrangements that require the Group to provide financial support to Mulcair Securities.

Investment companies

The Group has incorporated certain entities to provide investment opportunities to clients in international commercial properties. The Group considers that it sponsors these entities where it continues to be involved in the entity or if it is in receipt of income from the entity during the year. At 31 December 2019, there were three entities (2018: one). At 31 December 2019, the total gross asset value of these entities was €16 million (2018: €32 million).

With regard to the above unconsolidated structured entities, they are infrastructure fund managers whose principal activity is managing property investments. In 2019 and 2018, the Group did not receive asset management fees from these entities.

The structured entities are not consolidated, the associated fee and commission income in relation to these entities was €nil for 2019 (2018: €nil). The carrying amount of assets and liabilities in relation to these entities in the Group's financial statements is €nil (2018: €nil).

The Group's maximum exposure to loss in respect of these unconsolidated entities is €nil (2018: €nil).

In relation to these entities, there are no contractual arrangements that require the Group to provide financial support.

(h) Coterminous year end dates

The Group consolidates certain entities where the entity does not have the same year end reporting date as the Group. This is to ensure the reporting dates of these Group entities are kept consistent with the principal legal agreements used to engage in its core business.

Assets, liabilities and results of all Group undertakings have been included in the Group financial statements on the basis of financial statements made up to the end of the financial year.

56 Measurement basis of financial assets and financial liabilities

Group	At fair value through profit or loss		Debt instruments at fair value through other comprehensive income	Held at amortised cost	Derivatives designated as hedging instruments	Insurance contracts	Total
2019	Mandatorily €m	Designated €m	€m	€m	€m	€m	€m
Financial assets							
Cash and balances at central banks	-	-	-	8,325	-	-	8,325
Items in the course of collection from other banks	-	-	-	223	-	-	223
Trading securities	32	-	-	-	-	-	32
Derivative financial instruments	1,398	-	-	-	601	-	1,999
Other financial assets at FVTPL	16,484	-	-	-	-	-	16,484
Loans and advances to banks	306	-	-	3,022	-	-	3,328
Debt securities at amortised cost	-	-	-	4,511	-	-	4,511
Financial assets at FVOCI	-	-	10,797	-	-	-	10,797
Asset classified as held for sale	-	-	-	-	-	-	-
Loans and advances to customers	252	-	-	79,235	-	-	79,487
Interest in associates	-	56	-	-	-	-	56
Other financial assets	-	-	-	280	-	-	280
Total financial assets	**18,472**	**56**	**10,797**	**95,596**	**601**	**-**	**125,522**
Financial liabilities							
Deposits from banks	-	-	-	2,179	-	-	2,179
Customer accounts	-	930	-	83,113	-	-	84,043
Items in the course of transmission to other banks	-	-	-	219	-	-	219
Derivative financial instruments	1,566	-	-	-	912	-	2,478
Debt securities in issue	-	364	-	8,451	-	-	8,815
Liabilities to customers under investment contracts	-	5,890	-	-	-	-	5,890
Insurance contract liabilities	-	-	-	-	-	12,694	12,694
Other financial liabilities	-	-	-	3,043	-	-	3,043
Loss allowance provision on loan commitments and financial guarantees	-	-	-	30	-	-	30
Subordinated liabilities	-	-	-	1,693	-	-	1,693
Lease liabilities	-	-	-	565	-	-	565
Total financial liabilities	**1,566**	**7,184**	**-**	**99,293**	**912**	**12,694**	**121,649**

56 Measurement basis of financial assets and financial liabilities *(continued)*

Group	At fair value through profit or loss		Debt instruments at fair value through other comprehensive income	Held at amortised cost	Derivatives designated as hedging instruments	Insurance contracts	Total
2018	Mandatorily €m	Designated €m	€m	€m	€m	€m	€m
Financial assets							
Cash and balances at central banks	-	-	-	6,033	-	-	6,033
Items in the course of collection from other banks	-	-	-	259	-	-	259
Trading securities	29	-	-	-	-	-	29
Derivative financial instruments	1,268	-	-	-	456	-	1,724
Other financial assets at FVTPL	14,160	-	-	-	-	-	14,160
Loans and advances to banks	318	-	-	2,307	-	-	2,625
Debt securities at amortised cost	-	-	-	3,928	-	-	3,928
Financial assets at FVOCI	-	-	12,048	-	-	-	12,048
Asset classified as held for sale	-	-	-	602	-	-	602
Loans and advances to customers	261	-	-	76,102	-	-	76,363
Interest in associates	-	53	-	-	-	-	53
Other financial assets	-	-	-	278	-	-	278
Total financial assets	**16,036**	**53**	**12,048**	**89,509**	**456**	**-**	**118,102**
Financial liabilities							
Deposits from banks	-	-	-	2,482	-	-	2,482
Customer accounts	-	887	-	78,084	-	-	78,971
Items in the course of transmission to other banks	-	-	-	268	-	-	268
Derivative financial instruments	1,486	-	-	-	333	-	1,819
Debt securities in issue	-	522	-	8,385	-	-	8,907
Liabilities to customers under investment contracts	-	5,239	-	-	-	-	5,239
Insurance contract liabilities	-	-	-	-	-	11,003	11,003
Other financial liabilities	-	-	-	3,246	-	-	3,246
Loss allowance provision on loan commitments and financial guarantees	-	-	-	29	-	-	29
Subordinated liabilities	-	-	-	2,107	-	-	2,107
Short positions in trading securities	16	-	-	-	-	-	16
Total financial liabilities	**1,502**	**6,648**	**-**	**94,601**	**333**	**11,003**	**114,087**

The fair value and contractual amount due on maturity of financial liabilities designated at fair value upon initial recognition are shown in the table below.

Group	2019		2018	
	Fair values €m	Contractual amount due on maturity €m	Fair values €m	Contractual amount due on maturity €m
Customer accounts	930	930	887	918
Liabilities to customers under investment contracts	5,890	5,890	5,239	5,239
Debt securities in issue	364	329	522	503
Financial liabilities designated at fair value through profit or loss	**7,184**	**7,149**	**6,648**	**6,660**

56 Measurement basis of financial assets and financial liabilities *(continued)*

Bank 2019	At fair value through profit or loss Mandatorily €m	 Designated €m	Debt instruments at fair value through other comprehensive income €m	Held at amortised cost €m	Derivatives designated as hedging instruments €m	Insurance contracts €m	Total €m
Financial assets							
Cash and balances at central banks	-	-	-	5,817	-	-	5,817
Items in the course of collection from other banks	-	-	-	54	-	-	54
Trading securities	32	-	-	-	-	-	32
Derivative financial instruments	1,610	-	-	-	456	-	2,066
Other financial assets at FVTPL	517	-	-	-	-	-	517
Loans and advances to banks	1	-	-	14,276	-	-	14,277
Debt securities at amortised cost	-	-	-	6,675	-	-	6,675
Financial assets at FVOCI	-	-	10,797	-	-	-	10,797
Loans and advances to customers	166	-	-	38,417	-	-	38,583
Other financial assets	-	-	-	249	-	-	249
Total financial assets	**2,326**	**-**	**10,797**	**65,488**	**456**	**-**	**79,067**
Financial liabilities							
Deposits from banks	-	-	-	4,526	-	-	4,526
Customer accounts	-	1,546	-	62,871	-	-	64,417
Items in the course of transmission to other banks	-	-	-	108	-	-	108
Derivative financial instruments	1,755	-	-	-	865	-	2,620
Debt securities in issue	-	48	-	2,865	-	-	2,913
Other financial liabilities	-	-	-	1,011	-	-	1,011
Lease liabilities	-	-	-	551	-	-	551
Loss allowance provision on loan commitments and financial guarantees	-	-	-	28	-	-	28
Subordinated liabilities	-	-	-	1,655	-	-	1,655
Short positions in trading securities	-	-	-	-	-	-	-
Total financial liabilities	**1,755**	**1,594**	**-**	**73,615**	**865**	**-**	**77,829**

The fair value and contractual amount due on maturity of financial liabilities designated at fair value upon initial recognition are shown in the table below.

Bank	2019 Fair values €m	 Contractual amount due on maturity €m	2018 Fair values €m	 Contractual amount due on maturity €m
Customer accounts	1,546	1,546	1,507	1,544
Liabilities to customers under investment contracts	-	-	-	-
Debt securities in issue	48	46	161	171
Financial liabilities designated at fair value through profit or loss	**1,594**	**1,592**	**1,668**	**1,715**

56 Measurement basis of financial assets and financial liabilities *(continued)*

Bank	**At fair value through profit or loss**		**Debt instruments at fair value through other comprehensive income**	**Held at amortised cost**	**Derivatives designated as hedging instruments**	**Insurance contracts**	**Total**
2018	**Mandatorily €m**	**Designated €m**	**€m**	**€m**	**€m**	**€m**	**€m**
Financial assets							
Cash and balances at central banks	-	-	-	3,163	-	-	3,163
Items in the course of collection from other banks	-	-	-	71	-	-	71
Trading securities	29	-	-	-	-	-	29
Derivative financial instruments	1,442	-	-	-	329	-	1,771
Other financial assets at FVTPL	121	-	-	-	-	-	121
Loans and advances to banks	21	-	-	12,279	-	-	12,300
Debt securities at amortised cost	-	-	-	6,050	-	-	6,050
Financial assets at FVOCI	-	-	12,048	-	-	-	12,048
Loans and advances to customers	-	160	-	38,666	-	-	38,826
Other financial assets	-	-	-	246	-	-	246
Total financial assets	**1,613**	**160**	**12,048**	**60,475**	**329**	**-**	**74,625**
Financial liabilities							
Deposits from banks	-	-	-	5,399	-	-	5,399
Customer accounts	-	1,507	-	58,142	-	-	59,649
Items in the course of transmission to other banks	-	-	-	147	-	-	147
Derivative financial instruments	1,645	-	-	-	305	-	1,950
Debt securities in issue	-	161	-	2,602	-	-	2,763
Other financial liabilities	-	-	-	1,265	-	-	1,265
Loss allowance provision on loan commitments and financial guarantees	-	-	-	23	-	-	23
Subordinated liabilities	-	-	-	2,071	-	-	2,071
Short positions in trading securities	16	-	-	-	-	-	16
Total financial liabilities	**1,661**	**1,668**	**-**	**69,649**	**305**	**-**	**73,283**

57 Fair values of assets and liabilities

Fair value of assets and liabilities
Fair value is defined as 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.

Where possible, the Group calculates fair value using observable market prices. Where market prices are not available, fair values are determined using valuation techniques which may include DCF models or comparisons to instruments with characteristics either identical or similar to those of the instruments held by the Group or of recent arm's length market transactions. These fair values are classified within a three-level fair value hierarchy, based on the inputs used to value the instrument. Where the inputs might be categorised within different levels of the fair value hierarchy, the fair value measurement in its entirety is categorised in the same level of the hierarchy as the lowest level input that is significant to the entire measurement. The levels are defined as:

Level 1
Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2
Inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3
Inputs are unobservable inputs for the asset or liability.

Transfers between different levels are assessed at the end of all reporting periods.

(a) Financial assets and financial liabilities recognised and subsequently measured at fair value
All financial instruments are initially recognised at fair value. The Group subsequently measures the following instruments at FVTPL or at FVOCI: trading securities, other financial assets and financial liabilities designated at FVTPL, derivatives, loans and advances to customers held at fair value, loans and advances to banks held at fair value, financial assets held at FVOCI, customer accounts held at fair value and debt securities in issue held at fair value.

57 Fair values of assets and liabilities *(continued)*

A description of the methods and assumptions used to calculate fair values of these assets and liabilities is set out below. For fair value measurements categorised within level 3 of the fair value hierarchy, the valuation policies and procedures are developed by the management of the relevant business unit. The valuation process is documented before being reviewed and approved by senior management to ensure that the valuation method is consistent with market practice, that the output is reasonable and that the methodology is consistent both across the Group and compared to prior reporting periods.

Loans and advances to customers held at fair value
These consist of assets mandatorily measured at FVTPL, which predominantly relate to 'Life loan mortgage products'. Unlike a standard mortgage product, borrowers do not make any periodic repayments and the outstanding loan balance increases through the life of the loan as interest due is capitalised. The mortgage is typically repaid out of the proceeds of the sale of the property. These assets are valued using DCF models which incorporate unobservable inputs (level 3 inputs). Using reasonably possible alternative assumptions would not have a material impact on the value of these assets.

Loans and advances to banks held at fair value
These consist of assets mandatorily measured at FVTPL, and include assets managed on a fair value basis by the life assurance business and those assets that do not meet the requirements in order to be measured at FVOCI or amortised cost.

The estimated fair value of floating rate placements and overnight placings is their carrying amount. The estimated fair value of fixed interest bearing placements is based on DCFs using prevailing money market interest rates for assets with similar credit risk and remaining maturity (level 2 inputs).

Financial assets at fair value through other comprehensive income
Financial assets at FVOCI predominantly consist of government bonds and listed debt securities. For these assets where an active market exists, fair value has been determined directly from observable market prices (level 1 inputs) or yields through a recognised pricing source or an independent broker, price-provider or investment bank (level 2 inputs).

Financial assets and financial liabilities held for trading
These instruments are valued using observable market prices (level 1 inputs), directly from a recognised pricing source or an independent broker or investment bank.

Derivative financial instruments
The Group's derivative financial instruments are valued using valuation techniques commonly used by market participants. These consist of DCF and options pricing models, which typically incorporate observable market data, principally interest rates, basis spreads, FX rates, equity prices and counterparty credit (level 2 inputs).

The fair values of the Group's derivative financial liabilities reflect the impact of changes in own credit spreads derived from observable market data (debit valuation adjustment). The impact of the cost of funding derivative positions is also taken into account in determining the fair value of derivative financial instruments (funding valuation adjustment (FVA)).

The funding cost is derived from observable market data; however the model may perform numerical procedures in the pricing such as interpolation when market data input values do not directly correspond to the exact parameters of the trade. Both methodologies are considered to use level 2 inputs.

Certain derivatives are valued using unobservable inputs relating to counterparty credit such as credit grade, which are significant to their valuation. The effect of using reasonably possible alternative assumptions in the valuation of these derivatives as at 31 December 2019 is immaterial. At 31 December 2018 effect was to increase their fair value by up to €4 million with a corresponding impact on the income statement. Where the impact of unobservable inputs is material to the valuation of the asset or liability, it is categorised as level 3 on the fair value hierarchy.

In addition a small number of derivative financial instruments are valued using significant unobservable inputs other than counterparty credit (level 3 inputs). However, changing one or more assumptions used in the valuation of these derivatives would not have a significant impact as they are entered into to hedge the exposure arising on certain customer accounts (see below), leaving the Group with no net valuation risk due to the unobservable inputs.

Other financial assets at fair value through profit or loss
These consist of assets mandatorily at FVTPL, which are predominantly held for the benefit of unit linked policyholders, with any changes in valuation accruing to the policyholders. These assets consist principally of bonds, equities and unit trusts, which are traded on listed exchanges, are actively traded and have readily available prices. Substantially all of these assets are valued using valuation techniques which use observable market data i.e. level 1 or level 2 inputs. A small number of assets have been valued using DCF models, which incorporate unobservable inputs (level 3). Using reasonably possible alternative assumptions would not have a material impact on the value of these assets.

Interest in associates
Investments in associates, which are venture capital investments, are accounted for at FVTPL and are valued in accordance with the 'International Private Equity and Venture Capital Valuation Guidelines'. This requires the use of various inputs such as DCF analysis and comparison with the earnings multiples of listed comparative companies amongst others. Although the valuation of unquoted equity instruments is subjective by nature, the relevant methodologies are commonly applied by other market participants and have been consistently applied over time. Using reasonably possible alternative assumptions would not have a material impact on the value of these assets. As the inputs are unobservable, the valuation is deemed to be based on level 3 inputs.

Customer accounts
Customer accounts designated at FVTPL consist of deposits which contain an embedded derivative (typically an equity option). These instruments are typically valued using valuation techniques which use observable market data. The Group incorporates the effect of changes in its own credit spreads when valuing these instruments. Previously, the Group estimated this spread by reference to recent transactions in the same instrument or in similar instruments

57 Fair values of assets and liabilities *(continued)*

issued by the Group or other comparable financial institutions (level 2 inputs). During the year, the Group moved to source own credit spreads from independent brokers (level 3 inputs) as observable own credit spreads were not available. Where the impact of unobservable inputs is material to the valuation of a customer account, that account is categorised as level 3 on the fair value hierarchy.

A small number of customer accounts are valued using additional unobservable inputs (level 3 inputs). However, changing one or more assumptions used in the valuation of these customer accounts would not have a significant impact as these customer accounts are hedged with offsetting derivatives (see above), leaving the Group with no net valuation risk due to those unobservable inputs.

Liabilities to customers under insurance and investment contracts
In line with the accounting policy set out on page 88, the fair value of liabilities to customers under both insurance and investment unit linked contracts is contractually linked to the fair value of the financial assets within the policyholders' unit linked funds. The value of the unit linked financial liabilities is determined using current unit prices multiplied by the number of units attributed to the contract holders at the reporting date. Their value is never less than the amount payable on surrender, discounted for the required notice period where applicable.

Debt securities in issue
Debt securities in issue with a fair value of €364 million (2018: €522 million) are measured at FVTPL, in order to reduce an accounting mismatch which would otherwise arise from hedging derivatives. Their fair value is typically based on valuation techniques incorporating observable market data. The Group incorporates the effect of changes in its own credit spread when valuing these instruments. Previously, the Group estimated this spread by reference to market observable credit spreads of similar instruments issued by the Group or other comparable financial institutions (level 2 inputs). During the year, the Group moved to source own credit spreads from independent brokers (level 3 inputs) as observable own credit spreads were not available. Where the impact of unobservable inputs is material to the valuation of a debt security in issue, that issuance is categorised as level 3 on the fair value hierarchy.

A small number of the debt securities in issue are valued using additional unobservable inputs (level 3 inputs). However, changing one or more assumptions used in the valuation of these debt securities in issue would not have a significant impact.

(b) Financial assets and liabilities held at amortised cost
For financial assets and financial liabilities which are not subsequently measured at fair value on the balance sheet, the Group discloses their fair value in a way that permits them to be compared to their carrying amounts. The methods and assumptions used to calculate the fair values of these assets and liabilities are set out below.

Loans and advances to banks
The estimated fair value of floating rate placements and overnight placings which are held at amortised cost is their carrying amount. The estimated fair value of fixed interest bearing placements which are held at amortised cost is based on DCFs using prevailing money market interest rates for assets with similar credit risk and remaining maturity (level 2 inputs).

Loans and advances to customers held at amortised cost
The fair value of both fixed and variable rate loans and advances to customers held at amortised cost is estimated using valuation techniques which include the discounting of estimated future cash flows at current market rates, incorporating the impact of current credit spreads and margins. The fair value reflects both loan impairments at the reporting date and estimates of market participants' expectations of credit losses over the life of the loans (level 3 inputs).

Debt securities at amortised cost
For debt securities at amortised cost for which an active market exists, fair value has been determined directly from observable market prices (level 1 inputs). Debt securities at amortised cost consist mainly of government bonds, asset backed securities and other debt securities.

Deposits from banks and customer accounts
The estimated fair value of deposits with no stated maturity, which includes non-interest bearing deposits, is the amount repayable on demand. The estimated fair value of fixed interest bearing deposits and other borrowings without quoted market prices is based on DCFs using interest rates for new deposits with similar remaining maturity (level 2 inputs).

Debt securities in issue and subordinated liabilities
The fair values of these instruments are calculated based on quoted market prices where available (level 1 inputs). For those notes where quoted market prices are not available, a DCF model is used based on a current yield curve appropriate to the Group for the remaining term to maturity. The yield curve used incorporates the effect of changes in the Group's own credit spread (level 2 and level 3 inputs).

(c) Fair value on offsetting positions
Where the Group manages certain financial assets and financial liabilities on the basis of its net exposure to either market risks or credit risk, the Group applies the exception allowed under paragraph 48 of IFRS 13. That exception permits the Group to measure the fair value of a group of financial assets and financial liabilities on the basis of the price that would be received to sell a net long position (i.e. an asset) for a particular risk exposure or paid to transfer a net short position (i.e. a liability) for a particular risk exposure in an orderly transaction between market participants at the measurement date under current market conditions. Accordingly, the Group measures the fair value of the group of financial assets and financial liabilities consistently with how market participants would price the net risk exposure at the measurement date.

(d) Fair value of non-financial assets
Investment properties
Investment properties are carried at fair value as determined by external qualified property surveyors appropriate to the properties held. Fair values have been calculated using current trends in the market of property sales and rental yields in the retail, office and industrial property markets (level 2 inputs). Other inputs taken into consideration include occupancy rate forecasts, sales price expectations and letting prospects (level 3 inputs). All properties are valued based on highest and best use.

57 Fair values of assets and liabilities *(continued)*

Property
A revaluation of Group property was carried out as at 31 December 2019. All freehold and long leasehold commercial properties were valued by Lisney (or its partner, Sanderson Weatherall) as external valuers, with the exception of some select properties which were valued internally by the Group's qualified surveyors. External valuations were made on the basis of observable inputs such as comparable lettings and sales (level 2 inputs).

Unobservable inputs such as profile, lot size, layout and presentation of accommodation are also used (level 3 inputs). All properties are valued based on highest and best use.

The following tables set out the level of the fair value hierarchy for assets and liabilities held at fair value. Information is also given for items carried at amortised cost where the fair value is disclosed.

Group	2019				2018			
	Level 1 €m	Level 2 €m	Level 3 €m	Total €m	Level 1 €m	Level 2 €m	Level 3 €m	Total €m
Financial assets held at fair value								
Trading securities	32	-	-	32	29	-	-	29
Derivative financial instruments	-	1,996	3	1,999	1	1,705	18	1,724
Other financial assets at FVTPL	15,755	593	136	16,484	13,559	478	123	14,160
Loans and advances to banks	-	306	-	306	-	318	-	318
Financial assets at FVOCI	10,797	-	-	10,797	11,996	52	-	12,048
Loans and advances to customers	-	-	252	252	-	-	261	261
Interest in associates	-	-	56	56	-	-	53	53
Non-financial assets held at fair value								
Investment property	-	-	999	999	-	-	1,037	1,037
Property held at fair value	-	-	196	196	-	-	170	170
	26,584	**2,895**	**1,642**	**31,121**	**25,585**	**2,553**	**1,662**	**29,800**
Financial liabilities held at fair value								
Customer accounts	-	916	14	930	-	860	27	887
Derivative financial instruments	-	2,474	4	2,478	2	1,810	7	1,819
Debt securities in issue	-	362	2	364	-	520	2	522
Liabilities to customers under investment contracts	-	5,890	-	5,890	-	5,239	-	5,239
Insurance contract liabilities	-	12,694	-	12,694	-	11,003	-	11,003
Short positions in trading securities	-	-	-	-	16	-	-	16
	-	**22,336**	**20**	**22,356**	**18**	**19,432**	**36**	**19,486**
Fair value of financial assets held at amortised cost								
Loans and advances to banks	2	3,020	-	3,022	5	2,302	-	2,307
Debt securities at amortised cost	4,496	29	11	4,536	3,901	-	12	3,913
Loans and advances to customers	-	-	76,487	76,487	-	-	73,220	73,220
Fair value of financial liabilities held at amortised cost								
Deposits from banks	-	2,179	-	2,179	-	2,482	-	2,482
Customer accounts	-	83,138	-	83,138	-	78,089	-	78,089
Debt securities in issue	4,409	3.279	718	8.406	5,627	2,368	351	8,346
Subordinated liabilities	51	1,650	107	1,808	42	2,005	102	2,149

57 Fair values of assets and liabilities *(continued)*

Group **Movements in level 3 assets** **2019**	**Loans advances customers €m**	**Other financial assets at FVTPL €m**	**Derivative financial instruments €m**	**Interest in associates €m**	**Investment property €m**	**Property held at fair value €m**	**Total €m**
Opening Balance	**261**	**123**	**18**	**53**	**1,037**	**170**	**1,662**
Exchange Adjustment	-	-	1	-	14	2	17
Total gains or losses in:							
Profit or loss							
- Net trading income / (expense)	11	42	7	-	-	-	60
- Reversal of impairment charges	-	-	-	-	-	-	-
- Revaluation	-	-	-	-	(3)	-	(3)
- Impairment gains / (losses) on financial instruments	-	-	-	-	-	-	-
- Share of results of associates	-	-	-	5	-	-	5
- Life assurance investment income and gains	-	-	-	-	-	-	-
- Other operating income	-	-	-	-	-	-	-
- Gain on disposal of assets held for sale	-	-	-	-	-	-	-
Other comprehensive income	-	-	-	-	-	3	3
Additions	6	11	-	8	11	-	36
Disposals	-	(10)	(7)	(10)	(39)	-	(66)
Redemptions	(26)	(9)	-	-	-	-	(35)
Reclassifications	-	-	-	-	(21)	21	-
Transfers out of level 3							
- from level 3 to level 2	-	(21)	(16)	-	-	-	(37)
Transfers into level 3							
- from level 2 to level 3	-	-	-	-	-	-	-
Closing balance	**252**	**136**	**3**	**56**	**999**	**196**	**1,642**
Total unrealised gains / (losses) for the year included in profit or loss for level 3 assets at the end of the year	10	33	-	5	10	-	58
- Net trading income / (expense)	*10*	*33*	-	-	-	-	*43*
- Life assurance investment income and gains	-	-	-	-	*7*	-	*7*
- Share of results of associates	-	-	-	5	-	-	5
- Other operating income	-	-	-	-	*3*	-	*3*

The transfer from level 3 to level 2 arose as a result of the availability of observable inputs at 31 December 2019.

There were no transfers between level 1 and level 2.

57 Fair values of assets and liabilities *(continued)*

Group Movements in level 3 assets 2018	Loans advances customers €m	Other financial assets at FVTPL €m	Derivative financial instruments €m	Interest in associates €m	Investment property €m	Property held at fair value €m	Assets classified as held for sale €m	Total €m
Opening Balance	**269**	**139**	**44**	**59**	**912**	**155**	**28**	**1,606**
Exchange Adjustment	-	-	-	-	-	-	-	-
Total gains or losses in:								
Profit or loss								
- Net trading income / (expense)	14	14	(4)	-	-	-	-	24
- Reversal of impairment charges	-	-	-	-	-	4	-	4
- Revaluation	-	-	-	-	29	-	-	29
- Impairment gains / (losses) on financial instruments	-	-	-	-	-	-	-	-
- Share of results of associates	-	-	-	4	-	-	-	4
- Life assurance investment income and gains	-	-	-	-	-	-	-	-
- Other operating income	-	2	-	-	-	-	-	2
- Gain on disposal of assets held for sale	-	-	-	-	-	-	7	7
Other comprehensive income	-	-	-	-	-	11	-	11
Additions	-	2	-	5	123	-	-	130
Disposals	-	(22)	-	(15)	(12)	-	(35)	(84)
Redemptions	(22)	(12)	-	-	-	-	-	(34)
Reclassifications	-	-	-	-	(15)	-	-	(15)
Transfers out of level 3								
- from level 3 to level 2	-	-	(27)	-	-	-	-	(27)
Transfers into level 3								
- from level 2 to level 3	-	-	5	-	-	-	-	5
Closing balance	**261**	**123**	**18**	**53**	**1,037**	**170**	**-**	**1,662**
Total unrealised gains / (losses) for the year included in profit or loss for level 3 assets at the end of the year	**14**	**(5)**	**(16)**	**4**	**29**	**-**	**-**	**26**
- Net trading income / (expense)	*14*	*(5)*	*(16)*	*-*	*-*	*-*	*-*	*(7)*
- Life assurance investment income and gains	*-*	*-*	*-*	*-*	*29*	*-*	*-*	*29*
- Other operating income	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
- Share of results of associates	*-*	*-*	*-*	*4*	*-*	*-*	*-*	*4*

The transfer from level 3 to level 2 arose as a result of the availability of observable inputs at 31 December 2018 which were unavailable at 31 December 2017.

The transfer from level 2 to level 3 arose as a result of the unobservable inputs becoming significant to the fair value measurement of these assets.

There were no transfers between level 1 and level 2.

57 Fair values of assets and liabilities *(continued)*

Group	2019				2018			
Movements in level 3 liabilities	**Customer accounts €m**	**Derivative financial instruments €m**	**Debt securities in issue €m**	**Total €m**	**Customer accounts €m**	**Derivative financial instruments €m**	**Debt securities in issue €m**	**Total €m**
Opening balance	**27**	**7**	**2**	**36**	**3**	**1**	**2**	**6**
Exchange adjustments	-	-	-	-	-	-	-	-
Total gains or losses in:								
Profit or loss								
- Net trading (income) / expense	5	-	-	5	(2)	9	-	7
Other comprehensive income	**-**	**-**	**-**	**-**	**(1)**	**-**	**-**	**(1)**
Additions	23	-	-	23	30	-	-	30
Disposals	-	(3)	-	(3)	-	-	-	-
Redemptions and maturities	-	-	-	-	-	-	-	-
Reclassifications	-	-	-	-	-	-	-	-
Transfers out of level 3								
- from level 3 to level 2	(41)	-	-	(41)	(3)	(6)	-	(9)
Transfers into level 3								
- from level 2 to level 3	-	-	-	-	-	3	-	3
Closing balance	**14**	**4**	**2**	**20**	**27**	**7**	**2**	**36**
Total unrealised gains / (losses) for the year included in profit or loss for level 3 liabilities at the end of the year								
Net trading income / (expenses)	1	(1)	-	-	2	(6)	-	(4)

The transfers from level 3 to level 2 arose due to unobservable inputs becoming less significant to the fair value measurement of these liabilities.

The transfers from level 2 to level 3 arose as a result of the unobservable inputs becoming significant to the fair value measurement of this liability.

There were no transfers between levels 1 and 2.

57 Fair values of assets and liabilities *(continued)*

Quantitative information about fair value measurements using significant unobservable inputs (Level 3)

Group			Fair value		Range	
Level 3 assets	**Valuation technique**	**Unobservable input**	**2019 €m**	**2018 €m**	**2019 %**	**2018 %**
Loans and advances to customers	Discounted cash flow	Discount on market rate[1]	252	261	2.75%-4.5%	2.75%-4.5%
		Collateral charges			0.50%-5.8%	1.50%-7.5%
Other financial assets at fair value through profit or loss	Discounted cash flow	Discount rate[1]	136	123	Third party pricing	Third party pricing
	Equity Value less discount	Discount			0%-50%	0%-50%
Derivative financial instruments	Discounted cash flow	Counterparty credit spread[2]	3	18	0.0%-0.3%	0%-4%
	Option pricing model				Third party pricing	
Interest in associates	Market comparable companies	Price of recent investment	56	53	Third party pricing	Third party pricing
		Earnings multiple[3]				
		Revenue multiple[3]				
Investment property	Market comparable property transactions	Property valuation assumptions	999	1,037	Third party pricing	Third party pricing
Property held at fair value	Market comparable property transactions	Property valuation assumptions	196	170	Third party pricing	Third party pricing

Group			Fair value		Range	
Level 3 liabilities	**Valuation technique**	**Unobservable input**	**2019 €m**	**2018 €m**	**2019 %**	**2018 %**
Customer accounts	Discounted cash flow	Own credit spread[2]	14	27	0.6%-0.9%	0%-4%
	Option pricing model				Third party pricing	
Derivative financial instruments	Discounted cash flow	Counterparty credit spread[2]	4	7	0.0%-0.3%	0%-4%
	Option pricing model				Third party pricing	
Debt securities in issue	Discounted cash flow	Own credit spread[2]	2	2	0.0%-0.2%	0%-0.5%

[1] *The discount rate represents a range of discount rates that market participants would use in valuing these investments.*
[2] *The credit spread represents the range of credit spreads that market participants would use in valuing these contracts.*
[3] *The Group's multiples represent multiples that market participants would use in valuing these investments.*

Note: 100 basis points = 1%

57 Fair values of assets and liabilities *(continued)*

The carrying amount and the fair value of the Group and Bank's financial assets and liabilities which are carried at amortised cost are set out in the tables below. Items where the carrying amount is a reasonable approximation of fair value are not included, as permitted by IFRS 7.

Group	2019		2018	
Non-trading financial instruments	Carrying amount €m	Fair values €m	Carrying amount €m	Fair values €m
Assets				
Loans and advances to banks	3,022	3,022	2,307	2,307
Debt securities at amortised cost	4,511	4,536	3,928	3,913
Loans and advances to customers (including assets held for sale)	79,235	76,487	76,102	73,220
Liabilities				
Deposits from banks	2,179	2,179	2,482	2,482
Customer accounts	83,113	83,138	78,084	78,089
Debt securities in issue	8,451	8,406	8,385	8,346
Subordinated liabilities	1,693	1,808	2,107	2,149

Bank	2019				2018			
	Level 1 €m	Level 2 €m	Level 3 €m	Total €m	Level 1 €m	Level 2 €m	Level 3 €m	Total €m
Financial assets held at fair value								
Trading securities	32	-	-	32	29	-	-	29
Derivative financial instruments	-	2,062	4	2,066	1	1,751	19	1,771
Other financial assets at FVTPL	-	426	91	517	-	75	46	121
Loans and advances to banks	-	1	-	1	-	21	-	21
Financial assets at FVOCI	10,797	-	-	10,797	11,996	52	-	12,048
Loans and advances to customers	-	-	166	166	-	-	160	160
Non-financial assets held at fair value								
Property held at fair value	-	-	143	143	-	-	141	141
	10,829	**2,489**	**404**	**13,722**	**12,026**	**1,899**	**366**	**14,291**
Financial liabilities held at fair value								
Customer accounts	-	1,532	14	1,546	-	1,480	27	1,507
Derivative financial instruments	-	2,576	44	2,620	2	1,922	26	1,950
Debt securities in issue	-	46	2	48	-	159	2	161
Short positions in trading securities	-	-	-	-	16	-	-	16
	-	**4,154**	**60**	**4,214**	**18**	**3,561**	**55**	**3,634**
Fair value of financial assets held at amortised cost								
Loans and advances to banks	-	14,276	-	14,276	-	12,279	-	12,279
Debt securities at amortised cost	3,490	3,212	-	6,702	2,839	-	3,200	6,039
Loans and advances to customers	-	-	37,336	37,336	-	-	37,104	37,104
Fair value of financial liabilities held at amortised cost								
Deposits from banks	-	4,526	-	4,526	-	5,399	-	5,399
Customer accounts	-	62,870	-	62,870	-	58,133	-	58,133
Debt securities in issue	397	2,441		2,838	794	1,773	-	2,567
Subordinated liabilities	-	1,650	107	1,757	-	2,005	102	2,107

57 Fair values of assets and liabilities *(continued)*

Bank **Movements in level 3 assets** **2019**	**Loans advances customers €m**	**Other financial assets at FVTPL €m**	**Derivative financial instruments €m**	**Property held at fair value €m**	**Total €m**
Opening balance	**160**	**46**	**19**	**141**	**366**
Exchange Adjustment	-	-	1	1	2
Total gains or losses in:					
Profit or loss					
- Net trading income / (expense)	-	35	8	-	43
- Reversal of impairment charges	-	-	-	-	-
Other comprehensive income	-	-	-	1	1
Additions	6	10	-	-	16
Disposals	-	-	(8)	-	(8)
Redemptions	-	-	-	-	-
Reclassifications	-	-	-	-	-
Transfers out of level 3					
- from level 3 to level 2	-	-	(16)	-	(16)
Transfers into level 3					
- from level 2 to level 3	-	-	-	-	-
Closing balance	**166**	**91**	**4**	**143**	**404**
Total unrealised gains / (losses) for the year included in profit or loss for level 3 assets at the end of the year					
Net trading income / (expense)	-	32	1	-	33

The transfer from level 3 to level 2 arose as a result of the availability of observable inputs at 31 December 2019.

There were no transfers between level 1 and level 2.

57 Fair values of assets and liabilities *(continued)*

Bank **Movements in level 3 assets** **2018**	**Loans advances customers €m**	**Other financial assets at FVTPL €m**	**Derivative financial instruments €m**	**Property held at fair value €m**	**Total €m**
Opening balance	**160**	**54**	**47**	**127**	**388**
Exchange Adjustment	-	-	-	-	-
Total gains or losses in:					
Profit or loss					
- Net trading income / (expense)	-	(3)	(4)	-	(7)
- Reversal of impairment charges	-	-	-	3	3
Other comprehensive income					
Additions	-	-	-	11	11
Disposals	-	(5)	-	-	(5)
Redemptions	-	-	-	-	-
Reclassifications	-	-	(3)	-	(3)
Transfers out of level 3					
- from level 3 to level 2	-	-	(27)	-	(27)
Transfers into level 3					
- from level 2 to level 3	-	-	6	-	6
Closing balance	**160**	**46**	**19**	**141**	**366**
Total unrealised gains / (losses) for the year included in profit or loss for level 3 assets at the end of the year					
Net trading income / (expense)	-	(5)	(23)	-	(26)

The transfer from level 3 to level 2 arose as a result of the availability of observable inputs at 31 December 2018.

The transfer from level 2 to level 3 arose as a result of the unobservable inputs becoming significant to the fair value measurement of these assets.

There were no transfers between level 1 and level 2.

57 Fair values of assets and liabilities *(continued)*

Bank	**2019**				**2018**			
Movements in level 3 liabilities	**Customer accounts €m**	**Derivative financial instruments €m**	**Debt securities in issue €m**	**Total €m**	**Customer accounts €m**	**Derivative financial instruments €m**	**Debt securities in issue €m**	**Total €m**
Opening balance	**27**	**26**	**2**	**55**	**3**	**-**	**2**	**5**
Exchange adjustments	-	-	-	-	-	-	-	-
Total gains or losses in:								
Profit or loss								
- Net trading (income) / expense	5	34	-	39	(2)	37	-	35
Other comprehensive income	-	-	-	-	(2)	-	-	(2)
Additions	23	-	-	23	31	-	-	31
Disposals	-	(4)	-	(4)	-	-	-	-
Redemptions and maturities	-	(9)	-	(9)	-	(10)	-	(10)
Reclassifications	-	-	-	-	-	(3)	-	(3)
Transfers out of level 3								
- from level 3 to level 2	(41)	(3)	-	(44)	(3)	(6)	-	(9)
Transfers in to level 3								
- from level 2 to level 3	-	-	-	-	-	8	-	8
Closing balance	**14**	**44**	**2**	**60**	**27**	**26**	**2**	**55**
Total unrealised gains / (losses) for the year included in profit or loss for level 3 liabilities at the end of the year								
Net trading income / (expense)	1	(36)	-	(35)	2	(37)	-	(35)

The transfer from level 3 to level 2 arose as a result of the availability of observable inputs at 31 December 2019.

The transfer from level 2 to level 3 arose as a result of the unobservable inputs becoming significant to the fair value measurement of these liabilities.

There were no transfers between level 1 and level 2.

57 Fair values of assets and liabilities *(continued)*

Quantitative information about fair value measurements using significant unobservable inputs (Level 3)

Bank Level 3 assets	Valuation technique	Unobservable input	Fair value 2019 €m	Fair value 2018 €m	Range 2019 %	Range 2018 %
Loans and advances to customers	Discounted cash flow	Discount rate[1]	166	160	4%-5%	4%-5%
Other financial assets at fair value through profit or loss	Discounted cash flow Equity Value less discount	Discount rate[1] Discount	91	46	Third party pricing 0%-50%	Third party pricing 0%-50%
Derivative financial instruments	Discounted cash flow Option pricing model	Counterparty credit spread[2]	4	19	0.0%-0.3% Third party pricing	0%-4%
Property held at fair value	Market comparable property transactions	Property valuation assumptions	143	141	Third party pricing	Third party pricing

Bank Level 3 liabilities	Valuation technique	Unobservable input	Fair value 2019 €m	Fair value 2018 €m	Range 2019 %	Range 2018 %
Customer accounts	Discounted cash flow Option pricing model	Own credit spread[2]	14	27	0.6%-0.9% Third party pricing	0%-4%
Derivative financial instruments	Discounted cash flow Option pricing model	Counterparty credit spread[2]	44	26	0.0%-0.3% Third party pricing	0%-4%
Debt securities in issue	Discounted cash flow	Own credit spread[2]	2	2	0.0%-0.2%	0%-0.5%

[1] The discount rate represents a range of discount rates that market participants would use in valuing these investments.
[2] The credit spread represents the range of credit spreads that market participants would use in valuing these contracts.

Note: 100 basis points = 1%

57 Fair values of assets and liabilities *(continued)*

Bank	2019		2018	
Non-trading financial instruments	Carrying amount €m	Fair values €m	Carrying amount €m	Fair values €m
Assets				
Loans and advances to banks	14,276	14,276	12,279	12,279
Debt securities at amortised cost	6,675	6,702	6,050	6,039
Loans and advances to customers	38,417	37,336	38,666	37,104
Liabilities				
Deposits from banks	4,526	4,526	5,399	5,399
Customer accounts	62,871	62,870	58,142	58,133
Debt securities in issue	2,865	2,838	2,602	2,567
Subordinated liabilities	1,655	1,757	2,071	2,107

58 Transferred financial assets

Group	Carrying amount of transferred assets €m	Carrying amount of associated liabilities[1] €m	Fair value of transferred assets €m	Fair value of associated liabilities[1] €m	Net fair value position €m
2019					
Securitisation					
Loans and receivables					
Residential mortgages book (Brunel SPE) - Including buybacks[2]	486	547	448	535	(87)
Residential mortgages book[2] (Bowbell II SPE)	402	361	411	363	48
Sale and repurchase / similar products[3]					
Debt securities at amortised cost	18	18	-	-	-
Financial assets at FVOCI	17	17	-	-	-
2018					
Securitisation					
Loans and receivables					
Residential mortgages book (Brunel SPE) - Including buybacks[2]	531	610	497	595	(98)
Residential mortgages book[2] (Bowbell II SPE)	-	-	-	-	-
Sale and repurchase / similar products[3]					
Debt securities at amortised cost	28	28	-	-	-
Financial assets at FVOCI	38	39	-	-	-

The Group has transferred certain financial assets that are not derecognised from the Group's balance sheet. Such arrangements are securitisations and sale or repurchase agreements. The Group is exposed to substantially all risks and rewards including credit and market risk associated with the transferred assets.

The Group has not entered into any agreements on the sale of assets that entail the Group's continuing involvement in derecognised financial assets other than assets transferred to Mulcair Securities (note 55).

[1] *For the purposes of this disclosure, associated liabilities include liabilities issued by securitisation special purpose entity, held by other Group entities.*

[2] *For each securitisation the relevant loan book / pool is ring-fenced whereby the cash flows associated with these assets can only be used to repay the related notes holders plus associated issuance fees / costs.*

[3] *Assets sold or transferred subject to repurchase agreements or similar products are retained on the balance sheet and reclassified as pledged assets when the transferee has the right by contract to sell or repledge the collateral; the counterparty liability is included in deposits by banks or customer accounts, as appropriate. The difference between the original sale price of the bonds and the repurchase price is the repo rate.*

58 Transferred financial assets *(continued)*

Bank	Carrying amount of transferred assets €m	Carrying amount of associated liabilities[1] €m	Fair value of transferred assets €m	Fair value of associated liabilities[1] €m	Net fair value position €m
2019					
Securitisation					
Loans and receivables					
Residential mortgages book (Brunel SPE) - Including buybacks[2]	486	547	448	535	(87)
Sale and repurchase / similar products					
Financial assets at FVOCI	17	17	-	-	-
Debt securities at amortised cost	18	18	-	-	-
2018					
Securitisation					
Loans and receivables					
Residential mortgages book (Brunel SPE) - Including buybacks[2]	531	610	497	595	(98)
Sale and repurchase / similar products					
Financial assets at FVOCI	38	39	-	-	-
Debt securities at amortised cost[3]	470	412	-	-	-

The Bank has transferred certain financial assets that are not derecognised from the Bank's balance sheet. Such arrangements are securitisations and sale or repurchase agreements. The Bank is exposed to substantially all risks and rewards including credit and market risk associated with the transferred assets.

The Bank has not entered into any agreements on the sale of assets that entail the Bank's continuing involvement in derecognised financial assets other than assets transferred to Mulcair Securities (note 55).

[1] *For the purposes of this disclosure, associated liabilities include liabilities issued by securitisation special purpose entity, held by other Group entities.*
[2] *For each securitisation the relevant loan book / pool is ring-fenced whereby the cash flows associated with these assets can only be used to repay the related notes holders plus associated issuance fees / costs.*
[3] *Debt securities issued by BOIMB and held by the Bank as other debt securities, used to service Monetary Authority Funding.*

59 Offsetting financial assets and liabilities

The following tables set out the effect or potential effect of netting arrangements on the Group and Bank's financial positions. This includes the effect or potential effect of rights of set-off associated with the Group and Bank's recognised financial assets and recognised financial liabilities that are subject to an enforceable master netting arrangement, irrespective of whether they are set off in accordance with paragraph 42 of IAS 32.

Group				Related amounts not set off in the balance sheet		
Assets	Gross amounts of recognised financial assets €m	Gross amounts of recognised financial liabilities set off in the balance sheet €m	Net amounts of financial assets presented in the balance sheet €m	Financial[1] instruments €m	Cash[2] collateral received €m	Net amount €m
2019						
Derivative financial assets	1,994	-	1,994	(1,550)	(155)	289
Loans and advances to customers	313	(313)	-	-	-	-
Total	**2,307**	**(313)**	**1,994**	**(1,550)**	**(155)**	**289**
2018						
Derivative financial assets	1,723	-	1,723	(1,307)	(169)	247
Loans and advances to customers	376	(376)	-	-	-	-
Total	**2,099**	**(376)**	**1,723**	**(1,307)**	**(169)**	**247**

Bank				Related amounts not set off in the balance sheet			
Assets	Gross amounts of recognised financial assets €m	Gross amounts of recognised financial liabilities set off in the balance sheet €m	Net amounts of financial assets presented in the balance sheet €m	Financial[1] instruments €m	Cash[2] collateral received €m	Deposits by banks[3] €m	Net amount €m
2019							
Derivative financial assets	1,963	-	1,963	(1,550)	(124)	-	289
Loans and advances to banks[3]	2,328	-	2,328	-	-	(649)	1,679
Loans and advances to customers	313	(313)	-	-	-	-	-
Total	**4,604**	**(313)**	**4,291**	**(1,550)**	**(124)**	**(649)**	**1,968**
2018							
Derivative financial assets	1,681	-	1,681	(1,307)	(127)	-	247
Loans and advances to banks[3]	1,845	-	1,845	-	-	(1,040)	805
Loans and advances to customers	376	(376)	-	-	-	-	-
Total	**3,902**	**(376)**	**3,526**	**(1,307)**	**(127)**	**(1,040)**	**1,052**

[1] *Amounts of €1,550 million represent recognised derivatives assets at fair value that do not meet the offsetting criteria (2018: €1,307 million).*
[2] *Cash collateral amounts disclosed reflect the maximum collateral available for offset. Cash collateral received is reported within deposits from banks (note 38).*
[3] *Loans and advances to banks of €2,328 million (2018: €1,845 million) and deposits by banks of €649 million (2018: €1,040 million) represent balances with a subsidiary undertaking, Bank of Ireland (UK) plc.*

59 Offsetting financial assets and liabilities *(continued)*

The following financial liabilities are subject to offsetting, enforceable master netting arrangements.

Group Liabilities	Gross amounts of recognised financial liabilities €m	Gross amounts of recognised financial assets set off in the balance sheet €m	Net amounts of financial liabilities presented in the balance sheet €m	Related amounts not set off in the balance sheet Financial[1] instruments €m	 Cash[2] collateral pledged €m	Net amount €m
2019						
Derivative financial liabilities	2,469	-	2,469	(1,550)	(821)	98
Customer deposits	313	(313)	-	-	-	-
Total	**2,782**	**(313)**	**2,469**	**(1,550)**	**(821)**	**98**
2018						
Derivative financial liabilities	1,806	-	1,806	(1,307)	(409)	90
Customer deposits	376	(376)	-	-	-	-
Total	**2,182**	**(376)**	**1,806**	**(1,307)**	**(409)**	**90**

Bank Liabilities	Gross amounts of recognised financial liabilities €m	Gross amounts of recognised financial assets set off in the balance sheet €m	Net amounts of financial liabilities presented in the balance sheet €m	Related amounts not set off in the balance sheet Financial[1] instruments €m	 Cash[2] collateral pledged €m	 Loans and advances to banks[3] €m	Net amount €m
2019							
Derivative financial liabilities	2,469	-	2,469	(1,550)	(821)	-	98
Deposits by banks[3]	649	-	649	-	-	(2,328)	(1,679)
Customer deposits	313	(313)	-	-	-	-	-
Total	**3,431**	**(313)**	**3,118**	**(1,550)**	**(821)**	**(2,328)**	**(1,581)**
2018							
Derivative financial liabilities	1,806	-	1,806	(1,307)	(409)	-	90
Deposits by banks[3]	1,040	-	1,040	-	-	(1,845)	(805)
Customer deposits	376	(376)	-	-	-	-	-
Total	**3,222**	**(376)**	**2,846**	**(1,307)**	**(409)**	**(1,845)**	**(715)**

The ‘Financial Instruments’ column identifies financial assets and liabilities that are subject to set off under netting agreements such as an ISDA Master agreement. The agreement between the Group and the counterparty allows for net settlement of the relevant financial assets and liabilities when both elect to settle on a net basis. In the absence of such an election, financial assets and liabilities are settled on a gross basis: however each party to the master netting agreement has the option to settle all such amounts on a net basis in the event of default of the other party.

1 *Amounts of €1,550 million represent recognised derivatives liabilities at fair value that do not meet the offsetting criteria (2018: €1,307 million).*
2 *Cash collateral amounts disclosed reflect the maximum collateral available for offset.*
3 *Loans and advances to banks of €2,328 million (2018: €1,845 million) and deposits by banks of €649 million (2018: €1,040 million) represent balances with a subsidiary undertaking, Bank of Ireland (UK) plc.*

60 Group impact of adopting new accounting standard IFRS 16 'Leases'

As outlined in the Group accounting policies note on page 75, from 1 January 2019, the Group adopted IFRS 16 'Leases'. On transition to IFRS 16, the Group recognised RoU assets within Property, plant and equipment (note 34) and lease liabilities by adjusting the opening balances of the relevant assets and liabilities on the balance sheet, with no adjustment required to opening retained earnings. The impact on transition is summarised below:

	€m
Operating lease commitments as at 31 December 2018	**680**
Less	
Value added tax included in operating lease commitments as at 31 December 2018	(42)
Operating lease commitments as at 31 December 2018 excluding value added tax	**638**
Weighted average incremental borrowing rate as at 1 January 2019 (note 2)	*2.7%*
Discounted operating lease commitments as at 1 January 2019 excluding value added tax under IFRS 16	**528**
Less	
Commitments relating to contracts outside the scope of IFRS 16	(15)
Add	
Commitments relating to leases previously classified as finance leases	4
Service contracts not previously classified as leases under IAS 17	62
Commitments in optional extension periods not recognised as at 31 December 2018	58
Lease liabilities as at 1 January 2019	**637**

	Carrying amount under IAS 17 as at 31 December 2018[1] €m	Impact of new accounting standard €m	Carrying amount under IFRS 16 as at 1 January 2019 €m
Assets			
Property, plant and equipment	438	616	1,054
Other assets	2,282	(16)	2,266
Liabilities			
Lease liabilities	-	637	637
Other liabilities	3,262	(31)	3,231
Provisions	84	(6)	78

Group as lessee
The principal contracts where the Group is a lessee under IFRS 16 are in relation to property leases that the Group previously classified as operating leases under IAS 17 and a number of items of computer equipment which were previously classified as finance leases under IAS 17. The Group also reassessed contracts that were not identified as leases under IAS 17. As a result of this assessment service contracts for computer equipment were deemed to meet the definition of a lease under IFRS 16 resulting in the recognition of lease liabilities and RoU assets. Further qualitative information on the nature of the leases is set out in the Group accounting policies (note 1) and the undiscounted contractual maturity of total lease liabilities is set out in note 27.

The Group recognised variable lease expenses of €8 million and rent expense from short-term leases of €3 million for the year ended 31 December 2019. Variable lease payments on RoU assets relates to computer equipment that has a varying cost dependant on usage with the contracts on which the payments arise maturing within two years.

Total cash outflows on leases amounted to €95 million in 2019.

Group as lessor
As outlined in the Group accounting policies (note 1), the accounting for lessors has not materially changed under IFRS 16. The Group is engaged in finance lease and operating lease activities.

Finance leasing activity and a maturity analysis of the Group's net investment in finance leases are included within Loans and advances to customers (note 26) along with a gross to net reconciliation of the investment in finance leases. Associated income on finance leases is included in Interest income (note 4).

[1] *Includes €5 million of finance lease assets as at 31 December 2018 reclassified as Right of Use assets under IFRS 16 on 1 January 2019.*

60 Group impact of adopting new accounting standard IFRS 16 'Leases' *(continued)*

Operating leases where the Group is a lessor primarily relate to the business activities of MLL. Further detail on the nature of the company's leasing activities, risks and risk management is outlined in note 10.

In addition, the Group has also entered into a small number of operating leases and operating sub-leases as lessor which represent properties and components of properties surplus to the Group's own requirements.

A maturity analysis of undiscounted operating lease receivables set out on an annual basis is included in note 34. Income and expense associated with the Group's operating lease activities is included in note 10.

Amounts recognised in the balance sheet and income statement
Set out below are the carrying amounts of the Group's RoU assets and lease liabilities and the movements during the period:

Balance sheet under IFRS 16	RoU assets			
	Buildings €m	Computer and other equipment[1] €m	Total €m	Lease liabilities €m
As at 1 January 2019 (net book value)	555	66	621	637
Payments	-	-	-	(84)
Interest expense (note 5)	-	-	-	15
Reclassifications	(5)	-	(5)	-
Remeasurement of lease liabilities	(4)	(1)	(5)	(5)
Additions	1	2	3	3
Impairment	(2)	-	(2)	-
Depreciation expense	(40)	(29)	(69)	-
Exchange adjustments	(1)	-	(1)	(1)
As at 31 December 2019	**504**	**38**	**542**	**565**

Summary of amounts recognised in the income statement under IFRS 16 compared to equivalent amounts under IAS 17	2019 €m	2018 €m
Amounts recognised in interest expense		
Interest expense on lease liabilities	15	-
Amounts recognised in other operating expenses		
Depreciation of RoU assets in property, plant and equipment	69	-
Depreciation of Finance lease assets in property, plant and equipment	-	4
Operating lease payments	-	60
Variable lease expenses	8	-
Short-term lease expenses	3	-
Expenses on service contracts classified as leases under IFRS 16	-	33
	80	**97**
Amounts recognised in cost of restructuring		
Impairment	2	-
Total	**97**	**97**

[1] *Includes €5 million of finance lease assets as at 31 December 2018 reclassified as Right of Use assets under IFRS 16 on 1 January 2019.*

61 Bank impact of adopting new accounting standard IFRS 16 'Leases'

	€m
Operating lease commitments as at 31 December 2018	**633**
Less	
Value added tax included in operating lease commitments as at 31 December 2018	(24)
Operating lease commitments as at 31 December 2018 excluding value added tax	**609**
Weighted average incremental borrowing rate as at 1 January 2019 (note 2)	*2.7%*
Discounted operating lease commitments as at 1 January 2019 excluding value added tax under IFRS 16	**513**
Less	
Commitments relating to contracts outside the scope of IFRS 16	(15)
Add	
Commitments relating to leases previously classified as finance leases	4
Service contracts not previously classified as leases under IAS 17	62
Commitments in optional extension periods not recognised as at 31 December 2018	46
Lease liabilities as at 1 January 2019	**610**

	Carrying amount under IAS 17 as at 31 December 2018[1] €m	Impact of new accounting standard €m	Carrying amount under IFRS 16 as at 1 January 2019 €m
Assets			
Property, plant and equipment	304	591	895
Other assets	425	(15)	410
Liabilities			
Lease liabilities	-	610	610
Other liabilities	1,281	(28)	1,253
Provisions	38	(6)	32

Amounts recognised in the balance sheet and income statement

Set out below are the carrying amounts of the Group's RoU assets and lease liabilities and the movements during the period:

	RoU assets			
Balance sheet under IFRS 16	**Buildings €m**	**Computer and other equipment[1] €m**	**Total €m**	**Lease liabilities €m**
As at 1 January 2019	530	66	596	610
Payments	-	-	-	(79)
Interest expense	-	-	-	15
Reclassifications	(1)	-	(1)	-
Remeasurement of lease liabilities	3	(1)	2	2
Additions	2	2	4	4
Impairment	(1)	-	(1)	-
Depreciation expense	(38)	(29)	(67)	-
Exchange adjustments	(1)	-	(1)	(1)
As at 31 December 2019	**494**	**38**	**532**	**551**

[1] *Includes €5 million of finance lease assets as at 31 December 2018 reclassified as Right of Use assets under IFRS 16 on 1 January 2019.*

61 Bank impact of adopting new accounting standard IFRS 16 'Leases' *(continued)*

The Bank recognised variable lease expenses of €8 million and rent expense from short-term leases of €3 million for the year ended 31 December 2019. Variable lease payments on RoU assets relates to computer equipment that has a varying cost dependant on usage with the contracts on which the payments arise maturing within two years.

Summary of amounts recognised in the income statement under IFRS 16 compared to equivalent amounts under IAS 17	2019 €m	2018 €m
Amounts recognised in interest expense		
Interest expense on lease liabilities	15	-
Amounts recognised in other operating expenses		
Depreciation of RoU assets in property, plant and equipment	67	-
Depreciation of Finance lease assets in property, plant and equipment	-	4
Operating lease payments	-	59
Variable lease expenses	8	-
Short-term lease expenses	3	-
Expenses on service contracts classified as leases under IFRS 16	-	33
	78	**96**
Amounts recognised in cost of restructuring		
Impairment	1	-
Total	**94**	**96**

62 Other

(a) The Bank financial statements are prepared in accordance with Section 290 (1) of the Companies Act 2014.

(b) The Bank is domiciled in Ireland.

(c) The Bank is a corporation established in Ireland in 1783 under Royal Charter, with registration number of C-1.

(d) The Bank's immediate and ultimate holding undertaking, BOIG plc, includes the Bank in its consolidated financial statements. The consolidated financial statements of the BOIG plc Group are prepared in accordance with IFRS, are available to the public and may be obtained from the Bank of Ireland Head Office, Mespil Road, Dublin 4.

(e) As at 31 December 2019, the Bank has provided a guarantee under Section 357 of the Companies Act, 2014 for the following companies:

Bank of Ireland Commercial Finance Limited, Bank of Ireland Finance Limited, Bank of Ireland Insurance Management Services Limited, Bank of Ireland Insurance Services Limited, Bank of Ireland International Finance Designated Activity Company, Bank of Ireland Leasing Limited, Bank of Ireland Life Holdings Limited, Bank of Ireland Nominee 1 Limited, Bank of Ireland Nominee 3 Limited, Bank of Ireland Pensions Trust Unlimited Company, Bank of Ireland Unit Managers Limited, BIAM Holdings Unlimited Company, BOI Capital Holdings Limited, BOI-IF Services No 10 Company Unlimited Company, BOI-IF Services No 5 Company Unlimited Company, Bushfield Leasing Limited, C and I (Division) Holdings Unlimited Company, Edendork Leasing Limited, General Investment Trust Designated Activity Company, Hibernian Bank Limited, Hill Wilson Secretarial Limited, IBI Property Nominees Limited, Lansdowne Leasing Unlimited Company, Leopardstown Offices Management Company Limited by Guarantee, Nerling Limited, Nestland Limited, New Ireland Financial Services Limited, New Ireland Investment Managers Limited, Professional Audit Services Limited, Scribe Holdings Limited, The Investment Bank of Ireland Limited, The National Bank of Ireland Limited, Tockhill Unlimited Company, Trustcase Limited, Tustin Limited, Bank of Ireland Insurance & Investments Limited[1], December Leasing Limited[1], Florenville Limited[1], Kilkenny Promotion Project Limited[1], Rolmur Unlimited Company[1], Bank of Ireland Treasury and International Banking Limited[1], Bank of Ireland Trust Services Limited[1], Central Pensions Administration Limited[1], Centurion Card Services Limited[1].

(f) The Bank entered into a framework agreement on 22 September 2014 with the CBI under which the Bank may issue special mortgage-backed euro promissory notes to the CBI as security for Eurosystem credit operations. These obligations are secured by way of a deed of floating charge

[1] *In member's voluntary liquidation.*

62 Other *(continued)*

over all the Bank's right, title, interest and benefit, present and future in and to certain RoI mortgages and related loans forming part of a mortgage pool and the benefit of all related security. The deed of floating charge contains a provision whereby during the subsistence of the security constituted thereby, otherwise than with the prior written consent of the CBI, the Bank shall:

(i) not create or attempt to create or permit to arise or subsist any encumbrance on or over the property charged thereunder or any part thereof; or

(ii) not, otherwise than in the ordinary course of business, sell, transfer, lend or otherwise dispose of the property charged thereunder or any part thereof or redeem, agree to redeem or accept repayment in whole or in part of any loan or attempt or agree to do so whether by means of one or a number of transactions related or not and whether at one time or over a period of time.

(g) The Bank entered into a framework agreement in respect of Eurosystem Operations secured over collateral pool assets (the ‘Pooling Agreement’) with the CBI, together with a related Deed of Charge (the ‘Pooling Deed of Charge’), on 15 May 2014. Pursuant to the Pooling Agreement, the Bank may participate in Eurosystem Operations (as defined therein) which, inter alia, provides for access to the Eurosystem’s main refinancing operations. The Pooling Agreement and the Pooling Deed of Charge replaced the master repurchase agreement previously entered into by the Bank to access the main refinancing operations. As more fully described in the Pooling Deed of Charge, the Bank’s obligations pursuant to the Pooling Agreement are secured by way of:

(i) a first fixed charge over the Bank’s right, title, interest and benefit, present and future in and to eligible assets (as identified as such by the CBI) which comprise present and future rights, title, interest, claims and benefits of the Bank at that time in and to, or in connection with, a collateral account (the ‘Collateral Account’) and eligible assets which stand to the credit of the Collateral Account (together, the ‘Collateral Account Assets’); and

(ii) a floating charge over the Bank’s right, title, interest and benefit, present and future in and to other eligible assets of the Bank.

The Pooling Deed of Charge provides that the Bank may not, save with the prior written consent of the CBI or as permitted by the Pooling Agreement, until its obligations under the Pooling Agreement have been discharged in full:

(i) receive, withdraw, redeem or otherwise transfer or deal with the Collateral Account Assets;

(ii) assign, transfer or otherwise dispose of all or any of its rights, title, interest or benefit in or to the Collateral Account Assets;

(iii) give any instructions in respect of the Collateral Account Assets;

(iv) create or attempt to create or permit to arise or subsist any encumbrance on or over the property charged under the Pooling Deed of Charge;

(v) sell, transfer, lend or otherwise dispose of or deal in the assets subject to the fixed charge under the Pooling Deed of Charge or any part thereof or, in each case, attempt or agree to do so whether by means of one or a number of transactions related or not and whether at one time or over a period of time; and

(vi) otherwise than in the ordinary course of business (and provided that (A) no event of default or event that, with the giving of notice or the lapse of time or both, would constitute an event of default, has occurred, (B) the floating charge has not crystallised without being reconverted into, and continuing in effect as, a floating charge), sell, transfer, lend or otherwise dispose of or deal in the assets subject to the floating charge under the Pooling Deed of Charge or any part thereof, or redeem, agree to redeem or accept repayment in whole or in part of any credit claim subject to the floating charge, or enforce or release any related security or, in each case, attempt or agree to do so whether by means of one or a number of transactions related or not and whether at one time or over a period of time.

(h) Bank income statement:
In accordance with Section 304 of Companies Act 2014, the Bank is availing of the exemption to not present its individual income statement to the AGC and from filing it with the Registrar of Companies. The Bank's profit after tax for the year ended 31 December 2019 determined in accordance with FRS 101 is €565 million (2018: €388 million).

(i) BOI Capital Funding (No 1) LP, BOI Capital Funding (No 2) LP, BOI Capital Funding (No 3) LP and BOI Capital Funding (No 4) LP, which are funding vehicles for the Group, have been included in the results of the Group using acquisition accounting on the basis that the Bank controls these entities. The general partner of these companies is BOI GP No 1 Limited, a wholly owned subsidiary of the Bank.

The Group avails of the exemption provided under Regulation 7 of The Partnerships (Accounts) Regulations 2008 of the UK. Under this exemption, the financial statements of the Limited Partnerships which BOI GP No 1 Limited manages are not required to be filed as appended to the annual financial statements of BOI GP No 1 Limited as the Limited Partnerships are consolidated within the financial statements of the Group.

63 Post balance sheet events

There are no post balance sheet events that require disclosure in the Financial Statements.

64 Approval of financial statements

The Court of Directors approved the Consolidated and Bank financial statements on 21 February 2020.

Other Information

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Forward looking statement

This document contains forward-looking statements with respect to certain of The Governor and Company of the Bank of Ireland (the 'Bank') and its subsidiaries' (collectively the 'Group') plans and its current goals and expectations relating to its future financial condition and performance, the markets in which it operates and its future capital requirements. These forward-looking statements often can be identified by the fact that they do not relate only to historical or current facts. Generally, but not always, words such as 'may,' 'could,' 'should,' 'will,' 'expect,' 'intend,' 'estimate,' 'anticipate,' 'assume,' 'believe,' 'plan,' 'seek,' 'continue,' 'target,' 'goal,' 'would,' or their negative variations or similar expressions identify forward-looking statements, but their absence does not mean that a statement is not forward-looking.

Examples of forward-looking statements include, among others: statements regarding the Group's near term and longer term future capital requirements and ratios, LDR, expected impairment charges, the level of the Group's assets, the Group's financial position, future income, business strategy, projected costs, margins, macroeconomic conditions, the implementation of changes in respect of certain of the Group's pension schemes, estimates of capital expenditures, discussions with Irish, UK, European and other regulators and plans and objectives for future operations. Such forward-looking statements are inherently subject to risks and uncertainties, and hence actual results may differ materially from those expressed or implied by such forward-looking statements.

Such risks and uncertainties include, but are not limited to, those as set out in the 'Principal Risks and Uncertainties' (pages 9 to 18).

Nothing in this document should be considered to be a forecast of future profitability or financial position and none of the information in this document is or is intended to be a profit forecast or profit estimate. Any forward-looking statement speaks only as at the date it is made. The Group does not undertake to release publicly any revision to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date hereof.

Other disclosures

1. On 15 February 2008 a first floating charge (the Floating Charge) was placed in favour of the CBI over all The Governor and Company of the Bank of Ireland's right, title, interest and benefit, present and future, in and to (i) the balances now or at any time standing to the credit of The Governor and Company of the Bank of Ireland's account held as a TARGET 2 participant with the CBI; and (ii) certain segregated securities listed in an Eligible Securities Schedule kept by the Bank for purposes of participating in TARGET 2 ((i) and (ii) together the Charged Property) where TARGET 2 is a real time gross settlement system for payments in euro with settlement in central bank money.

   This Floating Charge contains a provision whereby during the subsistence of the security, otherwise than with the prior written consent of the CBI, the Bank shall:

   (a) not create or attempt to create or permit to arise or subsist any encumbrance on or over the Charged Property or any part thereof; or

   (b) not, otherwise than in the ordinary course of business, sell, transfer, lend or otherwise dispose of the Charged Property or any part thereof or attempt or agree to do so whether by means of one or a number of transactions related or not and whether at one time or over a period of time.

   On 14 September 2018, The Governor and Company of the Bank of Ireland entered into an Agreement in respect of Continued Participation in Target 2 Ireland with the CBI to restate and modify the terms and conditions applicable to the Bank existing participation in TARGET 2 with effect from 14 September 2018. This Agreement provided that The Governor and Company of the Bank of Ireland would continue to participate in TARGET 2 in accordance with the Agreement and the TARGET 2 Ireland terms and conditions as published on the CBI's website and that the Floating Charge would continue in full force and effect with respect to such continued and amended participation in TARGET 2.

Alternative performance measures

This section contains further information related to certain measures referred to in the Business Review.

The Business Review is prepared using IFRS and non-IFRS measures to analyse the Group's performance, providing comparability year on year. These performance measures are consistent with those presented to the Court and Group Executive Committee and include alternative performance measures as set out below. These performance measures may not be uniformly defined by all companies and accordingly they may not be directly comparable with similarly titled measures and disclosures by other companies. These measures should be considered in conjunction with IFRS measures as set out in the consolidated financial statements from page 63.

Forborne collateral realisation loans that are not greater than 90 days past due and / or impaired consist of loans (primarily residential mortgages) where forbearance is in place and where future reliance on the realisation of collateral is expected, for the repayment in full of the relevant borrower loan. Such arrangements will include Split Mortgages and certain 'Interest Only' / 'Interest Only plus' arrangements.

Gross new lending volumes represent loans and advances to customers drawn down during the period and portfolio acquisitions.

Loan to deposit ratio is calculated as being net loans and advances to customers divided by customer deposits.

Liquid assets are comprised of cash and balances at central banks, loans and advances to banks, debt securities at amortised cost, financial assets at FVOCI and certain financial assets at FVTPL (excluding balances in Wealth and Insurance).

Non-performing exposures: These are:

(i) **credit-impaired loans** (which includes loans where the borrower is considered unlikely to pay in full without recourse by the Group to actions such as realising security, including FCR cases, and loans where the borrower is greater than 90 days past due and the arrears amount is material; and); and

(ii) **other / probationary loans** that have yet to satisfy exit criteria in line with EBA guidance to return to performing.

Non-performing exposures ratio is calculated as NPEs on loans and advances to customers as a percentage of the gross carrying value of loans and advances to customers.

Organic capital generation consists of attributable profit and movements in regulatory deductions, including the reduction in DTAs deduction (DTAs that rely on future profitability) and movements in the Expected Loss deduction.

Return on assets is calculated as being statutory net profit (being profit after tax) divided by total assets, in line with the requirement in the EU (Capital Requirements) Regulations 2014.

Underlying excludes non-core items which are those items that the Group believes obscure the underlying performance trends in the business. See page 4 for further information.

Wholesale funding is comprised of deposits by banks (including collateral received) and debt securities in issue.

Abbreviations

AA Automobile Association
AGC Annual General Court
AGM Annual General Meeting
AIB Allied Irish Banks Group plc and subsidiaries
ALCO Group Asset & Liability Committee
AT1 Additional tier 1
ATM Automated Teller Machine
Bank The Governor and Company of the Bank of Ireland
BCBS Basel Committee on Banking Supervision
BoE Bank of England
BOIG plc Bank of Ireland Group plc
BoIGM Bank of Ireland Global Markets
BoIMB Bank of Ireland Mortgage Bank
bps Basis points
BRRD Bank Recovery and Resolution Directive
BSPF Bank of Ireland Staff Pensions Fund
BTL Buy to let
CAC Court Audit Committee
CBI Central Bank of Ireland
CDEAs Cleared Derivatives Execution Agreements
CDS Credit default swap
CEO Chief Executive Officer
CET1 Common equity tier 1
CFO Chief Financial Officer
CGU Cash generating units
CPI Consumer Price Index
CRC Court Remuneration Committee
CRD Capital Requirements Directive (EU)
CRMF Conduct Risk Management Framework
CRO Chief Risk Officer
CRR Capital Requirements Regulation
CSAs Credit Support Annexes
CSO Central Statistics Office
CVA Credit Valuation Adjustment
DAC Designated Activity Company
DCF Discounted Cash Flow
DGS Deposit Guarantee Scheme
DIRT Deposit Interest Retention Tax
DTA Deferred tax asset
EAD Exposure at Default
EBA European Banking Authority
EC European Commission
ECB European Central Bank
ECL Expected credit losses
EDIS European Deposit Insurance Scheme
EIOPA European Insurance and Occupational Pensions Authority
ELG Eligible Liabilities Guarantee
EMIR European Market Infrastructure Regulation
ESB Electricity Supply Board
ESMA European Securities and Markets Authority
EU European Union
EURIBOR Euro Inter Bank Offered Rate
FCA Financial Conduct Authority
FCR Forborne collateral realisation
FIRB Foundation Internal Rating Based
FLI Forward looking information
FRES First Rate Exchange Services Limited
FRESH First Rate Exchange Services Holdings Limited
FRS Financial Reporting Standard
FSCS Financial Services Compensation Scheme
FVA Funding Valuation Adjustment
FVOCI Fair Value through Other Comprehensive Income
FVTPL Fair Value Through Profit or Loss
FX Foreign exchange
GAC Group Audit Committee
GB Great Britain
GCR Group Credit Review
GDPR General Data Protection Regulation
GEC Group Executive Committee
GIA Group Internal Audit
GN&GC Group Nomination and Governance Committee
GM&LR Group Market and Liquidity Risk
GRPC Group Risk Policy Committee
GTOC Group Transformation Oversight Committee
HMRC HM Revenue & Customs
IAASA Irish Auditing Accounting Supervisory Authority
IAS International Accounting Standard
IASB International Accounting Standards Board
IBOR Inter Bank Offered Rate
IBR Incremental borrowing rate
ICAAP Internal Capital Adequacy Assessment Process
IFRIC International Financial Reporting Interpretation Committee
IFRS International Financial Reporting Standard
ILAAP Internal Liquidity Adequacy Assessment Process
ILTR Index Long Term Repo
IPO Initial Public Offering
IRB Internal Rating Based
IRRBB Interest Rate Risk in the Banking Book
ISDA International Swaps and Derivative Association
IVU Independent Valuation Unit
KMP Key management personnel
KPIs Key performance indicators
LDI Liability Driven Investment
LDR Loan to deposit ratio
LGD Loss Given Default
LIBOR London Inter Bank Offered Rate
LME Liability management exercise
LTV Loan to Value
MCEV Market Consistent Embedded Value
MFS Minimum Funding Standard
MLL Marshall Leasing Limited
MREL Minimum Requirement for own Funds and Eligible Liabilities
MRT Material Risk Taker

Abbreviations *(continued)*

NAMA	National Asset Management Agency
NAMAID	National Asset Management Agency Investment DAC
NED	Non-Executive Director
NI	Northern Ireland
NIAC	New Ireland Assurance Company plc
NPEs	Non-performing exposures
NTMA	National Treasury Management Agency
OCI	Other Comprehensive Income
ORSA	Own Risk and Solvency Assessment
OTC	Over the Counter
PD	Probability of Default
POCI	Purchased or Originated Credit-impaired financial asset
PRA	Prudential Regulation Authority
PRC	Portfolio Review Committee
RAROC	Risk Adjusted Return on Capital
RCF	Revolving Credit Facility
RCSA	Risk and Control Self Assessment
RMC	Risk Measurement Committee
RoI	Republic of Ireland
RoU	Right of Use
RoW	Rest of World
RPI	Retail Price Index
RPPI	Residential Property Price Index
RSB	Responsible and Sustainable Business
RWAs	Risk weighted assets
S&P	Standard and Poor's
SCR	Solvency Capital Requirement
SID	Senior Independent Director
SME	Small and Medium Enterprise
SPE	Special purpose entity
SRB	Single Resolution Board
SRF	Single Resolution Fund
SSM	Single Supervisory Mechanism
TFS	Term Funding Scheme
TLTRO	Targeted Longer Term Refinancing Operation
TtC	Through-the-Cycle
UK	United Kingdom
UN	United Nations
US	United States
VA	Volatility Adjustment
VaR	Value at Risk
ViF	Value of in Force
VIU	Value in Use