



LLOYDS
BANKING GROUP



HELPING BRITAIN PROSPER

Lloyds Banking Group
Capital and Risk Management Pillar 3 Report 2018

CONTENTS	
Executive summary	2
Key metrics (KM1)	3
Introduction	4
Disclosure policy	5
Scope of consolidation	6
Risk management	10
The regulatory capital framework	12
Capital management	19
Capital resources and leverage	22
Pillar 1 Capital requirements: Overview of risk-weighted assets	26
Pillar 1 Capital requirements: Credit risk	28
Overview and credit risk mitigation	29
Internal Development and Monitoring of IRB Models	36
Model performance	37
Analysis of credit risk exposures by asset class	46
Analysis of credit risk exposures subject to the Foundation IRB approach	49
Analysis of credit risk exposures subject to the Retail IRB approach	53
Analysis of credit risk exposures subject to Other IRB approaches	59
Analysis of equity exposures	60
Analysis of credit risk exposures subject to the standardised approach	61
Impairment and credit quality of exposures	70
Pillar 1 Capital requirements: Credit risk – securitisation	78
Pillar 1 Capital requirements: Counterparty credit risk	87
Pillar 1 Capital requirements: Market risk	99
Pillar 1 Capital requirements: Operational risk	108
Liquidity risk	109
Appendices	111
Appendix 1: Own Funds, Prudent Valuation Adjustments, Leverage and Countercyclical Capital Buffer	112
Appendix 2: Asset encumbrance	120
Appendix 3: Differences in the accounting and regulatory scopes of consolidation	122
Appendix 4: EBA and BCBS adopted templates	125
Appendix 5: CRR mapping	127
Abbreviations	133
Contacts	135

Index of Tables	
Table 1:	Key Metrics (KM1) and a comparison of own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 (IFRS 9-FL). 3
Table 2:	Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories (LI1) 7
Table 3:	Main sources of differences between regulatory exposure amounts and carrying values in financial statements (LI2) 9
Table 4:	Capital resources (audited) 22
Table 5:	Movements in capital resources 23
Table 5A:	Minimum requirement for own funds and eligible liabilities 24
Table 6:	Leverage ratio 25
Table 7:	Risk-weighted assets movement by key driver 26
Table 8:	Overview of risk-weighted assets (OV1) 27
Table 9:	Risk-weighted assets flow statements of credit risk exposures (CR8) 28
Table 10:	Divisional credit risk exposures and risk-weighted assets 29
Table 11:	CRM techniques – Overview (CR3) 32
Table 12:	Internal Corporate master scale 34
Table 13:	Internal Retail master scale 34
Table 14:	Model performance 38
Table 15:	Back-testing of PD per portfolio – Retail – Mortgages (UK) (CR9) 40
Table 16:	Back-testing of PD per portfolio – Retail QRRE (CR9) 41
Table 17:	Back-testing of PD per portfolio – Retail – Other (non-SME) (CR9) 42
Table 18:	Back-testing of PD per portfolio – Retail SME (CR9) 43
Table 19:	Back-testing of PD per portfolio – Corporate Main (CR9) 44
Table 20:	Back-testing of PD per portfolio – Corporate SME (CR9) 45
Table 21:	Total and average net amount of exposures (CRB-B) 46
Table 22:	IRB – Credit risk exposures by portfolio and PD range – Central governments or central banks (CR6) 49

Table 23:	IRB – Credit risk exposures by portfolio and PD range – Institutions (CR6) 50
Table 24:	IRB – Credit risk exposures by portfolio and PD range – Corporate Main (CR6) 51
Table 25:	IRB – Credit risk exposures by portfolio and PD range – Corporate SME (CR6) 52
Table 26:	IRB – Credit risk exposures by portfolio and PD range – Residential mortgages (SME) (CR6) 53
Table 27:	IRB – Credit risk exposures by portfolio and PD range – Residential mortgages (non-SME) (CR6) 54
Table 28:	Residential mortgage exposures by major portfolio 55
Table 29:	IRB – Credit risk exposures by portfolio and PD range – Qualifying revolving retail exposures (CR6) 56
Table 30:	IRB – Credit risk exposures by portfolio and PD range – Retail Other SME (CR6) 57
Table 31:	IRB – Credit risk exposures by portfolio and PD range – Retail Other non-SME (CR6) 58
Table 32A:	IRB – Specialised lending (CR10) 59
Table 32B:	Equity exposures subject to the simple risk weight method (CR10) 60
Table 33:	Analysis of non-trading book exposures in equities 60
Table 34:	Standardised approach – credit risk exposure and Credit Risk Mitigation (CRM) effects (CR4) 61
Table 35:	Standardised approach – exposures by asset class (CR5) 62
Table 36:	Geographical breakdown of exposures (CRB-C) 63
Table 37:	Exposures subject to the IRB approach analysed by geographical region 65
Table 38:	Concentration of exposures by industry (CRB-D) 66
Table 39:	Maturity of exposures (CRB-E) 68
Table 40:	Credit quality of exposures by exposure class and instrument (CR1-A) 70
Table 41:	Credit quality of exposures by industry types (CR1-B) 72
Table 42:	Credit quality of exposures by geography (CR1-C) 73
Table 43:	Ageing of performing and non-performing exposures (CR1-D hybrid) 74

Table 44:	Non-performing and forborne exposures (CR1-E) 75
Table 45:	Regulatory expected losses and specific credit risk adjustments 76
Table 46:	Summary of securitisation exposures and capital requirements 80
Table 47:	Value of exposures of retained and purchased positions in the banking and trading book by exposure type 81
Table 48:	Analysis of gross securitised exposures on a regulatory basis 82
Table 49:	Analysis of originated positions under the RBA by risk weight category 82
Table 50:	Analysis of originated positions under the Standardised approach by risk weight category 83
Table 51:	Analysis of sponsored positions by risk weight category 85
Table 52:	Analysis of invested positions by risk weight category 86
Table 53:	Risk-weighted assets flow statements of CCR exposures 87
Table 54:	CCR: analysis by measurement approach 89
Table 55:	Analysis of CCR exposure by approach (CCR1) 89
Table 56:	Exposures to CCPs (CCR8) 90
Table 57:	Credit valuation adjustment (CVA) capital charge (CCR2) 91
Table 58:	CCR: analysis by exposure class 91
Table 59:	IRB – CCR exposure by portfolio and PD scale – Corporate Main (CCR4) 92
Table 60:	IRB – CCR exposures by portfolio and PD scale – Central governments or central banks (CCR4) 93
Table 61:	IRB – CCR exposure by portfolio and PD scale – Institutions (CCR4) 94
Table 62:	CCR corporate exposures subject to supervisory slotting 95
Table 63:	Standardised approach – CCR exposures by regulatory portfolio and risk (CCR3) 96
Table 64:	CCR: analysis by contract type 97
Table 65:	Impact of netting and collateral held on exposure values (CCR5-A) 97
Table 66:	Credit derivatives exposures (CCR6) 98
Table 67:	Market risk own funds requirements 99
Table 68:	Market risk linkages to the balance sheet 100

Table 69:	Key market risks for the Group by individual business activity (profit before tax impact measured against Group single stress scenarios) 101
Table 70:	Backtesting results (VaR models) 103
Table 71:	Comparison of VaR estimates with gains/losses (MR4) 104
Table 72:	IMA values for trading portfolios (MR3) 105
Table 73:	Market risk under internal models approach (MR2-A) 106
Table 74:	Risk-weighted assets flow statements of market risk exposures under an IMA (MR2-B) 106
Table 75:	Market risk under Standardised approach (MR1) 107
Table 76:	Liquidity Coverage Ratio (LIQ1) 110
Table 77:	Own funds template 112
Table 78:	Items extracted from the consolidated regulatory balance sheet and reconciliation of own funds items to audited financial statements 114
Table 79:	Prudent valuation adjustments (PV1) 116
Table 80:	Leverage ratio common disclosure 117
Table 81:	Summary reconciliation of accounting assets and leverage ratio exposures 117
Table 82:	Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures) 118
Table 83:	Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer 119
Table 84:	Asset Encumbrance 120
Table 85:	Outline of the differences between the accounting and regulatory scopes of consolidation (LI3) 122

Forward looking statements

This Report contains certain forward looking statements with respect to the business, strategy, plans and/or results of Lloyds Banking Group and its current goals and expectations relating to its future financial condition and performance. Statements that are not historical facts, including statements about Lloyds Banking Group's or its directors' and/or management's beliefs and expectations, are forward looking statements. Words such as 'believes', 'anticipates', 'estimates', 'expects', 'intends', 'aims', 'potential', 'will', 'would', 'could', 'considered', 'likely', 'estimate' and variations of these words and similar future or conditional expressions are intended to identify forward looking statements but are not the exclusive means of identifying such statements. By their nature, forward looking statements involve risk and uncertainty because they relate to events and depend upon circumstances that will or may occur in the future.

Examples of such forward looking statements include, but are not limited to: projections or expectations of the Group's future financial position including profit attributable to shareholders, provisions, economic profit, dividends, capital structure, portfolios, net interest margin, capital ratios, liquidity, risk-weighted assets (RWAs), expenditures or any other financial items or ratios; litigation, regulatory and governmental investigations; the Group's future financial performance; the level and extent of future impairments and write-downs; statements of plans, objectives or goals of Lloyds Banking Group or its management including in respect of statements about the future business and economic environments in the UK and elsewhere including, but not limited to, future trends in interest rates, foreign exchange rates, credit and equity market levels and demographic developments; statements about competition, regulation, disposals and consolidation or technological developments in the financial services industry; and statements of assumptions underlying such statements.

Factors that could cause actual business, strategy, plans and/or results (including but not limited to the payment of dividends) to differ materially from forward looking statements made by the Group or on its behalf include, but are not limited to: general economic and business conditions in the UK and internationally; market related trends and developments; fluctuations in interest rates, inflation, exchange rates, stock markets and currencies; the ability to access sufficient sources of capital, liquidity and funding when required; changes to the Group's credit ratings; the ability to derive cost savings and other benefits including, but without limitation as a result of any acquisitions, disposals and other strategic transactions; changing customer behaviour including consumer spending, saving and borrowing habits; changes to borrower or counterparty credit quality; instability in the global financial markets, including Eurozone instability, instability as a result of the exit by the UK from the European Union (EU) and the potential for other countries to exit the EU or the Eurozone and the impact of any sovereign credit rating downgrade or other sovereign financial issues; technological changes and risks to the security of IT and operational infrastructure, systems, data and information resulting from increased threat of cyber and

other attacks; natural, pandemic and other disasters, adverse weather and similar contingencies outside the Group's control; inadequate or failed internal or external processes or systems; acts of war, other acts of hostility, terrorist acts and responses to those acts, geopolitical, pandemic or other such events; changes in laws, regulations, practices and accounting standards or taxation, including as a result of the exit by the UK from the EU, or a further possible referendum on Scottish independence; changes to regulatory capital or liquidity requirements and similar contingencies outside the Group's control; the policies, decisions and actions of governmental or regulatory authorities or courts in the UK, the EU, the US or elsewhere including the implementation and interpretation of key legislation and regulation together with any resulting impact on the future structure of the Group; the ability to attract and retain senior management and other employees and meet its diversity objectives; actions or omissions by the Group's directors, management or employees including industrial action; changes to the Group's post-retirement defined benefit scheme obligations; the extent of any future impairment charges or write-downs caused by, but not limited to, depressed asset valuations, market disruptions and illiquid markets; the value and effectiveness of any credit protection purchased by the Group; the inability to hedge certain risks economically; the adequacy of loss reserves; the actions of competitors, including non-bank financial services, lending companies and digital innovators and disruptive technologies; and exposure to regulatory or competition scrutiny, legal, regulatory or competition proceedings, investigations or complaints. Please refer to the latest Annual Report or Form 20-F filed with the US Securities and Exchange Commission for a discussion of certain factors and risks together with examples of forward looking statements.

Lloyds Banking Group may also make or disclose written and/or oral forward looking statements in reports filed with or furnished to the US Securities and Exchange Commission, Lloyds Banking Group annual reviews, half-year announcements, proxy statements, offering circulars, prospectuses, press releases and other written materials and in oral statements made by the directors, officers or employees of Lloyds Banking Group to third parties, including financial analysts. Except as required by any applicable law or regulation, the forward looking statements contained in This Report are made as of the date hereof, and Lloyds Banking Group expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward looking statements contained in This Report to reflect any change in Lloyds Banking Group's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

The information, statements and opinions contained in this Report do not constitute a public offer under any applicable law or an offer to sell any securities or financial instruments or any advice or recommendation with respect to such securities or financial instruments.

Executive summary

COMMON EQUITY TIER 1 RATIO

2018 14.6% (13.9% pro forma¹)

2017 14.1% (13.9% pro forma¹)

¹ Allowing for the announced share buyback

COMMON EQUITY TIER 1 RATIO

The Group's common equity tier 1 ratio has strengthened during the year primarily as a result of strong underlying capital build, largely driven by underlying profits, dividends received from the Insurance business and the sale of the Irish mortgage portfolio. This was partially offset by PPI charges.

TOTAL CAPITAL RATIO

2018 22.9%

2017 21.2%

TOTAL CAPITAL RATIO

The increase in the Group's transitional total capital ratio largely reflects the issuance of new AT1 and dated subordinated debt instruments, foreign exchange movements on subordinated debt instruments, the reduction in the significant investments deduction from tier 2 capital, the increase in common equity tier 1 capital and the reduction in risk-weighted assets, partially offset by the amortisation of dated tier 2 instruments and the annual reduction in the transitional limit applied to grandfathered AT1 capital instruments.

UK LEVERAGE RATIO

2018 5.5% (5.6% pro forma)

2017 5.3% (5.4% pro forma)

UK LEVERAGE RATIO

The increase in the Group's UK leverage ratio largely reflects the increase in fully loaded tier 1 capital, following the issuance of a new AT1 capital instrument, partially offset by a marginal increase in the exposure measure. The CRD IV leverage ratio is 5.1 per cent (2017: 4.9 per cent).

RISK-WEIGHTED ASSETS

2018 £206.4bn

2017 £210.9bn

RISK-WEIGHTED ASSETS

The reduction in risk weighted assets primarily reflects the sale of the Irish mortgage portfolio and certain strategic equity holdings as well as reductions in underlying market risk positions.

AVERAGE LIQUIDITY COVERAGE RATIO (WEIGHTED)

2018 128%

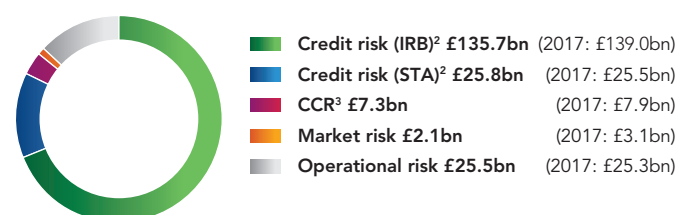
2017 125%

AVERAGE LIQUIDITY COVERAGE RATIO

The Group's liquidity position remains strong and in excess of the regulatory minimum and internal risk appetite, with a LCR of 128 per cent as at 31 December 2018.

SPLIT OF RISK-WEIGHTED ASSETS

Risk-weighted assets by risk type¹



Risk-weighted assets by division¹



¹ Numbers do not include threshold risk-weighted assets.

² Descriptions of credit risk approaches are detailed on page 13.

³ Counterparty credit risk (CCR) includes contributions to the default fund of central counterparties and credit valuation adjustment risk.

⁴ Restated.

Key metrics

The table below provides an overview of the Group's prudential regulatory metrics.

Table 1: Key Metrics (KM1) and a comparison of own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 (IFRS 9-FL).¹

	a	b	c	d	e
	T	T-1	T-2	T-3	T-4
	Q4 2018	Q3 2018	Q2 2018	Q1 2018	Q4 2017
Available capital (amounts)					
1 Common Equity Tier 1 (CET1) (£m)	30,167	30,167	29,794	29,638	29,647
2 CET1 capital as if IFRS 9 transitional arrangements had not been applied (£m)	29,592	29,593	29,216	29,066	
3 Tier 1 (£m)	37,539	36,365	35,973	35,807	36,329
4 Tier 1 capital as if IFRS 9 transitional arrangements had not been applied (£m)	36,964	35,791	35,395	35,235	
5 Total capital (£m)	47,234	45,149	45,584	45,436	44,659
6 Total capital as if IFRS 9 transitional arrangements had not been applied (£m)	47,195	45,111	45,343	45,397	
Risk-weighted assets (amounts)					
7 Total risk-weighted assets (£m)	206,366	206,884	210,689	210,570	210,919
8 Total risk-weighted assets as if IFRS 9 transitional arrangements had not been applied (£m)	206,614	207,364	211,165	210,821	
Risk-based capital ratios as a percentage of RWA					
9 Common Equity Tier 1 ratio (%) ²	14.6%	14.6%	14.1%	14.1%	14.1%
10 CET1 ratio as if IFRS 9 transitional arrangements had not been applied (%)	14.3%	14.3%	13.8%	13.8%	
11 Tier 1 ratio (%)	18.2%	17.6%	17.1%	17.0%	17.2%
12 Tier 1 ratio as if IFRS 9 transitional arrangements had not been applied (%)	17.9%	17.3%	16.8%	16.7%	
13 Total capital ratio (%)	22.9%	21.8%	21.6%	21.6%	21.2%
14 Total capital ratio as if IFRS 9 transitional arrangements had not been applied (%)	22.8%	21.8%	21.5%	21.5%	
Additional CET1 buffer requirements as a percentage of RWA					
Capital conservation buffer requirement (2.5% from 2019)	1.875%	1.875%	1.875%	1.875%	1.250%
Countercyclical buffer requirement (%)	0.884%	0.444%	0.443%	0.003%	0.002%
Bank G-SIB and/or D-SIB additional requirements (%)	–	–	–	–	–
Total of bank CET1 specific buffer requirements (%)	2.759%	2.319%	2.318%	1.878%	1.252%
CET1 available after meeting the bank's minimum capital requirements (%)	10.1%	10.1%	9.6%	9.6%	9.6%
UK leverage ratio³					
15 UK leverage ratio exposure measure (£m)	663,277	671,885	670,312	656,305	657,234
16 UK leverage ratio (%)	5.5%	5.3%	5.2%	5.3%	5.3%
17 UK leverage ratio as if IFRS 9 transitional arrangements had not been applied (%)	5.4%	5.2%	5.2%	5.2%	
Average Liquidity Coverage Ratio (weighted) (LCR)					
Total High Quality Liquid Assets (HQLA) (£m)	125,731	123,498	121,001	121,552	124,543
Total net cash outflow (£m)	98,489	97,091	96,817	97,623	99,703
LCR ratio (%)	128%	127%	125%	125%	125%

¹ Further details on the Group's adoption of the transitional arrangements for IFRS 9 can be found in the Group publication entitled 'IFRS 9 "Financial Instruments" Transition', published in March 2018 and located on the Group's website at <http://www.lloydsbankinggroup.com/investors/financial-performance/>. The Group has opted to apply paragraph 4 of CRR Article 473a (the 'transitional rules') which allows for additional capital relief in respect of any post 1 January 2018 increase in Stage 1 and Stage 2 IFRS 9 expected credit loss provisions (net of regulatory expected losses) during the transition period. As at 31 December 2018 no additional capital relief has been recognised.

² The post share buyback common equity tier 1 ratio is 13.9 per cent on a pro forma basis, reflecting the dividend paid by the Insurance business in February 2019 in relation to its 2018 earnings (31 December 2017: 13.9 per cent).

³ The UK leverage ratio is 5.6 per cent on a pro forma basis, reflecting the dividend paid by the Insurance business in February 2019 in relation to its 2018 earnings (31 December 2017: 5.4 per cent pro forma). The CRD IV leverage ratio at 31 December 2018 is 5.1 per cent (31 December 2017: 4.9 per cent).

Introduction

This document presents the consolidated Pillar 3 disclosures of Lloyds Banking Group plc ('the Group') as at 31 December 2018.

Pillar 3 requirements are set out under the Capital Requirements Directive & Regulation (CRD IV) and are designed to promote market discipline through the disclosure of key information around capital, risk exposures and risk management. The Group's year end disclosures comply with the requirements of CRD IV and associated European Banking Authority (EBA) guidelines and technical standards in force as at 31 December 2018.

In satisfaction of certain disclosure requirements, reference has been made to the 2018 Lloyds Banking Group plc Annual Report and Accounts (ARA). As such, this document should be read in conjunction with the Annual Report and Accounts, as highlighted throughout the remainder of the document.

In 2015 the Basel Committee on Banking Supervision (BCBS) published revised Pillar 3 disclosure requirements as part of the first phase of revisions to the Basel Pillar 3 Framework with the aim of improving the comparability and consistency of disclosures between banks and within the various disclosures made by individual banks.

The EBA subsequently issued its guidelines on Pillar 3 disclosure requirements in December 2016 to ensure the harmonised and timely implementation of the Basel Pillar 3 Framework revisions within the European Union. These guidelines applied in full from 31 December 2017. A full listing of all EBA and BCBS adopted templates can be found in Appendix 4.

A number of other EBA qualitative disclosure requirements are met either by existing disclosures in Pillar 3; within the risk management sections of the Annual Report and Accounts or through supplementary wording that has been inserted into the Pillar 3 report.

The disclosures cover a wider scope of risks than Pillar 1 capital requirements and capital resources, as mandated by the BCBS who published final standards in March 2017 on disclosure requirements arising from the second phase of the revisions to the Basel Pillar 3 Framework. In particular, the report includes quantitative and qualitative disclosures on liquidity requirements and prudent valuation adjustments (PVA). The liquidity disclosures, which include publication of a weighted average Liquidity Coverage Ratio, are being driven by EBA guidelines published in March 2017 which the PRA required UK banks to follow from December 2017. Qualitative disclosures on interest rate risk in the banking book (IRRBB) to meet the BCBS final standards have been included within the 2018 Lloyds Banking Group plc Annual Report and Accounts.

The third and final phase of revisions to the Pillar 3 framework, covering disclosure requirements arising from the final Basel III reforms, was published by the BCBS in December 2018. This final phase of revisions is expected to be implemented in full by 2022, in line with the final Basel III reforms.

RISK STATEMENT

The effectiveness of the risk management and internal control systems is reviewed regularly by the Board and the Audit Committee, which also receives reports of reviews undertaken by the Risk Division and Group Internal Audit. A statement from the Board is included within the Governance section of the 2018 Lloyds Banking Group plc Annual Report and Accounts (page 64) confirming that the Board concluded that the Group's risk management arrangements were adequate to provide assurance that the risk management systems put in place are suitable with regard to the Group's profile and strategy.

The Chief Finance Officer (CFO) and the Chief Risk Officer (CRO) have also attested in writing that the 2018 Pillar 3 disclosures have been prepared in accordance with the internal control processes agreed upon at the Board level.

In addition, a risk statement approved by the management body is included within the Risk Overview section of the 2018 Lloyds Banking Group Annual Report and Accounts (pages 30 to 35).

PILLAR 3 REQUIREMENTS NOT INCLUDED IN EITHER THE ANNUAL REPORT AND ACCOUNTS OR THE PILLAR 3 REPORT

SIGNIFICANT SUBSIDIARY DISCLOSURES (CAPITAL REQUIREMENTS REGULATION (CRR) ARTICLE 13)

Additional disclosures surrounding the consolidated capital resources, leverage exposures and capital requirements of Lloyds Bank plc ('Lloyds Bank Group') and Bank of Scotland plc ('BOS Group') will be published separately in conjunction with the Annual Report and Accounts for these subsidiaries.

G-SIB DISCLOSURE (CRR ARTICLE 441(1))

The Group is not currently classified as a Global Systemically Important Bank (G-SIB), however, by virtue of its leverage exposure measure exceeding €200bn, the Group is required to report G-SIB indicator metrics to the PRA. The Group's indicator metrics which will be used within the 2018 Basel G-SIBs annual exercise will be disclosed in April 2019; the results of the annual exercise will be made available by the Basel Committee later this year.

CAPITAL INSTRUMENTS DISCLOSURE (CRR ARTICLE 437(1)(B))

A description of the main features of common equity tier 1 (CET1), additional tier 1 (AT1) and tier 2 (T2) instruments issued by the Group and its significant subsidiaries are included in a separate document on the Group's website located at www.lloydsbankinggroup.com/investors/financial-performance/other-disclosures

Disclosure policy

The Group maintains a Pillar 3 Disclosure Policy to support compliance with Articles 431-455 of the CRR and associated EBA guidelines and technical standards. The following sets out the key elements of the disclosure policy including the basis of preparation, frequency, media and location, verification and risk profile disclosure.

BASIS OF PREPARATION

This document contains the consolidated Pillar 3 disclosures of Lloyds Banking Group plc as at 31 December 2018, prepared in accordance with the requirements of CRR Part Eight (Disclosure by Institutions) and associated EBA guidelines and technical standards in force at December 2018. A CRR mapping table has been included in Appendix 5, which details how the Group has complied with each article under Part Eight.

The impact of IFRS 9 has been reflected in the consolidated Pillar 3 disclosures as at 31 December 2018 (note, comparative values as at December 2017 have not been restated). The Group has adopted the transitional arrangements for IFRS 9 as set out under CRR Article 473a.

A number of significant differences exist between accounting disclosures published in accordance with International Financial Reporting Standards (IFRS) and Pillar 3 disclosures published in accordance with prudential requirements, which prevent direct comparison in a number of areas. Of particular note are the differences surrounding scope of consolidation, the definition of credit risk exposure and the recognition, classification and valuation of capital securities.

Details on the scope of consolidation applied to the disclosures presented within this document are provided within the Scope of Consolidation section.

Pursuant to the disclosure requirements under the PRA's Group Financial Support Instrument, and in accordance with the general principles set out in Articles 431-434 of the CRR, Lloyds Banking Group has not entered into any group financial support agreement.

Article 432 of the CRR on non-material, proprietary or confidential information permits institutions to omit one or more disclosures if the information provided by such a disclosure is not regarded as material. As the Group's portfolio of trading book securitisation positions is relatively small (£31m exposure, £3m risk-weighted assets) in the context of both the overall trading book and the Group's banking book securitisation positions, the Group has elected to provide only limited disclosure around its trading book securitisation positions.

The implementation of CRD IV is subject to transitional arrangements, with full implementation in the UK required by 1 January 2022 as per PRA policy statement PS7/13. Consequently, the Group's capital position is shown by applying both the transitional arrangements as implemented in the UK by PS7/13 (PRA transitional rules) and the end-point rules under PS7/13 (the 'fully loaded' basis).

The minimum Pillar 1 capital requirements referred to in this document are calculated as 8 per cent of aggregated risk-weighted assets.

BASIS OF CREDIT RISK EXPOSURES

To ensure compliance with both CRR requirements and subsequent EBA guidelines, credit risk exposures are presented on different bases throughout the document. Information on the exposure basis is given either in column headings or supporting narrative within the Pillar 3 Credit risk section (pages 28 to 77).

Counterparty credit risk exposures are presented on a post CRM basis, unless otherwise stated.

Securitisation positions represent the aggregate of the Group's retained or purchased positions, excluding those positions rated below BB- or that are unrated and therefore deducted from capital.

FREQUENCY, MEDIA AND LOCATION

In accordance with Pillar 3 disclosure requirements the Group will continue to make available its full consolidated Pillar 3 disclosures on an annual basis. A standalone copy of these disclosures is located on the Lloyds Banking Group plc website (www.lloydsbankinggroup.com/investors/financial-performance/other-disclosures).

The EBA guidelines on Pillar 3 disclosure frequency that were formally adopted by the Group from October 2015 define key information that institutions in the EU banking sector should consider disclosing on a more frequent than annual basis under Pillar 3. The Group's assessment of these guidelines has resulted in the disclosure of specific capital and leverage information at the interim quarter ends with further detailed analysis provided at half-year. The additional EBA guidelines issued in December 2016 (referred to in the Introduction) that applied in full from 31 December 2017 also define specific templates that banks are required to disclose on a quarterly and semi-annual basis. These templates relate mainly to credit risk, counterparty credit risk and market risk.

VERIFICATION

The disclosures presented within this document are not required to be subject to an external audit. Instead, the disclosures have been verified and approved through internal governance procedures in line with the Group's Pillar 3 Disclosure Policy, including the review and approval of the disclosures by the Group's Disclosure Committee and Audit Committee following the receipt of attestations in respect of both the quantitative and qualitative disclosures from Finance and Risk Directors at Divisional and Group level.

RISK PROFILE DISCLOSURE

In accordance with the requirements of CRR Part Eight (Disclosure by Institutions), the Group is required to assess whether its external disclosures taken as a whole (including the Group's News Release, Annual Report and Accounts and Pillar 3 disclosures) comprehensively portray its risk profile.

In this respect, the 2018 Lloyds Banking Group plc Annual Report and Accounts provides an in depth analysis of the principal risks and emerging risks to which the Group is exposed, together with further detail on the Group's key risk drivers.

The Group's Pillar 3 disclosures focus primarily on capital risk and the key risk drivers behind the Group's Pillar 1 capital requirements (credit, counterparty credit, market and operational risks), providing granular information and analysis in addition to that presented within the 2018 Lloyds Banking Group plc Annual Report and Accounts.

The relevant analysis is presented in the following sections of the 2018 Lloyds Banking Group plc Annual Report and Accounts:

- Risk overview, pages 30 to 35;
- Emerging risks, page 108;
- Risk categories, page 114.

Scope of consolidation

The following information sets out the scope of consolidation applied to the disclosures presented within this document.

INTRODUCTION

As a banking conglomerate, Lloyds Banking Group is required to calculate consolidated capital requirements and consolidated capital resources based on the regulatory consolidation provisions applicable to banks under the CRR (Part One, Title II, Chapter 2).

REGULATORY CONSOLIDATION

The scope of regulatory consolidation for the purposes of quantifying consolidated capital requirements and consolidated capital resources extends across the banking and investment operations of the Group. All banking and investment services related undertakings included within the scope of accounting consolidation are also included within the scope of regulatory consolidation. There are, however, a number of differences in the methods by which certain undertakings are consolidated for regulatory purposes.

Subsidiary undertakings included within the regulatory consolidation are fully consolidated, with capital resources determined on a line-by-line (accounting) consolidation basis. Capital requirements are determined either on a line-by-line (accounting) consolidation basis or by aggregating individual subsidiaries' risk capital requirements.

Undertakings in which the Group or its subsidiaries hold a 'participation', where it is deemed that the Group exerts significant influence over the undertaking, are generally consolidated within the regulatory calculations on a proportional (pro-rata) basis. This follows line-by-line (accounting) consolidation based on the ownership share in the particular undertaking. Such undertakings may include joint ventures and associates, as defined under IFRS accounting standards, and specified venture capital investments, where these are classified as financial sector entities. In certain circumstances, participations are deducted from capital rather than proportionally consolidated.

Insurance undertakings are excluded from the calculation of consolidated capital requirements and consolidated capital resources. The Group's investments in insurance undertakings are instead subject to threshold rules under CRD IV that determine the extent to which the investments are deducted from capital with remaining amounts risk-weighted in accordance with the rules. The regulatory consolidation group diagram presented below highlights the key insurance undertakings of the Group that are excluded from the scope of regulatory consolidation.

The full list of entities where the regulatory method of consolidation or treatment differs from the accounting method of consolidation or treatment is provided in Appendix 3, Table 85.

The capital requirements for the Insurance Group (under the Solvency II regime) and the capital available to meet them are regularly calculated in order to ensure that insurance businesses within the Group are sufficiently capitalised. The minimum required capital must be maintained at all times throughout the year.

Venture capital investments that are not classified as financial institutions and investments held by the Group in respect of which it does not have the ability to exert significant influence are included within the calculation of capital requirements, being treated as equity exposures. The underlying assets of these investments are neither consolidated nor deducted.

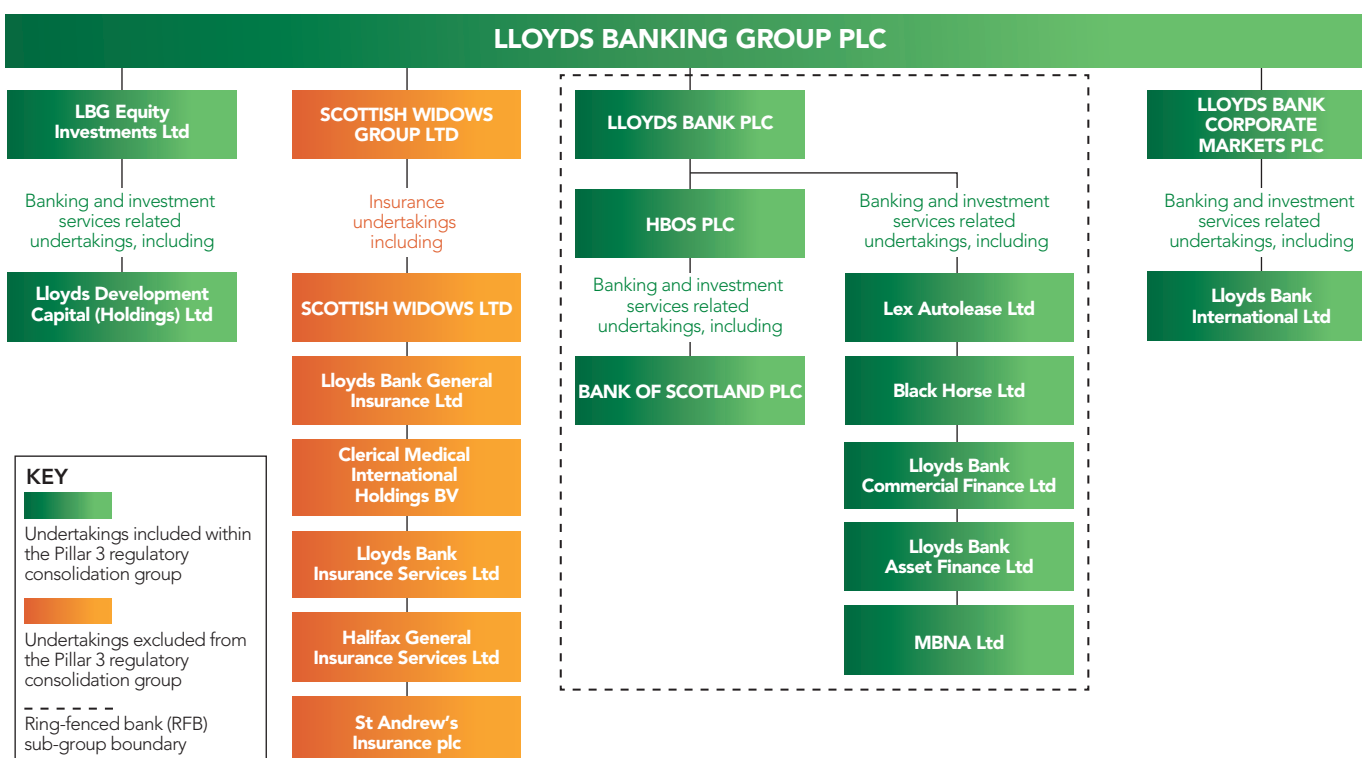
Management practice and policy ensures that capital adequacy is maintained at all levels of banking and insurance consolidation within the Group in accordance with the appropriate regulatory requirements.

The current legal and regulatory structure of the Group provides a capability for the transfer of surplus capital resources over and above regulatory and internal risk appetite requirements or repayment of liabilities when due throughout the Group. There are currently no material or contractual impediments to such transfers or repayments. Any such transfer would be subject to legal and regulatory requirements including those required by ring fencing to ensure the Group's ring-fenced bank remains adequately capitalised and any conflicts independently governed. In addition, constraints are imposed over the available capital resources of the Group's life assurance business.

REGULATORY CONSOLIDATION GROUP

The Group completed its internal restructuring activities during 2018 to comply with UK ring-fencing legislation from 1 January 2019, resulting in the formation of the ring-fenced bank (Lloyds Bank Group). The final structural changes included the transfer of international banking subsidiaries to Lloyds Bank Corporate Markets plc (LBCM) and the transfer of the Scottish Widows Group from Lloyds Bank plc to Lloyds Banking Group plc.

A summarised diagrammatical representation (as at 31 December 2018) of the regulatory consolidation group upon which the disclosures presented within this document are based is provided below.



Scope of consolidation continued

CONSOLIDATED BALANCE SHEET UNDER THE REGULATORY SCOPE OF CONSOLIDATION

The following table provides a reconciliation of the Group's consolidated balance sheet as at 31 December 2018 on an accounting consolidation basis (as presented on pages 172 and 173 of the 2018 Lloyds Banking Group plc Annual Report and Accounts) to the Group's consolidated balance sheet under the regulatory scope of consolidation. It also breaks down how carrying values under the scope of regulatory consolidation are allocated to the different risk frameworks laid out in Part Three of the CRR.

Table 2: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories (LI1)

	2018						
	Carrying values as reported in published financial statements £m	Carrying values under regulatory scope of consolidation £m	Carrying values of items:				
			subject to credit risk framework £m	subject to counterparty credit risk framework £m	subject to securitisation framework £m	subject to market risk framework £m	not subject to capital requirements or subject to deduction from capital £m
	a	b	c	d	e	f	g
Assets							
Cash and balances at central banks	54,663	55,102	55,102	–	–	–	–
Items in the course of collection from banks	647	–	–	–	–	–	–
Financial assets at fair value through profit or loss	158,529	41,522	2,045	28,387	1,720	35,246	1,383
Derivative financial instruments	23,595	22,219	727	21,497	–	14,734	–
Financial assets at amortised cost	496,379	497,085	430,147	47,093	19,261	–	584
Loans and advances to banks	6,283	5,817	2,659	3,158	–	–	–
Loans and advances to customers	484,858	483,703	422,958	43,935	16,811	–	–
Debt securities	5,238	7,565	4,531	–	2,450	–	584
Financial assets at fair value through other comprehensive income	24,815	24,814	24,814	–	–	–	–
Investment in group undertakings	–	8,754	3,530	–	–	–	5,224
Value of in-force business	4,762	–	–	–	–	–	–
Goodwill	2,310	474	–	–	–	–	474
Other intangible assets	3,347	3,347	–	–	–	–	3,347
Property, plant and equipment	12,300	8,571	8,571	–	–	–	–
Current tax recoverable	5	–	–	–	–	–	–
Deferred tax assets	2,453	3,112	572	–	–	–	2,540
Retirement benefit assets	1,267	1,267	–	–	–	–	1,267
Other assets	12,526	3,637	3,629	8	–	–	–
Total Assets	797,598	669,904	529,137	96,984	20,981	49,980	14,818

Scope of consolidation continued

	2018						
	Carrying values as reported in published financial statements £m	Carrying values under regulatory scope of consolidation £m	Carrying values of items:				
			subject to credit risk framework £m	subject to counterparty credit risk framework £m	subject to securitisation framework £m	subject to market risk framework £m	not subject to capital requirements or subject to deduction from capital £m
	a	b	c	d	e	f	g
Liabilities							
Deposits from banks	30,320	–	–	–	–	–	–
Customer deposits	418,066	450,388	–	26,212	–	–	424,176
Items in course of transmission to banks	636	–	–	–	–	–	–
Financial liabilities at fair value through profit or loss	30,547	30,486	–	21,595	–	23,451	–
Derivative financial instruments	21,373	20,426	–	18,885	–	10,827	–
Notes in circulation	1,104	–	–	–	–	–	–
Debt securities in issue	91,168	89,111	–	–	–	–	89,111
Liabilities arising from insurance contracts and participating investment contracts	98,874	–	–	–	–	–	–
Liabilities arising from non-participating investment contracts	13,853	–	–	–	–	–	–
Other liabilities	19,633	7,122	–	–	–	–	7,122
Retirement benefit obligations	245	245	–	–	–	–	245
Current tax liabilities	377	304	–	–	–	–	304
Deferred tax liabilities	–	–	–	–	–	–	–
Other provisions	3,547	3,365	–	–	–	–	3,365
Subordinated liabilities	17,656	15,970	–	–	–	–	15,970
Total Liabilities	747,399	617,417	–	66,693	–	34,278	540,292

Differences between accounting and regulatory scopes of consolidation: Insurance undertakings are included in the published financial statements but excluded from the scope of the Group's regulatory consolidation. Therefore, assets and liabilities relating to the Group's insurance undertakings require to be removed from the regulatory balance sheet. The regulatory consolidation group diagram on page 6 highlights the key undertakings of the Group that are excluded from the scope of regulatory consolidation.

The table provides the breakdown of how the amounts reported in consolidated regulatory balance sheet correspond to regulatory risk framework categories. Certain items included in these columns are subject to more than one risk framework. As a consequence, the total reported in the 'Carrying Values under regulatory scope of consolidation' column may not equal the sum of all the risk framework categories.

Market risk framework: Refer to Table 68: Market risk linkages to the balance sheet.

Not subject to capital requirements or subject to deduction from capital: Includes items which are not subject to capital requirements, as well as assets that are ultimately deducted from own funds and which are therefore not risk-weighted. See Table 78: Items extracted from the consolidated regulatory balance sheet and reconciliation of own funds items to audited financial statements.

Scope of consolidation continued

REGULATORY BALANCE SHEET ASSETS RECONCILIATION TO EXPOSURE AT DEFAULT (EAD)

A reconciliation of the consolidated regulatory balance sheet to exposure at default (EAD) pre CRM, post CCF for items subject to the credit risk, CCR and securitisation frameworks is presented below.

Table 3: Main sources of differences between regulatory exposure amounts and carrying values in financial statements (LI2)

	Items subject to:		
	Credit risk framework £m	CCR framework £m	Securitisation framework £m
	b	c	d
Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	529,137	96,984	20,981
Off balance sheet amounts	82,127	90,523	8,623
Differences due to specific regulatory adjustments	10,126	–	(2,340)
Differences due to consideration of provisions	3,539	–	–
Differences due to consideration of collateral, haircuts and netting	–	(163,274)	–
Net Potential Future Exposures	–	18,250	–
Exposure amounts considered for regulatory purposes	624,928	42,484	27,264

The carrying value of assets corresponds to the balances reported in Table 2.

Off balance sheet items are stated after the application of credit conversion factors (CCF). Under the credit risk framework, these balances principally consist of undrawn credit facilities. Under the counterparty credit risk framework, the off balance sheet items consist of the collateral given against cash received for securities financing transactions (SFT).

Differences due to specific regulatory adjustments primarily represent the uplift from gross exposure to modelled exposure at default for Retail IRB exposures.

Differences due to consideration of provisions relate to the grossing up of provisions related to IRB exposures.

Differences due to consideration of collateral, haircuts and netting consist of the regulatory calculation adjustments to arrive at the net exposure value.

Risk management

THE GROUP'S APPROACH TO RISK

The Group operates a prudent approach to risk with rigorous management controls to support sustainable business growth and minimise losses. Through a strong and independent risk function (Risk division), a robust control framework is maintained to identify and escalate current and emerging risks, support sustainable growth within Group risk appetite, and to drive and inform good risk reward decision-making.

To meet ring-fencing requirements from 1 January 2019, core UK retail financial services and ancillary retail activities have been ring-fenced from other activities of the Group. The Group Risk Management Framework and Group Risk Appetite apply across the Group and are supplemented by risk management frameworks and risk appetites for the sub-groups to meet sub-group specific needs. In each case these are aligned to the Group position. The Group's Corporate Governance Framework applies across Lloyds Banking Group plc, Lloyds Bank plc, Bank of Scotland plc and HBOS plc. It is tailored where needed to meet the entity specific needs of Lloyds Bank plc and Bank of Scotland plc, and supplementary Corporate Governance Frameworks are in place to address sub-group specific requirements of the other sub-groups (LBCM, Insurance and LBG Equity Investments). See our revised Group governance arrangements and Group restructure to comply with ring-fencing on page 58 of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Risk culture

Based on the Group's conservative business model, prudent approach to risk management, and guided by the Board, the senior management articulates the core risk values to which the Group aspires, and sets the tone at the top, with a strong focus on building and sustaining long-term relationships with customers through the economic cycle. The Group's code of responsibility reinforces colleague accountability for the risks they take and their responsibility to prioritise their customers' needs.

Risk as a strategic differentiator

Risks are identified, managed and mitigated using our comprehensive Risk Management Framework, and our well-articulated risk appetite provides a clear framework for decision-making. The principal risks we face, which could significantly impact the delivery of our strategy, are discussed on pages 32 to 35 of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

We believe effective risk management can be a strategic differentiator, in particular:

– Prudent approach to risk

Being low risk is fundamental to our business model and drives our participation choices. Strategy and risk appetite are developed in tandem and together outline the parameters within which the Group operates. The Board is responsible for approving the Group's risk appetite statement at least annually. Group Board-level metrics are cascaded into more detailed business appetite metrics and limits.

– Strong control framework

The Group's Risk Management Framework is the foundation for the delivery of effective risk control and ensures that the Group risk appetite is continually developed and adhered to.

– Business focus and accountability

Risk management is an integral feature of how we measure and manage performance – for individuals, businesses and the Group. In the first line of defence, business units are accountable for managing risk with oversight from a strong and independent second line of defence Risk division.

– Effective risk analysis, management and reporting

Regular close monitoring and comprehensive reporting to all levels of management and the Board ensures appetite limits are maintained and subject to stressed analysis at a risk type and portfolio level, as appropriate.

Risk appetite

We define our risk appetite as 'the amount and type of risk that the Group is prepared to seek, accept or tolerate' in delivering our Group strategy. Group strategy and risk appetite are developed in tandem. Business planning aims to optimise value within our risk appetite parameters and deliver on our promise to help Britain prosper.

The Group's risk appetite statement details the risk parameters within which the Group operates. The statement forms part of our control framework and is embedded into our policies, authorities and limits, to guide decision-making and risk management. The Board is responsible for approving the Group's risk appetite statement at least annually. Group Board-level metrics are cascaded into more detailed business appetite metrics and limits.

Governance and control

- The Group's approach to risk is founded on a robust control framework and a strong risk management culture which are the foundation for the delivery of effective risk management and guide the way all employees approach their work, behave and make decisions.
- Governance is maintained through delegation of authority from the Board down to individuals through the management hierarchy. Senior executives are supported by a committee based structure which is designed to ensure open challenge and support effective decision-making.
- The Group's risk appetite, principles, policies, procedures, controls and reporting are regularly reviewed and updated where needed to ensure they remain fully in line with regulations, law, corporate governance and industry good-practice.
- The interaction of the executive and non-executive governance structures relies upon a culture of transparency and openness that is encouraged by both the Board and senior management.
- Board-level engagement, coupled with the direct involvement of senior management in Group-wide risk issues at Group Executive Committee level, ensures that escalated issues are promptly addressed and remediation plans are initiated where required.
- Line managers are directly accountable for identifying and managing risks in their individual businesses, ensuring that business decisions strike an appropriate balance between risk and reward and are consistent with the Group's risk appetite.
- Clear responsibilities and accountabilities for risk are defined across the Group through a three lines of defence model which ensures effective independent oversight and assurance in respect of key decisions.

Risk management continued

Risk decision making and reporting

- Risk analysis and reporting enables better understanding of risks and returns, supporting the identification of opportunities as well as better management of risks.
- An aggregate view of the Group's overall risk profile, key risks and management actions, and performance against risk appetite is reported to and discussed monthly at the Group Risk Committee with regular reporting to the Board Risk Committee and the Board.
- Rigorous stress testing exercises are carried out to assess the impact of a range of adverse scenarios with different probabilities and severities to inform strategic planning.
- The Chief Risk Officer regularly informs the Board Risk Committee of the aggregate risk profile and has direct access to the Chairman and members of Board Risk Committee.

The most significant risks the Group faces which could impact delivery of its strategy together with key mitigating actions, in line with the Risk Management framework, are outlined in the Risk Overview section of the 2018 Lloyds Banking Group plc Annual Report and Accounts, pages 30 to 35.

Details of the Group's application of stress testing, the methodologies applied, use of reverse stress testing and governance are presented in the Risk Management section of the 2018 Lloyds Banking Group plc Annual Report and Accounts, page 110.

Further details on the Group's risk governance are presented in the Risk Management section of the 2018 Lloyds Banking Group plc Annual Report and Accounts, pages 112 to 114.

Further details on the Group's risk management processes in relation to the key risk drivers that do not fall under the scope of the Group's Pillar 3 disclosures are presented in the Risk Management section of the 2018 Lloyds Banking Group plc Annual Report and Accounts, as follows: Conduct risk page 136; Funding and liquidity risk, pages 147 to 152; Regulatory and legal risk, page 135; Insurance underwriting risk, page 138; People risk, page 138; Financial reporting risk, page 107; and Governance risk, page 153.

The regulatory capital framework

The Group's regulatory capital framework is defined by CRD IV, as implemented in the UK by the PRA and supplemented through additional regulation under the PRA Rulebook.

The framework consists of various classifications of capital resources – Common Equity Tier 1 (CET1), Additional Tier 1 (AT1) and Tier 2 (T2) – to meet a stack of regulatory capital requirements and buffers, over and above which the Board maintains a management buffer to provide capacity for growth, meet regulatory requirements and cover uncertainties.

REGULATORY CAPITAL RESOURCES

The Group's capital resources are classified depending on the degree of permanency and loss absorbency exhibited:

Common equity tier 1 capital

This represents the strongest form of capital consisting of shareholders' equity (ordinary share capital and reserves) after a number of regulatory adjustments and deductions are applied. Of these, the most significant for the Group are the deduction of part of the Group's equity investment in its Insurance business and deductions applied for goodwill and other intangible assets. Other significant deductions consist of a large part of the Group's deferred tax assets, the elimination of the cash flow hedging reserve and deductions applied for defined benefit pension surpluses.

Additional tier 1 capital

AT1 capital instruments are non-cumulative perpetual securities containing a specific provision to write down the security or convert it to equity should the CET1 ratio fall to a defined trigger limit. The Group's current AT1 securities contain a trigger limit of 7 per cent.

Under the CRD IV transitional rules, securities that do not qualify in their own right as AT1 but were issued and eligible as tier 1 capital prior to CRD IV can be partially included within AT1, until they are phased out altogether in 2022. To the extent that these securities do not qualify as AT1 they may nevertheless still qualify as tier 2 capital.

A portion of the subordinated debt issued by the Group's Insurance business and held by the Group is deducted from AT1 capital. The remaining portion is deducted from T2 capital.

CET1 and AT1 together form Tier 1 Capital (T1).

Tier 2 capital

T2 capital comprises certain other subordinated debt securities that do not qualify as AT1. They must have an original term of at least 5 years, cannot normally be redeemed within their first 5 years and are phased out as T2 regulatory capital in the final 5 years before maturity.

Again, CRD IV transitional rules operate allowing securities that do not qualify in their own right as T2 but which were issued and eligible as T2 capital prior to CRD IV to be partially included as T2 capital, until they are phased out altogether in 2022.

There are two further adjustments: any excess of IRB loan loss provisions over the corresponding expected losses is added back to T2 capital subject to a percentage cap based on IRB risk-weighted assets; and a deduction is made for part of the subordinated debt issued by the Group's Insurance business that is not deducted from AT1 capital.

T1 and T2 together form Total Capital.

REGULATORY CAPITAL REQUIREMENTS AND BUFFERS

Prudential requirements under the Basel framework are categorised under three pillars: Pillar 1 – Minimum Capital Requirements; Pillar 2 – Supervisory Review Process; and Pillar 3 – Market Discipline.

PILLAR 1 – MINIMUM CAPITAL REQUIREMENTS

Pillar 1 of the regulatory framework focuses on the determination of risk weighted assets and expected losses in respect of the firm's exposure to credit, counterparty credit, market and operational risks.

The minimum amount of total capital, under Pillar 1 of the regulatory framework, is 8 per cent of total risk-weighted assets. At least 4.5 per cent of risk-weighted assets are required to be covered by CET1 capital and at least 6 per cent of risk-weighted assets are required to be covered by tier 1 capital. These minimum Pillar 1 requirements are supplemented by additional minimum requirements under Pillar 2A of the regulatory framework and a number of regulatory capital buffers as described on pages 14 and 15.

A range of approaches, varying in sophistication, are available under the CRD IV framework to use in measuring risk-weighted assets to determine the minimum level of capital required under Pillar 1. Within the Group, risk-weighted assets are predominantly calculated using internal models that are prudently calibrated based on loss experience and are subject to a number of internal controls and external approval from the PRA. A brief summary of the different approaches for the different risk types and their application by the Group is disclosed on pages 13 and 14, with further detail provided in each of the sections as indicated.

The regulatory capital framework continued

PILLAR 1 CAPITAL REQUIREMENTS

Risk type	Approaches	Application within the Group
Credit risk	<p>Credit risk risk-weighted assets represent a measure of on and off-balance sheet exposures weighted according to risk as specified under the rules, utilising the following two key approaches:</p> <p>Standardised Approach (STA) This is the most basic approach which relies on the application of a prescribed set of risk weights to credit risk exposures, dependent on a number of factors including the applicable asset class and underlying credit quality.</p> <p>The Standardised Approach takes account of credit risk mitigation and specific credit risk adjustments that the Group has against an exposure, before the relevant risk weight is applied to the adjusted exposure amount. Unlike exposures modelled using the Group's internal ratings, there is no distinction made between expected and unexpected losses for exposures on the Standardised Approach.</p> <p>Under this approach banks can utilise risk assessments from External Credit Assessment Institutions (ECAIs) for a number of exposure classes that cover rated counterparties, including corporates, central governments or central banks and institutions (refer to page 62 for further information on the application of ECAI).</p> <p>IRB Approach (IRB) There are two main approaches for commercial exposures – Foundation IRB (FIRB) and Advanced IRB (AIRB). For retail exposures, Retail IRB (RIRB) is available. A prescribed regulatory formula is used to calculate risk-weighted assets which incorporates probability of default (PD), loss given default (LGD) and EAD in addition to other variables such as maturity and correlation.</p> <p>Regulatory expected losses (EL) under the FIRB, AIRB and RIRB approaches are calculated by multiplying regulatory EAD by PD and LGD, which are determined for each of the above IRB approaches with the exception of defaulted exposures on the AIRB where the best estimate of expected loss (BEEL) is used.</p> <p>Under CRD IV scaling factors are applied to the calculation of risk-weighted assets with an uplift applied for Financial Institutions Interconnectedness (FII) and a reduction for exposure to certain SMEs.</p> <p><i>Foundation IRB Approach</i> The FIRB Approach uses internal assessments of a counterparty's PD (subject to certain floors) together with regulatory defined assessments for LGD and EAD.</p> <p><i>Advanced IRB Approach</i> The AIRB Approach uses internal assessments of PD, EAD and LGD (subject to certain floors).</p> <p><i>Retail IRB Approach</i> The Retail IRB Approach is a version of the AIRB Approach tailored to retail exposures.</p> <p><i>Other IRB Approaches</i> For certain specialised lending exposures there is also a Supervisory Slotting Approach which assigns regulatory prescribed risk weights to assets based on the characteristics of each exposure. For more detail on the application of the Supervisory Slotting Approach refer to page 59.</p> <p>A number of alternative methodologies currently exist for other areas such as equity exposures and securitisation positions.</p> <p>For exposures on the Supervisory Slotting Approach and Equity Simple Risk Weight method, regulatory expected losses are determined by applying prescribed percentages.</p>	<p>The Group applies the Standardised Approach to the MBNA credit card portfolio and a small number of other portfolios across the Group. These portfolios are either awaiting roll-out under the Group's IRB roll-out plan (including the MBNA credit card portfolio) or are permanently exempt from the IRB Approach, including the majority of the Group's central government and central bank exposures. Minimal movement in the roll-out position occurred during 2018, with MBNA assets expected to move to the IRB approach in the medium to long term, subject to the full integration of the MBNA portfolio, data testing, model governance and regulatory approval.</p> <p>Information on the comparison of EL and SCRA, which form the basis of the calculation of Excess EL can be found on page 76.</p> <p>The FIRB Approach is used for the majority of the Group's commercial exposures as the Group does not have permission to utilise the AIRB Approach for these portfolios.</p> <p>The Group has permission to utilise the AIRB Approach for retail portfolios only and it applies the Retail IRB Approach (a version of the AIRB Approach) for its modelled retail exposures. For more information on IRB models refer to the Model Performance section on pages 35 to 45.</p> <p>The Group applies the Supervisory Slotting Approach to certain corporate specialised lending exposures comprising mainly of the commercial real estate portfolios.</p> <p>The Simple Risk Weight Method is applied to the Group's equity exposures.</p> <p>Securitisation positions are predominantly risk-weighted under the Ratings Based Approach (RBA), with limited use made of the Internal Assessment Approach (IAA), Supervisory Formula Approach (SFA) and Standardised Approach.</p>
Counterparty credit risk	<p>There are several approaches for measuring exposures to counterparty credit risk, as set out below. The resultant exposures are risk-weighted under either the Standardised Approach or the relevant IRB Approach, as appropriate, to determine the capital requirement.</p> <p>Standardised Approach The exposure value is calculated by applying a multiplier to the market value, dependent on the type of contract.</p> <p>Original Exposure Method Under this method the exposure value is calculated by multiplying the notional amount of the instrument by set percentages prescribed depending on maturity.</p> <p>Mark-to-Market Method Under this method an add-on for potential future exposure (PFE) is applied to the mark-to-market value of the instrument to give the overall exposure.</p>	<p>The Group's derivative and SFT counterparty credit risk exposures are respectively measured under the Mark-to-Market Method and SFT Comprehensive Approach, prior to being risk weighted under the Standardised Approach, FIRB Approach or Supervisory Slotting Approach as appropriate.</p>

The regulatory capital framework continued

Risk type	Approaches	Application within the Group
Counterparty credit risk (continued)	<p>SFT Comprehensive Approach Under this method volatility adjustments are applied to the market value of collateral to take account of price volatility.</p> <p>Internal Models Method (IMM) Under the IMM approach, the fair value on the balance sheet is replaced by an exposure value calculated using internal models.</p> <p>Exposures to central counterparties (CCPs), comprising trades, default fund contributions and initial margin are subject to specific measurement and risk weight requirements.</p> <p>Credit valuation adjustment (CVA) risk is calculated under either the Advanced Method (via the use of internal models) or the Standardised Method.</p>	The Group applies the Standardised Method for calculating CVA risk.
Market risk	<p>The two key approaches for Market Risk are as follows:</p> <p>Standardised Approach (STA) This requires the calculation of position risk requirements (PRR) for each type of market risk in the trading book in accordance with standard rules set by the PRA.</p> <p>Internal Models Approach (IMA) Following PRA approval, involves the use of internal Value at Risk (VaR) and other models to determine appropriate capital requirements based on the market risks in the trading book.</p>	The majority of the Group's trading book positions are assigned a capital requirement under the Internal Models Approach with the remainder following the Standardised Approach.
Operational risk	<p>There are three approaches for Operational Risk:</p> <p>Basic Indicator Approach (BIA) A low risk sensitivity approach which calculates the capital requirement as a percentage of average net interest and non-interest income.</p> <p>Standardised Approach (STA) A medium risk sensitivity approach where the capital requirement is derived from regulatory prescribed factors applied to the three year average income from various business lines.</p> <p>Advanced Measurement Approach (AMA) A high risk sensitivity approach where, following PRA approval, the capital requirement is determined through the use of an internal operational risk measurement model.</p>	The Group measures its operational risk requirement using the Standardised Approach.

PILLAR 2 – SUPERVISORY REVIEW PROCESS

The Pillar 1 minimum requirement for capital is supplemented by a Pillar 2A firm specific Individual Capital Requirement (ICR) and a framework of regulatory capital buffers.

The aggregate of the Pillar 1 and Pillar 2A capital requirements are referred to as the Total Capital Requirement (TCR).

INDIVIDUAL CAPITAL REQUIREMENT

Under Pillar 2A additional minimum requirements are currently set by the PRA through the issuance of a bank specific ICR. This reflects a point-in-time estimate by the PRA, which may change over time, of the minimum amount of capital that is needed by the Group to cover risks that are not fully covered by Pillar 1, such as credit concentration and operational risk, and those risks not covered at all by Pillar 1, such as pensions and interest rate risk in the banking book.

During 2018 the Group's ICR was reduced from 5.4 per cent to 4.6 per cent of risk-weighted assets of which 56 per cent (2.6 per cent of risk-weighted assets) must be met by CET1 capital. From 1 January 2019 the requirement has increased to 4.7 per cent of risk-weighted assets, of which 2.7 per cent of risk-weighted assets must be met by CET1 capital, to reflect the commencement of the UK's ring-fencing regime.

The Group is not permitted by the PRA to disclose any details on the individual components of Pillar 2A.

A key input into the PRA's ICR setting process is a bank's own assessment of the amount of capital it needs, a process known as the Internal Capital Adequacy Assessment Process (ICAAP). The Group's ICAAP supplements the Pillar 1 capital requirements for credit risk, counterparty credit risk, operational risk and traded market risk by assessments of the material risks not covered or not fully captured under Pillar 1. This not only has the advantage of consistency with Pillar 1 but also allows the Group to leverage the considerable investment it has made in developing the component Pillar 1 models. This includes a detailed internal review of the models, their embedding in business use and an external review of these models by the PRA.

Some of the key risks assessed within the ICAAP include:

Risks not fully captured under Pillar 1

- Concentration risk – greater loss volatility arising from a higher level of loan default correlation than is assumed by the Pillar 1 assessment. Such correlation can arise from, for example, geographic, industry sector and single name concentrations.
- Underestimation risk – where it is considered that the Pillar 1 capital assessments for credit, market or operational risk underestimate the risk. The operational risk assessment includes consideration of conduct risk.
- Residual value risk – the risk that the value of assets being returned are less than the customer balance, with resultant loss to the Group.

Risks not covered at all by Pillar 1

- Pension obligation risk – the potential for losses that the Group would incur in the event of a significant deterioration in the funding position of the Group's defined benefit pension schemes.
- Interest rate risk in the banking book – the potential losses in the non-trading book resulting from interest rate changes or changes in spreads between different rates.

The detailed ICAAP document is subject to a robust review process, approved by the Board and submitted to the PRA for their consideration ahead of setting the ICR.

REGULATORY CAPITAL BUFFERS

The Group is also required to maintain a number of regulatory capital buffers, which are required to be met with CET1 capital.

Systemic buffers

Systemic buffers are designed to hold systemically important banks to higher capital standards, so that they can withstand a greater level of stress before requiring resolution.

The regulatory capital framework continued

- Although the Group is not currently classified as a global systemically important institution (G-SII) under the Capital Requirements Directive, it has been classified as an ‘other’ systemically important institution (O-SII) by the PRA. The O-SII buffer is set to zero in the UK.
- The systemic risk buffer (SRB) will come into force for UK ring-fenced banks during 2019, with the PRA expected to announce both the SRB rate and date of application for the Group’s ring-fenced bank (RFB) sub-group in the first half of 2019. The size of buffer applied to the RFB sub-group will be dependent upon its total assets. Although the SRB will apply to the RFB sub-group, the PRA has indicated that they will include in the Group’s PRA Buffer an amount equivalent to the RFB sub-group’s SRB. As a percentage of risk-weighted assets, the amount included in the Group’s PRA Buffer is expected to be lower reflecting the risk-weighted assets of the Group that are not held in the RFB sub-group and for which the SRB will not apply.

Capital conservation buffer

The capital conservation buffer (CCB) is a standard buffer of 2.5 per cent of risk-weighted assets designed to provide for losses in the event of stress. The CCB has been phased in over a number of years – during 2018 it was 1.875 per cent and it increased to the full 2.5 per cent on 1 January 2019.

Countercyclical capital buffer

The countercyclical capital buffer (CCYB) is time-varying and is designed to require banks to hold additional capital to remove or reduce the build-up of systemic risk in times of credit boom, providing additional loss absorbing capacity and acting as an incentive for banks to constrain further credit growth. The amount of the buffer is determined by reference to buffer rates set by the FPC for the individual countries where the Group has relevant credit exposures.

The CCYB rate for the UK is currently set at 1.0 per cent. The FPC regularly considers the adequacy of the UK CCYB rate in light of the evolution of the overall risk environment.

As at 31 December 2018 non-zero buffer rates also currently apply for Norway, Sweden, Hong Kong, Iceland, Slovakia, Czech Republic, and Lithuania. During 2019 France, Bulgaria, Denmark and Ireland will implement non-zero buffer rates. The Group’s overall countercyclical

capital buffer at 31 December 2018 was 0.9 per cent of risk-weighted assets, having increased significantly during the year (from 0.002 per cent at 31 December 2017) as a result of the increase in the UK rate from nil to 1.0 per cent, the Group’s relevant credit exposures being predominantly UK based.

Additional disclosures around the geographical distribution of credit exposures relevant to the calculation of the countercyclical capital buffer have been included in Appendix 1.

PRA buffer

As part of the capital planning process, forecast capital positions are subjected to extensive internal stress testing to determine the adequacy of the Group’s capital resources against the minimum requirements, including the ICR. The PRA considers outputs from both the Group’s internal stress tests and the annual Bank of England stress test, in conjunction with the Group’s other regulatory capital buffers, as part of the process for informing the setting of a bank-specific capital buffer for the Group, known as the PRA Buffer. The PRA requires this buffer to remain confidential between the Group and the PRA.

Further details on the Group’s stress testing processes and the 2018 PRA stress testing results are included on page 147 of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

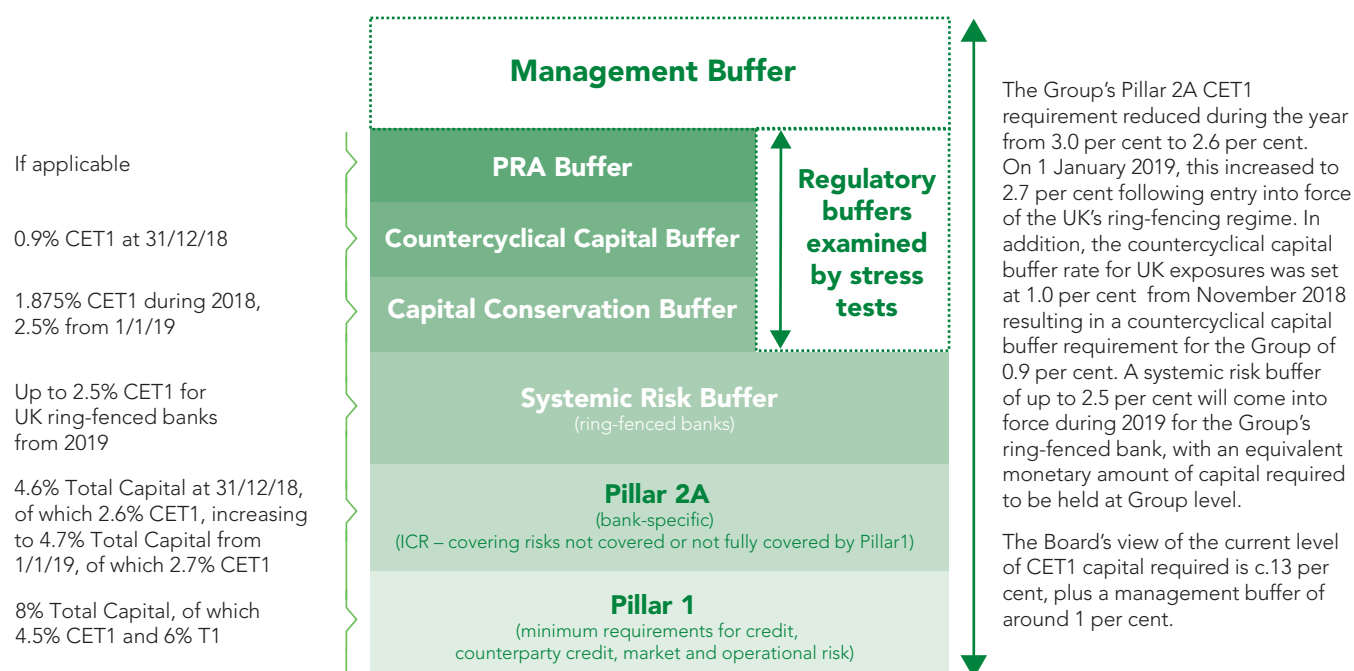
All buffers

All buffers are required to be met with CET1 capital. A breach of the PRA buffer would trigger a dialogue between the Group and the PRA to agree what action is required whereas a breach of the CRD IV combined buffer (all other regulatory buffers) would give rise to mandatory restrictions upon any discretionary capital distributions by the Group.

Sectoral capital requirements

The FPC can also set sectoral capital requirements which are temporary increases to banks’ capital requirements on exposures to specific sectors, if the FPC judges that exuberant lending to those sectors poses risks to financial stability. No sectoral capital requirements currently apply to the Group.

The following diagram summarises the requirements applied to the Group under the capital framework. Percentages referenced below are against risk-weighted assets.



The regulatory capital framework continued

PILLAR 3 – MARKET DISCIPLINE

The third pillar addresses the external publication of disclosures surrounding a firm's risk management practices, its approach to capital management, its capital resources and Pillar 1 capital requirements and a detailed analysis of its risk exposures.

Minimum disclosure requirements are set out under the relevant CRR provisions (Part Eight – Disclosure by Institutions), with further guidance and additional requirements set by the EBA. This includes the implementation of ongoing revisions to the Basel Pillar 3 framework, designed in part to enhance consistency and comparability.

LEVERAGE FRAMEWORK

In addition to the risk-based capital framework outlined on previous pages, the Group is also subject to minimum capital requirements under the UK Leverage Ratio Framework. The leverage ratio is calculated by dividing fully loaded tier 1 capital resources by a defined measure of on-balance sheet assets and off-balance sheet items.

The minimum leverage ratio requirement under the UK Leverage Ratio Framework is 3.25 per cent. This is supplemented by a time-varying countercyclical leverage buffer (CCLB) which is determined by multiplying the leverage exposure measure by 35 per cent of the countercyclical capital buffer (CCYB) rate. As at 31 December 2018 the CCLB was 0.3 per cent (2017: nil). An additional leverage ratio buffer (ALRB) will apply from 2019 to the Group's ring-fenced bank (RFB) sub-group, to be determined by multiplying the RFB leverage exposure measure by 35 per cent of the SRB. An equivalent amount of capital, referred to as the Leverage Ratio Group Add-on, will be required to be held at Group level under the UK framework to cover the RFB's ALRB.

At least 75 per cent of the 3.25 per cent minimum leverage ratio requirement and all regulatory buffers must be met by CET1 capital.

The calculation of the leverage ratio under the UK Leverage Ratio Framework differs from CRD IV requirements in that it excludes qualifying central bank claims from the leverage exposure measure.

The Group is required to continue to calculate and disclose a leverage ratio on a CRD IV basis, alongside the UK ratio.

The leverage ratio framework does not currently give rise to higher capital requirements for the Group than the risk-based capital framework.

RING-FENCING

The Group has completed the implementation of its ring fencing programme, which is designed to meet the legal and regulatory requirements of UK ring-fencing legislation from 1 January 2019.

As a predominantly UK retail and commercial bank, the impact on the Group is relatively limited, with minimal impact for the majority of the Group's retail and commercial customers.

Over the course of 2018, in order to comply with the ring-fencing legislation, certain businesses have been transferred out of Lloyds Bank plc and its subsidiaries to other parts of the Group by means of statutory or contractual transfers. This included the transfer of international banking subsidiaries to Lloyds Bank Corporate Markets plc (LBCM) and the transfer of the Scottish Widows Group from Lloyds Bank plc to Lloyds Banking Group plc.

Due to the Group's UK retail and commercial focus, the vast majority of the Group's business will continue to be held by Lloyds Bank plc and its subsidiaries (together the ring-fenced bank). These transfers have not had a material impact on the financial strength of Lloyds Bank plc.

IFRS 9 TRANSITIONAL ARRANGEMENTS

The European Parliament and Council published final rules in December 2017 on IFRS 9 transitional arrangements for capital. The arrangements, set out under CRR Article 473a, allow the initial net impact on CET1 capital resulting from the increase in accounting impairment provisions under the IFRS 9 Expected Credit Loss (ECL) framework, plus the capital impact of any subsequent increases in Stage 1 and Stage 2 ECLs (net of movements in regulatory expected losses), to be phased in over a five year transition period.

The phase in factors allow 95 per cent of the resultant 'transitional adjustment' to be added back to CET1 capital in 2018, reducing down to

85 per cent in 2019, 70 per cent in 2020, 50 per cent in 2021 and 25 per cent in 2022, with full recognition of the impact of IFRS 9 ECLs on CET1 capital from 2023.

The effect of adding back the transitional adjustment to CET1 capital results in further consequential adjustments being made to T2 capital (eligible provisions) and risk-weighted assets.

Further details on the Group's adoption of the transitional arrangements for IFRS 9 can be found in the Group publication entitled 'IFRS 9 "Financial Instruments" Transition', published in March 2018 and located on the Group's website at <http://www.lloydsbankinggroup.com/investors/financial-performance/>. This includes an analysis of the initial adjustments applied to CET1 capital, T2 capital and risk-weighted assets.

The Group has opted to apply paragraph 4 of CRR Article 473a which allows for the additional capital relief in respect of any post 1 January 2018 increase in Stage 1 and Stage 2 ECLs (net of movements in regulatory expected losses) during the transition period. As at 31 December 2018 no additional capital relief has been recognised.

FUTURE REGULATORY DEVELOPMENTS

Introduction

The Group's 2018 year end disclosures comply with all relevant CRD IV requirements and associated EBA guidelines and technical standards in force at 31 December 2018 as referenced in Appendices 4 and 5. It is important to note that specific aspects of the CRD IV text remain dependent upon the issuance of final EBA technical standards and guidelines as well as PRA policy and standards in relation to areas of national discretion.

The Group continues to closely monitor regulatory developments at global, European and UK levels in order to best position the Group to adapt to any changes arising.

Some of the key areas of development are discussed in the sections noted below:

- **Final Basel III reforms** will be subject to interpretation and implementation through European and UK legislation over the course of the next few years.
- **EU Risk Reduction Package** which comprises extensive revisions to the existing CRD IV legislation.
- **Other risk framework developments** which include a combination of ongoing consultations, recommendations and final rules.

Disclosure requirements

In December 2018, the Basel Committee on Banking Supervision published its third and final phase of revisions to the Pillar 3 framework, covering disclosure requirements arising from the final Basel III reforms and asset encumbrance. These requirements, together with the earlier revisions published in January 2015 (first phase) and March 2017 (second phase), complete the Pillar 3 framework. The implementation timeline for disclosure requirements in respect of the second phase of revisions has been extended out one year to end-2020, with the final phase of revisions expected to be implemented in full by 2022 in order to align with the implementation of the final Basel III reforms.

Final Basel III reforms

The Basel Committee published its final reforms of the Basel III Framework in December 2017. The purpose of the reforms is to restore credibility in the calculation of risk-weighted assets and to improve comparability between banks' capital ratios through the following measures:

- improving the granularity and risk sensitivity of the **standardised credit risk framework**;
- addressing shortcomings related to the use of the **IRB credit risk framework**, including excessive complexity, lack of comparability and lack of robustness in modelling certain asset classes, by removing the option to apply the Advanced IRB Approach for low default portfolios (banks, other financial institutions and large and mid-sized corporates), adopting input floors for PDs, LGDs and EADs to ensure a degree of conservatism is maintained in modelled outputs and providing greater specification of parameter estimation practices to reduce variability in risk-weighted assets.

The regulatory capital framework continued

- replacing the existing approaches under the **operational risk framework** with a single risk-sensitive standardised approach (the Standardised Measurement Approach) that combines a measure of a bank's income with a measure of its historic operational risk losses.
- revisions to the **credit valuation adjustment (CVA) risk framework** designed to enhance its risk sensitivity, strengthen its robustness and improve its consistency.
- replacing the current Basel II **capital floors (output)** requirement with a new version based on the revised Basel III standardised approaches.

The purpose of the new capital floors requirement is to act as a backstop that limits the extent to which banks can reduce their risk-weighted assets under modelled approaches relative to the standardised equivalents. The risk-weighted assets for a bank applying modelled approaches will therefore require to be the higher of (i) the total risk-weighted assets as calculated under the approaches applied by the bank and (ii) 72.5 per cent of the total risk-weighted assets calculated when applying standardised approaches only across all relevant risk categories.

The final reforms also include revisions to the **Basel III leverage ratio framework**, introducing a leverage buffer requirement for G-SIBs and refining the definition of the leverage ratio exposure measure. The latter includes the ability for local regulators to exempt central bank reserves from the exposure measure on a temporary basis during periods of exceptional macroeconomic circumstances, subject to a recalibration of the minimum leverage ratio requirement to compensate for the impact of excluding the associated balances. A similar regime already exists under the UK Leverage Ratio Framework.

The Basel Committee has proposed that the final reforms to the Basel III Framework should be implemented by 1 January 2022, with the exception of the capital floors (output) requirement which will be phased in over a five year period, commencing 1 January 2022 with a 50 per cent floor and thereafter building towards the full floor of 72.5 per cent by 1 January 2027.

The revised **market risk framework** that was finalised by the Basel Committee in January 2016 and subsequently updated in January 2019 is also to be implemented by 1 January 2022 in line with the other reforms. The original 2016 revisions have been considered as part of the EU Risk Reduction Package to address certain specific outstanding issues.

EU Risk Reduction Package

In November 2016, the European Commission published a substantial package of draft reforms aimed at further strengthening the resilience of banks across the EU. This package comprised draft legislative texts updating the Capital Requirements Directive and Regulation (CRD IV) to include revisions to supervisory measures and powers, capital conservation measures and, amongst other reforms, the implementation of various Basel III Framework revisions, including market risk, standardised counterparty credit risk (SA-CCR), leverage, the net stable funding ratio (NSFR) and Pillar 3 as further detailed below. These reforms have recently been finalised and are expected to be published later in 2019.

- **Market risk** – The Basel Committee originally issued its final standards on the Fundamental Review of the Trading Book (FRTB) in January 2016. The standard includes a move away from VaR based metrics under the internal models approach to a new expected shortfall measure of risk under stress, a revised Standardised approach for calculating market risk capital to a more risk-sensitive approach, incorporation of the risk of market illiquidity and a revised boundary between the banking book and the trading book. The new framework is expected to be implemented no earlier than 1 January 2022 in line with the revised Basel Committee timetable for implementation.
- **Standardised counterparty credit risk framework (SA-CCR)** – The Basel Committee issued its final revisions to the standardised counterparty credit risk framework in March 2014. The new requirements will impact upon the calculation of CCR exposures under the standardised approach and are expected to be implemented by 2021 at the earliest.
- **Leverage** – The EU Risk Reduction Package will introduce a binding minimum leverage ratio requirement of 3 per cent. This is to be supplemented through the introduction of a leverage ratio buffer requirement based upon the outcome of the final Basel III reforms.

In addition the Package contains multiple revisions to the definition of the leverage ratio exposure measure, combining both certain revisions that feature as part of the final Basel III reforms and additional EU specific revisions. Implementation is expected by 2021 at the earliest.

- **Net stable funding ratio (NSFR)** – The Basel Committee issued its standard for a NSFR in October 2014 as one of the key Basel III reforms to promote a more resilient banking sector, anticipating that it would become a minimum standard by 1 January 2018. The NSFR is expressed as a percentage, calculated as the ratio of an institution's amount of available stable funding to its required stable funding over a one year horizon, with a minimum requirement of 100 per cent on a continual basis. Following a period of consultation, the EU's Risk Reduction Package proposed some EU specific variations from the Basel NSFR standard, and implementation is now expected to occur by 2021 at the earliest.
- **Pillar 3** – Revisions to the Basel Pillar 3 framework currently reflected through the EBA guidelines on Pillar 3 will be formally adopted through the EU Risk Reduction Package in addition to a range of other EU specific amendments. The revisions are expected to be implemented by 2021 at the earliest.

Other risk framework developments

Other ongoing changes include the following which are of most relevance to the Group and span a range of different implementation dates.

- **Mortgage risk weights** – The PRA published final rules in June 2017 that require a new hybrid approach to be applied to mortgage book PD modelling and for LGD sets minimum peak-to-trough house price fall assumptions in Downturn LGD which must be greater than or equal to 25 per cent. The new requirements are to be implemented by the end of 2020.
- **Mortgage definition of default** – The EBA issued advice in December 2017 to the European Commission on the appropriateness of continuing to apply the 180 days past due (DPD) provision in the definition of default exemption for material exposures, recommending that this exemption be disallowed and all institutions should consequently rely on the 90 DPD regime for all exposures, subject to an appropriate transition period. The PRA is considering removing its discretion to use 180 days.
- **IRB Repair Programme** – The EBA has issued new regulation impacting IRB modelling approaches. This regulation, which is yet to be finalised, covers the definition of default, PD, LGD, the treatment of defaulted exposures and Downturn LGD. The PRA is consulting on the definition of default. Implementation of these changes is expected to occur from 2020. The effect of this new regulation will also be impacted by the final Basel III reforms in respect of the revisions to the IRB credit risk framework.
- **Interest rate risk in the banking book (IRRBB)** – Final EBA guidelines on the management of interest rate risk arising from non-trading book activities were published in July 2018. They were a result of the consultation paper published in October 2017 and built upon the EBA Guidelines published in May 2015. The final guidelines take account of existing supervisory expectations and practices including the Standards on Interest Rate Risk in the Banking Book published by the Basel Committee in April 2016. The BCBS Standards will be implemented within the EU in two phases. Firstly, through the final EBA Guidelines which become effective from the end of June 2019 and, secondly, through the ongoing revision of the CRD and the CRR. The EBA Guidelines uphold the BCBS Standards enhanced Pillar 2A approach for IRRBB capital.
- **Securitisation framework** – The Basel Committee issued final rules in December 2014 on introducing new risk weight methodologies for securitisation positions that have implications for the minimum risk weights applied. The adoption of the new framework has been agreed by EU regulators and was implemented on 1 January 2019, with grandfathering provisions in place until 1 January 2020 for positions that existed prior to the implementation date.
- **Sovereign risk** – The Basel Committee published a discussion paper in December 2017 on the regulatory treatment of sovereign exposures. The paper considers a range of options for revising the risk-weight treatment of sovereigns.

The regulatory capital framework continued

– **EU non-performing loans initiatives** – EU regulators and authorities are in the process of introducing a series of initiatives designed to tackle the high levels of non-performing loans (NPLs) on bank balance sheets across Europe, with the aim of accelerating the reduction in the current stock of NPLs and in preventing the build-up of new NPLs going forward. The initiatives include guidelines on the management of NPLs, new regulatory reporting and disclosure requirements, the development of secondary markets in NPLs and the introduction of a Pillar 1 backstop measure designed to introduce a framework for common minimum coverage levels for newly originated loans that become non-performing. The backstop measure will result in a deduction from CET1 capital where the minimum coverage level exceeds the provisions and other adjustments already applied to the loan.

Minimum requirement for own funds and eligible liabilities (MREL)

The purpose of MREL is to require firms to maintain sufficient equity and liabilities that are capable of credibly bearing losses in resolution. MREL can be satisfied by a combination of regulatory capital and certain unsecured liabilities (which must be subordinate to a firm's operating liabilities).

In November 2016 the Bank of England (BoE) published a statement of policy on its approach for setting MREL in line with EU requirements.

Applying the BoE's MREL policy to minimum capital requirements from 1 January 2019, the Group's indicative MREL requirement, excluding regulatory capital buffers, is as follows:

- From 2020, 2 times Pillar 1 plus Pillar 2A, equivalent to 20.7 per cent of risk-weighted assets
- From 2022, 2 times Pillar 1 plus 2 times Pillar 2A, equivalent to 25.4 per cent of risk-weighted assets

The BoE will review the calibration of MREL in 2020 before setting final end-state requirements to be met from 2022. This review will take into consideration any changes to the capital framework, including the finalisation of Basel III.

During 2018, the Group issued £8.8 billion (sterling equivalent) of senior unsecured securities from Lloyds Banking Group plc which, while not included in total capital, are eligible to meet MREL. Combined with previous issuances made over the last two years the Group remains comfortably positioned to meet MREL requirements from 2020 and, as at 31 December 2018, had a transitional MREL ratio of 32.4 per cent of risk-weighted assets.

Internal MREL requirements will apply to the Group's ring-fenced bank sub-group and main banking entities (Lloyds Bank plc, Bank of Scotland plc and Lloyds Bank Corporate Markets plc) over the same timeframe. They are calculated in a similar way to Group level requirements, prior to the application of a scalar set by the BoE.

An analysis of the Group's current MREL position is provided on page 24.

BREXIT

The BoE published a series of updates in October 2018 on preparations surrounding the UK's withdrawal from the EU. These include the Bank's proposed approach to onshoring current EU regulations into UK law to ensure continuity within the UK regardless of the outcome of negotiations between the EU and the UK. The approach largely preserves the status quo, ensuring that regulated firms do not, aside from a few exceptions, need to take action now to implement changes in UK law arising from the withdrawal.

Changes arising as a result of the onshoring process are not expected to take effect until after any Implementation Period agreed as part of the negotiations comes to an end. If an Implementation Period is not agreed then it is expected that the changes will come into effect on 29 March 2019, subject to any transitional relief provided for by the BoE.

Adoption of, or alignment to, future changes to EU regulation by the UK after 29 March 2019 or after the end of the Implementation Period remains unclear. It is feasible that a different approach could be undertaken by the UK in respect of the implementation of future regulatory changes and therefore the outline of EU changes provided in the sections above may not necessarily represent the UK approach where such changes are implemented after the relevant date.

Capital management

This section details Lloyds Banking Group's approach to capital management, focusing on measures including Common Equity Tier 1 (CET1), Additional Tier 1 (AT1), Tier 2 (T2) and the Leverage Ratio.

CET1 ratio of 14.6% (13.9% pro forma, including the announced share buyback)

Transitional T1 capital ratio of 18.2%

Transitional total capital ratio of 22.9%

UK leverage ratio of 5.5% (5.6% pro forma)

- The Group has a capital management framework that is designed to ensure that it operates within its risk appetite, uses its capital resources efficiently and continues to comply with regulatory requirements.
- CET1 capital resources have increased by £0.5bn during the year largely reflecting a combination of profit generation and dividends received from the Insurance business, offset by dividends paid and accrued, the completion of the share buyback programme and an increase in intangible assets which are deducted from capital.
- AT1 capital resources have increased by £0.6bn in the period, primarily reflecting the issuance of a new AT1 capital instrument during the year, partially offset by the annual reduction in the transitional limit applied to grandfathered AT1 capital instruments.
- Tier 2 capital resources have increased by £1.4bn in the period largely reflecting the issuance of new dated subordinated debt instruments, foreign exchange movements and a reduction in the significant investments deduction following the redemption by Scottish Widows of a subordinated debt instrument issued to the Group, partially offset by the amortisation of dated instruments.
- A description of the main features of CET1, AT1 and T2 instruments issued by the Group and its significant subsidiaries are included in a separate document on the Group's website. Summary information on movements and the underlying terms and conditions of capital securities is presented in Note 38 (Subordinated Liabilities) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.
- The Group's fully loaded UK leverage ratio increased to 5.5 per cent reflecting the increase in tier 1 capital, partially offset by the £6.0bn increase in the exposure measure. The latter largely reflects increases in both the derivatives exposure measure and securities financing transactions (SFT) exposure measure, offset in part by the reduction in financial assets at fair value through other comprehensive income and the reduction in off-balance sheet items.

Capital management continued

THE GROUP'S APPROACH TO CAPITAL RISK

DEFINITION

Capital risk is defined as the risk that the Group has a sub-optimal quantity or quality of capital or that capital is inefficiently deployed across the Group.

EXPOSURES

A capital risk exposure arises when the Group has insufficient capital resources to support its strategic objectives and plans, and to meet external stakeholder requirements and expectations. This could arise due to a depletion of the Group's capital resources as a result of the crystallisation of any of the risks to which it is exposed. Alternatively a shortage of capital could arise from an increase in the amount of capital that needs to be held either at Group level or at regulated entity or sub-group levels under the Group's post ring-fence structure. The Group's capital management approach is focused on maintaining sufficient capital resources to prevent such exposures while optimising value for shareholders.

MEASUREMENT

The Group measures the amount of capital it requires and holds through applying the regulatory framework defined by CRD IV as implemented in the UK by the PRA. Full details of the Group's regulatory capital framework are on pages 12 to 18.

MITIGATION

The Group has a capital management framework including policies and procedures that are designed to ensure that it operates within its risk appetite, uses its capital resources efficiently and continues to comply with regulatory requirements.

The Group is able to accumulate additional capital through the retention of profits over time, which can be enhanced through reducing or cancelling dividend payments and share buybacks, by raising new equity via, for example, a rights issue or debt exchange and by raising additional tier 1 or tier 2 capital securities. The cost and availability of additional capital is dependent upon market conditions and perceptions at the time. The Group is also able to manage the demand for capital through management actions including adjusting its lending strategy, risk hedging strategies and through business disposals.

MONITORING

Capital is actively managed and monitoring capital ratios is a key factor in the Group's planning processes and stress testing, which separately cover the RFB sub-group and individual banking entities. Multi-year forecasts of the Group's capital position, based upon the Group's operating plan, are produced at least annually to inform the Group's capital plan whilst shorter term forecasts are more frequently undertaken to understand and respond to variations of the Group's actual performance against the plan. The capital plans are tested for capital adequacy using a range of stress scenarios covering adverse economic conditions as well as other adverse factors that could impact the Group and the Group maintains a recovery plan which sets out a range of potential mitigating actions that could be taken in response to a stress.

The capital plans also consider the impact of IFRS 9 which has the potential to increase bank capital volatility. Under stress this is primarily a result of provisioning for assets that are not in default at an earlier stage than would have been the case under IAS 39. In addition it currently remains unclear as to how the IFRS 9 requirement to reflect the outcome of multiple future economic scenarios within the calculation of the expected credit loss (ECL) allowance should be reflected in capital stress tests.

The Group notes that the UK regulatory authorities have previously announced, via the Financial Policy Committee (FPC) of the Bank of England, that the change in accounting standard will not change the cumulative losses banks incur during any given stress period (the losses will however be provided for at an earlier point in the stress) and that the FPC will take steps to ensure that the interaction of IFRS 9 accounting with its annual stress test does not result in de facto increases in capital requirements. In the short term the IFRS 9 transitional arrangements for capital, which the Group has adopted, will provide some stability in capital requirements against the increased provisioning, measurement uncertainty and volatility introduced by IFRS 9.

Regular reporting of actual and projected ratios for the Group, the RFB sub-group and key legal entities including those in stressed scenarios, is undertaken, including submissions to the Group Capital Risk Committee (GCRC), Group Financial Risk Committee (GFRC), Group Asset and Liability Committee (GALCO), Group Risk Committee (GRC), Board Risk Committee (BRC) and the Board. Capital policies and procedures are subject to independent oversight.

The regulatory framework within which the Group operates continues to evolve and further detail on this is provided in this Pillar 3 report. The Group continues to monitor these developments very closely, analysing the potential capital impacts to ensure that, through organic capital generation, the Group continues to maintain a strong capital position that exceeds both minimum regulatory requirements and the Group's risk appetite and is consistent with market expectations.

TARGET CAPITAL RATIOS

The Board's view of the current level of CET1 capital required remains at around 13 per cent plus a management buffer of around 1 per cent to provide capacity for growth, meet regulatory requirements and cover uncertainties.

This takes into account, amongst other things:

- the minimum Pillar 1 CET1 capital requirement of 4.5 per cent of risk-weighted assets.
- the Group's Pillar 2A ICR set by the PRA. During the year the PRA reduced the Group's ICR from 5.4 per cent to 4.6 per cent of risk-weighted assets at 31 December 2018, of which 2.6 per cent must be met by CET1 capital. The requirement has increased to 4.7 per cent of risk-weighted assets, of which 2.7 per cent must be met by CET1 capital, from 1 January 2019 following entry into force of the UK's ring-fencing regime.
- the capital conservation buffer (CCB) requirement of 1.875 per cent of risk-weighted assets, increasing to 2.5 per cent of risk-weighted assets from 1 January 2019.
- the Group's current countercyclical capital buffer (CCyB) requirement of 0.9 per cent of risk-weighted assets.
- the introduction of the SRB during 2019 for the RFB sub-group, which will require the Group to hold an equivalent amount of capital.
- the Group's PRA stress buffer, which the PRA sets after taking account of the results of the PRA stress tests and other information, as well as outputs from the Group's internal stress tests. The PRA requires the PRA Buffer itself to remain confidential between the Group and the PRA.

Capital management continued

DIVIDEND POLICY

The Group has established an ordinary dividend policy that is both progressive and sustainable, based on growing the ordinary dividend per share over time. The rate of growth of the ordinary dividend will be decided by the Board in light of the circumstances at the time.

The Board also gives due consideration to the return of surplus capital through the use of special dividends or share buybacks. Surplus capital represents capital over and above the amount management wish to retain to grow the business, meet regulatory requirements and cover uncertainties. The amount of required capital may vary from time to time depending on circumstances and by its nature there can be no guarantee that any return of surplus capital will be appropriate in future years.

The ability of the Group to pay a dividend is also subject to constraints including the availability of distributable reserves, legal and regulatory restrictions and the Groups financial and operating performance.

Distributable reserves are determined as required by the Companies Act 2006 by reference to a company's individual financial statements. At 31 December 2018 Lloyds Banking Group plc ('the Company') had accumulated distributable reserves of approximately £8.5bn. Substantially all of the Company's merger reserve is available for distribution under UK company law as a result of transactions undertaken to recapitalise the Company in 2009.

Lloyds Banking Group plc acts as a holding company which also issues capital and other securities to capitalise and fund the activities of the Group. The profitability of the holding company, and consequently its ability to sustain dividend payments, is therefore dependent upon the continued receipt of dividends from its main operating subsidiaries, including Lloyds Bank plc (the ring-fenced bank), Lloyds Bank Corporate Markets plc (the non-ring-fenced bank), LBG Equity Investments Limited (the non-ring-fenced investments business) and Scottish Widows Group Limited (the insurance business). A number of Group subsidiaries, principally those with banking and insurance activities, are subject to regulatory capital requirements which require minimum amounts of capital to be maintained relative to their size and risk. The principal operating subsidiary is Lloyds Bank plc which, at 31 December 2018, had a consolidated CET1 capital ratio of 14.9 per cent (31 December 2017: 15.8 per cent). The Group actively manages the capital of its subsidiaries, which includes monitoring the regulatory capital ratios for its banking and insurance subsidiaries and, on a consolidated basis, the RFB sub-group against approved risk appetite. The Group operates a formal capital management policy which requires all subsidiary entities to remit surplus capital to their parent companies.

ANALYSIS OF CAPITAL POSITION

The Group's CET1 capital ratio increased by 2.10 per cent on a pro forma basis before ordinary dividends and the share buyback, primarily as a result of:

- Strong underlying capital build, net of remediation costs, of 1.95 per cent, largely driven by underlying profits.
- Dividends paid by the Insurance business in July 2018 and in February 2019, in relation to 2018 earnings generating an increase of 0.25 per cent.
- The completion of the sale of the Irish mortgage portfolio in the second half of the year which resulted in a 0.25 per cent increase.
- Other movements generating a net increase of 0.03 per cent, included the impact of structural changes arising from transfers between Insurance and the ring-fenced bank, risk-weighted asset reductions, market movements and additional pension contributions.
- Offset by a reduction of 0.38 per cent relating to PPI charges.

The implementation of IFRS 9 on 1 January 2018 resulted in an initial reduction in CET1 capital of 0.30 per cent which, following the application of transitional relief, reduced to 0.01 per cent. No additional relief has been recognised at 31 December 2018 as Stage 1 and Stage 2 expected credit losses (ECLs), net of regulatory expected losses, have not increased beyond the position at 1 January 2018.

Overall the Group's CET1 ratio has strengthened to 16.0 per cent on a pro forma basis before ordinary dividends and the share buyback. After ordinary dividends the Group's CET1 ratio reduces to 14.8 per cent on a pro forma basis. In addition the Board intends to implement a share buyback programme of up to £1.75bn, equivalent to 2.46 pence per share. The buyback will impact the Group's capital position in 2019 and is expected to reduce CET1 capital by c. 0.9 per cent. Allowing for this at 31 December 2018 the pro forma CET1 ratio would be 13.9 per cent after ordinary dividends (31 December 2017: 13.9 per cent pro forma, after ordinary dividends and the share buyback).

Excluding the Insurance dividend paid in February 2019 the Group's CET1 ratio has strengthened to 15.8 per cent before ordinary dividends and the share buyback and 14.6 per cent after ordinary dividends (31 December 2017: 14.1 per cent).

The accrual for foreseeable dividends reflects the recommended final ordinary dividend of 2.14 pence per share.

The transitional total capital ratio, after ordinary dividends, increased by 1.7 per cent to 22.9 per cent, largely reflecting the issuance of new AT1 and dated subordinated debt instruments, foreign exchange movements on subordinated debt instruments, the reduction in the significant investments deduction from tier 2 capital, the increase in CET1 capital and the reduction in risk-weighted assets, partially offset by the amortisation of dated tier 2 instruments and the annual reduction in the transitional limit applied to grandfathered AT1 capital instruments.

TOTAL CAPITAL REQUIREMENT

The Group's total capital requirement (TCR) as at 31 December 2018, being the aggregate of the Group's Pillar 1 and current Pillar 2A capital requirements, was £26,124 million (31 December 2017: £28,180 million).

CAPITAL RESOURCES

An analysis of the Group's capital position as at 31 December 2018 is presented in the following section on both a CRD IV transitional arrangements basis and a CRD IV fully loaded basis. In addition the Group's capital position reflects the application of the transitional arrangements for IFRS 9.

Capital management continued

CAPITAL RESOURCES

The table below summarises the consolidated capital position of the Group.

Table 4: Capital resources (audited)

	Transitional		Fully loaded	
	2018 £m	2017 £m	2018 £m	2017 £m
Common equity tier 1				
Shareholders' equity per balance sheet	43,434	43,551	43,434	43,551
Adjustment to retained earnings for foreseeable dividends	(1,523)	(1,475)	(1,523)	(1,475)
Deconsolidation adjustments ¹	2,273	1,301	2,273	1,301
Adjustment for own credit	(280)	109	(280)	109
Cash flow hedging reserve	(1,051)	(1,405)	(1,051)	(1,405)
Other adjustments	(19)	(177)	(19)	(177)
	42,834	41,904	42,834	41,904
less: deductions from common equity tier 1				
Goodwill and other intangible assets	(3,667)	(2,966)	(3,667)	(2,966)
Prudent valuation adjustment	(529)	(556)	(529)	(556)
Excess of expected losses over impairment provisions and value adjustments	(27)	(498)	(27)	(498)
Removal of defined benefit pension surplus	(994)	(541)	(994)	(541)
Securitisation deductions	(191)	(191)	(191)	(191)
Significant investments ¹	(4,222)	(4,250)	(4,222)	(4,250)
Deferred tax assets	(3,037)	(3,255)	(3,037)	(3,255)
Common equity tier 1 capital	30,167	29,647	30,167	29,647
Additional tier 1				
Other equity instruments	6,466	5,330	6,466	5,330
Preference shares and preferred securities ²	4,008	4,503	–	–
Transitional limit and other adjustments	(1,804)	(1,748)	–	–
	8,670	8,085	6,466	5,330
less: deductions from tier 1				
Significant investments ¹	(1,298)	(1,403)	–	–
Total tier 1 capital	37,539	36,329	36,633	34,977
Tier 2				
Other subordinated liabilities ²	13,648	13,419	13,648	13,419
Deconsolidation of instruments issued by insurance entities ¹	(1,767)	(1,786)	(1,767)	(1,786)
Adjustments for transitional limit and non-eligible instruments	1,504	1,617	(1,266)	(1,252)
Amortisation and other adjustments	(2,717)	(3,524)	(2,717)	(3,565)
Eligible provisions	–	120	–	120
	10,668	9,846	7,898	6,936
less: deductions from tier 2				
Significant investments ¹	(973)	(1,516)	(2,271)	(2,919)
Total capital resources	47,234	44,659	42,260	38,994
Risk-weighted assets (unaudited)	206,366	210,919	206,366	210,919
Common equity tier 1 capital ratio³	14.6%	14.1%	14.6%	14.1%
Tier 1 capital ratio	18.2%	17.2%	17.8%	16.6%
Total capital ratio	22.9%	21.2%	20.5%	18.5%

¹ For regulatory capital purposes, the Group's Insurance business is deconsolidated and replaced by the amount of the Group's investment in the business. A part of this amount is deducted from capital (shown as 'significant investments' in the table above) and the remaining amount is risk-weighted, forming part of threshold risk-weighted assets.

² Preference shares, preferred securities and other subordinated liabilities are categorised as subordinated liabilities in the balance sheet.

³ The Group's common equity tier 1 ratio is 14.8 per cent reflecting the dividend paid by the Insurance business in February 2019 in relation to its 2018 earnings. The post share buy back common equity tier 1 ratio is 13.9 per cent on a pro forma basis (31 December 2017: 13.9 per cent).

Movements in capital resources

The key difference between the transitional capital calculation as at 31 December 2018 and the fully loaded equivalent is primarily related to capital securities that previously qualified as tier 1 or tier 2 capital, but that do not fully qualify under CRD IV, which can be included in additional tier 1 (AT1) or tier 2 capital (as applicable) up to specified limits which reduce by 10 per cent per annum until 2022. The key movements on a transitional basis are set out in the table below.

Capital management continued

Table 5: Movements in capital resources

	Common equity tier 1 £m	Additional tier 1 £m	Tier 2 £m	Total capital £m
At 31 December 2017	29,647	6,682	8,330	44,659
Banking profit attributable to ordinary shareholders ¹	3,759			3,759
Movement in foreseeable dividends ²	(48)			(48)
Dividends paid out on ordinary shares during the year	(2,240)			(2,240)
Dividends received from the Insurance business ¹	750			750
Share buyback completed	(1,005)			(1,005)
Restatement of retained earnings on adoption of IFRS 9	(929)			(929)
IFRS 9 transitional adjustment to retained earnings	478			478
Movement in treasury shares and employee share schemes	300			300
Pension movements:				
Removal of defined benefit pension surplus	(453)			(453)
Movement through other comprehensive income	90			90
Fair value through other comprehensive income reserve	(401)			(401)
Prudent valuation adjustment	27			27
Deferred tax asset	218			218
Goodwill and other intangible assets	(701)			(701)
Excess of expected losses over impairment provisions and value adjustments	471			471
Significant investments	28	105	543	676
Eligible provisions ³			(120)	(120)
Movements in subordinated debt:				
Repurchases, redemptions and other		(551)	(824)	(1,375)
Issuances		1,136	1,766	2,902
Other movements	176			176
At 31 December 2018	30,167	7,372	9,695	47,234

1 Under the regulatory framework, profits made by Insurance are removed from CET1 capital. However, when dividends are paid to the Group by Insurance these are recognised through CET1 capital. The £750 million of dividends received from Insurance during the year include £600 million in respect of their 2017 full year ordinary dividend and £150 million in respect of their 2018 interim ordinary dividend.

2 Includes the accrual for the 2018 full year ordinary dividend and the reversal of the accrual for the 2017 full year ordinary dividend which was paid during the year.

3 The movement in eligible provisions reflects the adjustment made in respect of the application of the IFRS9 transitional arrangements.

CET1 capital resources have increased by £520 million over the year, primarily reflecting:

- profit generation during the year
- receipt of the dividends paid by the Insurance business in February 2018 and July 2018
- movements in treasury shares and the employee share schemes
- a reduction in the deferred tax asset deduction
- a reduction in excess expected losses resulting from the partial absorption of the increase in impairment provisions following the adoption of IFRS 9 on 1 January 2018 (remaining expected losses deducted from capital relate specifically to equity exposures), offset by the impact on retained earnings (net of transitional relief)
- largely offset by the interim dividend paid in September 2018, the accrual for the 2018 full year ordinary dividend, the completion of the share buyback programme during the year, the increase in the defined benefit pension scheme surplus deduction, movements through the fair value through other comprehensive income (FVOCI) reserve and an increase in intangible assets which are deducted from capital

AT1 capital resources have increased by £690 million in the period, primarily reflecting the issuance of a new AT1 capital instrument during the year, partially offset by the annual reduction in the transitional limit applied to grandfathered AT1 capital instruments.

Tier 2 capital resources have increased by £1,365 million in the period largely reflecting the issuance of new dated subordinated debt instruments, foreign exchange movements and a reduction in the significant investments deduction following the redemption by Scottish Widows of a subordinated debt instrument issued to the Group, partially offset by the amortisation of dated instruments.

Capital management continued

Table 5A: Minimum requirement for own funds and eligible liabilities

An analysis of the Group's current transitional MREL position is provided below.

	Transitional	
	At 31 Dec 2018 £m	At 31 Dec 2017 £m
Total capital resources (transitional basis)	47,234	44,659
Ineligible AT1 and tier 2 instruments ¹	(613)	(1,350)
Senior unsecured securities issued by Lloyds Banking Group plc	20,213	10,815
Total MREL²	66,834	54,124
Risk-weighted assets	206,366	210,919
MREL ratio³	32.4%	25.7%

1 Instruments with less than one year to maturity or governed under non-EEA law without a contractual bail-in clause.

2 Until 2022, externally issued regulatory capital in operating entities can count towards the Group's MREL to the extent that such capital would count towards the Group's consolidated capital resources.

3 The MREL ratio is 32.6 per cent on a pro forma basis reflecting the dividend paid by the Insurance business in February 2019 in relation to its 2018 earnings (31 December 2017: 26.0 per cent pro forma).

CAPITAL INSTRUMENTS

A description of the main features of CET1, AT1 and T2 instruments issued by the Group and its significant subsidiaries are included in a separate document on the Group's website located at www.lloydsbankinggroup.com/investors/financial-performance/other-disclosures

Summary information on movements in subordinated liabilities and share capital and the terms and conditions applying to these instruments is presented in the Notes to the Consolidated Financial Statements of the 2018 Lloyds Banking Group plc Annual Report and Accounts on page 228.

The full terms and conditions attached to capital instruments are also available on the Group's website at www.lloydsbankinggroup.com/investors/fixed-income-investors/

The recognition, classification and valuation of these instruments within the Group's regulatory capital resources are subject to the requirements of CRD IV. This can lead to a different treatment from the IFRS accounting approach upon which the disclosures within the 2018 Lloyds Banking Group plc Annual Report and Accounts are based. Not all subordinated liabilities qualify as regulatory capital, and for those that do, differences between the accounting and the regulatory value can arise in relation to fair value hedge accounting adjustments, accrued interest and regulatory amortisation.

OWN FUNDS DISCLOSURES

Additional disclosures on own funds, in accordance with the requirements of the EBA technical standard on Own Funds Disclosure, are provided in Appendix 1. These consist of a detailed analysis of the components of the Group's transitional own funds and a reconciliation of own funds items to the statutory balance sheet.

Capital management continued

LEVERAGE RATIO

Table 6: Leverage ratio

The table below summarises the component parts of the Group's leverage ratio.

	Fully loaded	
	At 31 Dec 2018 £m	At 31 Dec 2017 £m
Total tier 1 capital for leverage ratio		
Common equity tier 1 capital	30,167	29,647
Additional tier 1 capital	6,466	5,330
Total tier 1 capital	36,633	34,977
Exposure measure		
Statutory balance sheet assets		
Derivative financial instruments	23,595	25,834
Securities financing transactions	69,301	49,193
Loans and advances and other assets	704,702	737,082
Total assets	797,598	812,109
Qualifying central bank claims	(50,105)	(53,842)
Deconsolidation adjustments¹		
Derivative financial instruments	(1,376)	(2,043)
Securities financing transactions	(487)	(85)
Loans and advances and other assets	(130,048)	(140,387)
Total deconsolidation adjustments	(131,911)	(142,515)
Derivatives adjustments		
Adjustment for regulatory netting	(8,828)	(13,031)
Adjustment for cash collateral	(10,536)	(7,380)
Net written credit protection	539	881
Regulatory potential future exposure	18,250	12,335
Total derivatives adjustments	(575)	(7,195)
Securities financing transactions adjustments	40	(2,022)
Off-balance sheet items	56,393	58,357
Regulatory deductions and other adjustments	(8,163)	(7,658)
Total exposure measure²	663,277	657,234
Average exposure measure³	669,896	660,557
UK leverage ratio^{2,5}	5.5%	5.3%
Average UK leverage ratio³	5.5%	5.4%
CRD IV exposure measure⁴	713,382	711,076
CRD IV leverage ratio⁴	5.1%	4.9%

1 Deconsolidation adjustments relate to the deconsolidation of certain Group entities that fall outside the scope of the Group's regulatory capital consolidation, being primarily the Group's Insurance business.

2 Calculated in accordance with the UK Leverage Ratio Framework which requires qualifying central bank claims to be excluded from the leverage exposure measure.

3 The average UK leverage ratio is based on the average of the month end tier 1 capital position and average exposure measure over the quarter (1 October 2018 to 31 December 2018). The average of 5.5 per cent compares to 5.3 per cent at the start and 5.5 per cent at the end of the quarter.

4 Calculated in accordance with CRD IV rules which include central bank claims within the leverage exposure measure.

5 The UK leverage ratio is 5.6 per cent on a pro forma basis reflecting the dividend paid by the Insurance business in February 2019 in relation to its 2018 earnings (31 December 2017: 5.4 per cent pro forma).

Key movements

- The Group's fully loaded UK leverage ratio increased to 5.5 per cent reflecting the increase in tier 1 capital, partially offset by the £6.0 billion increase in the exposure measure. The latter largely reflects increases in both the derivatives exposure measure and securities financing transactions (SFT) exposure measure, offset in part by the reduction in financial assets at fair value through other comprehensive income and the reduction in off-balance sheet items.
- On a pro forma basis the UK leverage ratio increased to 5.6 per cent from 5.4 per cent pro forma at 31 December 2017, reflecting the increase in the pro forma fully loaded tier 1 capital position, partially offset by the increase in the exposure measure.
- The derivatives exposure measure, representing derivative financial instruments per the balance sheet net of deconsolidation and derivatives adjustment, increased by £5.0 billion during the period, predominantly reflecting a reduction in the regulatory netting benefit and a higher volume of trades through central counterparties, including longer dated trades, which has contributed to the increase in the regulatory potential future exposure. The movements in part reflect the impact of the separation of derivative portfolios between the ring-fenced and non-ring-fenced banks and the establishment of the latter through Lloyds Bank Corporate Markets.
- The SFT exposure measure, representing SFT assets per the balance sheet net of deconsolidation and other SFT adjustments, increased by £21.8 billion during the period, largely reflecting a continued increase in customer volumes, partially offset by a small reduction in trading volumes.
- Off-balance sheet items reduced by £2.0 billion during the period, primarily reflecting a net reduction in securitisation financing facility commitments, including drawdowns, and a small reduction in new residential mortgage offers placed.
- The average UK leverage ratio of 5.5 per cent over the quarter, compared to 5.3 per cent at the start of the quarter, primarily reflected the issuance of a new AT1 capital instrument in October 2018, partially offset by a marginally higher average exposure measure over the quarter when compared to the position at the end of the quarter.

Pillar 1 Capital requirements: Overview of risk-weighted assets

This section details Lloyds Banking Group's risk-weighted assets and pillar 1 capital requirements.

- The risk-weighted assets movement table provides analysis of the movement in risk-weighted assets in the period by risk type and an insight into the key drivers of the movements. The key driver analysis is compiled on a monthly basis through the identification and categorisation of risk-weighted asset movements and is subject to management judgment.
- Credit risk-weighted assets account for 78% of risk-weighted assets.

Table 7: Risk-weighted assets movement by key driver

	Credit risk IRB £m	Credit risk STA £m	Credit risk Total ² £m	Counterparty credit risk ³ £m	Market risk £m	Operational risk £m	Total £m
Total risk-weighted assets as at 31 December 2017							210,919
Less: total threshold risk-weighted assets ¹							10,168
Risk-weighted assets at 31 December 2017	138,986	25,503	164,489	7,885	3,051	25,326	200,751
Asset size	(271)	591	320	75	–	–	395
Asset quality	759	354	1,113	(348)	–	–	765
Model updates	1,472	–	1,472	–	(708)	–	764
Methodology and policy	(1,002)	182	(820)	(136)	–	–	(956)
Acquisitions and disposals	(4,892)	(984)	(5,876)	–	–	–	(5,876)
Movement in risk levels (market risk only)	–	–	–	–	(901)	–	(901)
Foreign exchange movements	639	(21)	618	(220)	–	–	398
Other	52	132	184	(6)	643	179	1,000
Risk-weighted assets at 31 December 2018	135,743	25,757	161,500	7,250	2,085	25,505	196,340
Threshold risk-weighted assets ¹							10,026
Total risk-weighted assets as at 31 December 2018							206,366

1 Threshold risk-weighted assets reflect the element of significant investments and deferred tax assets that are permitted to be risk-weighted instead of being deducted from CET1 capital. Significant investments primarily arise from investments in the Group's Insurance business.

2 Credit risk, risk-weighted assets and capital requirements in Table 7 are inclusive of securitisations. At 31 December 2018 IRB securitisation risk-weighted assets were £4,052m (2017: £3,949m) and standardised securitisation risk-weighted assets were £209m (2017: £244m).

3 Counterparty credit risk includes movements in contributions to the default funds of central counterparties and movements in credit valuation adjustment risk.

Key movements

Credit risk, risk-weighted assets:

- **Asset size** net increase £0.3bn includes targeted growth in some key customer segments
- **Asset quality** increase of £1.1bn captures movements due to changes in borrower risk, including moves in and out of default and changes in the economic environment
- **Model update** increases of £1.5bn were driven by model refinements, principally within Retail portfolios
- **Methodology and policy** reductions of £0.8bn were driven by further capital efficient securitisation activity
- **Acquisitions and disposals** reduction of £5.9bn reflects the sale of the Irish mortgage portfolio and certain strategic equity holdings
- **Sterling foreign exchange movements**, principally with Euro and US Dollar, contributed to an increase of £0.6bn in credit risk-weighted assets

Counterparty credit risk, risk-weighted assets reduction of £0.6bn were mainly driven by lower CVA risk-weighted assets, foreign exchange movements and yield movement.

Market risk, risk-weighted assets reductions of £1.0bn were largely due to a reduction in underlying positions and refinements to internal models, partly offset by migrations to Lloyds Bank Corporate Markets.

Operational risk, risk-weighted assets increased following the annual update of the income based Standardised Approach operational risk calculation.

Pillar 1 Capital requirements: Overview of risk-weighted assets continued

Table 8: Overview of risk-weighted assets (OV1)

	2018 RWA £m	2017 RWA £m	2018 Minimum capital Requirements £m	2017 Minimum capital Requirements £m
	T	T-1	T	T-1
1 Credit risk (excluding counterparty credit risk)	157,239	160,301	12,579	12,824
2 of which: standardised approach	25,548	25,259	2,044	2,021
3 of which: the foundation rating-based (FIRB) approach	48,747	48,242	3,900	3,859
4 of which: the retail IRB (RIRB) approach	59,522	61,588	4,762	4,927
of which: corporates – specialised lending	11,808	11,965	945	957
of which: non-credit obligation assets	5,866	5,866	469	469
5 of which: equity IRB under the simple risk-weight	5,749	7,381	460	591
6 Counterparty credit risk	7,250	7,885	580	631
7 of which: marked to market	4,917	5,481	393	439
8 of which: original exposure	–	–	–	–
9 of which: the standardised approach	–	–	–	–
10 of which: internal ratings-based model method (IMM)	–	–	–	–
of which: comprehensive approach for credit risk mitigation (for SFTs)	471	403	38	32
11 of which: exposures to central counterparties (including trades, default fund contributions and initial margin)	1,160	599	93	48
12 of which: credit valuation adjustment (CVA)	702	1,402	56	112
13 Settlement risk	–	–	–	–
14 Securitisation exposures in banking book	4,262	4,188	341	335
15 of which: IRB ratings-based approach (RBA)	3,159	3,167	253	253
16 of which: IRB supervisory formula approach (SFA)	72	46	6	4
17 of which: internal assessment approach (IAA)	820	731	66	58
18 of which: standardised approach	209	244	17	20
19 Market risk	2,085	3,051	167	244
20 of which: standardised approach	416	395	34	32
21 of which: internal model approaches	1,669	2,656	134	212
22 Large exposures	–	–	–	–
23 Operational risk	25,505	25,326	2,040	2,026
24 of which: basic indicator approach	–	–	–	–
25 of which: standardised approach	25,505	25,326	2,040	2,026
26 of which: advanced measurement approach	–	–	–	–
27 Amounts below the thresholds for deduction (subject to 250% risk weight)	10,026	10,168	802	813
28 Floor adjustment	–	–	–	–
29 Total	206,366	210,919	16,509	16,874

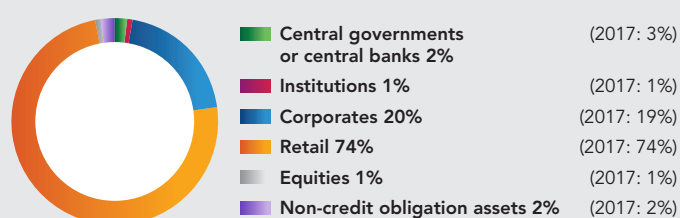
A detailed analysis of the key movements in exposures and risk-weighted assets is provided in Table 21.

Pillar 1 Capital requirements: Credit risk

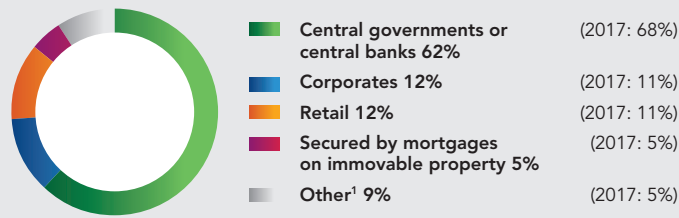
This section details Lloyds Banking Group's credit risk profile, focusing on regulatory measures such as exposure at default and risk-weighted assets.

- The Group remained focused on the UK, which generates over 89% of credit risk exposures.
- Of the Group's credit risk exposures, 84% (£522.2bn) are risk-weighted under the IRB approach, with the remainder (£98.7bn) risk-weighted using the Standardised approach. Standardised exposures include MBNA assets which are on an IRB roll-out plan.
- Total credit risk risk-weighted assets decreased by 2% to £157.2bn, primarily due to disposal of the Irish mortgage portfolio offset by targeted asset growth and model refinements.
- The Group's average risk weight for credit risk IRB exposures remained stable. The increase in average risk weight for standardised approach is driven by the reduction in the Central governments or central banks exposures (predominantly 0% risk weight).
- During 2018 expected losses have decreased by £0.3bn due to the disposal of the Irish mortgage portfolio and lower defaulted exposures within Commercial banking portfolios. Specific credit risk adjustments (SCRA) applied against expected losses have increased by £0.6bn primarily due to the impact of IFRS 9.
- The Group's models continue to maintain a conservative approach.

IRB exposures (EAD pre CRM, post CCF)



Standardised exposures (EAD pre CRM, post CCF)



¹ Other includes regional governments or local authorities, public sector entities, multilateral development banks, institutions, exposures in default and other balance sheet assets that have no associated credit risk.

Table 9: Risk-weighted assets flow statements of credit risk exposures (CR8)

	Credit Risk IRB RWA amount Total £m	Credit Risk IRB Capital Requirements £m	Credit Risk STA RWA amount Total £m	Credit Risk STA Capital Requirements Total £m
	a	b	a	b
1 Risk-weighted assets at 31 December 2017¹	138,986	11,119	25,503	2,040
2 Asset size	(271)	(22)	591	47
3 Asset quality	759	61	354	28
4 Model updates	1,472	118	–	–
5 Methodology and policy	(1,002)	(80)	182	15
6 Acquisitions and disposals	(4,892)	(391)	(984)	(79)
7 Foreign exchange movements	639	51	(21)	(2)
8 Other	52	4	132	11
9 Risk-weighted assets at 31 December 2018¹	135,743	10,859	25,757	2,061

¹ Credit risk, risk-weighted assets and capital requirements in Table 9 are inclusive of securitisations. At 31 December 2018 IRB securitisation risk-weighted assets were £4,052m (2017: £3,949m) and standardised securitisation risk-weighted assets were £209m (2017: £244m).

Pillar 1 Capital requirements: Credit risk continued

OVERVIEW

DEFINITION

Credit risk is defined as the risk that parties with whom the Group has contracted fail to meet their financial obligations (both on or off balance sheet).

RISK APPETITE

The Group has a conservative and well balanced credit portfolio managed through the economic cycle.

EXPOSURES

The principal sources of credit risk within the Group arise from loans and advances, contingent liabilities, commitments, debt securities and equity with customers, financial institutions and sovereigns. Credit risk exposures are categorised as 'retail', arising primarily in the Retail division, and some small and medium sized enterprises (SMEs), and 'corporate' (including larger SMEs, corporates, banks, financial institutions and sovereigns) arising primarily in the Commercial Banking, Wealth and Central Items divisions.

In terms of loans and advances, (for example mortgages, term loans and overdrafts) and contingent liabilities (for example credit instruments such as guarantees and documentary letters of credit), credit risk arises both from amounts advanced and commitments to extend credit to a customer or bank. With respect to commitments to extend credit, the Group is potentially exposed to loss up to an amount equal to the total unutilised commitments. However, the likely amount of loss may be less than the total unutilised commitments, as most retail and certain commercial lending commitments may be cancelled based on regular assessment of the prevailing creditworthiness of customers. Most commercial term commitments are also contingent upon customers maintaining specific credit standards.

The credit risk exposures of the Group from a regulatory capital perspective, as defined by the CRR, are included throughout the Pillar 3 disclosures.

Exposures and risk-weighted assets values presented in this section (Pillar 1 Capital requirements: Credit risk) exclude securitisation positions in line with the EBA prescribed format. This presentation is reflected in both current and comparative numbers.

An analysis of total credit risk exposures and risk-weighted assets by division is provided below.

Table 10: Divisional credit risk exposures and risk-weighted assets

Division	Risk Weight approach	2018 EAD pre CRM post CCF £m	2018 Risk-weighted assets £m	2018 Average risk weight %	2017 EAD pre CRM post CCF ¹ £m	2017 Risk-weighted assets ¹ £m	2017 Average risk weight ¹ %
Retail	IRB	388,469	62,997	16%	390,689	60,743	16%
	Standardised	16,905	11,524	68%	16,177	10,873	67%
Commercial Banking	IRB	112,656	58,929	52%	112,203	58,608	52%
	Standardised	13,308	11,518	87%	13,335	10,683	80%
Insurance and Wealth	IRB	–	–	–	–	–	–
	Standardised	924	660	71%	903	643	71%
Central Items	IRB	21,056	9,765	46%	30,960	15,691	51%
	Standardised	67,599	1,846	3%	82,845	3,061	4%
Total		620,917	157,239	25%	647,112	160,301	25%
Total IRB		522,181	131,692	25%	533,852	135,042	25%
Total Standardised		98,736	25,548	26%	113,259	25,259	22%

¹ Restated.

Key movements

Retail credit risk-weighted assets increased by £2.9bn mainly due to growth in key customer segments and model refinements.

Commercial Banking credit risk-weighted assets increased by £1.2bn mainly due to targeted growth in some key customer segments partly offset by capital efficient securitisation activity.

Central Items credit risk-weighted assets decreased by £7.1bn reflecting the disposal of the Irish mortgage portfolio and strategic equity holdings.

Pillar 1 Capital requirements: Credit risk continued

MEASUREMENT

The process for credit risk identification, measurement, and control is integrated into the Board-approved framework for credit risk appetite and governance.

Credit risk is measured from different perspectives using a range of appropriate modelling and scoring techniques at a number of levels of granularity, including total balance sheet, individual portfolio, pertinent concentrations and individual customer – for both new business and existing lending. Key metrics, such as total exposure, risk-weighted assets, new business quality, concentration risk and portfolio performance are reported monthly to Risk Committees.

Measures such as expected credit loss, risk-weighted assets, observed credit performance, predicted credit quality (usually from predictive credit scoring models), collateral cover and quality and other credit drivers (such as cash flow, affordability, leverage and indebtedness) are used to enable effective risk measurement across the Group.

EAD includes on-balance sheet netting where permissible, however, the Group does not practice off-balance sheet netting on its credit risk exposures.

For regulatory capital purposes the Group's credit risk exposures are measured as risk-weighted assets, primarily calculated using Internal Ratings Based approach, with the remainder calculated under the Standardised approach. The Group's application of these approaches is explained in more detail on pages 13 and 14.

MONITORING

In conjunction with Risk division, businesses identify and define portfolios of credit and related risk exposures and the key behaviours and characteristics by which those portfolios are managed and monitored.

This entails the production and analysis of regular portfolio monitoring reports for review by senior management. Risk division in turn produces an aggregated view of credit risk across the Group, including reports on material credit exposures, concentrations, concerns and other management information, which is presented to the divisional risk committees, Group Risk Committee and the Board Risk Committee.

The performance of all rating models is monitored on a regular basis, as outlined on pages 37 and 38.

Further details are provided on page 117 of the Risk Management section of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

CREDIT RISK MITIGATION

The Group uses a range of approaches to mitigate credit risk. For detailed information on approaches to mitigate credit risk, including details of the Group's policies and principles, see pages 115 to 117 of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Collateral

The Group maintains appetite parameters on the acceptability of specific classes of collateral. Only certain types of collateral are deemed eligible for internal risk management and regulatory capital purposes. The recognition of eligible collateral requires a number of factors to be considered such as legal certainty of charge, frequency and independency of revaluation and correlation of the value of the underlying asset to the obligor.

Collateral held as security for financial assets other than loans and advances is determined by the nature of the underlying exposure. Debt securities, including treasury and other bills, are generally unsecured, with the exception of asset-backed securities and similar instruments such as covered bonds, which are secured by portfolios of financial assets. Collateral is generally not held against loans and advances to financial institutions, however securities are held as part of reverse repurchase or securities borrowing transactions or where a collateral agreement has been entered into under a master netting agreement.

For non-mortgage retail lending to small businesses, collateral may include second charges over residential property and the assignment of life cover.

The additional mitigation for Retail and Commercial customers is explained in more detail on page 116 of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Where collateral is held, the eligible collateral for loans and advances and contingent liabilities is classified as either financial collateral or other collateral, as outlined below:

Eligible financial collateral

- Eligible financial collateral includes cash on deposit with the bank, gold, rated debt securities (subject to certain restrictions), equities or convertible bonds included in a main index and units in certain collective investment undertakings or mutual funds.
- The Group predominantly applies financial collateral to its corporate (IRB and Standardised) and institutions (IRB) exposures.

Other eligible collateral

- Real estate collateral includes charges over residential and commercial properties, for example, for the Group's mainstream mortgages.
- Other eligible collateral includes real estate, short term financial receivables, credit insurance, life policies and other physical collateral for example, vehicles, providing the criteria for eligibility are met.
- The Group largely applies other eligible collateral to the IRB corporate main, corporate SME and retail asset classes.

Collateral values are assessed at the time of loan origination. The Group requires collateral to be realistically valued by an appropriately qualified source, independent of both the credit decision process and the customer, at the time of borrowing. In certain circumstances, for Retail residential mortgages this may include the use of automated valuation models based on market data, subject to accuracy criteria and LTV limits. Where third parties are used for collateral valuations, they are subject to regular monitoring and review. Collateral values are reviewed on a regular basis which will vary according to the type of lending, collateral involved and account performance. Such reviews are undertaken to confirm that the value recorded remains appropriate and whether revaluation is required, considering for example, account performance, market conditions and any information available that may indicate that the value of the collateral has materially declined. In such instances, the Group may seek additional collateral and/or other amendments to the terms of the facility. The Group adjusts estimated market values to take account of the costs of realisation and any discount associated with the realisation of the collateral when estimating credit losses.

The Group considers risk concentrations by collateral providers and collateral type with a view to ensuring that any potential undue concentrations of risk are identified and suitably managed by changes to strategy, policy and/or business plans.

Refer to page 116 of the Risk Management section and Note 52 (Financial Risk Management) of the 2018 Lloyds Banking Group plc Annual Report and Accounts for further information on collateral.

Pillar 1 Capital requirements: Credit risk continued

Other credit risk transfers

The Group also undertakes asset sales, credit derivative based transactions and securitisations as a means of mitigating or reducing credit risk, taking into account the nature of assets and the prevailing market conditions.

- Credit derivatives are a method of transferring credit risk from one counterparty (the protection buyer) to another (the protection seller). Capital relief under regulatory requirements is restricted to the following types of credit derivative: credit default swaps (CDS); total return swaps; and credit linked notes (CLN) (to the extent of their cash funding).
- The Group makes limited use of credit derivatives as credit risk mitigation from a capital perspective.
- Further details on the application within the Group are included within the Counterparty credit risk section on page 87.

Guarantees

- In addition, guarantees from eligible protection providers including governments, institutions and corporates, can also provide regulatory capital relief, although there are minimum operational and legal requirements which must be met before reflecting the risk mitigating effect. On the basis that these requirements are met, alternative forms of protection, for example indemnities, may be classified as a guarantee for regulatory capital purposes. Export Credit agencies can provide risk mitigation in the form of a guarantee (typically up to 85% – 95% of a contract value) providing cover and guarantee of payment in relation to commercial and political risk.
- Regulatory capital relief is taken for guarantees provided by appropriate sovereigns, institutions or corporates, as well as for collateralised guarantees from corporates where available.

APPLICATION OF CREDIT RISK MITIGATION

The Group's application of different types of credit risk mitigation from a regulatory capital perspective is outlined below:

	Standardised		IRB		
	EAD	Other	EAD	LGD	PD
Eligible financial collateral					
trading book	✓		✓		
non-trading book	✓			✓	
Other eligible collateral					
real estate collateral ¹		✓		✓	✓
other physical collateral				✓	✓
credit insurance ²		✓			✓
receivables	✓			✓	
life policies	✓			✓	
Credit derivatives ²		✓			✓
Collateralised guarantees ²		✓		✓	
Non collateralised guarantees ²		✓			✓

1 Real estate collateral determines the exposure class under the Standardised Approach as explained below.

2 As per application under the PD Substitution Approach (IRB), as explained below.

Application under the Standardised Approach

Where a credit risk exposure subject to the Standardised Approach is covered by a form of eligible financial collateral the EAD value is adjusted accordingly under the Financial Collateral Comprehensive Method (FCCM) applying adjustments for volatility and currency mismatch, in addition to maturity mismatches for all collateral types and appropriate value discounts as needed.

For unfunded credit protection, for example where guarantees or credit derivatives apply, the exposure class and therefore risk weight applied to the portion of the exposure covered by the protection provider is based on the exposure class of the provider, referred to as the Substitution Approach. The covered portion is determined after the application of 'haircuts' for currency and maturity mismatch applied to the protection provided. The risk weight applied to the uncovered portion of the exposure is not impacted.

Real estate collateral does not impact EAD directly under the Standardised Approach, however, it instead determines the exposure class and directly impacts the risk-weight applied to the exposure.

The use of credit derivatives and collateral in respect of securitisation and counterparty credit risk exposures are discussed further within the Securitisation and Counterparty credit risk section of the document.

Collateral may also be used as an input for modelling SCRA against exposures, which will also indirectly reduce the EAD for exposures subject to the Standardised Approach.

Application under the IRB approach

In recognising eligible financial collateral under the FIRB Approach, the Group adjusts the relevant LGD value in accordance with the application of the FCCM, applying adjustments for volatility and currency mismatch, in addition to maturity mismatches for all collateral types and appropriate value discounts as needed.

Other eligible collateral, collateralised guarantees and real estate collateral applied under the FIRB Approach will typically result in an adjustment to the regulatory LGD value, subject to floors as prescribed in the CRR. The adjustment applied is dependent on the value and type of collateral used.

Where appropriate guarantees or credit derivatives apply, the PD applied to the portion of the exposure covered by the protection provider is based on the PD of the provider, referred to as the PD substitution approach. The covered portion is determined after the application of 'haircuts' for currency and maturity mismatch applied to the protection provided. The PD applied to the uncovered portion of the exposure is not impacted.

Under the Retail IRB Approach, own estimates of LGD are used, taking into account eligible collateral, including real estate collateral or other physical collateral, among other factors. As well as impacting LGD, real estate collateral may also influence a counterparty's PD under the Retail IRB approach in certain cases, for example, for residential mortgages.

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF CREDIT RISK MITIGATION

The following table provides an analysis of net carrying values of credit risk exposures secured by different CRM techniques split by regulatory approach and asset class.

Table 11: CRM techniques – Overview (CR3)

	2018				
	Exposures unsecured – carrying amount £m	Exposures to be secured ¹ £m	Exposures secured by collateral ² £m	Exposures secured by financial guarantees £m	Exposures secured by credit derivatives ³ £m
	a	b	c	d	e
Exposures subject to the IRB approach					
Central governments or central banks	11,966	757	–	757	–
Institutions	6,419	98	82	–	15
Corporates	74,631	43,898	43,046	259	593
of which: Specialised lending	–	16,755	16,755	–	–
of which: SMEs	4,376	7,810	7,810	–	–
Retail	62,606	323,585	323,585	–	–
Secured by real estate property	–	312,634	312,634	–	–
SMEs	–	9,122	9,122	–	–
Non-SMEs	–	303,511	303,511	–	–
Qualifying revolving	52,509	–	–	–	–
Other retail	10,098	10,951	10,951	–	–
SMEs	2,147	29	29	–	–
Non-SMEs	7,951	10,922	10,922	–	–
Equity	2,700	–	–	–	–
Non-credit obligation assets	9,933	–	–	–	–
Total – IRB approach	168,256	368,337	366,713	1,016	609
Exposures subject to the standardised approach					
Central governments or central banks	61,429	–	–	–	–
Regional governments or local authorities	5	–	–	–	–
Public sector entities	41	–	–	–	–
Multilateral development banks	2,974	–	–	–	–
International organisations	–	–	–	–	–
Institutions	160	–	–	–	–
Corporates	15,774	916	473	426	17
Retail	32,262	168	168	–	–
Secured by mortgages on immovable property	–	4,510	4,510	–	–
Exposures in default	1,230	438	438	–	–
Items associated with particularly high risk	–	–	–	–	–
Covered bonds	–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–
Collective investment undertakings	716	–	–	–	–
Equity exposures	–	–	–	–	–
Other exposures	3,680	–	–	–	–
Total – standardised approach	118,271	6,032	5,589	426	17
Total exposures	286,527	374,369	372,301	1,442	625
of which: defaulted	2,442	3,655	3,655	–	–

Further details on collateral held as security for financial assets, collateral pledged as security and collateral repossessed can be found in Note 52 (Financial Risk Management) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Pillar 1 Capital requirements: Credit risk continued

	2017				
	Exposures unsecured – carrying amount £m	Exposures to be secured ¹ £m	Exposures secured by collateral ² £m	Exposures secured by financial guarantees £m	Exposures secured by credit derivatives ³ £m
	a	b	c	d	e
Exposures subject to the IRB approach					
Central governments or central banks	17,722	–	–	–	–
Institutions ⁴	4,454	333	245	–	88
Corporates ⁴	72,621	46,277	44,894	338	1,045
of which: Specialised lending	–	16,927	16,927	–	–
of which: SMEs	4,386	7,909	7,909	–	–
Retail	62,052	328,450	328,450	–	–
Secured by real estate property	–	318,833	318,833	–	–
SMEs	–	9,761	9,761	–	–
Non-SMEs	–	309,072	309,072	–	–
Qualifying revolving	51,968	–	–	–	–
Other retail	10,083	9,617	9,617	–	–
SMEs	2,150	34	34	–	–
Non-SMEs	7,933	9,583	9,583	–	–
Equity	3,355	–	–	–	–
Non-credit obligation assets	10,231	–	–	–	–
Total – IRB approach	170,434	375,060	373,589	338	1,133
Exposures subject to the standardised approach					
Central governments and central banks ⁴	76,416	–	–	–	–
Regional governments or local authorities	5	–	–	–	–
Public sector entities	41	–	–	–	–
Multilateral development banks	1,837	–	–	–	–
International organisations	–	–	–	–	–
Institutions	146	237	237	–	–
Corporates ⁴	17,041	1,001	818	183	–
Retail	33,935	150	150	–	–
Secured by mortgages on immovable property	–	5,158	5,158	–	–
Exposures in default	255	446	446	–	–
Items associated with particularly high risk	–	–	–	–	–
Covered bonds	–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–
Collective investment undertakings	278	–	–	–	–
Equity exposures	–	–	–	–	–
Other exposures	3,114	–	–	–	–
Total – standardised approach	133,330	6,992	6,809	183	–
Total exposures	303,764	382,052	380,398	521	1,133
of which: defaulted	1,716	4,206	4,206	–	–

1 Allocation of the carrying amount of multi-secured exposures is made by order of priority to their different CRM techniques.

2 At 31 December 2018 the value of exposures secured by eligible financial collateral is £4.2bn (2017: £5.5bn) and the value of exposures secured by other eligible collateral is £368.0bn (2017: £374.9bn).

3 Exposures secured by credit derivatives mainly represents Corporate exposures where the risk has been transferred into Institutions.

4 Restated.

Pillar 1 Capital requirements: Credit risk continued

INTERNAL RATING SCALES

Within the Group, internal PD rating scales are used in assessing the credit quality of the Foundation IRB and Retail IRB portfolios. There are two master scales – a Corporate master scale which covers all relevant corporate, central government or central bank and institution portfolios and a Retail master scale which covers all relevant retail portfolios.

PD master scales**Table 12: Internal Corporate master scale**

In corporate portfolios the PD models segment counterparties into a number of rating grades, with each grade representing a defined range of default probabilities, and there are a number of different model rating scales. Counterparties/exposures migrate between rating grades if the assessment of the PD changes. The modelled PDs 'map' to the single Corporate (non-retail) master scale comprising 19 non-default ratings. Together with four default ratings the corporate master scale forms the basis on which internal reporting is completed. These ratings scales can also be mapped to external ratings as shown below.

PD Grades	Range			External S&P Rating (Approximate Equivalent)
	Lower	Mid	Upper	
1-4	0.000%	0.018%	0.035%	AAA to AA-
5	0.036%	0.040%	0.050%	A+
6	0.051%	0.060%	0.080%	A
7	0.081%	0.110%	0.140%	A-
8	0.141%	0.180%	0.220%	BBB+
9	0.221%	0.280%	0.340%	BBB
10	0.341%	0.420%	0.500%	BBB-
11	0.501%	0.630%	0.760%	BB+
12	0.761%	1.000%	1.240%	BB
13	1.241%	1.620%	2.000%	BB-
14	2.001%	2.600%	3.200%	B+
15	3.201%	4.200%	5.200%	B+
16	5.201%	6.200%	7.200%	B
17	7.201%	8.700%	10.200%	B-
18	10.201%	12.000%	13.800%	B-
19	13.801%	31.000%	99.999%	CCC to C
20 – 23 (Default)	100.000%	100.000%	100.000%	Default

Table 13: Internal Retail master scale

For reporting purposes, customers are segmented into a number of rating grades, each representing a defined range of default probabilities and exposures migrate between rating grades if the assessment of the counterparty PD changes. The Retail master scale comprises 13 non-default ratings and one default rating.

PD Grades	Range		
	Lower	Mid	Upper
0	0.000%	0.050%	0.100%
1	0.101%	0.251%	0.400%
2	0.401%	0.601%	0.800%
3	0.801%	1.001%	1.200%
4	1.201%	1.851%	2.500%
5	2.501%	3.501%	4.500%
6	4.501%	6.001%	7.500%
7	7.501%	8.751%	10.000%
8	10.001%	12.001%	14.000%
9	14.001%	17.001%	20.000%
10	20.001%	25.001%	30.000%
11	30.001%	37.501%	45.000%
12	45.001%	72.500%	99.999%
Default	100.000%	100.000%	100.000%

Pillar 1 Capital requirements: Credit risk continued

DISTRIBUTION OF EXPOSURES BY APPROACH

To illustrate the degree to which IRB models are used within the bank, the table below shows the EAD split between RIRB, FIRB, Other IRB (including Supervisory Slotting and Equity Exposures) and Standardised (not modelled) approaches across the different Basel asset classes. Exposures presented in the table below are in line with Table 21, and are on a post CRM and post CCF basis.

	RIRB £m	FIRB £m	Other IRB £m	Standardised £m
Central governments or central banks	–	11,966	–	61,952
Institutions ¹	–	5,980	–	3,898
Corporates ²	–	86,509	16,052	10,892
Retail - Secured by property	327,800	–	–	4,505
Retail – Qualifying revolving	38,342	–	–	–
Retail – Other	21,651	–	–	12,294
Other ³	–	–	12,633	6,038
Total	387,793	104,455	28,685	99,579
% coverage	62%	17%	5%	16%

1 Standardised institutions exposures also include regional governments or local authorities, public sector entities and multilateral development banks.

2 Corporate Other IRB exposures represent exposures risk-weighted under the Supervisory Slotting Approach.

3 Other exposures include equity exposures, non-credit obligations, standardised exposures in default, collective investment undertakings and other exposures.

SCOPE OF THE IRB PERMISSION

The Group has regulatory approval, subject to annual CRR attestations, to use its internal models in the calculation of the majority of its credit risk capital requirements. The Group currently has permission to use both the FIRB Approach (used for corporate exposures, institutions and central governments or central banks) and the RIRB Approach (for retail exposures).

The Group applies the Supervisory Slotting Approach to certain corporate specialised lending exposures (including the Group's income-producing real estate exposures) and the Simple Risk Weight Method to equity exposures; hence no models are used for these two groups. Securitisation positions are predominantly risk-weighted under the Ratings Based Approach (RBA), with some use made of the Internal Assessment Approach (IAA) and Standardised Approach (STA).

Further details on other areas such as the Supervisory Slotting Approach for Corporate Specialised Lending exposures, Simple Risk Weight Method for Equities and various approaches for Securitisations can be found in the relevant sections later in the document.

Under the Group's IRB rating permission, the following list comprises the rating systems that are significant at a group level, each having risk-weighted assets in excess of £2.5bn (based on risk-weighted asset figures in the latest CRR attestation). The capital models listed are the same as used in the PD backtesting analysis (later in this section) with the exception of the PELF and Quasi State rating systems which are excluded from PD backtesting due to the low level of defaults.

Approach	Basel asset class	Ratings system	Associated portfolio (risk-weighted assets)
RIRB	Retail Mortgages	HBOS Mainstream and Lloyds Bank Mortgages ^{1,2}	>£15bn
FIRB	Corporate Main, Corporate SME	Publicly Quoted	£10-£15bn
FIRB	Corporate Main, Corporate SME	Unquoted ³	£10-£15bn
FIRB/RIRB	Corporate SME, Retail SME and Retail Mortgages	Business Dynamic Credit Scoring (BDCS)	£5bn – £10bn
RIRB	Retail – Other (non-SME)	HBOS and Lloyds Bank Loans ¹	£5bn – £10bn
RIRB	Retail – Qualifying Revolving	HBOS and Lloyds Bank Credit Cards ^{1,4}	£5bn – £10bn
RIRB	Retail Mortgages	HBOS Buy-to-Let Mortgages	£5bn – £10bn
RIRB	Retail Mortgages	HBOS Other Mortgages ⁵	£2.5bn – £5bn
RIRB	Retail – Qualifying Revolving	HBOS and Lloyds Bank Overdrafts ¹	£2.5bn – £5bn
FIRB	Corporate Main	Private Equity & Loan Fund (PELF)	£2.5bn – £5bn
FIRB	Corporate Main	Quasi State	£2.5bn – £5bn
FIRB	Corporate Main	UK Motor Finance (Commercial)	£2.5bn – £5bn
RIRB	Retail – Other (non-SME)	UK Motor Finance (Retail)	£2.5bn – £5bn

1 Separate rating systems exist for Lloyds Bank and HBOS but as the risk profiles are sufficiently similar, they are grouped together in this table.

2 Lloyds Bank mortgages comprise three rating systems – Lloyds Mainstream mortgages, Lloyds Near-Mainstream mortgages and Lloyds Buy-to-Let mortgages.

3 Unquoted rating system has a small number of obligors which are included in the Institutions asset class.

4 MBNA exposures are currently rated on the Standardised approach.

5 These are all closed books with HBOS Self Certified Mortgages being the largest.

Pillar 1 Capital requirements: Credit risk continued

KEY CHARACTERISTICS OF MATERIAL GROUP RATINGS SYSTEMS

PD rating philosophy

PD ratings generally adhere to either 'Point-in-time' (PIT) or 'Through-the-cycle' (TTC) rating approaches.

- For Qualifying Revolving Retail Exposures (QRRE) and Retail – Other (non-SME), PD ratings are constructed on a PIT basis with a PD 'buffer' added to the PIT PD to cover potential underestimation of default risk between regular calibrations.
- Retail Mortgages use a TTC approach where this is available (the majority of Lloyds Bank and Halifax Mainstream mortgages) and a PIT approach with a PD buffer otherwise.
- Corporate PD models are largely calibrated to a long-run of default experience, meaning the PD predictions are more TTC in nature. The material exception to this being BDCS, which is more PIT in nature.

With the exception of the Lloyds/HBOS UK retail mortgage portfolios, models use a 90 days-past-due backstop; Lloyds/HBOS UK retail mortgage portfolios (except those rated through BDCS) use a 180 days-past-due backstop. Unlikelihood to pay triggers vary by portfolio, using criteria such as bankruptcy/IVAs, repossession and forbearance treatments.

The PD models are all 'bottom up' style models, based on a number of counterparty-specific or account-specific factors. In retail portfolios this includes application and behavioural scorecards; in commercial portfolios this includes counterparty quantitative (e.g. financial) and qualitative (e.g. assessment of management) factors.

EAD and LGD modelling approach

Corporate exposures are rated using the FIRB approach, so have no LGD and EAD models for capital purposes.

Retail exposures use EAD models, where the general approach is to estimate the proportion of the unused credit facility that will be further drawn down prior to default and add this to the current balance. This is material for revolving credit facilities, but generally not material for term products. The EAD calculated to determine regulatory capital is based on an economic downturn.

Retail LGD models are built using statistical models based on key drivers of loss. The LGD calculated to determine regulatory capital is based on an economic downturn. For portfolios with security (residential property, non-residential property, and vehicles), components include probability of repossession and loss severity; for portfolios of an unsecured nature, components include probability of paying back a proportion of the debt and severity of loss.

Data history

The Group always seeks to use the longest history of available representative data when building its capital models:

- Mortgage models are built on data dating back to 1987
- Credit card, Loans, Overdrafts, Unquoted and UK Motor Finance (Retail) models are built on data dating back to 2007
- Publicly Quoted companies model is built on data dating back to 2004
- PELF and UK Motor Finance (Commercial) models use data dating back to 2008

When default volumes are sufficient, the Group's PD models are built using logistic regression. Where historical default volumes are low, alternative approaches are used; in the case of the Publicly Quoted model, a ratings replication approach has been taken, while the PELF model is designed to align to the rank-order assessment of default risk by portfolio experts, thus providing consistency in rating assessments. Low default calibration methods are used as appropriate to ensure that the Group does not erroneously underestimate risk due to low volumes of default data.

INTERNAL DEVELOPMENT AND MONITORING OF IRB MODELS

Model development, validation and review

Risk models (including all IRB models), and subsequent changes, are generally developed by the relevant business area modelling teams (within Risk division) on behalf of the business area. The models are challenged, both technically and from a business usage perspective, by an independent 'second line' unit (Risk Model Approval Team) which reports through an independent reporting line within the Risk division.

The Group's most material models are approved and monitored by the Group Risk Committee (GRC). GRC is the most senior executive risk committee in the Group, and its membership includes the Chief Financial Officer and the Chief Risk Officer, as well as representation from each division of the Group.

Lower materiality models are approved and monitored by the Model Governance Committee (MGC). The chair of MGC has delegated approval responsibility from GRC. MGC attendees include senior risk and business model owners responsible for the model under consideration. All new IRB models and all material model changes are subject to governance in line with regulatory guidance from the EBA and PRA.

Once a model has been approved, it is subject to ongoing monitoring and Periodic Validation requirements. The Periodic Validation of models is undertaken by the business area modelling teams (within Risk division) and is subject to the same governance process as a new model build. Periodic Validations are undertaken on an annual basis for all IRB models.

A hierarchy of model monitoring exists for all IRB models – detailed regular technical risk model performance (including rank ordering and predictive accuracy) is used to prioritise both model changes and corrective action for model underperformance. This is supplemented by more summarised half-yearly model monitoring to MGC. GRC is provided with an annual update on model performance. IRB model monitoring is also provided and discussed with the PRA on a regular basis.

In addition to a technical/statistical review of IRB models, the Risk Model Approval Team undertakes a review of the controls and processes that are in place to support the production of capital figures. This focusses on three areas, namely data, implementation and usage of the model. The review frequency of this is linked to the materiality of the model and is stipulated within the Group Model Governance Policy. Additional reviews can occur if there are material changes to the controls and processes.

Where required, typically where there is a data or model weakness, an appropriate margin of conservatism is included in the estimated value of risk parameters to ensure capital adequacy. If a model or data weakness is identified that indicates the understatement of capital, the capital requirements are adjusted, on a temporary and immediate 'post model adjustment' basis until the issue is remediated.

The Risk Model Approval Team maintains an inventory of all models within the scope of the Group Model Governance Policy, including IRB models. In a general sense, this serves to assist the wider model governance process. More specifically, the inventory enables the following: a schedule of models under development or awaiting periodic validation to be maintained, a means of tracking the resolution of corrective actions set by the Risk Model Approval Team, defines individual accountability for models and the collation of documentation relating to all models.

Pillar 1 Capital requirements: Credit risk continued

Given the overarching governance framework, which is applied to exposures under each asset class, the risk model management information produced, and the effective controls and processes in place, the Group is confident that the performance of risk models is sufficient to ensure Pillar 1 capital requirements adequately reflect the Group's risk exposure.

Further information on model risk, including details on measurement, mitigation and monitoring can be found in the Risk Management section of the 2018 Lloyds Banking Group plc Annual Report and Accounts (page 159).

Relationships between risk management function and internal audit function

Group Audit (the 'third line' of defence) check that appropriate controls and processes are in place and operating effectively, across all aspects of capital models. Group Audit is independent from the first and second lines of defence, reporting through to the Group Audit Director, a Group Executive Committee attendee.

OTHER APPLICATION OF IRB MODEL OUTPUTS

In addition to the regulatory capital calculation process, IRB models are used for other purposes within the Group, for example:

Credit approval: IRB models are strongly linked to the credit approval process, though the precise nature differs between business areas. For retail exposures, operational, application and behavioural scorecards (primarily used to make retail credit approval and account management decisions) are used as inputs to PD models. For corporate exposures, the PD model ascribes a credit risk grade to each customer and their exposures and this grade is used as a key input into the credit approval process.

Credit portfolio reporting and risk appetite: IRB parameters are embedded into management information at both Group and Divisional levels and are used to inform the setting of risk appetite.

Pricing: IRB outputs are used within pricing tools in the business to allow for risk-adjusted pricing.

Calculating impairment: The calculation of provision levels within each portfolio is subject to rigorous challenge and oversight from both Finance and Risk functions. In Commercial Banking, IRB models are used in the estimation of expected credit losses within the wider IFRS 9 reporting framework. Within Retail, the PD, EAD and LGD models for capital and impairment are very similar, with differences primarily reflecting the different regulatory regimes for IRB and IFRS 9.

Stress Testing: IRB model outputs are used in the various internal and regulatory stress testing exercises.

MODEL PERFORMANCE

This section splits into two parts. The first section provides an analysis of the performance of IRB models over the period 2016-2018. The second section focusses on the backtesting of the Group's most material PD models. All models were maintained at a Group level in 2018, with no separate calibrations for LBCM and RFB and hence there is no separate backtesting for LBCM and RFB exposures.

Summary performance of IRB models

The scope of this section includes all models using an RIRB or FIRB approach. In terms of risk metrics, the results show the predicted and actual PD, LGD, and EAD ratio (ratio of predicted to actual) by exposure class. No LGD or EAD information is provided for exposures modelled under the FIRB Approach since these are determined by regulatory values.

The calculations for PD consider the portfolio of non-defaulted exposures at the start of the period and compare the default level experienced during the year to the default level predicted by the Group's IRB models at the start of the period.

The calculations for LGD consider the set of exposures that have defaulted during the year and compare the loss level experienced on these accounts with the amounts predicted by the Group's IRB models at the start of the period. For those defaulted assets where losses are not yet realised the determination of actual LGD includes estimates of future recoveries; in the case of Retail SME and the small proportion of the Residential Mortgage book that is within the BDCS rating system, the estimates are based on downturn LGDs, for other asset classes a PiT LGD is used.

For the purposes of comparison, EAD weighting has been used throughout.

The calculation of the EAD ratio considers the set of defaulted accounts during the relevant period and compares the realised EAD for these exposures with the amounts predicted by the Group's IRB models at the start of the period. Where the predicted EAD was greater than the actual exposure on the date of default, the ratio will be greater than 100%.

Care should be taken in interpreting the predicted to actual ratios:

- 'Actual' (i.e. observed default and loss) outcome data is by its nature point-in-time and reflects the experience during a given year, whereas some model 'predicted' outputs are 'through-the-cycle' or 'downturn' in nature. The gap between 'predicted' and 'actual' outcomes will therefore narrow or widen to reflect the current position in the economic cycle. In addition differences between actuals and predictions may arise due to changes in circumstances over the course of the 12-month period, e.g. credit policy or operational process changes.
- PD models are built on an 'obligor-weighted' basis, but the reported figures in the following table are 'EAD weighted'. Hence 'actual' outcomes can be impacted by small numbers of defaulted counterparties with relatively larger EAD values.
- Changes in portfolio composition and client exposure can affect 'actual' observed defaults over the course of a year, but will not adjust the 'predicted' factors at the start of an outcome period.

Pillar 1 Capital requirements: Credit risk continued

MODEL PERFORMANCE DATA

Corporates exposures in the tables below include SME and exclude specialised lending. Retail results are all based on the 12 months ending November. Commercial Banking results for 2018 and 2017 are based on the 12 months ending September. For 2016 they are based on a 12-month period ending December.

Table 14: Model performance

2018 IRB Exposure Class	Probability of default		Loss given default of defaulted assets		EAD of defaulted assets
	Predicted Dec 17 %	Actual Dec 18 %	Predicted Dec 17 %	Actual Dec 18 %	Ratio of predicted to actual %
Central governments or central banks	0.03%	0.00%			
Institutions	0.12%	0.07%			
Corporates	0.77%	0.83%			
Retail – mortgage total	1.27%	0.53%	12.02%	5.81%	103%
Retail – SME	3.24%	2.63%	81.83%	80.47%	105%
Retail – Qualifying revolving	1.37%	1.59%	78.09%	59.03%	113%
Retail – Other (non-SME)	2.53%	2.98%	59.72%	50.95%	116%

2017 IRB Exposure Class	Probability of default		Loss given default of defaulted assets		EAD of defaulted assets
	Predicted Dec 16 %	Actual Dec 17 %	Predicted Dec 16 %	Actual Dec 17 %	Ratio of predicted to actual %
Central governments or central banks	0.06%	0.00%			
Institutions	0.12%	0.40%			
Corporates	0.71%	0.76%			
Retail – mortgage total	1.33%	0.66%	13.48%	6.16%	103%
Retail – SME	2.70%	2.34%	80.05%	73.94%	105%
Retail – Qualifying revolving	1.58%	1.34%	79.09%	63.00%	107%
Retail – Other (non-SME)	2.51%	2.63%	63.43%	53.47%	114%

2016 IRB Exposure Class	Probability of default		Loss given default of defaulted assets		EAD of defaulted assets
	Predicted Dec 15 %	Actual Dec 16 %	Predicted Dec 15 %	Actual Dec 16 %	Ratio of predicted to actual %
Central governments or central banks	0.05%	0.00%			
Institutions	0.21%	0.35%			
Corporates	0.69%	0.84%			
Retail – mortgage total	1.36%	0.77%	13.71%	4.86%	103%
Retail – SME	2.79%	1.67%	78.27%	72.61%	102%
Retail – Qualifying revolving	1.63%	1.31%	80.44%	60.10%	109%
Retail – Other (non-SME)	2.65%	2.31%	70.01%	56.68%	111%

Key observations

Non-Retail (all):

- A small number of relatively large value cases drive the PD under-predictions in the Corporate asset class. On an obligor-weighted basis, the Corporate asset class predictions exceed the actual default rates.

Retail SME:

- Model recalibrations drive the Predicted PD increase within the Retail SME asset class.

Retail Mortgages:

- Predicted PDs exceed actual default rates and predicted LGDs exceed actual LGDs for the retail mortgages portfolio. The higher predicted PD in comparison to actual default rates at this point in the cycle is a reflection of the use of Through-the-Cycle models across most of the portfolio.

Retail – QRRE:

- Implementation of an aligned PD scorecard across Retail QRRE in November 2017, providing better risk-discrimination, has driven the overall reduction in predicted PD.

- The increase in Retail QRRE Actual PD is due to a temporary impact from changes to collections processes on Retail Credit Cards and the introduction of a new pricing structure for Retail Overdrafts which changed the composition of defaulting obligors.

- Predicted LGDs exceed actual LGDs. Implementation of a new LGD model on the HBOs Overdrafts portfolio has led to a modest decrease in model estimates and actual LGD.

Retail – Other (non-SME):

- Actual default rates in 2018 were greater than the predicted default rates for Retail Other, partly due to the inclusion of certain non-credit events inflating the default rate on the UK Motor Finance (Retail) book. Retail Loans have also seen an increase in actual default rates, exceeding estimates, due to a temporary impact from changes to collections processes.
- Predicted LGDs exceed actual LGDs. The implementation of a new LGD model for HBOs Retail Loans, in line with the Lloyds models introduced in 2017, has led to a reduction in predicted LGD. The Actual LGD reduction is driven by the growing proportion of Motor Finance exposures in this asset class which, given their secured nature, have lower LGDs than for unsecured Retail Loans.

Pillar 1 Capital requirements: Credit risk continued

Backtesting of PD models

This section focusses on the backtesting of PD models. The information in the following tables is based on the key significant rating systems noted earlier in this section with the exception of PELF and Quasi State. Both of these have risk-weighted-assets above the threshold of £2.5bn, but rarely any defaults, hence their inclusion in backtesting tables would have limited value. The figures reported in this section are therefore a subset of Tables 24 and 25.

In line with EBA guidance this information is aggregated to Basel asset class, with exposures assessed under RIRB and FIRB shown in separate tables.

All tables follow the same format and adopt the following definitions:

- The PD ranges match those in the respective retail and commercial internal master scales.
- The external rating equivalent is the equivalent S&P rating described on page 34.
- The weighted average PD is calculated using the regulatory PD (within that risk grade) at the start of the period. The weighting is based on the EAD at the start of the period.
- The arithmetic average PD is calculated using the regulatory PD at the start of the period. This PD is volume weighted.
- The number of obligors is shown at the beginning and end of the period. This represents the full book position at both points, with new obligors (opened during the period) included in the end of year position (if still on book). Obligor that left during the year are not included in the end of year position. Various definitions of obligor operate within the bank, reflecting how the exposures are managed within each area. This translates as follows:
 - **Cards, Loans and Overdrafts** aggregate at customer level within brand and product (an obligor's accounts are aggregated if they share the same brand and product).
 - **Mortgages and UK Motor Finance (Retail)** treat each account as a unique obligor. An obligor with two accounts would have two PDs.
 - The **Commercial Banking (including BDCS)** and **UK Motor Finance (Commercial)** definition is legal entity by source system (obligors reside on different source systems according to the nature of the lending). This means that one legal entity might be represented by one or more obligors in the data if that entity has borrowing across one or more businesses (source systems). Furthermore, obligors that are 'connected' may share the same PD subject to certain conditions (known as Obligor Risk Groups, or ORGs) and for this year's return these cases have been aggregated and reported as single obligors which provides greater alignment to Tables 24 and 25. However, where exposures within an ORG span multiple asset classes, the ORG will be counted in each of those asset classes. This approach has not been restated for previous years.
- The number of defaults during the year is the total number of non-defaulted obligors at the start of the year that subsequently defaulted at any point in the following 12 months. The allocation to a risk grade is based on the PIT PD at the start of the year for Retail asset classes and regulatory PD for Non-Retail asset classes. Exposures opened during the year are not included.
- Defaulted obligors – new exposures' relates to obligors that opened during the year and subsequently defaulted. Only one figure is provided within this column and this is assigned to the row 'New to Book'. This figure is currently unavailable for the Corporate SME and Corporate Main tables.
- The average default rate is calculated as a simple (volume weighted) average default rate over the past five years.

For each table, a risk-weighted-asset coverage per cent is shown. This represents the proportion of the total (not in default) IRB risk-weighted assets within that Basel asset class that is covered by the backtesting analysis. For example, a figure of 95% would indicate that 5% of the IRB risk-weighted assets for that Basel asset class has not been included – the 5% would relate to rating systems not classed as significant or where they have been excluded due to the low level of defaults.

The primary benefit of these tables is that they enable a comparison of predicted PD with actual default rate over both the short-term (12 months) and the medium-term (five years). When making this comparison, care needs to be taken with the interpretation as the result is partially dependent on the choice of PD approach (PIT or TTC).

As the PD backtesting tables have to be collated at Basel asset class level, the link between the Basel asset class and key rating systems has been summarised in the following table. All rating systems are for UK exposures only with the exception of Publicly Quoted which is a global rating system.

Basel Asset Class	Rating Systems Included
Corporate Main	Publicly Quoted, Unquoted, UK Motor Finance (Commercial)
Corporate SME	Unquoted, Publicly Quoted, BDCS
Retail – Mortgages (UK)	HBOS Mainstream mortgages, Lloyds Bank mortgages, HBOS Buy-to-Let mortgages, HBOS Other mortgages, BDCS
Retail – SME	BDCS
Retail – Qualifying revolving	HBOS and Lloyds Bank Credit Cards, HBOS and Lloyds Bank Overdrafts
Retail – Other (non-SME)	HBOS and Lloyds Bank Personal Loans and UK Motor Finance (Retail)

The identified significant rating systems provide only a very small volume of obligors to Institutions and Central Governments or Banks and hence no backtesting results are shown for these Basel asset classes.

The following is a list of pre-notifications sent to the PRA over the period of the 2018 backtesting. Pre-notifications represent material changes to rating systems and require PRA approval before they can be implemented. The list is restricted to the significant rating systems listed in the preceding table. Some of these changes have impacts on the backtesting and this has been reflected in the commentaries.

- New PIT and Downturn LGD models for HBOS Loans and HBOS Overdrafts rating systems.

Pillar 1 Capital requirements: Credit risk continued

In the following backtesting tables the results are based on the significant rating systems shown in the table on page 39. Against each table we show the RWA coverage (risk-weighted assets within the table as a proportion of total IRB risk-weighted assets for that asset class). As these tables are based on key rating systems only, the number of obligors may not reconcile fully with figures shown elsewhere in this document. In some instances the volumes at 2017 year end do not align to the 2018 starting position and where this occurs, an explanation is provided.

Table 15: Back-testing of PD per portfolio – Retail – Mortgages (UK) (CR9)

RWA coverage: 95-99%

2018							
PD Range	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
			End of previous year	End of the year			
b	d	e	f		g	h	i
0.00 - 0.10%	0.23%	0.20%	1,974,582	1,971,745	723	N/a	0.04%
0.10 - 0.40%	0.75%	0.72%	567,800	469,113	1,129	N/a	0.19%
0.40 - 0.80%	1.53%	1.63%	113,930	99,781	655	N/a	0.55%
0.80 - 1.20%	2.64%	2.91%	29,225	24,622	261	N/a	0.95%
1.20 - 2.50%	5.25%	5.50%	40,262	41,176	634	N/a	1.59%
2.50 - 4.50%	8.97%	9.51%	25,934	22,401	862	N/a	3.06%
4.40 - 7.50%	12.54%	13.69%	15,986	15,137	891	N/a	5.08%
7.50 - 10.00%	22.51%	22.87%	6,841	7,475	534	N/a	8.05%
10.00 - 14.00%	25.32%	26.31%	7,542	5,662	800	N/a	9.56%
14.00 - 20.00%	34.13%	34.96%	4,728	5,421	727	N/a	16.08%
20.00 - 30.00%	48.04%	48.18%	5,352	4,326	1,268	N/a	24.61%
30.00 - 45.00%	57.76%	59.34%	5,330	5,116	1,822	N/a	35.66%
45.00 - 99.99%	78.66%	79.62%	6,269	4,956	3,506	N/a	57.00%
In Default	100.00%	100.00%	29,440	26,881	N/a	N/a	N/a
New to Book	N/a	N/a	–	239,361	N/a	18	N/a

2017							
PD Range	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
			End of previous year	End of the year			
b	d	e	f		g	h	i
0.00 - 0.10%	0.20%	0.18%	2,080,331	1,974,582	837	N/a	0.05%
0.10 - 0.40%	0.73%	0.70%	547,808	567,800	1,238	N/a	0.18%
0.40 - 0.80%	1.51%	1.60%	106,642	113,930	656	N/a	0.56%
0.80 - 1.20%	2.33%	2.55%	34,229	29,225	361	N/a	0.94%
1.20 - 2.50%	5.57%	5.71%	45,829	40,262	681	N/a	1.63%
2.50 - 4.50%	8.40%	8.95%	27,031	25,934	880	N/a	2.95%
4.40 - 7.50%	13.46%	14.27%	17,209	15,986	986	N/a	4.81%
7.50 - 10.00%	20.98%	21.59%	6,788	6,841	682	N/a	7.85%
10.00 - 14.00%	21.84%	22.75%	9,001	7,542	829	N/a	9.25%
14.00 - 20.00%	31.94%	33.22%	6,311	4,728	1,177	N/a	15.72%
20.00 - 30.00%	45.11%	46.02%	5,595	5,352	1,412	N/a	24.22%
30.00 - 45.00%	55.86%	57.78%	5,983	5,330	2,252	N/a	35.84%
45.00 - 99.99%	76.97%	77.85%	7,028	6,269	4,456	N/a	57.27%
In Default	100.00%	100.00%	30,069	29,440	N/a	N/a	N/a
New to Book	N/a	N/a	–	244,445	N/a	9	N/a

Key observations

- The majority of obligors are rated on a TTC basis which is conservative relative to the average historic observed default rates.
- Obligor are allocated to grades based on PIT PDs, so the weighted and arithmetic average PDs are above the range due to the use of more conservative TTC PDs.
- The distribution of obligors by PD grade has slightly shifted towards lower risk grades between the two year-ends. This results in a higher PD within each grade, but a lower overall PD for the portfolio.

Pillar 1 Capital requirements: Credit risk continued

Table 16: Back-testing of PD per portfolio – Retail QRRE (CR9)

RWA coverage: 100%

2018							
PD Range	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
			End of previous year	End of the year			
b	d	e	f		g	h	i
0.00 - 0.10%	0.07%	0.07%	4,888,034	4,562,417	785	N/a	0.03%
0.10 - 0.40%	0.23%	0.22%	10,152,967	10,178,529	6,801	N/a	0.12%
0.40 - 0.80%	0.57%	0.58%	4,778,957	5,106,690	14,422	N/a	0.39%
0.80 - 1.20%	0.99%	0.99%	2,579,596	2,830,933	16,640	N/a	0.79%
1.20 - 2.50%	1.73%	1.67%	2,912,982	3,514,917	49,907	N/a	1.53%
2.50 - 4.50%	3.31%	3.30%	1,080,663	1,203,808	47,025	N/a	3.17%
4.40 - 7.50%	5.69%	5.67%	505,831	594,179	35,195	N/a	5.07%
7.50 - 10.00%	8.64%	8.65%	147,540	167,647	14,657	N/a	7.10%
10.00 - 14.00%	11.76%	11.78%	126,124	131,972	14,226	N/a	9.98%
14.00 - 20.00%	16.72%	16.81%	107,506	98,318	14,778	N/a	14.59%
20.00 - 30.00%	24.84%	24.98%	147,537	100,912	33,301	N/a	21.85%
30.00 - 45.00%	36.89%	36.25%	133,428	123,100	42,183	N/a	31.58%
45.00 - 99.99%	58.66%	58.24%	88,189	123,575	42,182	N/a	53.78%
In Default	100.00%	100.00%	734,921	1,009,756	N/a	N/a	N/a
New to Book	N/a	N/a	–	2,812,800	N/a	13,630	N/a

2017							
PD Range	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
			End of previous year	End of the year			
b	d	e	f		g	h	i
0.00 - 0.10%	0.05%	0.05%	8,539,152	4,888,047	2,289	N/a	0.04%
0.10 - 0.40%	0.22%	0.23%	8,161,096	10,153,143	11,690	N/a	0.14%
0.40 - 0.80%	0.58%	0.59%	3,684,842	4,779,340	13,932	N/a	0.42%
0.80 - 1.20%	0.99%	0.99%	1,477,550	2,580,000	13,582	N/a	0.85%
1.20 - 2.50%	1.75%	1.76%	2,172,031	2,914,486	35,500	N/a	1.59%
2.50 - 4.50%	3.31%	3.33%	1,274,787	1,082,800	40,187	N/a	2.99%
4.40 - 7.50%	5.96%	5.87%	987,176	507,788	48,446	N/a	4.69%
7.50 - 10.00%	8.33%	8.27%	543,869	148,433	36,432	N/a	7.02%
10.00 - 14.00%	11.53%	11.59%	244,141	127,124	25,798	N/a	10.05%
14.00 - 20.00%	16.49%	16.55%	160,385	108,487	25,470	N/a	15.17%
20.00 - 30.00%	24.19%	24.23%	106,142	148,945	23,627	N/a	22.22%
30.00 - 45.00%	36.00%	36.14%	64,872	135,321	20,801	N/a	31.89%
45.00 - 99.99%	65.78%	66.63%	74,086	89,763	40,609	N/a	57.06%
In Default	100.00%	100.00%	158,866	720,859	N/a	N/a	N/a
New to Book	N/a	N/a	–	2,452,369	N/a	28,076	N/a

Key observations

- Average PDs are in excess of average default rates in all risk grades due to the presence of a PD buffer; all PD models are PIT.
- Operational and policy changes, such as a new fee structure on Retail Overdrafts, have caused some temporary grade migration towards higher risk grades.
- The scope of the improved LGD model that was implemented for HBoS Overdrafts rating system in 2018 now includes assets in recoveries, leading to an increase in In Default obligors at the end of the year.
- A 2018 enhancement to data, used to identify defaults for Lloyds Bank Overdrafts, has been retrospectively applied to the start of the 2018 backtesting period. This gives rise to a difference in the distribution of obligors, including Defaulted obligors, between the end 2017 position and that at the start of 2018.

Pillar 1 Capital requirements: Credit risk continued

Table 17: Back-testing of PD per portfolio – Retail – Other (non-SME) (CR9)

RWA coverage: 100%

2018							
PD Range	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
			End of previous year	End of the year			
b	d	e	f		g	h	i
0.00 - 0.10%	0.08%	0.08%	19,321	21,893	17	N/a	0.09%
0.10 - 0.40%	0.36%	0.36%	388,599	419,612	2,856	N/a	0.54%
0.40 - 0.80%	0.68%	0.66%	339,487	366,194	2,718	N/a	0.69%
0.80 - 1.20%	1.00%	1.00%	180,100	182,181	976	N/a	0.71%
1.20 - 2.50%	1.68%	1.70%	569,346	594,470	9,354	N/a	1.42%
2.50 - 4.50%	3.27%	3.29%	246,303	237,553	9,712	N/a	2.92%
4.40 - 7.50%	5.87%	5.83%	108,671	102,780	9,085	N/a	5.77%
7.50 - 10.00%	8.86%	8.72%	25,044	23,448	2,799	N/a	8.24%
10.00 - 14.00%	11.12%	11.30%	20,877	19,585	3,128	N/a	10.42%
14.00 - 20.00%	16.46%	16.48%	8,371	7,106	1,491	N/a	12.28%
20.00 - 30.00%	21.75%	22.20%	13,350	18,242	2,564	N/a	17.30%
30.00 - 45.00%	34.97%	35.21%	16,166	16,824	5,268	N/a	30.24%
45.00 - 99.99%	71.10%	71.30%	19,238	19,802	12,793	N/a	65.61%
In Default	100.00%	100.00%	126,608	142,211	N/a	N/a	N/a
New to Book	N/a	N/a	–	643,110	N/a	3,580	N/a

2017							
PD Range	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
			End of previous year	End of the year			
b	d	e	f		g	h	i
0.00 - 0.10%	0.08%	0.08%	24,078	20,130	25	N/a	0.09%
0.10 - 0.40%	0.36%	0.35%	374,386	391,087	2,471	N/a	0.51%
0.40 - 0.80%	0.68%	0.66%	306,420	340,260	2,579	N/a	0.67%
0.80 - 1.20%	1.01%	1.01%	178,697	180,100	1,471	N/a	0.77%
1.20 - 2.50%	1.69%	1.70%	531,827	570,727	8,892	N/a	1.45%
2.50 - 4.50%	3.29%	3.33%	226,051	246,621	7,920	N/a	2.79%
4.40 - 7.50%	5.88%	5.87%	104,236	108,829	7,094	N/a	5.37%
7.50 - 10.00%	8.62%	8.63%	24,785	23,532	2,390	N/a	7.72%
10.00 - 14.00%	11.22%	11.43%	28,060	22,436	3,476	N/a	10.06%
14.00 - 20.00%	17.99%	17.84%	21,063	8,373	2,424	N/a	11.96%
20.00 - 30.00%	22.03%	22.54%	14,419	13,376	2,857	N/a	17.92%
30.00 - 45.00%	34.87%	35.70%	14,289	16,202	4,493	N/a	31.18%
45.00 - 99.99%	74.18%	74.57%	12,998	19,284	8,769	N/a	66.57%
In Default	100.00%	100.00%	24,905	126,671	N/a	N/a	N/a
New to Book	N/a	N/a	–	641,755	N/a	4,643	N/a

Key observations

- Average predicted default rates are greater than actual default rates for all bands except the three lowest risk grades. The definition of default includes certain non-credit events that have increased in frequency over 2017 and 2018 and occur predominantly in the lowest risk grades. The PD models are not optimised to predict these events, leading to the under-prediction.
- The scope of the improved LGD model that was implemented for the HBoS Loans rating system in 2018 includes assets in recoveries, leading to an increase in Defaulted obligors at the end of 2018.

Pillar 1 Capital requirements: Credit risk continued

Table 18: Back-testing of PD per portfolio – Retail SME (CR9)¹

RWA coverage: 100%

2018							
PD Range ¹	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
			End of previous year	End of the year			
b	d	e	f		g	h	i
0.00 - 0.10%	–	–	–	–	–	N/a	–
0.10 - 0.40%	–	–	–	–	–	N/a	–
0.40 - 0.80%	0.61%	0.60%	55,249	56,597	148	N/a	0.24%
0.80 - 1.20%	1.12%	1.12%	13,470	15,621	99	N/a	0.79%
1.20 - 2.50%	1.67%	1.67%	13,166	13,246	164	N/a	1.42%
2.50 - 4.50%	2.80%	2.62%	12,167	11,367	305	N/a	2.26%
4.40 - 7.50%	5.67%	5.67%	12,616	13,631	664	N/a	4.46%
7.50 - 10.00%	8.04%	8.04%	491	662	5	N/a	1.67%
10.00 - 14.00%	10.61%	10.61%	4,996	5,695	467	N/a	5.47%
14.00 - 20.00%	18.14%	19.79%	19,947	23,129	840	N/a	13.40%
20.00 - 30.00%	–	–	–	–	–	N/a	–
30.00 - 45.00%	34.10%	34.10%	1,418	1,694	333	N/a	28.41%
45.00 - 99.99%	78.18%	78.18%	1,964	2,094	703	N/a	30.81%
In Default	100.00%	100.00%	8,611	8,619	N/a	N/a	N/a
New to Book	N/a	N/a	N/a	N/a	N/a	N/a	N/a

2017							
PD Range	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate ²
			End of previous year	End of the year			
b	d	e	f		g	h	i
0.00 - 0.10%	–	–	–	–	–	N/a	–
0.10 - 0.40%	–	–	–	–	–	N/a	–
0.40 - 0.80%	0.61%	0.59%	54,859	55,249	152	N/a	0.24%
0.80 - 1.20%	1.12%	1.12%	20,992	13,470	220	N/a	0.81%
1.20 - 2.50%	1.67%	1.67%	11,158	13,166	225	N/a	1.46%
2.50 - 4.50%	2.65%	2.62%	11,265	12,167	321	N/a	2.20%
4.40 - 7.50%	5.67%	5.67%	8,470	12,616	491	N/a	4.26%
7.50 - 10.00%	8.04%	8.04%	665	491	17	N/a	1.83%
10.00 - 14.00%	10.61%	10.66%	24,155	4,996	1,078	N/a	4.50%
14.00 - 20.00%	18.02%	18.02%	1,914	19,947	388	N/a	15.70%
20.00 - 30.00%	–	–	–	–	–	N/a	–
30.00 - 45.00%	34.10%	34.10%	781	1,418	287	N/a	29.64%
45.00 - 99.99%	78.18%	78.18%	1,090	1,964	310	N/a	29.56%
In Default	100.00%	100.00%	8,834	8,611	N/a	N/a	N/a
New to Book	N/a	N/a	N/a	N/a	N/a	N/a	N/a

¹ Covers BDCS only. Exposures have been transferred from Corporate RMS to Retail RMS which leads to some 'gaps' in the risk grades.² Default rates are based on four years of data for 2017.**Key observations**

- Average historical defaults rates have increased in some grades, but all remain below the associated PD estimate.
- Default rates exhibit volatility due to low volumes in some risk grades.

Pillar 1 Capital requirements: Credit risk continued

Table 19: Back-testing of PD per portfolio – Corporate Main (CR9)¹

RWA coverage: 70-75%

2018								
PD Range	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
				End of previous year	End of the year			
b	c	d	e	f		g	h	i
0.00 - 0.035%	AAA to AA-	0.03%	0.03%	212	62	–	N/a	0.18%
0.035 - 0.050%	A+	0.04%	0.05%	457	41	–	N/a	0.00%
0.050 - 0.080%	A	0.06%	0.06%	107	96	–	N/a	0.00%
0.080 - 0.140%	A-	0.11%	0.11%	310	267	–	N/a	0.09%
0.140 - 0.220%	BBB+	0.18%	0.19%	1078	1015	1	N/a	0.09%
0.220 - 0.340%	BBB	0.28%	0.27%	1047	995	1	N/a	0.13%
0.340 - 0.500%	BBB-	0.42%	0.43%	2650	2509	2	N/a	0.24%
0.500 - 0.760%	BB+	0.63%	0.66%	2904	2742	8	N/a	0.52%
0.760 - 1.240%	BB	1.01%	1.00%	2531	2393	13	N/a	0.57%
1.240 - 2.000%	BB-	1.62%	1.61%	1776	1992	15	N/a	1.18%
2.000 - 3.200%	B+	2.60%	2.60%	482	470	12	N/a	2.70%
3.200 - 5.200%	B+	4.11%	3.82%	1106	1115	9	N/a	1.59%
5.200 - 7.200%	B	6.20%	6.14%	210	179	15	N/a	5.09%
7.200 - 10.200%	B-	8.70%	8.69%	92	120	2	N/a	3.16%
10.200 - 13.800%	B-	11.99%	11.70%	60	52	3	N/a	7.26%
13.800 - 99.99%	CCC to C	30.52%	28.04%	179	188	9	N/a	9.67%
In Default	Default	100.0%	100.0%	416	304	N/a	N/a	N/a
New to Book	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a

2017								
PD Range	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate ²
				End of previous year	End of the year			
b	c	d	e	f		g	h	i
0.00 - 0.035%	AAA to AA-	0.03%	0.03%	255	225	–	N/a	0.22%
0.035 - 0.050%	A+	0.04%	0.05%	509	461	–	N/a	0.00%
0.050 - 0.080%	A	0.06%	0.06%	113	124	–	N/a	0.00%
0.080 - 0.140%	A-	0.11%	0.11%	461	520	–	N/a	0.11%
0.140 - 0.220%	BBB+	0.18%	0.19%	1,136	1,253	1	N/a	0.09%
0.220 - 0.340%	BBB	0.28%	0.28%	1,049	1,339	2	N/a	0.14%
0.340 - 0.500%	BBB-	0.42%	0.43%	2,844	2,809	5	N/a	0.29%
0.500 - 0.760%	BB+	0.63%	0.66%	3,018	3,065	18	N/a	0.58%
0.760 - 1.240%	BB	1.01%	1.00%	2,652	2,736	16	N/a	0.59%
1.240 - 2.000%	BB-	1.62%	1.61%	2,042	1,878	26	N/a	1.27%
2.000 - 3.200%	B+	2.60%	2.59%	525	559	10	N/a	2.76%
3.200 - 5.200%	B+	3.99%	3.81%	1,236	1,131	27	N/a	1.78%
5.200 - 7.200%	B	6.20%	6.17%	197	248	16	N/a	4.58%
7.200 - 10.200%	B-	8.71%	8.75%	86	98	7	N/a	3.41%
10.200 - 13.800%	B-	11.97%	11.54%	56	74	7	N/a	7.82%
13.800 - 99.99%	CCC to C	29.52%	26.76%	104	184	19	N/a	10.83%
In Default	Default	100.00%	100.00%	468	440	N/a	N/a	N/a
New to Book	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a

1 Covers Publicly Quoted, Unquoted and UK Motor Finance (Commercial) with very little contribution from BDCS.

2 Default rates based on four years of data for 2017.

Key observations

- Relatively low default volumes lead to year-to-year volatility in default rates within a given PD range.
- The number of obligors reported at the end of the 2017 and the start of the 2018 do not align due to improvements introduced this year to recognise entities within a group that share the same PD estimate. This approach aligns with that used in Table 26 (CR6), albeit it should be noted that CR9 uses a different reporting period and considers the most significant rating systems only.

- The change in method for calculating the number of obligors leads to some slight fluctuation in the average historic default rates but they remain broadly aligned across the 2 years.
- The large reduction in obligors in the first two risk grades during 2018 is in part driven by the introduction of the Quasi State rating system which led to a movement of obligors out of the Unquoted rating system's scope. Simultaneously, there has been a movement out of this asset class of UK Motor Finance (Commercial) exposures in the same risk grades.

Pillar 1 Capital requirements: Credit risk continued

Table 20: Back-testing of PD per portfolio – Corporate SME (CR9)¹

RWA coverage: 65-70%

2018								
PD Range	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate
				End of previous year	End of the year			
b	c	d	e	f	g	h	i	
0.00 - 0.035%	AAA to AA-	0.03%	0.03%	6	4	–	N/a	0.00%
0.035 - 0.050%	A+	0.04%	0.04%	1	3	–	N/a	0.00%
0.050 - 0.080%	A	0.06%	0.06%	30	23	–	N/a	0.00%
0.080 - 0.140%	A-	0.11%	0.11%	79	83	–	N/a	0.06%
0.140 - 0.220%	BBB+	0.18%	0.18%	130	121	1	N/a	0.19%
0.220 - 0.340%	BBB	0.28%	0.28%	239	238	2	N/a	0.54%
0.340 - 0.500%	BBB-	0.42%	0.42%	285	342	–	N/a	0.20%
0.500 - 0.760%	BB+	0.63%	0.63%	3,915	4,291	18	N/a	0.46%
0.760 - 1.240%	BB	1.06%	1.09%	1,913	2,034	5	N/a	0.88%
1.240 - 2.000%	BB-	1.65%	1.65%	1,547	1,488	18	N/a	0.99%
2.000 - 3.200%	B+	2.61%	2.61%	1,187	1,088	9	N/a	2.10%
3.200 - 5.200%	B+	4.20%	4.20%	185	182	2	N/a	1.40%
5.200 - 7.200%	B	5.78%	5.76%	854	848	42	N/a	4.22%
7.200 - 10.200%	B-	8.22%	8.27%	145	195	3	N/a	1.95%
10.200 - 13.800%	B-	10.77%	10.76%	352	203	19	N/a	8.39%
13.800 - 99.99%	CCC to C	28.66%	29.18%	316	303	22	N/a	20.01%
In Default	Default	100.00%	100.00%	219	191	N/a	N/a	N/a
New to Book	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a

2017								
PD Range	External rating equivalent	Weighted average PD	Arithmetic average PD by obligors	Number of obligors		Defaulted obligors in the year	of which: new defaulted obligors in the year	Average historical annual default rate ²
				End of previous year	End of the year			
b	c	d	e	f	g	h	i	
0.00 - 0.035%	AAA to AA-	0.03%	0.03%	12	6	–	N/a	0.00%
0.035 - 0.050%	A+	0.04%	0.04%	4	1	–	N/a	0.00%
0.050 - 0.080%	A	0.06%	0.06%	222	214	–	N/a	0.00%
0.080 - 0.140%	A-	0.11%	0.11%	1,693	1,624	–	N/a	0.08%
0.140 - 0.220%	BBB+	0.18%	0.18%	633	362	–	N/a	0.05%
0.220 - 0.340%	BBB	0.28%	0.28%	703	964	1	N/a	0.47%
0.340 - 0.500%	BBB-	0.42%	0.42%	618	386	–	N/a	0.25%
0.500 - 0.760%	BB+	0.63%	0.62%	3,371	3,961	13	N/a	0.47%
0.760 - 1.240%	BB	1.08%	1.09%	2,510	1,959	18	N/a	1.03%
1.240 - 2.000%	BB-	1.65%	1.66%	1,393	1,563	13	N/a	0.95%
2.000 - 3.200%	B+	2.61%	2.62%	1,255	1,215	16	N/a	2.44%
3.200 - 5.200%	B+	4.20%	4.20%	131	195	1	N/a	1.48%
5.200 - 7.200%	B	5.78%	5.75%	619	873	32	N/a	4.05%
7.200 - 10.200%	B-	8.21%	8.20%	204	149	3	N/a	1.92%
10.200 - 13.800%	B-	10.75%	10.70%	349	356	34	N/a	9.14%
13.800 - 99.99%	CCC to C	25.13%	26.87%	134	316	32	N/a	23.27%
In Default	Default	100.00%	100.00%	259	232	N/a	N/a	N/a
New to Book	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a

¹ Covers BDCS and Unquoted with very little contribution from Publicly Quoted.² Default rates based on four years of data for 2017.**Key observations**

- Relatively low default volumes lead to year-to-year volatility in default rates within a given PD range.
- The distribution of obligors by PD grade is similar for the two year ends.
- The change in method for calculating the number of obligors leads to some slight fluctuation in the average historic default rates but they remain broadly aligned across the 2 years.

– The number of obligors reported at the end of the 2017 and the start of the 2018 returns do not align due to improvements introduced this year to recognise entities within a group that share the same PD estimate. This approach aligns with that used in Table 26 (CR6), albeit it should be noted that CR9 uses a different reporting period and considers the most significant rating systems only.

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF CREDIT RISK EXPOSURES BY ASSET CLASS

CREDIT RISK EXPOSURES

The following tables show the Group's credit exposures split by Basel exposure class, together with associated risk-weighted assets and average risk weight.

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

		2018					
		EAD pre CRM and post CCF £m	EAD post CRM and post CCF £m	Average credit risk exposure £m	Risk-weighted assets £m	Minimum capital requirements £m	Average risk weight %
		a	a	b			
1	Central governments or central banks	12,435	11,966	17,445	740	59	6%
2	Institutions	5,954	5,980	5,759	1,103	88	19%
3	Corporates	103,367	102,561	104,031	58,712	4,697	57%
4	of which: Specialised lending	16,351	16,052	16,702	11,808	945	72%
5	of which: SMEs	11,638	11,638	11,594	8,162	653	70%
6	Retail	387,793	387,793	391,570	59,522	4,762	15%
7	Secured by real estate property	327,800	327,800	331,116	33,284	2,663	10%
8	SMEs	9,204	9,204	9,503	2,269	182	25%
9	Non-SMEs	318,596	318,596	321,613	31,015	2,481	10%
10	Qualifying revolving	38,342	38,342	39,564	11,294	904	29%
11	Other retail	21,651	21,651	20,891	14,943	1,195	69%
12	SMEs	2,234	2,234	2,210	1,581	126	71%
13	Non-SMEs	19,417	19,417	18,680	13,362	1,069	69%
14	Equity	2,700	2,700	3,111	5,749	460	213%
	Non-credit obligation assets ¹	9,933	9,933	9,920	5,866	469	59%
15	Total IRB approach	522,181	520,932	531,836	131,692	10,535	25%
16	Central governments or central banks	61,428	62,077	70,949	4	–	–
17	Regional governments or local authorities	5	5	5	1	–	20%
18	Public sector entities	21	21	21	21	2	100%
19	Multilateral development banks	2,974	2,974	2,132	–	–	–
20	International organisations	–	–	–	–	–	–
21	Institutions	161	773	289	67	5	42%
22	Corporates	11,310	10,892	12,373	9,887	791	86%
23	of which: SMEs	3,424	3,331	3,661	3,156	252	92%
24	Retail	12,294	12,294	12,561	8,842	707	72%
25	of which: SMEs	2,271	2,271	2,210	1,325	106	58%
26	Secured by mortgages on immovable property	4,505	4,505	4,690	1,578	126	35%
27	of which: SMEs	11	11	9	5	0	44%
28	Exposures in default	1,642	1,642	895	2,186	175	133%
29	Items associated with particularly high risk	–	–	–	–	–	–
30	Covered bonds	–	–	–	–	–	–
31	Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–
32	Collective investments undertakings	716	716	557	143	11	20%
33	Equity exposures	–	–	–	–	–	–
34	Other exposures ¹	3,680	3,680	4,646	2,819	225	77%
35	Total standardised approach	98,736	99,580	109,119	25,548	2,044	26%
36	Total	620,917	620,512	640,955	157,239	12,579	25%

Pillar 1 Capital requirements: Credit risk continued

2017

	EAD pre CRM and post CCF £m	EAD post CRM and post CCF £m	Average credit risk exposure £m	Risk-weighted assets £m	Minimum capital requirements £m	Average risk weight %
	a	a	b			
1 Central governments or central banks	17,722	17,722	16,550	1,416	113	8%
2 Institutions	4,173	5,001	4,912	1,087	87	26%
3 Corporates	103,708	102,259	105,373	57,703	4,616	56%
4 of which: Specialised lending	16,596	16,117	17,474	11,965	957	72%
5 of which: SMEs	11,662	11,662	11,762	7,608	609	65%
6 Retail	394,687	394,687	393,507	61,588	4,927	16%
7 Secured by real estate property	334,359	334,359	334,934	36,763	2,941	11%
8 SMEs	9,769	9,769	9,991	2,554	204	26%
9 Non-SMEs	324,590	324,590	324,943	34,209	2,737	11%
10 Qualifying revolving	40,285	40,285	39,179	11,142	891	28%
11 Other retail	20,043	20,043	19,394	13,684	1,095	68%
12 SMEs	2,200	2,200	2,320	1,578	126	72%
13 Non-SMEs	17,843	17,843	17,074	12,106	968	68%
14 Equity	3,355	3,355	3,479	7,381	591	220%
Non-credit obligation assets ¹	10,208	10,208	10,454	5,866	469	57%
15 Total IRB approach	533,852	533,231	534,275	135,042	10,803	25%
16 Central governments or central banks	76,438	76,701	79,632	8	1	–
17 Regional governments or local authorities	5	5	2	1	–	20%
18 Public sector entities	21	21	9	21	2	100%
19 Multilateral development banks	1,837	1,837	1,834	–	–	–
20 International organisations	–	–	–	–	–	–
21 Institutions	189	149	264	32	3	17%
22 Corporates	12,724	12,271	12,854	10,902	872	86%
23 of which: SMEs	3,209	3,209	3,199	2,927	234	91%
24 Retail	12,819	12,819	9,276	9,256	740	72%
25 of which: SMEs	2,144	2,144	2,054	1,250	100	58%
26 Secured by mortgages on immovable property	5,153	5,153	5,327	1,944	156	38%
27 of which: SMEs	14	14	8	7	1	49%
28 Exposures in default	681	680	755	765	61	112%
29 Items associated with particularly high risk	–	–	–	–	–	–
30 Covered bonds	–	–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–
31	–	–	–	–	–	–
32 Collective investments undertakings	278	278	244	56	4	20%
33 Equity exposures	–	–	–	–	–	–
34 Other exposures ¹	3,114	3,114	3,313	2,273	182	73%
35 Total standardised approach	113,259	113,027	113,511	25,259	2,021	22%
36 Total	647,111	646,259	647,787	160,301	12,824	25%

¹ Non-credit obligation assets (IRB approach) and other exposures (Standardised approach) predominantly relate to other balance sheet assets that have no associated credit risk. These comprise various non-financial assets, including fixed assets, cash, items in the course of collection, prepayments and sundry debtors.

Pillar 1 Capital requirements: Credit risk continued

Exposures referred to below are on a post CRM and post CCF basis.

Exposures subject to the IRB approach – key movements

Corporates

- Exposures and RWA increased by £0.3bn and £1.0bn respectively driven by targeted growth in some key customer segments. Corporate SME risk weight increases were driven by reductions in defaulted assets (where RWA is nil) together with an increase in average PD for non-defaulted assets.

Central governments or central banks

- Exposures decreased by £5.8bn with a reduction in risk-weighted assets of £0.7bn mainly due to reduced deposits placed with the US Federal reserve and sale of some government bond holdings.

Retail – Secured by real estate property

- Exposures and risk-weighted assets decreased by £6.6bn and £3.5bn respectively mainly due to the sale of the Irish mortgage portfolio.

Retail – Qualifying revolving

- The decrease in exposures of £1.9bn was driven by model calibrations.

Retail – Other (non-SME)

- Exposures and risk-weighted assets increased by £1.6bn and £1.3bn respectively principally due to growth in the UK Motor Finance business and model refinements.

Equity

- Exposures and risk-weighted assets decreased by £0.7bn and £1.6bn respectively primarily driven by the sale of strategic equity investments.

Exposures subject to the Standardised approach – key movements

Central governments or central banks

- Exposures decreased by £14.6bn mainly due to a reduction in UK Gilt holdings and as a result of lower cash deposits placed with De Nederlandsche Bank.

Corporates

- Exposures decreased by £1.4bn and risk-weighted assets decreased by £1.0bn due to continued changes in the portfolio, including movements to default.

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF CREDIT RISK EXPOSURES SUBJECT TO THE FOUNDATION IRB APPROACH

This section provides a detailed analysis, by PD Grade, of credit risk exposures subject to the FIRB Approach. Exposures in the tables below are stated on two different bases (gross carrying values and EAD post-CCF and CRM). On-balance sheet gross exposures and off- balance sheet exposures represent gross carrying values (before taking into account SCRA’s) before the application of CRM and CCF.

Disclosures provided in the tables below take into account PD floors specified by regulators in respect of the calculation of regulatory capital requirements.

The EBA guidelines include a single prescribed scale for presenting the credit quality of all IRB portfolios by asset class. The tables that follow present the prescribed scale. This does not map directly to the internal scales per tables 12 and 13, but is apportioned on the same basis.

Throughout this section ‘RWA density’ represents the ‘average risk weight’. ‘Number of obligors’ corresponds to the number of individual PDs (in each band). In the case of Corporate Main and Corporate SME, as customers may have exposures in both Commercial Banking and Motor Finance divisions, an individual corporate obligor may be counted twice.

Table 22: IRB – Credit risk exposures by portfolio and PD range – Central governments or central banks (CR6)

PD Scale	2018 Original on-balance sheet gross exposure £m	2018 Off balance sheet exposures pre CCF £m	2018 Average CCF %	2018 EAD post CRM and post CCF £m	2018 Average PD %	2018 Number of Obligors	2018 Average LGD %	2018 Average Maturity (years)	2018 RWA £m	2018 RWA density %	2018 EL £m	2018 Value adjustments and Provisions £m
Central governments or central banks	a	b	c	d	e	f	g	h	i	j	k	l
0.00 to <0.15	12,146	576	–	11,966	0.01%	13	45.00%	1.9	740	6.19%	1	
0.15 to <0.25	–	–	–	–	–	–	–	–	–	–	–	
0.25 to <0.50	–	–	–	–	–	–	–	–	–	–	–	
0.50 to <0.75	–	–	–	–	–	–	–	–	–	–	–	
0.75 to <2.50	–	–	–	–	–	–	–	–	–	–	–	
2.50 to <10.00	–	–	–	–	–	–	–	–	–	–	–	
10.00 to <100.00	–	–	–	–	–	–	–	–	–	–	–	
100.00 (Default)	–	–	–	–	–	–	–	–	–	–	–	
Sub-total	12,146	576	–	11,966	0.01%	13	45.00%	1.9	740	6.19%	1	–

PD Scale	2017 Original on-balance sheet gross exposure £m	2017 Off balance sheet exposures pre CCF £m	2017 Average CCF %	2017 EAD post CRM and post CCF £m	2017 Average PD %	2017 Number of Obligors	2017 Average LGD %	2017 Average Maturity (years)	2017 RWA £m	2017 RWA density %	2017 EL £m	2017 Value adjustments and Provisions £m
Central governments or central banks	a	b	c	d	e	f	g	h	i	j	k	l
0.00 to <0.15	17,722	–	–	17,722	0.01%	11	45.00%	2.5	1,416	7.99%	1	
0.15 to <0.25	–	–	–	–	–	–	–	–	–	–	–	
0.25 to <0.50	–	–	–	–	–	–	–	–	–	–	–	
0.50 to <0.75	–	–	–	–	–	–	–	–	–	–	–	
0.75 to <2.50	–	–	–	–	–	–	–	–	–	–	–	
2.50 to <10.00	–	–	–	–	–	–	–	–	–	–	–	
10.00 to <100.00	–	–	–	–	–	–	–	–	–	–	–	
100.00 (Default)	–	–	–	–	–	–	–	–	–	–	–	
Sub-total	17,722	–	–	17,722	0.01%	11	45.00%	2.5	1,416	7.99%	1	–

Key movements

– EAD post CRM and post CCF decreased by £5.8bn mainly due to reduced deposits placed with the US Fed Reserve and the sale of GNMA bonds, partially offset by foreign exchange revaluation.

Pillar 1 Capital requirements: Credit risk continued

Table 23: IRB – Credit risk exposures by portfolio and PD range – Institutions (CR6)

PD Scale Institutions	2018 Original on-balance sheet gross exposure £m	2018 Off balance sheet exposures pre CCF £m	2018 Average CCF %	2018 EAD post CRM and post CCF £m	2018 Average PD %	2018 Number of Obligors	2018 Average LGD %	2018 Average Maturity (years)	2018 RWA £m	2018 RWA density %	2018 EL £m	2018 Value adjustments and Provisions £m
	a	b	c	d	e	f	g	h	i	j	k	l
0.00 to <0.15	4,433	1,090	64.00%	5,130	0.06%	1,534	38.87%	1.2	647	12.60%	1	
0.15 to <0.25	257	104	66.36%	326	0.18%	65	41.15%	0.7	87	26.67%	–	
0.25 to <0.50	20	181	69.84%	141	0.28%	65	45.00%	1.5	65	46.34%	–	
0.50 to <0.75	151	28	33.31%	161	0.63%	34	44.99%	0.8	98	60.98%	–	
0.75 to <2.50	129	69	60.32%	171	1.35%	56	37.05%	0.8	149	87.06%	1	
2.50 to <10.00	42	8	58.58%	47	2.61%	22	45.00%	0.6	52	111.35%	1	
10.00 to <100.00	2	–	75.00%	2	16.25%	14	44.52%	1.3	5	243.91%	–	
100.00 (Default)	2	–	–	2	100.00%	5	45.00%	4.4	–	–	1	
Sub-total	5,037	1,480	64.09%	5,980	0.18%	1,796	39.31%	1.2	1,103	18.44%	5	1

PD Scale Institutions	2017 Original on-balance sheet gross exposure £m	2017 Off balance sheet exposures pre CCF £m	2017 Average CCF %	2017 EAD post CRM and post CCF £m	2017 Average PD %	2017 Number of Obligors ¹	2017 Average LGD %	2017 Average Maturity (years)	2017 RWA £m	2017 RWA density %	2017 EL £m	2017 Value adjustments and Provisions £m
	a	b	c	d	e	f	g	h	i	j	k	l
0.00 to <0.15	2,882	845	70.78%	4,256	0.05%	1,486	38.29%	1.6	681	16.01%	1	
0.15 to <0.25	95	326	50.79%	222	0.18%	54	39.34%	1.5	75	33.86%	–	
0.25 to <0.50	19	233	72.33%	177	0.29%	58	44.97%	1.7	86	48.60%	–	
0.50 to <0.75	128	17	68.80%	139	0.63%	33	45.00%	1.2	95	68.05%	–	
0.75 to <2.50	157	56	36.46%	178	1.01%	52	41.21%	0.6	149	83.72%	1	
2.50 to <10.00	1	–	–	1	3.07%	17	42.69%	1.3	1	139.55%	–	
10.00 to <100.00	–	–	–	–	–	7	–	–	–	–	–	
100.00 (Default)	28	–	–	28	100.00%	6	45.00%	1.2	–	–	13	
Sub-total	3,310	1,476	68.10%	5,001	0.68%	1,713	38.90%	1.6	1,087	21.74%	15	–

1 Restated.

Key movements

– EAD post CRM and post CCF increased by £1bn, driven primarily by exposure migration from Corporates.

– RWA density has reduced as a result of the asset migrations and reductions in average maturity, offset by a small increase in average LGD.

– The decrease in average PD is largely due to the reduction in the level of defaulted exposure.

Pillar 1 Capital requirements: Credit risk continued

Table 24: IRB – Credit risk exposures by portfolio and PD range – Corporate Main (CR6)

PD Scale	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018
Corporate – Main	Original on-balance sheet gross exposure £m	Off balance sheet exposures pre CCF £m	Average CCF %	EAD post CRM and post CCF £m	Average PD %	Number of Obligors	Average LGD %	Average Maturity (years)	RWA £m	RWA density %	EL £m	Value adjustments and Provisions £m
	a	b	c	d	e	f	g	h	i	j	k	l
0.00 to <0.15	19,317	18,621	75.99%	33,275	0.08%	1,159	42.89%	2.7	8,826	26.52%	11	
0.15 to <0.25	4,448	6,373	70.97%	8,518	0.18%	3,176	44.66%	2.5	3,731	43.80%	7	
0.25 to <0.50	9,576	10,832	67.78%	15,048	0.35%	5,840	43.88%	2.4	8,875	58.98%	23	
0.50 to <0.75	3,161	2,235	73.49%	4,655	0.63%	7,392	43.32%	2.1	3,449	74.10%	13	
0.75 to <2.50	6,284	3,769	68.69%	8,419	1.24%	11,067	43.10%	2.1	8,093	96.12%	45	
2.50 to <10.00	2,762	1,575	64.68%	3,710	4.07%	5,045	42.93%	2.1	5,071	136.68%	64	
10.00 to <100.00	228	88	72.91%	291	23.99%	571	44.38%	2.1	697	239.64%	31	
100.00 (Default)	897	84	74.38%	955	100.00%	631	43.11%	1.6	–	–	412	
Sub-total	46,673	43,577	72.05%	74,871	1.88%	34,880	43.35%	2.5	38,741	51.74%	606	663

PD Scale	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017	2017
Corporate – Main	Original on-balance sheet gross exposure £m	Off balance sheet exposures pre CCF £m	Average CCF %	EAD post CRM and post CCF £m	Average PD %	Number of Obligors	Average LGD %	Average Maturity (years)	RWA £m	RWA density %	EL £m	Value adjustments and Provisions £m
	a	b	c	d	e	f	g	h	i	j	k	l
0.00 to <0.15	16,820	19,291	74.99%	30,580	0.07%	1,088	42.45%	2.9	7,986	26.12%	10	
0.15 to <0.25	5,930	6,961	73.60%	10,573	0.18%	3,126	43.69%	2.0	4,004	37.87%	9	
0.25 to <0.50	10,591	10,016	71.56%	15,886	0.34%	5,866	43.48%	2.3	9,163	57.68%	25	
0.50 to <0.75	2,806	1,976	70.16%	4,034	0.63%	6,730	43.42%	2.1	3,030	75.12%	11	
0.75 to <2.50	6,092	4,636	70.02%	8,975	1.24%	11,254	43.48%	2.3	8,990	100.17%	54	
2.50 to <10.00	2,563	1,307	63.58%	3,264	3.99%	5,088	42.97%	2.3	4,552	139.45%	64	
10.00 to <100.00	102	109	71.52%	179	20.76%	652	44.19%	2.6	406	226.07%	14	
100.00 (Default)	864	177	71.29%	989	100.00%	756	43.05%	1.8	–	–	426	
Sub-total	45,769	44,474	72.90%	74,480	1.86%	34,560	43.06%	2.5	38,131	51.20%	611	567

Key movements

– Exposure growth has been offset by the migration of assets into Institutions, leaving EAD post CRM and post CCF up by £0.4bn.

– RWA density has risen by 0.55%, largely as a result of a small increase in LGD.

Pillar 1 Capital requirements: Credit risk continued

Table 25: IRB – Credit risk exposures by portfolio and PD range – Corporate SME (CR6)

PD Scale	2018 Original on-balance sheet gross exposure £m	2018 Off balance sheet exposures pre CCF £m	2018 Average CCF %	2018 EAD post CRM and post CCF £m	2018 Average PD %	2018 Number of Obligors	2018 Average LGD %	2018 Average Maturity (years)	2018 RWA £m	2018 RWA density %	2018 EL £m	2018 Value adjustments and Provisions £m
Corporate – SME	a	b	c	d	e	f	g	h	i	j	k	l
0.00 to <0.15	614	267	79.58%	849	0.08%	923	41.44%	2.9	176	20.78%	–	
0.15 to <0.25	128	187	75.53%	269	0.18%	218	43.27%	1.9	80	29.62%	–	
0.25 to <0.50	892	501	72.84%	1,248	0.37%	1,515	41.59%	2.4	592	47.46%	2	
0.50 to <0.75	1,567	451	69.58%	1,880	0.58%	4,388	38.87%	3.2	1,115	59.31%	4	
0.75 to <2.50	3,207	819	70.77%	3,786	1.24%	7,794	38.01%	3.0	2,724	71.94%	18	
2.50 to <10.00	2,597	425	72.29%	2,905	4.32%	5,061	38.36%	2.7	2,852	98.18%	48	
10.00 to <100.00	404	43	73.74%	433	18.81%	1,536	37.88%	2.6	623	143.88%	31	
100.00 (Default)	248	29	67.25%	267	100.00%	827	38.92%	2.2	–	–	104	
Sub-total	9,657	2,722	72.40%	11,638	4.62%	22,262	39.01%	2.8	8,162	70.14%	208	193

PD Scale	2017 Original on-balance sheet gross exposure £m	2017 Off balance sheet exposures pre CCF £m	2017 Average CCF %	2017 EAD post CRM and post CCF £m	2017 Average PD %	2017 Number of Obligors	2017 Average LGD %	2017 Average Maturity (years)	2017 RWA £m	2017 RWA density %	2017 EL £m	2017 Value adjustments and Provisions £m
Corporate – SME	a	b	c	d	e	f	g	h	i	j	k	l
0.00 to <0.15	744	476	87.09%	1,172	0.07%	245	40.39%	3.2	253	21.56%	–	
0.15 to <0.25	244	391	74.97%	536	0.18%	324	43.26%	2.4	188	35.11%	–	
0.25 to <0.50	902	533	72.72%	1,282	0.36%	1,063	41.83%	2.2	668	52.10%	2	
0.50 to <0.75	1,311	371	70.87%	1,574	0.58%	3,573	37.93%	3.1	902	57.28%	4	
0.75 to <2.50	3,255	791	71.40%	3,813	1.24%	8,322	37.79%	2.9	2,700	70.79%	19	
2.50 to <10.00	2,223	441	78.19%	2,571	4.37%	5,077	38.06%	2.9	2,523	98.10%	43	
10.00 to <100.00	274	25	71.07%	291	17.75%	1,449	37.43%	2.5	375	128.76%	15	
100.00 (Default)	401	27	80.76%	423	100.00%	894	39.19%	2.0	–	–	166	
Sub-total	9,353	3,056	75.53%	11,662	5.57%	20,948	38.87%	2.8	7,608	65.23%	250	115

Key movements

– EAD post CRM and post CCF is flat, whilst RWA increased £0.6bn leading to an RWA density increase of 4.9%.

– The RWA increase is largely due to a change in portfolio mix and model updates which sees a reduction in defaulted assets (where RWA is nil) and an increase in PD for non-defaulted assets.

– Decrease in average PD is driven by a reduction in the level of defaulted assets.

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF CREDIT RISK EXPOSURES SUBJECT TO THE RETAIL IRB APPROACH

This section provides a detailed analysis, by PD Grade, of credit risk exposures subject to the Retail IRB Approach. Exposures in the tables below are stated on two different bases (gross carrying values and EAD post-CCF and CRM). On-balance sheet gross exposures and off- balance sheet exposures represent gross carrying values (before taking into account SCRAs) before the application of CRM and CCF.

Disclosures provided in the tables below take into account PD floors and LGD floors specified by regulators in respect of the calculation of regulatory capital requirements.

The Basel guidelines include a single prescribed scale for presenting the credit quality of all IRB portfolios by asset class. The tables that follow present the prescribed scale. This does not map directly to the internal scales per tables 12 and 13, but is apportioned on the same basis.

Throughout this section ‘RWA density’ represents the ‘average risk weight’.

‘Number of obligors’ corresponds to the number of individual PDs (in each band). This means that a customer may be counted more than once in the same asset class. In the case of Other Retail, for example, which includes both Motor Finance and Unsecured Personal Loans, a customer may have both of those products which would be reported as two separate obligors.

Table 26: IRB – Credit risk exposures by portfolio and PD range – Residential mortgages (SME) (CR6)

	2018 Original on-balance sheet gross exposure £m	2018 Off balance sheet exposures pre CCF £m	2018 Average CCF %	2018 EAD post CRM and post CCF £m	2018 Average PD %	2018 Number of Obligors	2018 Average LGD %	2018 RWA £m	2018 RWA density %	2018 EL £m	2018 Value adjustments and Provisions £m	2018 Undrawn commitments (post CCF) £m
PD Scale Residential mortgages (SME)	a	b	c	d	e	f	g	i	j	k	l	
0.00 to <0.15	–	–	–	–	–	–	–	–	–	–		–
0.15 to <0.25	–	–	–	–	–	–	–	–	–	–		–
0.25 to <0.50	–	–	–	–	–	–	–	–	–	–		–
0.50 to <0.75	3,187	299	97.24%	3,478	0.54%	25,642	17.54%	433	12.45%	3		291
0.75 to <2.50	3,390	311	97.71%	3,694	1.15%	23,572	16.47%	714	19.34%	7		304
2.50 to <10.00	1,367	83	97.38%	1,448	4.27%	9,544	17.25%	641	44.30%	11		81
10.00 to <100.00	396	19	97.50%	414	23.05%	3,313	17.74%	308	74.39%	17		18
100.00 (Default)	166	4	98.06%	170	100.00%	1,324	13.35%	172	101.47%	23		4
Sub-total	8,505	716	97.47%	9,204	4.22%	63,395	17.00%	2,269	24.65%	61	99	697

	2017 Original on-balance sheet gross exposure £m	2017 Off balance sheet exposures pre CCF £m	2017 Average CCF %	2017 EAD post CRM and post CCF £m	2017 Average PD %	2017 Number of Obligors	2017 Average LGD %	2017 RWA £m	2017 RWA density %	2017 EL £m	2017 Value adjustments and Provisions £m	2017 Undrawn commitments (post CCF) £m
PD Scale Residential mortgages (SME)	a	b	c	d	e	f	g	i	j	k	l	
0.00 to <0.15	–	–	–	–	–	–	–	–	–	–		–
0.15 to <0.25	–	–	–	–	–	–	–	–	–	–		–
0.25 to <0.50	–	–	–	–	–	–	–	–	–	–		–
0.50 to <0.75	3,045	310	97.79%	3,349	0.54%	23,555	15.56%	377	11.25%	3		304
0.75 to <2.50	3,807	330	97.47%	4,128	1.13%	26,937	17.05%	824	19.97%	8		322
2.50 to <10.00	1,599	97	97.08%	1,694	4.25%	11,269	17.91%	779	45.99%	13		94
10.00 to <100.00	401	17	95.77%	417	21.59%	3,652	19.77%	348	83.33%	18		16
100.00 (Default)	177	3	98.01%	180	100.00%	1,632	10.52%	226	125.22%	19		3
Sub-total	9,029	757	97.52%	9,769	4.17%	67,045	16.69%	2,554	26.14%	61	25	739

Pillar 1 Capital requirements: Credit risk continued

Table 27: IRB – Credit risk exposures by portfolio and PD range – Residential mortgages (non-SME) (CR6)

	2018 Original on-balance sheet gross exposure £m	2018 Off balance sheet exposures pre CCF £m	2018 Average CCF %	2018 EAD post CRM and post CCF £m	2018 Average PD %	2018 Number of Obligors	2018 Average LGD %	2018 RWA £m	2018 RWA density %	2018 EL £m	2018 Value adjustments and Provisions £m	2018 Undrawn commitments (post CCF) £m
PD Scale Residential mortgages (non-SME)	a	b	c	d	e	f	g	i	j	k	l	
0.00 to <0.15	232,731	10,951	98.04%	255,103	0.27%	2,190,785	10.35%	15,539	6.09%	85		10,737
0.15 to <0.25	24,340	249	75.86%	25,642	0.79%	209,034	10.41%	3,096	12.08%	23		189
0.25 to <0.50	14,822	147	80.01%	15,608	1.27%	124,494	10.92%	2,519	16.14%	21		117
0.50 to <0.75	3,941	15	72.54%	4,139	2.31%	37,428	11.75%	1,108	26.76%	10		11
0.75 to <2.50	6,607	544	69.58%	7,301	5.10%	58,297	11.47%	2,780	38.07%	40		379
2.50 to <10.00	4,335	16	100.12%	4,542	16.59%	37,596	10.66%	2,816	61.99%	80		16
10.00 to <100.00	2,782	–	–	2,856	51.24%	23,623	10.28%	1,710	59.87%	155		–
100.00 (Default)	3,405	–	–	3,405	100.00%	26,057	11.60%	1,447	42.50%	407		–
Sub-total	292,962	11,921	96.03%	318,596	2.25%	2,707,314	10.45%	31,015	9.73%	821	1,372	11,448

	2017 Original on-balance sheet gross exposure £m	2017 Off balance sheet exposures pre CCF £m	2017 Average CCF %	2017 EAD post CRM and post CCF £m	2017 Average PD %	2017 Number of Obligors	2017 Average LGD %	2017 RWA £m	2017 RWA density %	2017 EL £m	2017 Value adjustments and Provisions £m	2017 Undrawn commitments (post CCF) £m
PD Scale Residential mortgages (non-SME)	a	b	c	d	e	f	g	i	j	k	l	
0.00 to <0.15	231,775	11,172	97.60%	254,252	0.26%	2,265,026	10.30%	13,936	5.48%	72		10,904
0.15 to <0.25	22,637	212	70.05%	23,872	0.76%	200,175	10.99%	2,802	11.74%	20		149
0.25 to <0.50	17,971	130	73.01%	18,933	1.17%	158,996	10.91%	2,954	15.60%	23		95
0.50 to <0.75	4,852	11	60.59%	5,085	2.15%	47,177	12.80%	1,329	26.13%	12		6
0.75 to <2.50	9,218	174	64.36%	9,698	4.15%	74,360	17.72%	4,382	45.18%	52		112
2.50 to <10.00	5,389	7	82.15%	5,603	13.24%	41,737	16.41%	4,175	74.52%	90		5
10.00 to <100.00	3,162	–	–	3,247	49.08%	27,129	12.31%	2,218	68.30%	179		–
100.00 (Default)	3,901	–	–	3,901	100.00%	28,273	14.41%	2,413	61.86%	445		–
Sub-total	298,905	11,707	96.28%	324,590	2.40%	2,842,873	10.82%	34,209	10.54%	893	1,540	11,272

Key movements

– EAD post CRM and post CCF and risk-weighted assets decreased by £5.9bn and £3.2bn respectively, mainly due to the sale of the Irish mortgage portfolio.

Pillar 1 Capital requirements: Credit risk continued

Table 28: Residential mortgage exposures by major portfolio

Exposures in the table below are presented on a pre CRM and post CCF basis.

Major Portfolio	2018 EAD pre CRM and post CCF £m	2018 Exposure weighted average PD %	2018 Exposure weighted average LGD %	2018 Average risk weight %	2018 Undrawn commitments (pre CCF) ¹ £m	2018 Undrawn commitments (post CCF) £m
UK mainstream	241,548	2.20%	10.04%	8.96%	9,740	9,659
UK buy-to-let	54,766	1.39%	11.84%	12.49%	1,215	1,206
UK self certified	13,201	7.40%	8.37%	10.76%	454	233
Irish mortgages	–	–	–	–	–	–
Dutch mortgages	7,249	1.07%	16.68%	12.88%	512	349
Other mortgages	11,037	3.96%	16.17%	22.11%	716	698
Total	327,800	2.31%	10.63%	10.15%	12,637	12,146

Major Portfolio	2017 EAD pre CRM and post CCF £m	2017 Exposure weighted average PD %	2017 Exposure weighted average LGD ² %	2017 Average risk weight %	2017 Undrawn commitments (pre CCF) ¹ £m	2017 Undrawn commitments (post CCF) £m
UK mainstream	241,006	2.26%	9.83%	8.42%	9,587	9,441
UK buy-to-let	56,767	1.44%	12.10%	13.28%	1,498	1,498
UK self certified	14,737	7.16%	8.82%	10.63%	476	244
Irish mortgages	3,541	9.73%	41.92%	101.19%	–	–
Dutch mortgages	6,471	1.30%	23.27%	15.75%	146	87
Other mortgages	11,835	3.92%	15.96%	23.30%	758	739
Total	334,359	2.46%	10.99%	10.99%	12,464	12,009

1 Undrawn commitments predominantly relate to pipeline mortgages, offered but not drawn down by the customer.

2 The 10 per cent LGD floor that applies to residential mortgage exposures is not applied in alignment with the portfolios in the table above, rather at aggregated portfolio levels. This leads to the mainstream portfolio having an average LGD lower than 10 per cent in 2017 and self-certified portfolio having an average LGD lower than 10 per cent in 2017 and 2018.

Pillar 1 Capital requirements: Credit risk continued

Table 29: IRB – Credit risk exposures by portfolio and PD range – Qualifying revolving retail exposures (CR6)

	2018 Original on-balance sheet gross exposure £m	2018 Off balance sheet exposures pre CCF £m	2018 Average CCF %	2018 EAD post CRM and post CCF £m	2018 Average PD %	2018 Number of Obligors	2018 Average LGD %	2018 RWA £m	2018 RWA density %	2018 EL £m	2018 Value adjustments and Provisions £m	2018 Undrawn commitments (post CCF) £m
PD Scale Qualifying revolving retail exposures	a	b	c	d	e	f	g	i	j	k	l	
0.00 to <0.15	771	13,928	65.48%	9,891	0.09%	8,019,751	62.75%	359	3.63%	6		9,120
0.15 to <0.25	554	6,461	64.12%	4,697	0.20%	3,822,377	67.76%	362	7.71%	6		4,143
0.25 to <0.50	1,443	9,952	58.88%	7,304	0.36%	5,294,693	71.33%	957	13.10%	19		5,860
0.50 to <0.75	1,201	4,240	61.37%	3,803	0.62%	3,053,183	75.12%	797	20.97%	18		2,602
0.75 to <2.50	3,962	5,501	70.86%	7,860	1.37%	6,495,278	78.91%	3,147	40.04%	85		3,898
2.50 to <10.00	2,485	1,329	85.87%	3,627	4.50%	1,847,413	79.94%	3,230	89.06%	130		1,141
10.00 to <100.00	653	115	117.32%	810	31.57%	599,867	77.13%	1,663	205.32%	197		135
100.00 (Default)	350	28	0.00%	350	100.00%	1,127,625	54.46%	780	222.95%	144		–
Sub-total	11,420	41,555	64.73%	38,342	2.46%	30,260,187	71.39%	11,294	29.46%	605	467	26,900

	2017 Original on-balance sheet gross exposure £m	2017 Off balance sheet exposures pre CCF £m	2017 Average CCF %	2017 EAD post CRM and post CCF £m	2017 Average PD %	2017 Number of Obligors	2017 Average LGD %	2017 RWA £m	2017 RWA density %	2017 EL £m	2017 Value adjustments and Provisions £m	2017 Undrawn commitments (post CCF) £m
PD Scale Qualifying revolving retail exposures	a	b	c	d	e	f	g	i	j	k	l	
0.00 to <0.15	801	14,207	71.05%	10,894	0.09%	7,772,519	67.06%	418	3.84%	7		10,093
0.15 to <0.25	606	6,917	68.54%	5,347	0.20%	3,770,664	70.09%	424	7.92%	8		4,741
0.25 to <0.50	1,647	9,644	63.49%	7,771	0.36%	5,227,102	73.05%	1,036	13.33%	21		6,123
0.50 to <0.75	1,301	3,793	67.38%	3,857	0.62%	2,792,152	76.36%	824	21.37%	18		2,555
0.75 to <2.50	4,133	4,621	81.06%	7,879	1.38%	5,963,333	79.39%	3,190	40.48%	86		3,746
2.50 to <10.00	2,143	1,267	96.89%	3,371	4.52%	1,738,615	80.22%	2,995	88.84%	122		1,228
10.00 to <100.00	613	125	131.30%	797	30.41%	582,427	78.41%	1,704	213.78%	191		164
100.00 (Default)	369	31	0.25%	369	100.00%	724,839	48.31%	550	149.26%	176		–
Sub-total	11,613	40,606	70.56%	40,285	2.34%	28,571,651	73.07%	11,142	27.66%	628	251	28,651

Key movements

- EAD post CRM and post CCF decreased by £1.9bn driven by model calibrations.
- The implementation of an improved LGD model for HBOS Overdrafts rating systems during 2018 has led to reduction in average LGD.
- The scope of the new model includes assets in Recoveries leading to an increase in the number of default obligors at the end of the year.

Pillar 1 Capital requirements: Credit risk continued

Table 30: IRB – Credit risk exposures by portfolio and PD range – Retail Other SME (CR6)

PD Scale Other SME	2018 Original on-balance sheet gross exposure £m	2018 Off balance sheet exposures pre CCF £m	2018 Average CCF %	2018 EAD post CRM and post CCF £m	2018 Average PD %	2018 Number of Obligors	2018 Average LGD %	2018 RWA £m	2018 RWA density %	2018 EL £m	2018 Value adjustments and Provisions £m	2018 Undrawn commitments (post CCF) £m
	a	b	c	d	e	f	g	i	j	k	l	
0.00 to <0.15	–	–	–	–	–	–	–	–	–	–		–
0.15 to <0.25	–	–	–	–	–	–	–	–	–	–		–
0.25 to <0.50	–	–	–	–	–	–	–	–	–	–		–
0.50 to <0.75	301	380	99.99%	681	0.54%	58,941	78.37%	354	52.06%	3		380
0.75 to <2.50	461	344	99.99%	805	1.14%	62,191	77.41%	554	68.84%	7		344
2.50 to <10.00	308	109	99.99%	418	4.45%	32,695	78.22%	401	96.09%	15		109
10.00 to <100.00	110	23	100.00%	133	25.00%	32,949	85.14%	184	137.74%	29		23
100.00 (Default)	194	4	100.00%	198	100.00%	9,747	13.37%	87	44.09%	26		4
Sub-total	1,375	859	99.99%	2,234	11.76%	196,523	72.64%	1,581	70.74%	80	58	859

PD Scale Other SME	2017 Original on-balance sheet gross exposure £m	2017 Off balance sheet exposures pre CCF £m	2017 Average CCF %	2017 EAD post CRM and post CCF £m	2017 Average PD %	2017 Number of Obligors	2017 Average LGD %	2017 RWA £m	2017 RWA density %	2017 EL £m	2017 Value adjustments and Provisions £m	2017 Undrawn commitments (post CCF) £m
	a	b	c	d	e	f	g	i	j	k	l	
0.00 to <0.15	–	–	–	–	–	–	–	–	–	–		–
0.15 to <0.25	–	–	–	–	–	–	–	–	–	–		–
0.25 to <0.50	–	–	–	–	–	–	–	–	–	–		–
0.50 to <0.75	251	313	99.99%	563	0.54%	50,000	76.91%	293	51.99%	2		313
0.75 to <2.50	480	363	99.99%	843	1.15%	63,175	76.91%	578	68.55%	7		363
2.50 to <10.00	320	121	99.99%	441	4.53%	33,777	78.51%	427	96.66%	16		121
10.00 to <100.00	112	23	99.99%	135	23.51%	32,278	83.98%	183	135.37%	27		23
100.00 (Default)	213	3	100.00%	217	100.00%	9,960	11.62%	97	44.78%	25		3
Sub-total	1,377	823	99.99%	2,200	12.78%	189,190	71.24%	1,578	71.72%	78	16	823

Pillar 1 Capital requirements: Credit risk continued

Table 31: IRB – Credit risk exposures by portfolio and PD range – Retail Other non-SME (CR6)

	2018 Original on-balance sheet gross exposure £m	2018 Off balance sheet exposures pre CCF £m	2018 Average CCF %	2018 EAD post CRM and post CCF £m	2018 Average PD %	2018 Number of Obligors	2018 Average LGD %	2018 RWA £m	2018 RWA density %	2018 EL £m	2018 Value adjustments and Provisions £m	2018 Undrawn commitments (post CCF) £m
PD Scale Other non-SME	a	b	c	d	e	f	g	i	j	k	l	
0.00 to <0.15	306	–	–	307	0.08%	21,322	34.64%	27	8.83%	–		–
0.15 to <0.25	91	2	30.00%	94	0.22%	18,553	77.02%	34	35.69%	–		1
0.25 to <0.50	4,622	7	30.00%	4,635	0.37%	441,562	39.07%	1,279	27.58%	7		2
0.50 to <0.75	3,011	7	30.00%	3,024	0.71%	290,943	47.96%	1,403	46.41%	10		2
0.75 to <2.50	7,400	27	30.00%	7,452	1.52%	788,745	61.27%	5,911	79.32%	73		8
2.50 to <10.00	2,995	14	30.00%	3,020	4.35%	363,522	66.61%	3,222	106.68%	93		4
10.00 to <100.00	599	3	30.00%	605	33.20%	81,692	56.06%	804	132.84%	127		1
100.00 (Default)	279	–	–	279	100.00%	143,293	50.08%	683	245.07%	87		–
Sub-total	19,302	61	30.00%	19,417	3.93%	2,149,632	54.06%	13,362	68.82%	398	490	18

	2017 Original on-balance sheet gross exposure £m	2017 Off balance sheet exposures pre CCF £m	2017 Average CCF %	2017 EAD post CRM and post CCF £m	2017 Average PD %	2017 Number of Obligors	2017 Average LGD %	2017 RWA £m	2017 RWA density %	2017 EL £m	2017 Value adjustments and Provisions £m	2017 Undrawn commitments (post CCF) £m
PD Scale Other non-SME	a	b	c	d	e	f	g	i	j	k	l	
0.00 to <0.15	262	–	–	262	0.08%	19,348	34.41%	20	7.81%	–		–
0.15 to <0.25	76	1	30.00%	79	0.21%	16,098	79.39%	28	35.57%	–		–
0.25 to <0.50	4,068	6	30.00%	4,081	0.37%	418,457	39.69%	1,044	25.59%	6		2
0.50 to <0.75	2,595	6	30.00%	2,608	0.70%	265,347	48.98%	1,146	43.94%	9		2
0.75 to <2.50	6,901	23	30.00%	6,954	1.52%	781,574	63.65%	5,440	78.23%	66		7
2.50 to <10.00	2,966	12	30.00%	2,993	4.25%	383,894	69.11%	3,166	105.78%	88		4
10.00 to <100.00	562	3	30.00%	568	33.14%	80,753	58.28%	732	128.80%	115		1
100.00 (Default)	298	–	–	298	100.00%	125,333	49.79%	529	177.71%	116		–
Sub-total	17,727	51	30.00%	17,843	4.22%	2,090,804	56.18%	12,106	67.85%	400	261	15

Key movements

– EAD post CRM and post CCF and risk weighted assets increased by £1.6bn and £1.3bn, respectively, due to growth in the UK Motor Finance business and model refinements.

– The scope of the new LGD model for HBOS Loans rating systems during 2018 includes assets in Recoveries leading to an increase in default obligors at the end of the year.

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF CREDIT RISK EXPOSURES SUBJECT TO OTHER IRB APPROACHES

Corporate specialised lending exposures subject to supervisory slotting

Corporate specialised lending exposures subject to the IRB Supervisory Slotting Approach are assigned to a grade, the determination of which takes into account the following factors:

- financial strength e.g. market conditions, financial ratios, stress analysis, financial structure, cash flow predictability, market liquidity and degree of over-collateralisation of trade;
- political and legal environment e.g. political risks, country risks, force majeure risks, government support, stability of legal and regulatory environment, enforceability of contracts and collateral and security;
- transaction and/or asset characteristics e.g. location, design and technology risks, construction risks, completion guarantees, financial strength of contractors and reliability, operating risks, off-take risks, supply risks, financing terms, resale values, value sensitivities and susceptibility to damage;
- strength of the sponsor and developer including any public private partnership income stream e.g. sponsor's financial strength, quality of financial disclosure, sponsor's support, reputation and track record, trading controls and hedging policies; and
- security package e.g. assignment of contracts and accounts, pledge of assets, lender's control over cash flow, covenant package, reserve funds, nature of lien, quality of insurance coverage, asset control and inspection rights.

Differing criteria apply to each of the four sub-classes of specialised lending recognised by the PRA: i.e. project finance, object finance, commodities finance and income-producing real estate.

Once assigned to a grade, the exposure is risk-weighted in accordance with the risk weight applicable to that grade and remaining maturity banding.

As at 31 December 2018, corporate specialised lending exposures subject to supervisory slotting amounted to £16.0bn (2017: £16.1bn). Risk-weighted assets arising from this amounted to £11.8bn (2017: £12.0bn) as analysed in the table below.

Exposures in the table below are stated on two different bases. On-balance sheet and off-balance sheet amounts represent net carrying values (after taking into account SCRAAs) before the application of CRM and CCF. Exposure amount represents EAD post CRM and post CCF.

Table 32A: IRB – Specialised lending (CR10)

2018							
Specialised lending							
Regulatory Categories	Remaining maturity	On-balance sheet amount £m	Off-balance sheet amount £m	RW %	EAD post CRM and post CCF £m	RWA £m	Expected losses £m
1) Strong	Less than 2.5 years	3,069	970	50%	3,634	1,817	–
	Equal to or more than 2.5 years	2,586	858	70%	3,181	2,226	13
2) Good	Less than 2.5 years	2,284	631	70%	2,809	1,965	11
	Equal to or more than 2.5 years	4,817	609	90%	5,331	4,794	43
3) Satisfactory	Less than 2.5 years	98	12	115%	110	125	3
	Equal to or more than 2.5 years	543	16	115%	592	677	17
4) Weak	Less than 2.5 years	8	1	250%	8	20	1
	Equal to or more than 2.5 years	66	–	250%	72	180	6
5) Default	Less than 2.5 years	121	4	0%	228	–	114
	Equal to or more than 2.5 years	56	3	0%	85	–	43
Total	Less than 2.5 years	5,579	1,619		6,788	3,927	129
	Equal to or more than 2.5 years	8,068	1,486		9,260	7,877	120

2017							
Specialised lending							
Regulatory Categories	Remaining maturity	On-balance sheet amount £m	Off-balance sheet amount £m	RW %	EAD post CRM and post CCF £m	RWA £m	Expected losses £m
1) Strong	Less than 2.5 years	2,784	673	50%	3,168	1,587	–
	Equal to or more than 2.5 years	2,999	951	70%	3,446	2,412	14
2) Good	Less than 2.5 years	2,314	449	70%	2,686	1,881	11
	Equal to or more than 2.5 years	4,778	424	90%	5,148	4,629	41
3) Satisfactory	Less than 2.5 years	160	27	115%	182	209	5
	Equal to or more than 2.5 years	791	64	115%	860	982	24
4) Weak	Less than 2.5 years	20	1	250%	21	51	2
	Equal to or more than 2.5 years	84	1	250%	86	214	7
5) Default	Less than 2.5 years	257	25	0%	374	–	187
	Equal to or more than 2.5 years	74	52	0%	146	–	73
Total	Less than 2.5 years	5,534	1,174		6,431	3,728	205
	Equal to or more than 2.5 years	8,727	1,491		9,686	8,237	159

Key movements

- The expected loss reduction of £0.1bn is driven by lower defaulted exposures.

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF EQUITY EXPOSURES

EQUITY EXPOSURES SUBJECT TO THE SIMPLE RISK WEIGHT METHOD

An analysis of equity exposures and risk-weighted assets categorised under the Simple Risk Weight Method is provided in the table below.

As at 31 December 2018, total credit risk exposures in respect of equities subject to the Simple Risk Weight Method amounted to £2.7bn (2017: £3.4bn). Risk-weighted assets arising from this amounted to £5.7bn (2017: £7.4bn).

Table 32B: Equity exposures subject to the simple risk weight method (CR10)

2018						
Equities under the simple risk-weight approach						
Categories	On-balance sheet amount £m	Off-balance sheet amount £m	RW %	EAD post CRM and post CCF £m	RWA £m	Capital requirements £m
Exchange-traded equity exposures	53	–	290%	53	154	12
Private equity exposures ¹	2,280	52	190%	2,332	4,431	354
Other equity exposures	314	–	370%	314	1,163	93
Total	2,648	52		2,700	5,749	460
2017						
Equities under the simple risk-weight approach						
Categories	On-balance sheet amount £m	Off-balance sheet amount £m	RW %	EAD post CRM and post CCF £m	RWA £m	Capital requirements £m
Exchange-traded equity exposures	573	–	290%	573	1,662	133
Private equity exposures ¹	2,439	101	190%	2,540	4,827	386
Other equity exposures	241	–	370%	241	893	71
Total	3,254	101		3,355	7,381	591

¹ The Group's private equity investments predominantly consist of venture capital investments, the equity component of which is reflected through both equity exposures (Table 32B) and the analysis of non-trading book exposures in equities (Table 33). Equity exposures in Table 32B also include the investment in debt securities issued by venture capital entities.

Non-trading book exposures in equities

Non-trading book exposures in equities held by the Group primarily arise within Central Items and Commercial Banking through a combination of individual transactions in the private equity market, debt for equity swaps and strategic equity investments.

The Group's strategic equity investments predominantly arise as a result of management actions undertaken by the Group resulting in equity holdings.

Private equity investments are generally medium term investments, held for gain and include limited partnership stakes and listed and unlisted equity shares. Private equity investments are managed, and evaluated, in accordance with a documented risk management or investment strategy and reported to key management personnel on that basis.

The accounting techniques and valuation methodologies applied are set out within the Group's accounting policies, references to which are provided below.

Financial assets at fair value through other comprehensive income, Note 2 (Accounting Policies) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Equity investments (including venture capital), Note 49 (Financial Instruments) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

The balance sheet value of non-trading book exposures in equities, as at 31 December 2018, is presented in the table below. There was no difference between the balance sheet value and the fair value of these exposures.

Table 33: Analysis of non-trading book exposures in equities

Equity grouping	2018 Balance sheet value £m	2017 Balance sheet value £m
Publicly quoted equities	37	563
Privately held equities	1,624	1,423
Total	1,661	1,986

There were £129m realised losses (2017: £83m gain) recognised in the year to 31 December 2018 in respect of the sale and liquidation of non-trading book exposures in equities (assets at fair value through other comprehensive income).

As at 31 December 2018, there were no net unrealised gains on equity investments at fair value through other comprehensive income (2017: £87m).

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF CREDIT RISK EXPOSURES SUBJECT TO THE STANDARDISED APPROACH

Standardised exposures in the table below are stated on two different bases (pre-CCF and CRM and post-CCF and CRM). Note, the exposures are also net of SCRAAs.

Throughout this section 'RWA density' represents the 'average risk weight'.

As at 31 December 2018, credit risk exposures risk-weighted under the Standardised Approach post-CCF and CRM, amounted to £99.6bn (2017: £113.0bn), generating risk-weighted assets of £25.5bn (2017: £25.3bn).

Table 34: Standardised approach – credit risk exposure and Credit Risk Mitigation (CRM) effects (CR4)

		2018					
		Exposures pre CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
		On balance sheet amount £m	Off balance sheet amount £m	On balance sheet amount £m	Off balance sheet amount £m	RWA £m	RWA density ¹ %
		a	b	c	d	e	f
1	Central governments or central banks	61,428	1	61,608	468	4	–
2	Regional governments or local authorities	5	–	5	–	1	20%
3	Public sector entities	1	40	1	20	21	100%
4	Multilateral development banks	2,974	–	2,974	–	–	–
5	International organisations	–	–	–	–	–	–
6	Institutions	160	–	193	580	67	9%
7	Corporates	8,162	8,527	7,773	3,120	9,887	91%
8	Retail	12,098	20,332	12,098	196	8,842	72%
9	Secured by mortgages on immovable property	4,500	9	4,500	5	1,578	35%
	of which: residential property	4,498	9	4,498	5	1,576	35%
	of which: commercial property	2	–	2	–	2	100%
10	Exposures in default	1,570	98	1,570	72	2,186	133%
11	Items associated with particularly high risk	–	–	–	–	–	–
12	Covered bonds	–	–	–	–	–	–
13	Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–
14	Collective investment undertakings	716	–	716	–	143	20%
15	Equity exposures	–	–	–	–	–	–
16	Other items	3,680	–	3,680	–	2,819	77%
17	Total	95,295	29,008	95,119	4,461	25,548	26%

		2017					
		Exposures pre CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
		On balance sheet amount £m	Off balance sheet amount £m	On balance sheet amount £m	Off balance sheet amount £m	RWA £m	RWA density ¹ %
		a	b	c	d	e	f
1	Central governments or central banks	76,352	327	76,352	349	8	–
2	Regional governments or local authorities	5	–	5	–	1	20%
3	Public sector entities	1	40	1	20	21	100%
4	Multilateral development banks	1,837	–	1,837	–	–	–
5	International organisations	–	–	–	–	–	–
6	Institutions	136	247	135	13	32	22%
7	Corporates	10,036	8,006	9,600	2,671	10,902	89%
8	Retail	12,619	21,466	12,619	201	9,256	72%
9	Secured by mortgages on immovable property	5,148	10	5,148	5	1,944	38%
	of which: residential property	5,146	10	5,146	5	1,942	38%
	of which: commercial property	2	–	2	–	2	100%
10	Exposures in default	662	39	661	19	765	112%
11	Items associated with particularly high risk	–	–	–	–	–	–
12	Covered bonds	–	–	–	–	–	–
13	Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–
14	Collective investment undertakings	278	–	278	–	56	20%
15	Equity exposures	–	–	–	–	–	–
16	Other items	3,114	–	3,114	–	2,273	73%
17	Total	110,187	30,136	109,750	3,278	25,259	22%

1 RWA density is RWA expressed as a percentage of Exposures post-CCF and CRM.

Key movements

– The increase in RWA density for total Standardised exposures is driven by the substantial reduction in 0% risk-weighted Central governments or central banks exposures.

Pillar 1 Capital requirements: Credit risk continued

Table 35: Standardised approach – exposures by asset class (CR5)

Exposures in the table below are presented on a post CRM and post CCF basis.

The Group makes limited use of ECAs assessments for its Standardised exposures. Where a credit assessment is used this must be provided by an eligible ECAI from the PRA’s approved list. The appropriate risk weight to apply to the credit risk exposure is determined by assigning the exposure to the relevant credit quality step under CRD IV, based on the PRA’s mapping of credit assessments to credit quality steps.

For the below disclosure, exposures are classed as ‘rated’ only where an ECAI rating has been used to derive the risk weight. Where a rating is unavailable, or where the risk weight has been determined by application of specific CRR provisions, exposures have been classed as ‘unrated’. This also applies to central governments or central banks exposures within the UK and EEA that receive a zero per cent risk weight in line with regulatory permission.

		2018															Total £m	Of which: Unrated £m
		Risk Weight																
		0% £m	2% £m	4% £m	10% £m	20% £m	35% £m	50% £m	70% £m	75% £m	100% £m	150% £m	250% £m	370% £m	1250% £m	Others £m		
1	Central governments or central banks	62,058	–	–	–	19	–	–	–	–	–	–	–	–	–	–	62,077	58,522
2	Regional government or local authorities	–	–	–	–	5	–	–	–	–	–	–	–	–	–	–	5	5
3	Public sector entities	–	–	–	–	–	–	–	–	–	21	–	–	–	–	–	21	21
4	Multilateral development banks	2,974	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2,974	2,974
5	International organisations	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6	Institutions	–	–	613	–	124	–	36	–	–	–	–	–	–	–	–	773	655
7	Corporates	–	–	–	–	123	–	1,252	–	–	9,501	16	–	–	–	–	10,892	9,405
8	Retail	–	–	–	–	–	–	–	–	12,294	–	–	–	–	–	–	12,294	12,294
9	Secured by mortgages on immovable property	–	–	–	–	–	4,503	–	–	–	2	–	–	–	–	–	4,505	4,505
	of which: residential property	–	–	–	–	–	4,503	–	–	–	–	–	–	–	–	–	4,503	4,503
	of which: commercial property	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–	2	2
10	Exposures in default	–	–	–	–	–	–	–	–	–	525	1,117	–	–	–	–	1,642	1,642
11	Items associated with particularly high risk	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12	Covered bonds	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13	Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14	Collective investment undertakings	–	–	–	–	716	–	–	–	–	–	–	–	–	–	–	716	–
15	Equity	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16	Other items	122	–	–	–	924	–	–	–	–	2,634	–	–	–	–	–	3,680	3,680
17	Total	65,154	–	613	–	1,911	4,503	1,288	–	12,294	12,682	1,133	–	–	–	–	99,580	93,704

		2017															Total £m	Of which: Unrated £m
		Risk Weight																
		0% £m	2% £m	4% £m	10% £m	20% £m	35% £m	50% £m	70% £m	75% £m	100% £m	150% £m	250% £m	370% £m	1250% £m	Others £m		
1	Central governments or central banks	76,660	–	–	–	41	–	–	–	–	–	–	–	–	–	–	76,701	76,701
2	Regional government or local authorities	–	–	–	–	5	–	–	–	–	–	–	–	–	–	–	5	5
3	Public sector entities	–	–	–	–	–	–	–	–	–	21	–	–	–	–	–	21	21
4	Multilateral development banks	1,837	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1,837	1,837
5	International organisations	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
6	Institutions	29	–	–	–	100	–	16	–	–	4	–	–	–	–	–	149	59
7	Corporates	–	–	–	–	217	–	1,805	–	–	10,248	–	–	–	–	–	12,271	10,187
8	Retail	–	–	–	–	–	–	–	–	12,819	–	–	–	–	–	–	12,819	12,819
9	Secured by mortgages on immovable property	–	–	–	–	–	4,695	183	–	260	14	–	–	–	–	–	5,153	5,153
	of which: residential property	–	–	–	–	–	4,695	183	–	260	12	–	–	–	–	–	5,151	5,151
	of which: commercial property	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–	2	2
10	Exposures in default	–	–	–	–	–	–	–	–	–	510	170	–	–	–	–	680	680
11	Items associated with particularly high risk	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12	Covered bonds	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
13	Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
14	Collective investment undertakings	–	–	–	–	278	–	–	–	–	–	–	–	–	–	–	278	–
15	Equity	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16	Other items	195	–	–	–	807	–	–	–	–	2,111	–	–	–	–	–	3,114	3,114
17	Total	78,721	–	–	–	1,448	4,695	2,005	–	13,080	12,908	170	–	–	–	–	113,028	110,576

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF CREDIT RISK EXPOSURES BY GEOGRAPHY

Credit risk exposures as at 31 December 2018, analysed by geographical region, based on country of residence/incorporation of the customers, are provided in the table below. Exposures are presented on a pre CRM and post CCF basis.

Table 36: Geographical breakdown of exposures (CRB-C)

	2018 United Kingdom £m	2018 Rest of Europe £m	2018 United States of America £m	2018 Asia-Pacific £m	2018 Other £m	2018 Total £m
Central governments or central banks	433	–	11,625	–	377	12,435
Institutions	2,534	676	435	974	1,335	5,954
Corporates	78,844	11,373	9,923	475	2,752	103,367
of which: Specialised lending	13,294	2,062	370	1	622	16,351
of which: SMEs	11,552	30	–	–	56	11,638
Retail	380,467	7,319	–	1	6	387,793
Secured by real estate property	320,539	7,255	–	1	5	327,800
SMEs	9,192	6	–	1	5	9,204
Non-SMEs	311,348	7,249	–	–	–	318,596
Qualifying revolving	38,342	–	–	–	–	38,342
Other retail	21,586	64	–	–	1	21,651
SMEs	2,234	–	–	–	1	2,234
Non-SMEs	19,353	64	–	–	–	19,417
Equity	2,367	64	268	1	–	2,700
Non-credit obligation assets	9,919	15	–	–	–	9,933
Total IRB approach	474,564	19,447	22,251	1,450	4,470	522,181
Central governments or central banks	51,506	9,903	–	–	19	61,428
Regional governments or local authorities	5	–	–	–	–	5
Public sector entities	21	–	–	–	–	21
Multilateral development banks	–	–	–	–	2,974	2,974
International organisations	–	–	–	–	–	–
Institutions	42	82	36	–	–	161
Corporates	7,067	1,674	1,720	532	317	11,310
Retail	11,664	617	2	7	5	12,294
Secured by mortgages on immovable property	3,736	221	76	362	109	4,505
Exposures in default	687	35	5	11	904	1,642
Items associated with particularly high risk	–	–	–	–	–	–
Covered bonds	–	–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–
Collective investments undertakings	716	–	–	–	–	716
Equity exposures	–	–	–	–	–	–
Other exposures	3,522	92	–	5	62	3,680
Total standardised approach	78,965	12,624	1,840	917	4,390	98,736
Total	553,529	32,070	24,091	2,367	8,860	620,917

Pillar 1 Capital requirements: Credit risk continued

	2017 United Kingdom £m	2017 Rest of Europe £m	2017 United States of America £m	2017 Asia-Pacific £m	2017 Other £m	2017 Total £m
Central governments or central banks	50	–	17,468	–	204	17,722
Institutions	1,551	893	419	585	724	4,173
Corporates	76,554	12,022	11,366	436	3,329	103,708
of which: Specialised lending	12,974	2,131	420	104	966	16,596
of which: SMEs	11,510	29	–	–	123	11,662
Retail	384,607	10,074	–	1	4	394,687
Secured by real estate property	324,338	10,016	–	1	4	334,359
SMEs	9,760	4	–	1	4	9,769
Non-SMEs	314,578	10,013	–	–	–	324,590
Qualifying revolving	40,285	–	–	–	–	40,285
Other retail	19,984	58	–	–	–	20,043
SMEs	2,199	–	–	–	–	2,200
Non-SMEs	17,785	58	–	–	–	17,843
Equity	3,151	184	13	6	–	3,355
Non-credit obligation assets	10,181	27	–	–	–	10,208
Total IRB approach	476,094	23,201	29,267	1,028	4,261	533,852
Central governments or central banks	61,815	14,582	–	–	41	76,438
Regional governments or local authorities	5	–	–	–	–	5
Public sector entities	21	–	–	–	–	21
Multilateral development banks	–	–	–	–	1,837	1,837
International organisations	–	–	–	–	–	–
Institutions	85	50	49	–	4	189
Corporates	7,427	1,527	2,225	381	1,165	12,724
Retail	11,342	1,463	2	7	6	12,819
Secured by mortgages on immovable property	4,296	241	84	408	124	5,153
Exposures in default	571	85	5	9	11	681
Items associated with particularly high risk	–	–	–	–	–	–
Covered bonds	–	–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–
Collective investments undertakings	278	–	–	–	–	278
Equity exposures	–	–	–	–	–	–
Other exposures	2,957	64	15	5	73	3,114
Total standardised approach	88,797	18,011	2,379	810	3,261	113,259
Total	564,892	41,213	31,647	1,838	7,522	647,111

Pillar 1 Capital requirements: Credit risk continued

Exposures in the table below are presented are on a pre CRM and post CCF basis.

Table 37: Exposures subject to the IRB approach analysed by geographical region

	2018 United Kingdom			2018 Rest of Europe			2018 United States of America			2018 Asia-Pacific			2018 Other			2018 Total		
	EAD pre CRM and post CCF £m	LGD %	PD %	EAD pre CRM and post CCF £m	LGD %	PD %	EAD pre CRM and post CCF £m	LGD %	PD %	EAD pre CRM and post CCF £m	LGD %	PD %	EAD pre CRM and post CCF £m	LGD %	PD %	EAD pre CRM and post CCF £m	LGD %	PD %
Exposures subject to the IRB approach																		
<i>Foundation IRB approach</i>																		
Central governments or central banks	433		0.03%	–		–	11,625		0.01%	–		–	377		0.01%	12,435		0.01%
Institutions	2,534		0.13%	676		0.30%	435		0.11%	974		0.29%	1,335		0.17%	5,954		0.18%
Corporate – main	53,997		2.51%	9,280		0.28%	9,553		0.20%	474		0.16%	2,074		0.40%	75,378		1.88%
Corporate – SME	11,552		4.65%	30		1.35%	–		–	–		–	56		0.72%	11,638		4.62%
Corporate – specialised lending ¹	3		1.42%	–		–	–		–	–		–	–		–	3		1.42%
Total – Foundation IRB approach	68,520		2.78%	9,986		0.29%	21,613		0.09%	1,448		0.25%	3,842		0.30%	105,408		1.87%
<i>Retail IRB approach</i>																		
Retail mortgages	320,539	10.49%	2.34%	7,255	16.68%	1.07%	–	–	–	1	12.17%	4.80%	5	13.03%	6.99%	327,800	10.63%	2.31%
of which: residential mortgages (SME)	9,192	17.00%	4.22%	6	12.47%	1.84%	–	–	–	1	12.17%	4.80%	5	13.03%	6.99%	9,204	17.00%	4.22%
of which: residential mortgages (non-SME)	311,348	10.30%	2.28%	7,249	16.68%	1.07%	–	–	–	–	–	–	–	–	–	318,596	10.45%	2.25%
Qualifying revolving retail exposures	38,342	71.39%	2.46%	–	–	–	–	–	–	–	–	–	–	–	–	38,342	71.39%	2.46%
Other SME	2,234	72.64%	11.76%	–	–	–	–	–	–	–	–	–	1	75.62%	0.57%	2,234	72.64%	11.76%
Other non-SME	19,353	54.11%	3.94%	64	40.28%	1.76%	–	–	–	–	–	–	–	–	–	19,417	54.06%	3.93%
Total – Retail IRB approach	380,467	19.21%	2.49%	7,319	16.89%	1.08%	–	–	–	1	12.17%	4.80%	6	18.73%	6.41%	387,793	19.17%	2.46%
	2017 United Kingdom			2017 Rest of Europe			2017 United States of America			2017 Asia-Pacific			2017 Other			2017 Total		
	EAD pre CRM and post CCF £m	LGD %	PD %	EAD pre CRM and post CCF £m	LGD %	PD %	EAD pre CRM and post CCF £m	LGD %	PD %	EAD pre CRM and post CCF £m	LGD %	PD %	EAD pre CRM and post CCF £m	LGD %	PD %	EAD pre CRM and post CCF £m	LGD %	PD %
Exposures subject to the IRB approach																		
<i>Foundation IRB approach</i>																		
Central governments or central banks	50		0.01%	–		–	17,468		0.01%	–		–	204		0.01%	17,722		0.01%
Institutions	1,551		0.14%	893		0.13%	419		0.06%	585		4.89%	724		0.22%	4,173		0.68%
Corporate – main	52,070		2.52%	9,862		0.53%	10,946		0.34%	332		0.28%	2,240		0.24%	75,450		1.86%
Corporate – SME	11,510		5.64%	29		1.16%	–		–	–		–	123		0.29%	11,662		5.57%
Corporate – specialised lending ¹	1		45.24%	–		–	–		–	–		–	–		–	1		45.24%
Total – Foundation IRB approach	65,182		3.02%	10,784		0.50%	28,834		0.13%	917		3.22%	3,291		0.22%	109,008		1.90%
<i>Retail IRB approach</i>																		
Retail mortgages	324,338	10.41%	2.40%	10,016	29.86%	4.28%	–	–	–	1	10.82%	1.01%	4	12.59%	1.36%	334,359	10.99%	2.46%
of which: residential mortgages (SME)	9,760	16.69%	4.17%	4	11.71%	1.33%	–	–	–	1	10.82%	1.01%	4	12.59%	1.36%	9,769	16.69%	4.17%
of which: residential mortgages (non-SME)	314,578	10.21%	2.34%	10,013	29.86%	4.28%	–	–	–	–	–	–	–	–	–	324,590	10.82%	2.40%
Qualifying revolving retail exposures	40,285	73.07%	2.34%	–	–	–	–	–	–	–	–	–	–	–	–	40,285	73.07%	2.34%
Other SME	2,200	71.24%	12.78%	–	–	–	–	–	–	–	–	–	–	–	–	2,200	71.24%	12.78%
Other non-SME	17,785	56.23%	4.23%	58	40.25%	1.09%	–	–	–	–	–	–	–	–	–	17,843	56.18%	4.22%
Total – Retail IRB approach	384,607	19.44%	2.54%	10,074	29.92%	4.26%	–	–	–	1	10.82%	1.01%	4	12.59%	1.36%	394,687	19.71%	2.58%

1 Corporate-specialised lending includes those exposures subject to the Foundation IRB approach only and does not include exposures subject to supervisory slotting (refer to Table 32A on page 59).

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF CREDIT RISK EXPOSURES BY INDUSTRY

Credit risk exposures as at 31 December 2018, analysed by major industrial sector, are provided in the table below. Exposures are presented are on a pre CRM and post CCF basis.

Table 38: Concentration of exposures by industry (CRB-D)

	2018 Agriculture, forestry and fishing £m	2018 Energy and water supply £m	2018 Manufacturing £m	2018 Construction £m	2018 Transport, distribution and hotels £m	2018 Postal and comms £m	2018 Property companies £m	2018 Financial, business and other services £m	2018 Personal: mortgages £m	2018 Personal: other £m	2018 Lease financing £m	2018 Hire purchase £m	2018 Total £m
Central governments or central banks	–	–	–	–	–	–	–	12,435	–	–	–	–	12,435
Institutions	–	–	–	–	–	–	–	5,808	–	–	73	73	5,954
Corporates	1,482	3,950	12,051	4,477	16,440	1,504	24,312	34,001	–	–	2,104	3,046	103,367
of which: Specialised lending	10	954	304	152	1,145	140	12,661	687	–	–	299	–	16,351
of which: SMEs	1,248	60	1,429	554	2,616	56	1,628	3,645	–	–	35	367	11,638
Retail	1,637	7	492	595	2,032	37	4,054	2,580	318,596	46,582	–	11,181	387,793
Secured by real estate property	1,435	5	326	282	1,513	23	3,820	1,799	318,596	1	–	–	327,800
SMEs	1,435	5	326	282	1,513	23	3,820	1,799	–	1	–	–	9,204
Non-SMEs	–	–	–	–	–	–	–	–	318,596	–	–	–	318,596
Qualifying revolving	–	–	–	–	–	–	–	–	–	38,342	–	–	38,342
Other retail	202	2	166	313	519	14	233	781	–	8,239	–	11,181	21,651
SMEs	202	2	166	313	519	14	233	781	–	3	–	–	2,234
Non-SMEs	–	–	–	–	–	–	–	–	–	8,236	–	11,181	19,417
Equity	–	–	370	106	281	307	68	1,568	–	–	–	–	2,700
Non-credit obligation assets													9,933
Total IRB approach	3,119	3,956	12,913	5,178	18,752	1,848	28,434	56,392	318,596	46,582	2,177	14,300	522,181
Central governments or central banks	–	–	–	–	–	–	–	61,380	–	–	47	1	61,428
Regional governments or local authorities	–	–	–	–	–	–	–	5	–	–	–	–	5
Public sector entities	–	–	–	–	–	–	–	21	–	–	–	–	21
Multilateral development banks	–	–	–	–	–	–	–	2,974	–	–	–	–	2,974
International organisations	–	–	–	–	–	–	–	–	–	–	–	–	–
Institutions	–	–	–	–	–	–	–	155	–	–	5	–	161
Corporates	2,128	345	1,485	91	2,318	320	962	3,176	4	179	242	59	11,310
Retail	1,293	4	17	18	128	1	202	168	107	9,307	248	801	12,294
Secured by mortgages on immovable property	–	–	–	–	–	–	1	3	4,500	–	–	–	4,505
Exposures in default	36	–	3	7	914	–	33	23	433	190	1	3	1,642
Items associated with particularly high risk	–	–	–	–	–	–	–	–	–	–	–	–	–
Covered bonds	–	–	–	–	–	–	–	–	–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–	–	–	–	–	–	–	–
Collective investments undertakings	–	–	–	–	–	–	–	716	–	–	–	–	716
Equity exposures	–	–	–	–	–	–	–	–	–	–	–	–	–
Other exposures													3,680
Total standardised approach	3,457	349	1,505	116	3,361	321	1,198	68,622	5,044	9,676	543	864	98,736
Total	6,577	4,305	14,419	5,295	22,113	2,168	29,631	125,014	323,640	56,258	2,720	15,164	620,917

Pillar 1 Capital requirements: Credit risk continued

	2017 Agriculture, forestry and fishing £m	2017 Energy and water supply £m	2017 Manufacturing £m	2017 Construction £m	2017 Transport, distribution and hotels £m	2017 Postal and comms £m	2017 Property companies £m	2017 Financial, business and other services £m	2017 Personal: mortgages £m	2017 Personal: other £m	2017 Lease financing £m	2017 Hire purchase £m	2017 Total £m
Central governments or central banks	–	–	–	–	–	–	–	17,722	–	–	–	–	17,722
Institutions	–	–	–	–	–	–	–	4,064	–	–	60	49	4,173
Corporates	1,433	3,777	12,396	4,489	16,187	1,570	24,372	34,038	–	–	2,584	2,862	103,708
of which: Specialised lending	10	1,092	234	160	982	121	13,296	308	–	–	392	–	16,596
of which: SMEs	1,203	39	1,420	538	2,524	71	1,888	3,591	–	–	37	352	11,662
Retail	1,672	10	514	614	2,127	41	4,358	2,629	324,590	48,396	–	9,736	394,687
Secured by real estate property	1,475	8	344	312	1,619	27	4,108	1,875	324,590	1	–	–	334,359
SMEs	1,475	8	344	312	1,619	27	4,108	1,875	–	1	–	–	9,769
Non-SMEs	–	–	–	–	–	–	–	–	324,590	–	–	–	324,590
Qualifying revolving	–	–	–	–	–	–	–	–	–	40,285	–	–	40,285
Other retail	197	1	171	301	509	14	250	754	–	8,110	–	9,736	20,043
SMEs	197	1	171	301	509	14	250	754	–	3	–	–	2,200
Non-SMEs	–	–	–	–	–	–	–	–	–	8,107	–	9,736	17,843
Equity	–	33	315	93	253	321	91	2,249	–	–	–	–	3,355
Non-credit obligation assets													10,208
Total IRB approach	3,105	3,819	13,226	5,195	18,567	1,932	28,820	60,702	324,590	48,397	2,644	12,648	533,852
Central governments or central banks	–	–	–	–	–	–	–	76,412	–	–	26	–	76,438
Regional governments or local authorities	–	–	–	–	–	–	–	5	–	–	–	–	5
Public sector entities	–	–	–	–	–	–	–	21	–	–	–	–	21
Multilateral development banks	–	–	–	–	–	–	–	1,837	–	–	–	–	1,837
International organisations	–	–	–	–	–	–	–	–	–	–	–	–	–
Institutions	–	–	–	–	1	–	–	184	–	–	4	–	189
Corporates	1,837	305	1,472	105	3,391	141	1,033	3,632	60	412	282	55	12,724
Retail	1,158	4	21	22	154	1	224	207	1,038	9,144	264	583	12,819
Secured by mortgages on immovable property	–	–	–	–	–	–	4	276	4,872	–	–	–	5,153
Exposures in default	38	–	5	1	8	–	65	22	447	92	1	2	681
Items associated with particularly high risk	–	–	–	–	–	–	–	–	–	–	–	–	–
Covered bonds	–	–	–	–	–	–	–	–	–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–	–	–	–	–	–	–	–
Collective investments undertakings	–	–	–	–	–	–	–	278	–	–	–	–	278
Equity exposures	–	–	–	–	–	–	–	–	–	–	–	–	–
Other exposures													3,114
Total standardised approach	3,033	309	1,498	128	3,553	142	1,326	82,874	6,416	9,649	578	639	113,259
Total	6,138	4,128	14,724	5,323	22,120	2,074	30,146	143,576	331,006	58,045	3,222	13,287	647,111

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF CREDIT RISK EXPOSURES BY RESIDUAL MATURITY

Credit risk exposures at 31 December 2018, analysed by residual maturity, are provided in the table below. Exposures are presented on a pre CRM and post CCF basis.

Table 39: Maturity of exposures (CRB-E)

	2018					
	Net exposure value					
	On demand £m	<= 1 year £m	> 1 year <= 5 years £m	> 5 years £m	No stated maturity £m	Total £m
Central governments or central banks	–	8,660	1,731	2,044	–	12,435
Institutions	1,442	2,905	1,514	92	–	5,954
Corporates	7,181	27,701	51,156	17,328	–	103,367
of which: Specialised lending	193	3,165	8,532	4,461	–	16,351
of which: SMEs	916	3,708	2,887	4,128	–	11,638
Retail	40,103	17,969	35,732	293,989	–	387,793
Secured by real estate property	1,616	14,659	19,702	291,822	–	327,800
SMEs	218	1,247	741	6,998	–	9,204
Non-SMEs	1,398	13,413	18,961	284,825	–	318,596
Qualifying revolving	38,342	–	–	–	–	38,342
Other retail	145	3,309	16,030	2,167	–	21,651
SMEs	124	1,101	239	770	–	2,234
Non-SMEs	21	2,208	15,790	1,397	–	19,417
Equity	–	–	–	–	2,700	2,700
Non-credit obligation assets	1,562	1,093	1,897	71	5,310	9,933
Total IRB approach	50,289	58,327	92,030	313,525	8,009	522,181
Central governments or central banks	30,021	15,567	10,353	5,486	–	61,428
Regional governments or local authorities	–	–	–	5	–	5
Public sector entities	–	–	20	1	–	21
Multilateral development banks	–	394	1,369	1,211	–	2,974
International organisations	–	–	–	–	–	–
Institutions	31	64	66	–	–	161
Corporates	862	2,258	3,422	4,769	–	11,310
Retail	8,523	258	1,781	1,732	–	12,294
Secured by mortgages on immovable property	704	129	606	3,065	–	4,505
Exposures in default	112	944	108	478	–	1,642
Items associated with particularly high risk	–	–	–	–	–	–
Covered bonds	–	–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–
Collective investments undertakings	–	–	–	–	716	716
Equity exposures	–	–	–	–	–	–
Other exposures	165	147	585	304	2,480	3,680
Total standardised approach	40,419	19,761	18,310	17,051	3,195	98,736
Total	90,708	78,089	110,339	330,576	11,205	620,917

Pillar 1 Capital requirements: Credit risk continued

	2017					
	Net exposure value					Total £m
	On demand £m	<= 1 year £m	> 1 year <= 5 years £m	> 5 years £m	No stated maturity £m	
Central governments or central banks	–	8,493	4,625	4,604	–	17,722
Institutions	628	2,463	1,057	25	–	4,173
Corporates	7,506	25,727	51,337	19,138	–	103,708
of which: Specialised lending	208	2,661	8,615	5,112	–	16,596
of which: SMEs	976	3,801	2,681	4,204	–	11,662
Retail	41,865	18,663	34,418	299,742	–	394,687
Secured by real estate property	1,469	15,615	19,549	297,726	–	334,359
SMEs	223	1,544	1,105	6,897	–	9,769
Non-SMEs	1,246	14,071	18,445	290,828	–	324,590
Qualifying revolving	40,285	–	–	–	–	40,285
Other retail	111	3,047	14,869	2,016	–	20,043
SMEs	94	1,084	283	739	–	2,200
Non-SMEs	17	1,963	14,586	1,277	–	17,843
Equity	–	–	–	–	3,355	3,355
Non-credit obligation assets	1,646	872	2,192	132	5,367	10,208
Total IRB approach	51,644	56,217	93,629	323,640	8,722	533,852
Central governments or central banks	34,509	13,595	11,772	16,562	–	76,438
Regional governments or local authorities	–	–	–	5	–	5
Public sector entities	–	–	20	1	–	21
Multilateral development banks	–	200	1,388	249	–	1,837
International organisations	–	–	–	–	–	–
Institutions	23	65	95	6	–	189
Corporates	1,326	3,156	3,121	5,123	–	12,724
Retail	8,327	157	1,795	2,541	–	12,819
Secured by mortgages on immovable property	665	154	547	3,787	–	5,153
Exposures in default	76	71	110	424	–	681
Items associated with particularly high risk	–	–	–	–	–	–
Covered bonds	–	–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–
Collective investments undertakings	–	–	–	–	278	278
Equity exposures	–	–	–	–	–	–
Other exposures	215	261	506	455	1,677	3,114
Total standardised approach	45,142	17,657	19,353	29,152	1,955	113,259
Total	96,786	73,875	112,982	352,792	10,677	647,111

Pillar 1 Capital requirements: Credit risk continued

IMPAIRMENT AND CREDIT QUALITY OF EXPOSURES

On 1st January 2018 the Group implemented IFRS 9 which addresses the impairment of financial assets and replaces the 'incurred loss' impairment approach with the 'expected credit loss' (ECL) approach. The implementation of IFRS 9 has required the Group to both adapt existing credit models and develop new models and supporting processes in order to calculate the expected credit loss allowance. IFRS 9 definition of default has been aligned to the regulatory definition of default except that the Group has made the decision to treat forborne non-performing past term interest only mortgages as credit impaired (Stage 3). Comparative information for 2017 is on IAS 39 basis.

Further details are provided in Note 2 (Accounting policies), Impairment of Financial assets and Note 3 (Critical accounting judgements and estimates), Allowance for Impairment losses on pages 180 and 181 and 185 to 187 respectively of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Tables below present analysis of credit risk exposures and credit risk adjustments analysed by regulatory exposure class, industry types and geography. Gross carrying value comprises both on and off-balance sheet exposures. Net values represent gross carrying values less specific credit risk adjustments (note, the Group does not recognise any general credit risk adjustments (GCRAs) as defined by the EBA).

Table 40: Credit quality of exposures by exposure class and instrument (CR1-A)

	2018					
	Gross carrying values of				Credit risk adjustment charges in the period £m	Net values £m
	Defaulted exposures £m	Non-defaulted exposures £m	Specific credit risk adjustment £m	General credit risk adjustment £m		
	a	b	c	d	f	g
Central governments or central banks	–	12,723	–	–	–	12,723
Institutions	2	6,515	1	–	(12)	6,516
Corporates	1,566	118,016	1,053	–	88	118,529
of which: Specialised lending	307	16,646	198	–	(2)	16,755
of which: SMEs	277	12,102	193	–	9	12,186
Retail	4,429	384,248	2,485	–	638	386,191
Secured by real estate property	3,575	310,530	1,471	–	41	312,634
SMEs	170	9,051	99	–	10	9,122
Non-SMEs	3,405	301,479	1,372	–	31	303,511
Qualifying revolving	378	52,598	467	–	303	52,509
Other retail	477	21,120	548	–	293	21,049
SMEs	198	2,036	58	–	11	2,176
Non-SMEs	279	19,084	490	–	282	18,873
Equity	–	2,700	–	–	–	2,700
Non-credit obligation assets	–	9,933	–	–	–	9,933
Total IRB approach	5,997	534,135	3,539	–	714	536,593
Central governments or central banks		61,429	–	–	–	61,429
Regional governments or local authorities		5	–	–	–	5
Public sector entities		41	–	–	–	41
Multilateral development banks		2,974	–	–	–	2,974
International organisations		–	–	–	–	–
Institutions		161	–	–	–	161
Corporates		16,716	26	–	4	16,690
of which: SMEs		3,754	5	–	–	3,749
Retail		32,679	248	–	186	32,430
of which: SMEs		2,423	5	–	–	2,418
Secured by mortgages on immovable property		4,543	34	–	1	4,510
of which: SMEs		11	–	–	–	11
Exposures in default ¹	1,981	–	314	–	31	1,668
Items associated with particularly high risk		–	–	–	–	–
Covered bonds		–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment		–	–	–	–	–
Collective investments undertakings		716	–	–	–	716
Equity exposures		–	–	–	–	–
Other exposures		3,680	–	–	–	3,680
Total standardised approach	1,981	122,944	622	–	223	124,303
Total	7,978	657,079	4,162	–	937	660,896
of which: Loans	7,710	421,821	3,915	–	1,009	425,616
of which: Debt securities	12	4,519	–	–	–	4,531
of which: Off-balance-sheet exposures	256	135,404	247	–	(72)	135,413

Pillar 1 Capital requirements: Credit risk continued

2017						
	Gross carrying values of		Specific credit risk adjustment £m	General credit risk adjustment £m	Credit risk adjustment charges in the period £m	Net values £m
	Defaulted exposures £m	Non-defaulted exposures £m				
	a	b	c	d	f	g
Central governments or central banks	–	17,722	–	–	–	17,722
Institutions	28	4,759	–	–	–	4,787
Corporates	1,993	117,752	847	–	92	118,898
of which: Specialised lending	524	16,569	166	–	(25)	16,927
of which: SMEs	428	11,981	115	–	(12)	12,294
Retail	4,995	387,600	2,093	–	563	390,502
Secured by real estate property	4,081	316,317	1,565	–	(22)	318,834
SMEs	180	9,606	25	–	7	9,761
Non-SMEs	3,901	306,711	1,540	–	(30)	309,072
Qualifying revolving	400	51,819	251	–	359	51,968
Other retail	514	19,463	277	–	226	19,700
SMEs	217	1,983	16	–	15	2,184
Non-SMEs	298	17,480	261	–	211	17,516
Equity	–	3,355	–	–	–	3,355
Non-credit obligation assets	–	10,231	–	–	–	10,231
Total IRB approach	7,017	541,418	2,940	–	655	545,494
Central governments or central banks		76,679	–	–	–	76,679
Regional governments or local authorities		5	–	–	–	5
Public sector entities		41	–	–	–	41
Multilateral development banks		1,837	–	–	–	1,837
International organisations		–	–	–	–	–
Institutions		383	–	–	–	383
Corporates		18,074	32	–	7	18,042
of which: SMEs		3,492	4	–	–	3,488
Retail		34,159	74	–	57	34,085
of which: SMEs		2,303	3	–	–	2,300
Secured by mortgages on immovable property		5,181	23	–	3	5,158
of which: SMEs		8	–	–	–	8
Exposures in default ¹	1,031	–	330	–	60	701
Items associated with particularly high risk		–	–	–	–	–
Covered bonds		–	–	–	–	–
Claims on institutions and corporates with a short-term credit assessment		–	–	–	–	–
Collective investments undertakings		278	–	–	–	278
Equity exposures		–	–	–	–	–
Other exposures		3,114	–	–	–	3,114
Total standardised approach	1,031	139,751	459	–	127	140,323
Total	8,048	681,169	3,400	–	782	685,817
of which: Loans	7,649	426,513	3,225	–	782	430,937
of which: Debt securities	40	3,459	–	–	–	3,499
of which: Off-balance-sheet exposures	359	135,492	175	–	–	135,677

1 The breakdown of 'exposures in default' by the exposure class that corresponds to the exposure before default, comprises Corporate £1,224m (2017: 319m) and Retail £757m (2017: £712m).

Pillar 1 Capital requirements: Credit risk continued

Table 41: Credit quality of exposures by industry types (CR1-B)

	2018					
	Gross carrying values of		Specific credit risk adjustment £m	General credit risk adjustment £m	Credit risk adjustment charges in the period £m	Net values £m
	Defaulted exposures £m	Non-defaulted exposures £m				
	a	b	c	d	f	g
Agriculture, forestry and fishing	160	6,788	53	–	(12)	6,896
Energy and water supply	–	5,434	9	–	(16)	5,426
Manufacturing	225	18,118	103	–	3	18,240
Construction	494	5,921	360	–	14	6,056
Transport, distribution and hotels	1,267	24,569	217	–	47	25,619
Postal and communications	3	2,691	2	–	(12)	2,692
Property companies	601	30,762	343	–	16	31,020
Financial, business and other services	351	145,077	265	–	87	145,163
Personal: mortgages	3,908	306,137	1,488	–	32	308,557
Personal: other	824	89,924	1,026	–	682	89,722
Lease financing	8	5,998	14	–	5	5,992
Hire purchase	138	15,659	282	–	91	15,514
Total	7,978	657,079	4,162	–	937	660,896

	2017					
	Gross carrying values of		Specific credit risk adjustment £m	General credit risk adjustment £m	Credit risk adjustment charges in the period £m	Net values £m
	Defaulted exposures £m	Non-defaulted exposures £m				
	a	b	c	d	f	g
Agriculture, forestry and fishing	143	6,302	18	–	2	6,426
Energy and water supply	1	5,078	5	–	–	5,073
Manufacturing	284	17,980	111	–	5	18,153
Construction	551	5,808	251	–	85	6,108
Transport, distribution and hotels	280	26,322	102	–	(19)	26,500
Postal and communications	4	2,404	3	–	1	2,405
Property companies	995	30,686	343	–	(7)	31,338
Financial, business and other services	433	160,966	204	–	42	161,196
Personal: mortgages	4,471	313,103	1,678	–	(34)	315,896
Personal: other	765	91,897	513	–	596	92,149
Lease financing	8	6,867	2	–	–	6,873
Hire purchase	114	13,756	171	–	111	13,699
Total	8,048	681,169	3,400	–	782	685,817

Pillar 1 Capital requirements: Credit risk continued

Table 42: Credit quality of exposures by geography (CR1-C)

	2018					
	Gross carrying values of		Specific credit risk adjustment £m	General credit risk adjustment £m	Credit risk adjustment charges in the period £m	Net values £m
	Defaulted exposures £m	Non-defaulted exposures £m				
	a	b	c	d	f	g
United Kingdom	6,823	583,449	3,984	–	955	586,289
Rest of Europe	127	35,060	89	–	(4)	35,099
United States of America	22	27,809	20	–	(12)	27,811
Asia-Pacific	16	2,295	6	–	(1)	2,305
Other	989	8,466	64	–	(1)	9,392
Total	7,978	657,079	4,162	–	937	660,896

	2017					
	Gross carrying values of		Specific credit risk adjustment £m	General credit risk adjustment £m	Credit risk adjustment charges in the period £m	Net values £m
	Defaulted exposures £m	Non-defaulted exposures £m				
	a	b	c	d	f	g
United Kingdom	7,354	590,813	3,097	–	802	595,071
Rest of Europe	541	44,204	227	–	(19)	44,519
United States of America	78	35,861	51	–	(2)	35,888
Asia-Pacific	39	2,079	4	–	(2)	2,115
Other	36	8,211	21	–	3	8,225
Total	8,048	681,169	3,400	–	782	685,817

Pillar 1 Capital requirements: Credit risk continued

ANALYSIS OF PAST DUE, NON-PERFORMING AND FORBORNE EXPOSURES

Exposures are treated as past due when a counterparty has failed to make payment when contractually due. Detail on past due exposures within Stage 2 is included on page 122 in the 2018 Lloyds Banking Group plc Annual Report and Accounts (note, assets are transferred to Stage 2 after there has been a significant increase in credit risk).

Non-performing exposures included in the tables below are subject to the FINREP regulations (Annex V) and are therefore different from the Stage 3 exposures (assets are transferred to Stage 3 if defaulted or are otherwise considered to be credit impaired).

Table 43: Ageing of performing and non-performing exposures (CR1-D hybrid)

		2018					
		Gross carrying values					
		Performing		Non-performing			
		Not past due or Past due ≤ 30 days £m	Past due > 30 days ≤ 90 days	Unlikely to pay that are not past-due or past-due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year
		b, c			d	e	f
1	Loans	532,440	2,302	5,896	1,941	1,412	2,346
2	Debt securities	7,558	–	–	–	–	12
3	Total exposures	539,998	2,302	5,896	1,941	1,412	2,358

		2017					
		Gross carrying values					
		Performing		Non-performing			
		Not past due or Past due ≤ 30 days £m	Past due > 30 days ≤ 90 days ¹	Unlikely to pay that are not past- due or past-due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year
		b, c			d	e	f
1	Loans	511,444	2,085	6,102	2,158	1,800	2,832
2	Debt securities	4,172	–	–	–	–	40
3	Total exposures	515,616	2,085	6,102	2,158	1,800	2,872

1 Restated.

Pillar 1 Capital requirements: Credit risk continued

Table 44: Non-performing and forborne exposures (CR1-E)

2018																			
		Gross carrying amount of performing and non-performing exposures						Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received							
								on performing exposures		on non-performing exposures									
		of which performing but past due >30 days and <=90 days		of which non-performing										of which: defaulted		of which: impaired		of which: forborne	
		£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
		a	b	c	d	e	f	g	h	i	j	k	l	m					
1	Debt securities	7,571	–	–	12	12	12	12	(1)	(1)	(5)	(5)	–	–					
2	Loans and advances	546,336	2,302	3,127	11,595	7,756	8,660	7,723	(1,510)	(65)	(1,642)	(1,247)	8,234	7,008					
3	Off balance sheet exposures	137,107	–	457	416	312	–	324	(198)	(1)	(3)	(1)	–	–					
2017																			
		Gross carrying amount of performing and non-performing exposures						Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received							
								on performing exposures		on non-performing exposures									
		of which performing but past due >30 days and <=90 days		of which non-performing										of which: defaulted		of which: impaired		of which: forborne	
		£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
		a	b	c	d	e	f	g	h	i	j	k	l	m					
1	Debt securities	4,212	–	–	40	40	40	40	–	–	(26)	(26)	–	–					
2	Loans and advances	526,421	2,086	3,395	12,891	7,994	7,790	8,467	(485)	(259)	(1,716)	(1,279)	9,028	8,482					
3	Off balance sheet exposures	132,759	–	139	360	260	–	264	–	–	–	–	–	–					

COMPARISON OF EXPECTED LOSSES TO SPECIFIC CREDIT RISK ADJUSTMENTS

The table on page 76 provides a comparison of regulatory ELs to SCRAAs (accounting impairment provisions) on loans and receivables, in respect of credit risk exposures subject to the IRB Approach.

The treatment of regulatory ELs is covered on page 13.

Further details on accounting expected credit losses (ECLs) can be found in the 2018 Lloyds Banking Group plc Annual Report and Accounts: Notes 2(H) and 3 on pages 180 to 181 and 185 to 188.

Although the regulatory EL and accounting ECL are both forward looking measures, there are some key differences in the parameters applied when determining expected losses, in particular:

- Regulatory EL calculations are predicated on loss estimates over a 12 month time horizon. Under the accounting ECL model Stage 1 assets are also predicated on 12 month losses whereas assets classified as Stage 2 and Stage 3 carry an ECL allowance equivalent to the expected credit losses arising over the lifetime of the asset (lifetime expected credit losses).
- Regulatory ELs are based on TTC or PiT probability estimates that utilise historic default experience, whereas accounting ECLs are based on probability-weighted PiT measures reflecting a range of possible future economic scenarios.
- Regulatory ELs apply downturn LGD parameters whereas LGDs applied in the calculation of accounting ECLs also consider a range of possible future economic scenarios.
- Regulatory ELs under the Foundation IRB Approach use LGD that are set by the regulator. The LGD used in the accounting ECL calculation is modelled.

Pillar 1 Capital requirements: Credit risk continued

Table 45: Regulatory expected losses and specific credit risk adjustments

In comparing regulatory ELs to the accounting ECLs, consideration of the above should be taken into account. Where ELs exceed SCRA linked to the underlying credit risk exposures the resultant excess expected loss (EEL) is deducted from capital resources. Where SCRA exceeds ELs, a 'surplus provision' may be recognised in tier 2 capital subject to certain restrictions.

	2018 Regulatory expected losses £m	2018 Specific credit risk adjustments £m	2018 Excess expected losses £m	2017 Regulatory expected losses £m	2017 Specific credit risk adjustments £m	2017 Excess expected losses £m	2016 Regulatory expected losses £m	2016 Specific credit risk adjustments £m	2016 Excess expected losses £m
CREDIT RISK									
Foundation IRB approach									
Central governments or central banks	1	–	1	1	–	1	1	–	1
Institutions	5	1	4	15	–	15	21	13	8
Corporates	814	855	(41)	861	682	179	884	632	252
Retail IRB approach									
Residential mortgages	882	1,471	(589)	954	1,474	(520)	880	1,543	(663)
QRRE	605	467	138	628	251	378	640	241	399
Other SME	80	58	22	78	16	62	78	13	65
Other non-SME	398	490	(92)	400	261	139	384	201	183
Other IRB approaches									
Corporate – specialised lending	249	198	51	364	166	198	632	381	251
Counterparty credit risk	38	–	38	53	–	53	64	–	64
	3,070	3,539	(469)	3,353	2,849	504	3,583	3,023	560
Fair value adjustments ¹					91			177	
Total prior to additional adjustments	3,070	3,539	(469)	3,353	2,940	413	3,583	3,201	382
Other adjustments ²			(37)			53			186
Total excess expected losses/ (eligible provisions)			(506)³			466			568
Expected loss on equity exposures ⁴	27		27	31		31	34		34
Negative amounts resulting from the calculation of expected loss amounts			27			498			602
Reconciliation of SCRA to statutory consolidated balance sheet allowance for impairment losses on loans and receivables									
Total SCRA applied against expected losses			3,539			2,940			3,201
SCRA applied to Standardised Approach exposures			622			459			420
Acquisition related and other adjustments ⁵			(799)			(1,172)			(1,133)
Total per statutory consolidated balance sheet			3,362			2,227			2,488

1 The calculation of EEL amounts, where regulatory ELs are netted against SCRA on IRB portfolios, is subject to the application of acquisition related fair value adjustments (not applicable post implementation of IFRS 9).

2 Other adjustments include an increase for SCRA in excess of EL on defaulted exposures which, under CRD IV, may not be offset against non-defaulted EEL, and prudent valuation adjustments.

3 As a consequence of applying IFRS 9 transitional relief to CET 1 capital, adjustments require to be applied to eligible provisions recognised through tier 2 capital where these provisions relate to the same IFRS 9 expected credit losses that have effectively been removed from the calculation of CET 1 capital by virtue of applying the transitional relief. As at 31 December 2018 the consequential adjustment applied to tier 2 eligible provisions reflects the 'static' adjustment arising under the transitional arrangements on 1 January 2018. As expected credit losses, and the resultant increase in the level of tier 2 eligible provisions, were higher for IRB exposures at 1 January 2018 compared to 31 December 2018, the application of the 'static' consequential adjustment to tier 2 eligible provisions at 31 December 2018 has resulted in no eligible provisions being recognised. Also refer to Table 78.

4 Expected losses arising on equity exposures subject to the simple risk weight method require to be excluded from both the calculation of excess expected losses per CRR Article 159 and the calculation of IFRS 9 transitional relief per CRR Article 473a.

5 Includes the impact of HBOS and MBNA acquisition related adjustments.

Pillar 1 Capital requirements: Credit risk continued

Key movements (2018)

Note SCRA in 2018 are quoted post the impact of IFRS 9. In 2017 SCRA were calculated on IAS 39 basis.

FIRB Corporates

- The expected loss reduction is primarily driven by lower defaulted exposures, with the SCRA increase of £0.2bn mainly a result of the impact of IFRS 9.

Retail IRB Residential Mortgages

- SCRA are stable year on year as an increase in SCRA as a result of the impact of IFRS 9 is offset by the sale of the Irish mortgage portfolio.

QRRE & Other Retail IRB:

- Increases in SCRA are due to the impact of IFRS 9.

Specialised Lending

- The expected loss reduction of £0.1bn is driven by lower defaulted exposures with the SCRA increase a result of the impact of IFRS 9.

Key movements (2017)

Retail IRB Residential Mortgages

- The expected loss increase is driven by PRA approved model changes offset by favourable House Price Index (HPI). The group continues to maintain a prudent provisioning policy and this has resulted in SCRA exceeding regulatory ELs.

Other Retail IRB

- In line with the requirements of the CRR, Retail IRB LGD models are based on 'downturn' conditions, resulting in regulatory ELs being in excess of PiT SCRA. Growth in the UK Motor Finance business and PRA approved model changes, partially offset by continued improvements in credit quality, have driven an increase in regulatory ELs for these portfolios. Other non-SME SCRA have increased due to portfolio growth and increased provisions for residual value risks reflecting a more conservative outlook on used car prices.

Specialised Lending

- The expected loss reduction of £0.3bn to £0.4bn and the SCRA reduction of £0.2bn to £0.2bn are primarily driven by active portfolio management.

Other adjustments

- Other adjustments have decreased by £0.1bn due to lower surplus SCRA of defaulted exposures and an updated assessment of prudent valuation adjustment.

Pillar 1 Capital requirements: Credit risk – securitisation

This section details Lloyds Banking Group’s securitisation profile.

- The Group operates in the securitisation market in the following capacity:
 - As an originator, sponsor of an asset-backed commercial paper (ABCP) conduit and as an arranger of and an investor in third party securitisations.
 - As a provider of liquidity and funding facilities to own originated and sponsored positions as well as to third parties.
 - It also holds a small portfolio of ABS trading book securitisation positions.
- Securitisations represent a small proportion (2.2%) (2017: 2.0%) of the Group’s total risk-weighted assets
- Banking book securitisation exposures increased £1.1bn and RWAs £0.1bn in the year primarily as a result of a new originated securitisation transaction, a net increase in liquidity facilities provided to the ABCP conduit and new facilities provided to third party clients. This was offset by maturities, terminations and amortisations.

% Exposure by securitisation type



% Risk-weighted assets by securitisation type



Pillar 1 Capital requirements: Credit risk – securitisation continued

The Group is an active participant in the securitisation market, operating as an originator, a sponsor of an asset-backed commercial paper conduit and as an arranger of and an investor in third party securitisations. The Group also provides liquidity and funding facilities to both own originated and sponsored securitisations as well as to third parties. In addition, the Group also holds a small portfolio of ABS trading book securitisation positions.

Banking book securitisation strategy and roles

The Group's objectives in relation to banking book securitisations are to manage risk concentrations in its balance sheet, to support relationships with customers and to manage its funding requirements and capital position. It undertakes the following roles to meet these objectives:

As an originator the Group uses securitisation as a means of managing its balance sheet. Although primarily a funding tool, the Group also uses originated securitisations to generate capital efficiencies through the use of synthetic loan securitisations which involve the use of credit derivatives.

Traditional originated securitisation transactions typically involve the sale of a group or portfolio of ring fenced loans to a structured entity (SE). A SE is a purposely created company within a group of companies where the ultimate holding company of the group is unrelated to the originator and is usually held by a trust. This means the Group does not legally own the SE. The originating Group company receives fees from the SE for continuing to service the loans and undertaking certain cash management activities on behalf of the SE. Traditional securitisations are typically funding driven transactions where the most junior tranches are retained by the Group meaning there is effectively no significant risk transfer of credit risk away from the Group. Instead the vehicle serves as a diverse source of funding for the Group.

Synthetic originated securitisations work in a similar way to the traditional version except that the economic risk of the assets is transferred using credit derivatives with the Group retaining the risk on the senior tranches.

Where capital efficiency is sought, a test of significant risk transfer (SRT) is required. Passing the test allows the capital required on the underlying exposures to be replaced by the lower capital requirements of the retained positions in the securitisation.

Origination activities mainly extend to the Group's retail and commercial lending portfolios.

As a sponsor the Group manages and supports, through the provision of liquidity facilities, an ABCP conduit (Cancara) that invests in client receivables. Liquidity facilities provided to Cancara are risk-weighted using the internal assessment approach (IAA). The Group also holds some commercial paper (CP) issued by Cancara.

All the external assets in Cancara are consolidated for accounting purposes in the Group's financial statements, following similar accounting policies to those established for originated securitisations.

As an investor the Group invests directly in third party ABS and notes and provides liquidity facilities to other third party securitisations. Invested securitisation positions are risk-weighted using the ratings based approach (RBA).

Trading book securitisation strategy and roles

The Group's ABS trading book consists primarily of investments in third party securitisation positions and to a lesser extent, in the Group's sponsored securitisations.

The main objectives of the ABS trading book are;

- to create a secondary market through normal market making activity for the Group's related issuance where the underlying loans or receivables are originated by the Group;
- to support the development of a third party securitisation debt capital market business that generates fees for the Group by normal market making activities; and
- to carry out normal market making activities in support of the Group's clients.

The key risks attached to the Group's holding of trading book securitisation positions include price risk, credit risk, event risk, interest rate fluctuations, moral hazard and servicer risk. Liquidity risk is considered to be low as the Group's ABS trading book is relatively small, with maximum holding period limits and with positions held for the short term.

The trading desk does not undertake origination activities and does not structure transactions, nor does it re-structure or re-securitise securitisations for the purposes of holding them on the trading book.

As the Group's portfolio of trading book securitisation positions is relatively small (£31m exposure, £3m risk-weighted assets) in the context of both the overall trading book and the Group's banking book securitisation positions, the Group has elected to provide only limited disclosure around its trading book securitisation positions as permitted by CRR Article 432 and in accordance with related EBA guidelines.

Pillar 1 Capital requirements: Credit risk – securitisation continued

Summary analysis

An analysis of securitisation exposures by book, type and risk weight approach, together with the associated capital requirement, is provided in the table below. In addition, the table provides an analysis of securitisation positions that have been deducted from capital.

Table 46: Summary of securitisation exposures and capital requirements

Securitisation type and risk weight approach	2018 Exposure value ¹ £m	2018 Risk-weighted assets ² £m	2018 Capital requirement £m	2018 Deduction from capital ³ £m	2017 Exposure value ¹ £m	2017 Risk-weighted assets ² £m	2017 Capital requirement £m	2017 Deduction from capital ³ £m
Originated:								
Ratings Based approach (RBA)	7,365	1,802	144	–	6,655	1,592	127	4
Standardised approach	937	209	17	–	1,067	244	20	–
Supervisory formula approach (SFA)	123	72	6	–	72	46	4	–
Sponsored and invested:								
Internal assessment approach (IAA)	9,398	820	66	–	8,574	731	58	–
Ratings based approach (RBA)	9,442	1,358	109	191	9,789	1,575	126	187
Total banking book⁴	27,264	4,262	341	191	26,157	4,188	335	191
Trading book – specific interest rate market risk	31	3	–	–	289	28	2	–
Total trading book	31	3	–	–	289	28	2	–

1 Banking book exposure value is defined as the aggregate of the Group's gross retained or purchased positions, excluding those positions rated below BB- or that are unrated and therefore deducted from capital. Trading book exposure value is defined as the sum of the net long and net short positions as per CRD IV rules.

2 Risk-weighted assets are stated net of SCRA's where applicable. These adjustments represent a combination of impairment write downs and appropriate fair value adjustments.

3 Retained or purchased positions rated below BB- or that are unrated are deducted from capital and are stated net of SCRA's.

4 Excludes counterparty credit risk securitisation positions, further information on which can be found on page 91.

Key movements

Banking book

- Originator: The increase during the year is primarily the result of a new capital efficient securitisation transaction.
- Sponsor: The increase in the year is primarily due to a net increase in liquidity facilities provided to the conduit. This is a result of new and increased client transactions, offset by reduced and matured positions.
- Investor: The movement in the year is the result of terminations, sales and amortisations, offset by new facilities to third party clients.

Trading book

- Trading Book exposures remained low throughout the year.

Securitisation programmes and activity

The Group's securitisation programmes are predominantly funding or collateral creation transactions, including all of the residential mortgage programmes. The Group's principal originated securitisation programmes, together with the balances of the advances subject to securitisation and the carrying value of the notes in issue at 31 December, are outlined in Note 30 (Securitisations and covered bonds) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

No securitisation transactions undertaken during the year were recognised as sales. During the year the Group originated a new capital efficient synthetic loan securitisation, referencing Commercial Banking assets.

Re-securitisation

Re-securitisation transactions involve securitisations where the risk associated with the underlying pool of assets is tranching and at least one of the underlying assets is a securitisation position. The Group has no originated re-securitisation positions in either its banking or trading book.

Pillar 1 Capital requirements: Credit risk – securitisation continued

Risks inherent in banking book securitised assets

Where the Group acts as originator its securitisation programmes primarily include residential mortgage portfolios, credit card portfolios and commercial loan portfolios. In each case credit risk is the primary risk driver attached to the underlying asset pool. Assets securitised are originated from the Group's UK operations.

The performance of the securitised assets is largely dependent on prevailing economic conditions, and in the case of residential mortgage assets, the health of the UK housing market. The likelihood of defaults in the underlying asset pool and the amounts that may be recovered in the event of default are related to a number of factors and may vary according to characteristics, product type, security, collateral and customer support initiatives. Significant changes in the national or international economic climate, regional economic or housing conditions, tax laws, interest rates, inflation, the availability of financing, yields on alternative investments, political developments and government policies or in the health of a particular geographic zone that represents a concentration in the securitised assets, could also affect the cashflows from the underlying asset pool.

Liquidity risk arises where insufficient funds are received by the SE to service payments to the noteholders as they fall due. The receipt of funds is in part dependent on the level of repayment on the underlying asset pool. In general, where such a situation arises noteholders may not be paid in full and amounts may be deferred to subsequent periods. Such deferred amounts will be due but not payable until funds become available in accordance with the relevant priority of payments as set out in the programme documentation. Variations in the rate of prepayment of principal on the underlying loans may affect each series and class of notes differently.

In addition, both the notes in issue and the underlying asset pool are exposed to interest rate risk and, in certain cases, may be subject to foreign exchange risk.

Where the Group holds notes in a securitisation it is exposed to the credit performance of the underlying asset pool, the impact of interest rates and, in some cases, foreign exchange volatility on the value of the notes, and to the seniority of the notes held, the latter of which determines the extent to which the Group would suffer any loss as a result of a shortfall in funds received by the SE.

Monitoring changes in the credit risk of securitised exposures

The Group employs a range of measures to monitor changes in the credit risk of securitised assets. These include monitoring on a monthly basis of current exposures in the underlying pool (including credit events, default history and disposals), together with data tracking collateral cover and loan repayments which are tracked from the original amount advanced.

Monitoring changes in the credit risk of ABS portfolios

ABS exposures reside primarily in the residual run-off portfolio managed by Commercial Banking Client Asset Management. The Group also holds some small ABS exposures for liquidity coverage ratio (LCR) purposes which are managed by the Liquid Asset Portfolio team. Each team is therefore responsible for the monitoring of changes in the credit risk of ABS within its portfolio.

The credit process is the same across portfolios: credit reviews are produced at least annually for a particular sector or for a specific bond (or both) as well as for third party ABS liquidity facilities.

A credit review process will also be triggered where an ECAI applies a significant downgrade to a bond.

The Specialist Finance Credit (SFC) team provides an independent risk oversight for ABS credit reviews. It provides each ABS transaction with a credit risk classification (ranging from good to substandard), as well as sanctioning credit limits either locally or by referral to the credit committee.

Furthermore, additional monitoring measures are applied: quarterly watch list (including a review of downgraded bonds), stress testing of portfolios and in the case of the Liquid Asset Portfolio a quarterly risk review forum is also conducted.

Banking and trading book securitisation analysis

The table below discloses the Group's retained and purchased positions across the banking and trading book by exposure type and role.

Table 47: Value of exposures of retained and purchased positions in the banking and trading book by exposure type

Exposure type	2018						2017					
	Banking book				Trading book ¹		Banking book				Trading book ¹	
	Originator £m	Sponsor £m	Investor £m	Total £m	Investor £m	Total £m	Originator £m	Sponsor £m	Investor £m	Total £m	Investor £m	Total £m
Retail (total) of which	–	6,382	5,187	11,569	26	26	–	6,098	6,363	12,461	271	271
residential mortgage	–	807	3,804	4,612	26	26	–	472	4,459	4,932	271	271
credit card	–	332	392	723	–	–	–	460	–	460	–	–
leases and receivables	–	3,309	–	3,309	–	–	–	3,759	–	3,759	–	–
other retail exposures	–	1,934	991	2,924	–	–	–	1,406	1,903	3,310	–	–
Commercial (total) of which	8,425	3,016	4,255	15,695	4	4	7,794	2,476	3,426	13,697	18	18
loans to corporates or SMEs	7,313	766	994	9,073	–	–	6,462	770	1,241	8,474	–	–
social housing associations	1,111	–	–	1,111	–	–	1,332	–	–	1,332	–	–
commercial mortgage	–	–	1,094	1,094	–	–	–	–	1,293	1,293	–	–
leases and receivables	–	2,039	2,127	4,166	3	3	–	1,487	822	2,308	11	11
other commercial	–	210	40	250	1	1	–	219	70	290	7	7
re-securitisation	–	–	–	–	–	–	–	–	–	–	–	–

¹ All trading book securitisations are traditional securitisations.

Pillar 1 Capital requirements: Credit risk – securitisation continued

ORIGINATED SECURITISATIONS

Regulatory treatment

In deriving credit risk exposures associated with originated securitisations, the Group takes into account that certain securitised assets, whilst held on the balance sheet for accounting purposes, are deemed to have met the prudential SRT tests when securitised. Meeting these tests allows the retained positions in the securitisations to be included within regulatory calculations, and the risk-weighted assets on the exposures underlying the securitisation to be removed. Where the minimum requirements for recognition of SRT are not met, the underlying exposures remain part of the relevant exposure class and are risk-weighted accordingly.

Capital requirements in relation to originated securitisation positions are primarily determined under the RBA or the Standardised approach, with limited use made of the Supervisory Formula Approach. Where appropriate, the Group utilises the ratings services of several ECAs, including Standard & Poor's, Moody's and Fitch, to rate securitisation transactions and retained or purchased positions for risk weight allocation purposes under both the RBA and Standardised approach. For synthetic securitisations any maturity mismatch between the credit protection and securitised exposures is treated in line with CRR Article 250.

On a regulatory basis, the gross securitised exposures in relation to originated securitisations where significant risk transfer is achieved amounted to £9.4bn (2017: £8.6bn) comprising synthetic originated securitisations. An analysis is provided in the table below together with the amount of impaired exposures and past due but performing exposures.

Table 48: Analysis of gross securitised exposures on a regulatory basis

	2018			2017		
	Gross securitised exposure			Gross securitised exposure		
	Synthetic £m	Non-performing exposures £m	Past due but performing exposures £m	Synthetic £m	Non-performing exposures £m	Past due but performing exposures £m
Commercial						
social housing associations	1,166	–	–	1,386	–	–
loans to corporates or SMEs	8,206	57	8	7,204	86	6
Total	9,372	57	8	8,590	86	6

The gross charge to the income statement for the year to 31 December 2018 in respect of losses attributed to the gross securitised exposures noted above amounted to £7m (2017: £9.6m).

Originated securitisations subject to the RBA

The RBA utilises a set of defined risk weights prescribed by CRD IV rules. The appropriate risk weight is dependent on the rating of the position, its classification as a securitisation position or a re-securitisation position, the maturity and the seniority of the position and the granularity of the asset pool backing the position. As at 31 December 2018, securitisation positions arising from origination activities and risk-weighted under the RBA amounted to £7.4bn (2017: £6.7bn), generating a capital requirement of £144m (2017: £127m). An analysis of these positions, by risk weight category, is provided in the table below.

Table 49: Analysis of originated positions under the RBA by risk weight category

S&P Equivalent Rating and RBA Risk Weight ¹		Securitisation positions				Total 2018		Total 2017	
		Senior		Non-Senior		Exposure £m	Cap req £m	Exposure £m	Cap req £m
		Exposure £m	Cap req £m	Exposure £m	Cap req £m				
AAA	(7%, 12%)	5,300	63	332	6	5,633	69	5,024	48
AA	(8%, 15%)	–	–	666	14	666	14	632	11
A+	(10%, 18%)	–	–	410	7	410	7	338	5
A	(12%, 20%)	–	–	92	2	92	2	69	1
A-	(20%, 35%)	–	–	63	2	63	2	61	2
BBB+	(35%, 50%)	–	–	201	9	200	9	205	9
BBB	(60%, 75%)	–	–	76	4	76	4	68	4
BBB-	(100%, 100%)	–	–	54	5	54	5	56	5
BB+	(250%, 250%)	–	–	169	32	169	32	196	39
BB	(425%, 425%)	–	–	2	1	2	1	5	2
BB-	(650%, 650%)	–	–	–	–	–	–	1	1
Below BB- or unrated	Deduction	–	–	–	–	–	–	–	–
Total credit risk exposure/capital requirement²		5,300	63	2,066	82	7,364	144	6,655	127

1 The RBA risk weights for each rating are listed in the following order: senior securitisation positions, non-senior securitisation positions. Positions rated below BB- or that are unrated are deducted from capital, net of SCARs applied.

2 Total credit risk exposure is defined as the aggregate of the Group's gross retained or purchased positions, excluding those positions rated below BB- or that are unrated and therefore deducted from capital. Capital requirements are stated net of SCARs, where applicable. All retained positions are held on-balance sheet.

As at 31 December 2018, there was a de-minimis non senior securitisation position arising from origination activities held and risk-weighted under the SFA amounting to £123m (2017: £72m), generating a capital requirement of £6m.

Pillar 1 Capital requirements: Credit risk – securitisation continued

Originated Securitisations subject to the Standardised approach

The Standardised approach utilises a set of defined risk weights prescribed by CRD IV rules. The appropriate risk-weight is dependent on the rating of the position and its classification as a securitisation position or re-securitisation position. As at 31 December 2018, securitisation positions arising from origination activities and risk-weighted under the Standardised approach amounted to £0.9bn (2017: £1.1bn) generating a capital requirement of £17m (2017: £20m). An analysis of these positions, by risk weight category, is provided in the table below.

Table 50: Analysis of originated positions under the Standardised approach by risk weight category

		Total 2018		Total 2017	
		Securitisation positions		Securitisation positions	
Fitch equivalent rating and standardised approach risk weight		Exposure £m	Cap req £m	Exposure £m	Cap req £m
AAA to AA-	(20%)	864	14	994	17
A+ to A-	(50%)	73	3	55	2
BBB+ to BBB-	(100%)	–	–	18	1
BB+ to BB-	(350%)	–	–	–	–
Below BB- or unrated	Deduction	–	–	–	–
Total credit risk exposure/capital requirement¹		937	17	1,067	20

¹ Total credit risk exposure is defined as the aggregate of the Group's gross retained or purchased positions, excluding those positions rated below BB- or that are unrated and therefore deducted from capital. Capital requirements are stated net of SCRAs, where applicable. All retained positions are held on-balance sheet.

Accounting treatment

From an accounting perspective, the treatment of SEs is assessed in accordance with IFRS 10 which establishes the principles for when the Group is deemed to control another entity and therefore required to consolidate it through the Group's financial statements.

Under IFRS 10, the Group controls an entity where it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through the exercise of power.

Where the transfer of the Group assets to an SE that it controls fails the 'derecognition' accounting tests under IFRS 9, the transferred assets remain on the Group's balance sheet for accounting purposes. These assets are classified as financial assets measured at amortised cost on the balance sheet and the notes issued (excluding those held by the Group) are classified as debt securities in issue, which are also measured at amortised cost.

Securitised assets are only derecognised where the following conditions are met:

- substantially all of the risks and rewards associated with the assets have been transferred in which case they are derecognised in full; or
- a significant proportion but not all of the risks and rewards have been transferred, in which case the assets are either derecognised in full where the transferee has the ability to sell the assets, or continue to be recognised by the Group but only to the extent of its continuing involvement; or
- substantially all of the risks and rewards associated with a fully proportional share of all or of specifically identified cash flows have been transferred, in which case that proportion of the assets are derecognised.

A securitisation transaction is recognised as a sale or partial sale where derecognition is achieved. The difference between the carrying amount and the consideration received is recorded in the income statement. Securitisation transactions that do not achieve derecognition are treated as financing arrangements.

The Group's securitised residential mortgages and commercial banking loans are not typically derecognised because the Group retains substantially all the risks and rewards associated with the underlying portfolios of assets. In addition, for many of these assets, the Group has not transferred the contractual rights to receive the cash flows or assumed a contractual obligation to pay the cash flows to a third party.

Where internal transactions between the banking group and the insurance group achieve accounting derecognition from the underlying banking subsidiary balance sheet, the assets continue to be fully consolidated from a Group perspective but may achieve derecognition under the regulatory scope of consolidation. Synthetic securitisations, where credit derivatives or financial guarantees are used to transfer the economic risk of the underlying assets but the Group retains legal ownership of the assets, are accounted for under similar accounting policies to those summarised above, with the associated credit protection accounted for under the requirements of IFRS 9.

Liquidity lines provided to conduits are accounted for in accordance with the accounting policies set out in the 2018 Lloyds Banking Group plc Annual Report and Accounts.

The Group's retained and purchased securitisation positions are valued for accounting purposes in accordance with the Group's accounting policies as outlined on Note 2(E) (Accounting Policies: Financial Assets and Liabilities) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

For those positions measured at fair value, further details on the valuation methodologies applied are outlined in Note 49(3) (Financial Instruments: Financial assets and liabilities carried at fair value) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Pillar 1 Capital requirements: Credit risk – securitisation continued

Use of credit derivatives and guarantees

Synthetic securitisations, covering social housing associations and other loans to corporates and SMEs, involve the provision of protection to the Group through a combination of financial guarantees and credit protection agreements with the SE, established under the transactions, that results in a net protected position of a junior tranche of the securitised portfolio. The SE issues CLNs to pass on the risk associated with the net protected position to third party investors who primarily include other institutions and professional investors.

The Group does not typically make use of hedging against securitisation positions.

Assets awaiting securitisation

In 2012 the Group established a warehousing facility for a third party client. The facility was not extended in 2018, the last funded amount repaid in Q2 2018 (2017: commitment £350m, £40m drawn).

SPONSORED AND INVESTED SECURITISATIONS

Cancara – summary of activity

Cancara

General description	Cancara was established in 2002 by Lloyds Bank. It provides financing facilities to the Group's core corporate and financial institution clients, funded by ABCP.
Programme limit/CP outstanding as at 31 December 2018	\$20.0bn/\$6.0bn (£15.7bn/£4.7bn)
Conduit structure	Fully supported multi-seller
Credit enhancement	Full support liquidity
Liquidity provider	Lloyds Bank Plc and Bank of Scotland Plc

Structure and liquidity facilities

Cancara Asset Securitisation Limited is an ABCP conduit that buys assets from clients of the Group. The conduit funds the purchase of the assets primarily by issuing ABCP. Cancara Asset Securitisation LLC is a separate bankruptcy remote, special purpose limited liability company established to co-issue US Dollar domestic CP with Cancara Asset Securitisation Limited.

Assets purchased relate to pools of third party receivables.

A number of intermediary special purpose entities within the conduit structure are used to purchase the assets. Each purchasing company enters into a commissioning agreement with the issuer, which then advances funds to the purchasing company to buy the assets. The purchasing company issues a purchaser demand note to the issuer which benefits from security over the assets.

For each new asset purchase, Cancara enters into a liquidity facility with the Group, to cover the ABCP notes. In the absence of market disruption the conduit will usually look to fund through issuing ABCP. In 2017 certain liquidity facilities supporting the program were drawn to provide funding alongside the proceeds of ABCP issuance. During 2018 some liquidity facilities continued to be drawn to provide funding and a small number of transactions were moved on balance sheet due to ring-fencing considerations.

Cancara Assets

All the external assets in the conduit are consolidated for accounting purposes in the Group's financial statements, following similar accounting policies to those established for originated securitisations. The total consolidated assets in the conduits are set out in Note 48 (Structured entities) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Pillar 1 Capital requirements: Credit risk – securitisation continued

Capital assessment

With regard to sponsored activities, the Group has approval to utilise the IAA for calculating capital requirements for the liquidity facilities provided to the conduit purchasing companies.

The Group's IAA model is a proprietary credit rating system. This model generates a rating equivalent to an external rating. This rating then feeds the RBA in order to calculate the capital requirement.

The model consists of a number of scorecards, one for each asset class. Unlike the Group's Foundation and Retail IRB models, the ABCP IAA model does not estimate the PD for the exposure, but instead is used to determine a model rating grade equivalent to an ECAI grade. The internal rating methodology must reflect the ECAI's methodology. Periodically, ECAIs publish updates to their methodologies relating to different asset classes. The Securitised Products Group monitors rating agency updates and undertakes assessment to confirm that all relevant changes to rating methodologies have been reflected in the cashflow modelling and the IAA model.

Stress factor inputs play an important part in determining the rating of a transaction. Depending on the level of credit enhancement, the stress factor contributes towards the final rating a transaction would receive from an ECAI taking into account 'stressed scenarios' on the level of cash-flows generated by the underlying pool of assets.

The sponsored receivables facilities are modelled using a stress factor input which reflects the ability of the transaction to withstand a significant deterioration in the asset quality and is a through-the-cycle measure that is applied to a base case default rate. To determine the base case default rate historic loss data is used. For example, in its approach Standard & Poor's incorporates additional analysis into historic loss data to mitigate any effects of recent changes with the result that in many cases the base case loss rate assumed is above the historical average.

The model is subject to a robust governance framework. In line with the Group Model Governance Policy, the Group undertakes an Annual Review to ensure that the model remains compliant with the requirements of CRR (Article 259) which establishes the criteria that must be met in order to apply the IAA to exposures relating to programmes such as liquidity facilities.

An analysis of the total credit risk exposure and associated capital requirement by risk weight category under the ABCP IAA is provided in the table below.

Table 51: Analysis of sponsored positions by risk weight category

		2018		2017	
		Exposure £m	Capital requirement £m	Exposure £m	Capital requirement £m
S&P equivalent rating and IAA risk weight					
On Balance Sheet					
AAA	7%	1,841	11	911	5
AA+ to AA-	8%	450	3	593	4
A+	10%	–	–	–	–
A	12%	542	6	368	4
A-	20%	–	–	–	–
BBB	60%	–	–	–	–
Off Balance Sheet					
AAA	7%	3,655	22	4,045	24
AA+ to AA-	8%	1,649	11	1,838	13
A+	10%	–	–	–	–
A	12%	1,254	13	811	8
A-	20%	–	–	–	–
BBB	60%	8	–	8	–
Total credit risk exposure/capital requirement		9,398	66	8,574	58

Direct investments and liquidity facilities

In addition to sponsoring an ABCP conduit, the Group has invested directly in third party ABS and notes and is a provider of liquidity facilities to other third party securitisations.

The majority of these direct investments are accounted for as loans and receivables on the balance sheet and held at amortised cost, with the remainder held at fair value through other comprehensive income or at fair value through profit or loss. Further details on the Group's holding of ABS are presented on pages 262 and 263 in Note 52(c) (Financial Risk Management: Credit Quality of Assets) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Pillar 1 Capital requirements: Credit risk – securitisation continued

Invested securitisations subject to the RBA

As at 31 December 2018, securitisation positions relating to the Group's direct investments in third party ABS and notes and the provision of liquidity facilities to third party securitisations risk weighted under the RBA, amounted to £9.4bn (2017: £9.8bn).

Table 52: Analysis of invested positions by risk weight category

S&P Equivalent Rating and RBA Risk Weight ¹	Securitisation positions 2018						2018		2017	
	Senior		Non-senior		Tranches backed by non granular pools		Total		Total	
	Exposure £m	Cap req £m	Exposure £m	Cap req £m	Exposure £m	Cap req £m	Exposure £m	Cap req £m	Exposure £m	Cap req £m
On Balance Sheet										
AAA (7%, 12%, 20%, 20%)	4,822	29	–	–	1	–	4,823	29	3,558	21
AA (8%, 15%, 25%, 25%)	1,174	8	208	3	369	8	1,751	18	1,148	14
A+ (10%, 18%, 35%, 35%)	–	–	381	6	1	–	381	6	450	8
A (12%, 20%, 35%, 40%)	138	1	48	1	1	–	186	2	433	4
A- (20%, 35%, 35%, 60%)	19	–	54	2	–	–	73	2	163	3
BBB+ (35%, 50%, 50%, 100%)	3	–	69	3	–	–	72	3	114	5
BBB (60%, 75%, 75%, 150%)	89	5	7	–	–	–	96	5	–	–
BBB- (100%, 100%, 100%, 200%)	–	–	–	–	–	–	–	–	–	–
BB+ (250%, 250%, 250%, 300%)	–	–	–	–	–	–	–	–	–	–
BB (425%, 425%, 425%, 500%)	–	–	–	–	–	–	–	–	1	–
BB- (650%, 650%, 650%, 750%)	–	–	–	–	2	1	2	1	17	9
Below BB- or unrated	–	–	–	–	184	–	184	–	180	–
Off Balance Sheet										
AAA (7%, 12%, 20%, 20%)	556	3	–	–	455	8	1,011	11	2,127	19
AA (8%, 15%, 25%, 25%)	169	1	–	–	115	2	284	4	785	8
A+ (10%, 18%, 35%, 35%)	19	–	–	–	237	7	256	7	148	4
A (12%, 20%, 35%, 40%)	88	1	–	–	183	5	271	6	498	11
A- (20%, 35%, 35%, 60%)	–	–	–	–	71	2	71	2	156	5
BBB+ (35%, 50%, 50%, 100%)	–	–	–	–	80	3	80	3	76	3
BBB (60%, 75%, 75%, 150%)	–	–	1	–	46	3	47	3	78	5
BBB- (100%, 100%, 100%, 200%)	–	–	–	–	28	2	28	2	28	2
BB+ (250%, 250%, 250%, 300%)	–	–	–	–	–	–	–	–	–	–
BB (425%, 425%, 425%, 500%)	–	–	–	–	10	3	10	3	9	3
BB- (650%, 650%, 650%, 750%)	–	–	–	–	–	–	–	–	–	–
Below BB- or unrated	–	–	–	–	7	–	7	–	7	–
Total	7,076	48	768	14	1,789	46	9,632	109	9,976	126
Deduction from capital							(191)	–	(187)	–
Total credit risk exposure/ capital requirement²							9,442	109	9,789	126

¹ The RBA risk weights for each rating are listed in the following order: senior securitisation positions, non-senior securitisation positions, tranches backed by non-granular pools, senior re-securitisation positions. Positions rated below BB- or that are unrated are deducted from capital, net of SCRA's applied.

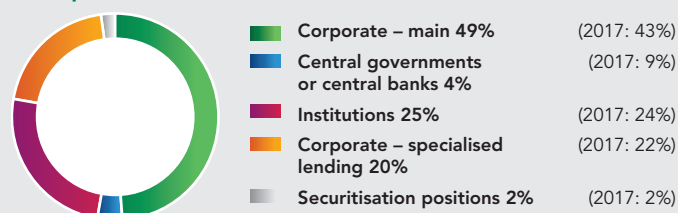
² Total credit risk exposure is defined as the aggregate of the Group's gross retained or purchased positions, excluding those positions rated below BB- or that are unrated and therefore deducted from capital. Capital requirements are stated net of SCRA's, where applicable.

Pillar 1 Capital requirements: Counterparty credit risk

This section details Lloyds Banking Group's counterparty credit risk profile, focussing on regulatory measures such as exposure at default and risk-weighted assets.

- The Group's counterparty credit risk strategy is to use collateral agreements and other risk management techniques, such as central clearing, to mitigate risk exposure.
- Counterparty credit risk (including credit valuation adjustment (CVA)) represents a small proportion (3.7%) (2017: 3.7%) of the Group's total risk-weighted assets.
- Counterparty credit risk exposure increased by 6% to £42.5bn driven by an increase in trading which is cleared centrally following the establishment of Lloyds Bank Corporate Markets plc, offset by Term Funding Scheme related decreases in 2018.
- Risk-weighted assets decreased by 8% to £7.3bn.

IRB exposures



Standardised exposures

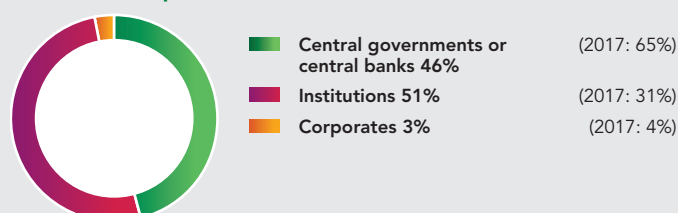


Table 53: Risk-weighted assets flow statements of CCR exposures^{1,2}

	RWA amounts £m	Capital requirements £m
Risk-weighted assets as at 31 December 2017	7,885	631
Asset size	75	6
Asset quality	(348)	(28)
Model updates	–	–
Methodology and policy	(136)	(11)
Acquisitions and disposals	–	–
Foreign exchange movements	(220)	(18)
Other	(6)	(1)
Risk-weighted assets as at 31 December 2018	7,250	580

¹ There are no exposures under the Internal Model Method requiring analysis under EBA template CCR7. The Group has elected to include the above risk-weighted assets flow statement of total CCR as a supplementary disclosure.

² CCR includes movements in contributions to the default fund of central counterparties and movements in credit valuation adjustment risk.

Key movements

- **Counterparty credit risk and CVA risk weighted assets** reductions of £0.6bn were mainly driven by CVA, foreign exchange movements and yield movement.

Pillar 1 Capital requirements: Counterparty credit risk continued

DEFINITION

Counterparty credit risk is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. Such transactions relate to contracts for financial instruments derivatives and repo contracts.

INTERNAL CAPITAL AND CREDIT LIMITS

The maximum credit risk appetite for counterparties is determined through a combination of credit quality (expressed as an internal credit rating) and size (measured by its capital and reserves). In general, activity of the Group is conducted with counterparties that have internal obligor ratings equivalent to investment grade as measured by external credit rating agencies.

Internal obligor ratings are mapped to modelled PDs, which when combined with LGDs and EADs determine EL. To calculate EAD, values for derivative products are determined by using the mark-to-market methodology for regulatory purposes and internally developed models for limit management.

Additionally a number of product specific, obligor quality limit guidelines and counterparty specific policies also serve to determine risk management and credit limit setting. Once commercial approval has been obtained for a counterparty, credit limits are established through the Group's credit approval framework on the basis of the projected maximum PFE of anticipated derivative transaction volumes, based on 95th percentile assumptions.

Credit limits are set by product and reflect documentation held for netting or collateral management purposes. Outstanding exposures are calculated on a PFE basis, based upon the transaction characteristics and documentation.

SECURING COLLATERAL AND ESTABLISHING CREDIT RESERVES

Use is made of collateral and risk mitigation techniques to reduce credit risks in various portfolios. These include the use of collateral (principally cash, which is largely applied to central governments or central banks and institution exposures; government securities and guarantees), break clauses and netting. A significant amount of derivative exposure is cleared at Qualified Central Counterparties (QCCPs), which replaces exposure to individual counterparties with an exposure against the Central Counterparty (CCP).

Policy is set governing types of acceptable collateral and haircuts, in line with industry practice.

Collateral arrangements are governed by standard agreements (such as Global Master Repurchase Agreements and Credit Support Annexes (CSA) to International Swaps and Derivative Association (ISDA) Master Agreements). It is policy that appropriate documentation is put in place for all clients prior to trading, any exceptions being subject to specific approval from the appropriate Credit Sanctioner. Policy also defines minimum acceptable requirements for the negotiation of ISDA and CSA documentation. Derivative transactions with wholesale counterparties are typically collateralised under a Credit Support Annex (CSA) in conjunction with the ISDA Master Agreement. Derivative transactions with non-bank customers are not usually supported by a CSA.

To recognise the effects of credit risk mitigation, any agreements must be valid, enforceable, unconditional and irrevocable. In addition, collateral must be transferred to the bank through the passing of title and should be offset on a portfolio by portfolio basis. Once these conditions are met, the effect of collateral received is reflected in reductions to all applicable credit exposures and in capital adequacy calculations.

Collateral received is reviewed daily to ensure quality is maintained and concentrations are avoided as necessary.

MASTER NETTING AGREEMENTS

It is credit policy that a Group approved master netting agreement must be used for all derivative and traded product transactions and must be in place prior to trading. This requirement extends to both trades with clients and the counterparties used for the Group's own hedging activities. Any exceptions must be approved by the appropriate credit sanctioner. Although master netting agreements do not generally result in an offset of balance sheet assets and liabilities for accounting purposes, as transactions are usually settled on a gross basis, within relevant jurisdictions and for appropriate counterparty types they do reduce the credit risk to the extent that, if an event of default occurs, all trades with the counterparty may be terminated and settled on a net basis. The Group's overall exposure to credit risk on derivative instruments subject to master netting agreements can change substantially within a short period, since this is the net position of all trades under the master netting agreement.

COLLATERAL REQUIREMENTS IN THE EVENT OF A DOWNGRADE IN CREDIT RATING

Internal stress testing results at 31 December 2018 showed that the banking business had liquidity resources representing 167 per cent of modelled outflows from all wholesale funding sources, retail and corporate deposits, intraday requirements and rating dependent contracts under the Group's most severe liquidity stress scenario.

A two notch downgrade of the Group's current long-term debt rating and accompanying short term downgrade implemented instantaneously by all major rating agencies, could result in an outflow of £1.3bn of cash over a period of up to one year, £2.2bn of collateral posting related to customer financial contracts and £6.1bn of collateral posting associated with secured funding.

CORRELATION (WRONG WAY) RISK

The Group seeks to avoid correlation or wrong way risk where possible. Under repurchase (repo) policy, the issuer of the collateral and the repo counterparty should be neither the same nor connected. The same rule applies for derivatives. The Risk Division has the necessary discretion to extend this rule to other cases where there is significant correlation. Countries with a rating equivalent to AA- and above may be considered to have no adverse correlation between the counterparty domiciled in the country and that country of risk (issuer of securities).

DERIVATIVE VALUATION ADJUSTMENTS

Details on the application of derivative valuation adjustments, including Credit and Debit Valuation Adjustments (CVA and DVA), are provided in Note 49 (Financial Instruments) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Pillar 1 Capital requirements: Counterparty credit risk continued

COUNTERPARTY CREDIT RISK EXPOSURES: ANALYSIS BY MEASUREMENT APPROACH

The credit risk exposure value in respect of counterparty credit risk as at 31 December 2018 was £42.5bn (2017: £40.0bn). An analysis by measurement approach is presented in the table below.

Table 54: CCR: analysis by measurement approach

	2018	2017
	EAD post CRM £m	EAD post CRM £m
CCR standardised approach	–	–
CCR mark-to-market method	9,605	10,669
CCR internal model method	–	–
SFT comprehensive approach	16,471	20,597
CCR central counterparty	16,004	8,556
Contributions to the default fund of a central counterparty	404	201
Total	42,484	40,023

1 Counterparty credit risk exposures are stated on an EAD post CRM basis throughout this section, unless otherwise stated.

Key movements

- SFT exposure decreased by £4.1bn mainly due to Term Funding Scheme related decrease in 2018.
- CCR central counterparty exposure increased by £7.5bn due to an increase in trading cleared centrally following the establishment of LBCM.
- Contributions to the default fund of a central counterparty increased by £0.2bn due to increase in trading cleared centrally.

Table 55: Analysis of CCR exposure by approach (CCR1)³

The methods and parameters used to calculate the CCR regulatory requirements are presented in the table below.

	2018						
	Notional £m	Replacement cost/current market value ¹ £m	Potential future credit exposure ¹ £m	Effective expected positive exposure (EEPE) £m	Multiplier x	EAD Post CRM ² £m	RWAs £m
	a	b	c	d	e	f	g
1 Mark to market		5,627	4,367			9,605	4,917
2 Original exposure	–					–	–
3 Standardised approach		–		–	–	–	–
4 IMM (for derivatives and SFTs)				–	–	–	–
5 of which: securities financing transactions				–	–	–	–
6 of which: derivatives and long settlement transactions				–	–	–	–
7 of which: from contractual cross- product netting				–	–	–	–
8 Financial collateral simple method (for SFTs)						–	–
9 Financial collateral comprehensive method (for SFTs)						16,471	471
10 VaR for SFTs						–	–
11 Total	–	5,627	4,367	–	–	26,076	5,387

1 Replacement cost and PFE have been reported on a net basis where a netting agreement is in place (collateral is deducted from the replacement cost).

2 Exposure values of £3bn (2017: £2.7bn) subject to CVA are embedded in this section, the CVA risk-weighted assets are excluded from this table. For CVA risk-weighted assets please refer to Table 57.

3 CCP exposures and charges are excluded from this table. For CCP balances please refer to Table 56: Exposures to CCPs (CCR8).

Key movements

- Financial Collateral comprehensive method (for SFTs) reduced by £4.1bn mainly due to Term Funding Scheme related decrease in 2018.

Pillar 1 Capital requirements: Counterparty credit risk continued

		2017						
		Notional £m	Replacement cost/current market value ¹ £m	Potential future credit exposure ¹ £m	Effective expected positive exposure (EEPE) £m	Multiplier x	EAD Post CRM ² £m	RWAs £m
		a	b	c	d	e	f	g
1	Mark to market		6,267	4,314			10,669	5,481
2	Original exposure	–					–	–
3	Standardised approach		–		–	–	–	–
4	IMM (for derivatives and SFTs)				–	–	–	–
5	of which: securities financing transactions				–	–	–	–
6	of which: derivatives and long settlement transactions				–	–	–	–
7	of which: from contractual cross-product netting				–	–	–	–
8	Financial collateral simple method (for SFTs)						–	–
9	Financial collateral comprehensive method (for SFTs)						20,597	403
10	VaR for SFTs						–	–
11	Total	–	6,267	4,314	–	–	31,266	5,884

Table 56: Exposures to CCPs (CCR8)

An analysis of the group's exposures to CCPs and related capital requirements are shown in this table.

		2018		2017	
		EAD post CRM £m	RWAs £m	EAD post CRM £m	RWAs £m
1	Exposures to QCCPs (total)	16,408	1,160	8,757	599
		a	b	a	b
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	15,915	329	8,534	171
3	(i) OTC derivatives	14,883	298	7,592	152
4	(ii) Exchange-traded derivatives	1,003	30	417	8
5	(iii) SFTs	30	1	524	11
6	(iv) Netting sets where cross-product netting has been approved	–	–	–	–
7	Segregated initial margin	–	–	–	–
8	Non-segregated initial margin	89	2	22	–
9	Prefunded default fund contributions	404	830	201	428
10	Alternative calculation of own funds requirements for exposures	–	–	–	–
11	Exposures to non-QCCPs (total)	–	–	–	–
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which	–	–	–	–
13	(i) OTC derivatives	–	–	–	–
14	(ii) Exchange-traded derivatives	–	–	–	–
15	(iii) SFTs	–	–	–	–
16	(iv) Netting sets where cross-product netting has been approved	–	–	–	–
17	Segregated initial margin	–	–	–	–
18	Non-segregated initial margin	–	–	–	–
19	Prefunded default fund contributions	–	–	–	–
20	Unfunded default fund contributions	–	–	–	–

Key movements

- Exposures for trades at QCCPs increased by £7.7bn mainly due to an increase in trading cleared centrally following the establishment of Lloyds Bank Corporate Markets (LBCM).
- Prefunded default fund contributions increased by £0.2bn due to an increase in trading cleared centrally.

Pillar 1 Capital requirements: Counterparty credit risk continued

Table 57: Credit valuation adjustment (CVA) capital charge (CCR2)¹

	2018 EAD post CRM £m	2018 RWA £m	2017 EAD post CRM £m	2017 RWA £m
	a	b	a	b
1 Total portfolios subject to the Advanced CVA capital charge	–	–	–	–
2 (i) VaR component (including the 3×multiplier)	–	–	–	–
3 (ii) Stressed VaR component (including the 3×multiplier)	–	–	–	–
4 All portfolios subject to the Standardised Method	2,985	702	2,657	1,402
EU4 Based on Original Exposure Method	–	–	–	–
5 Total subject to the CVA capital charge	2,985	702	2,657	1,402

1 The CVA exposures disclosed in this table are embedded in the exposures reported in Table 55: Analysis of CCR exposure by approach (CCR1).

Key movements

– The decrease in risk-weighted assets is primarily driven by hedging activity in the year.

COUNTERPARTY CREDIT RISK EXPOSURES: ANALYSIS BY EXPOSURE CLASS

An analysis of counterparty credit risk exposures by exposure class is presented in the table below.

Table 58: CCR: analysis by exposure class

	2018 EAD post CRM £m	2018 Risk weighted assets £m	2017 EAD post CRM £m	2017 Risk weighted assets £m
Foundation IRB approach				
Corporate – Main	5,180	2,189	5,109	2,218
Corporate – SME	2	2	3	4
Central governments or central banks	429	21	987	43
Institutions	2,630	1,045	2,850	1,118
Other IRB approach				
Corporate – Specialised lending ¹	2,128	1,567	2,569	1,890
Securitisation positions ²	174	67	283	107
Total IRB approach	10,542	4,891	11,802	5,381
Exposures subject to the standardised approach				
Central governments or central banks	14,578	–	18,319	–
Multilateral development banks	28	–	62	–
International organisations	41	–	65	–
Institutions	16,012	333	8,574	184
Corporates	878	494	1,000	490
Total standardised approach	31,538	827	28,020	674
Contributions to the default fund of a Central Counterparty	404	830	201	428
Credit valuation adjustment ³		702		1,402
Total	42,484	7,250	40,023	7,885

1 Exposures subject to the IRB Supervisory Slotting Approach.

2 No positions relating to counterparty credit risk securitisation positions were deducted from capital (2017: £nil).

3 CVA exposure values of £3.0bn (2017: £2.7bn) are embedded in the exposure class analysis above.

Key movements

– Exposures to Central governments or central banks subject to the standardised approach decreased by £3.7bn mainly due to Term Funding Scheme related decrease in 2018.

– Exposures to Institutions subject to the standardised approach increased by £7.4bn due to increase in trading cleared centrally.

– Contributions to the default fund of a central counterparty increased by £0.2bn due to increase in trading cleared centrally.

Pillar 1 Capital requirements: Counterparty credit risk continued

COUNTERPARTY CREDIT RISK EXPOSURES: FURTHER ANALYSIS OF IRB EXPOSURES

Further analysis, by PD Grade, of counterparty credit risk exposures subject to the Foundation IRB Approach and the IRB Supervisory Slotting Approach are provided in the tables below.

Throughout this section 'RWA density' represents the average risk weight.

Table 59: IRB – CCR exposure by portfolio and PD scale – Corporate Main (CCR4)

PD Scale	2018						
	EAD post CRM	Average PD	Number of obligors	Average LGD	Average Maturity (years)	RWA	RWA density
	£m	%		%		£m	%
Corporate – Main	a	b	c	d	e	f	g
0.00 to <0.15	3,173	0.07%	866	45.0%	3.4	1,037	32.7%
0.15 to <0.25	662	0.18%	278	45.0%	3.1	330	49.9%
0.25 to <0.50	987	0.31%	986	45.1%	1.6	495	50.2%
0.50 to <0.75	65	0.63%	172	45.0%	2.4	53	81.2%
0.75 to <2.50	190	1.22%	232	45.0%	2.1	187	98.4%
2.50 to <10.00	59	3.88%	154	45.0%	2.3	84	142.7%
10.00 to <100.00	1	25.97%	8	45.0%	3.9	3	264.6%
100.00 (Default)	43	100.00%	10	45.0%	2.1	–	–
Sub-total	5,180	1.06%	2,706	45.0%	2.9	2,189	42.3%

PD Scale	2017						
	EAD post CRM	Average PD	Number of obligors	Average LGD	Average Maturity (years)	RWA	RWA density
	£m	%		%		£m	%
Corporate – Main	a	b	c	d	e	f	g
0.00 to <0.15	3,213	0.07%	711	45.0%	3.4	1,003	31.2%
0.15 to <0.25	789	0.18%	254	45.0%	2.8	379	48.1%
0.25 to <0.50	751	0.33%	766	45.0%	2.3	442	58.9%
0.50 to <0.75	84	0.63%	129	45.0%	3.2	76	90.8%
0.75 to <2.50	102	1.21%	240	45.0%	2.7	110	108.0%
2.50 to <10.00	90	3.30%	109	45.0%	2.2	123	136.6%
10.00 to <100.00	41	13.46%	4	45.0%	1.0	85	204.8%
100.00 (Default)	40	100.00%	10	45.0%	2.8	–	–
Sub-total	5,109	1.10%	2,223	45.0%	3.1	2,218	43.4%

Pillar 1 Capital requirements: Counterparty credit risk continued

Table 60: IRB – CCR exposures by portfolio and PD scale – Central governments or central banks (CCR4)

PD Scale	2018						
	EAD post CRM	Average PD	Number of obligors	Average LGD	Average Maturity (years)	RWA	RWA density
	£m	%		%		£m	%
Central governments or central banks	a	b	c	d	e	f	g
0.00 to <0.15	427	0.04%	8	45.0%	0.0	18	4.3%
0.15 to <0.25	–	–	–	–	–	–	–
0.25 to <0.50	–	–	–	–	–	–	–
0.50 to <0.75	–	–	–	–	–	–	–
0.75 to <2.50	–	–	–	–	–	–	–
2.50 to <10.00	–	–	–	–	–	–	–
10.00 to <100.00	1	12.00%	2	45.0%	1.0	3	200.5%
100.00 (Default)	–	–	–	–	–	–	–
Sub-total	429	0.08%	10	45.0%	0.0	21	4.9%

2017							
PD Scale	EAD post CRM	Average PD	Number of obligors	Average LGD	Average Maturity (years)	RWA	RWA density
Central governments or central banks	£m	%		%		£m	%
	a	b	c	d	e	f	g
0.00 to <0.15	986	0.04%	13	45.0%	0.1	42	4.3%
0.15 to <0.25	–	–	–	–	–	–	–
0.25 to <0.50	–	–	–	–	–	–	–
0.50 to <0.75	–	–	–	–	–	–	–
0.75 to <2.50	–	–	–	–	–	–	–
2.50 to <10.00	–	–	–	–	–	–	–
10.00 to <100.00	1	12.00%	1	45.0%	1.0	1	100.0%
100.00 (Default)	–	–	–	–	–	–	–
Sub-total	987	0.04%	14	45.0%	0.1	43	4.3%

Pillar 1 Capital requirements: Counterparty credit risk continued

Table 61: IRB – CCR exposure by portfolio and PD scale – Institutions (CCR4)

PD Scale	2018						
	EAD post CRM	Average PD	Number of obligors	Average LGD	Average Maturity (years)	RWA	RWA density
	£m	%		%		£m	%
Institutions	a	b	c	d	e	f	g
0.00 to <0.15	2,179	0.05%	239	45.0%	3.2	713	32.7%
0.15 to <0.25	386	0.18%	52	45.0%	3.4	269	69.8%
0.25 to <0.50	51	0.29%	34	45.0%	4.4	48	95.1%
0.50 to <0.75	7	0.63%	6	45.0%	1.0	5	71.8%
0.75 to <2.50	6	1.07%	8	45.0%	2.9	7	116.5%
2.50 to <10.00	1	2.60%	3	45.0%	1.0	1	136.5%
10.00 to <100.00	0	31.00%	1	45.0%	4.5	1	312.3%
100.00 (Default)	–	–	–	–	–	–	–
Sub-total	2,630	0.08%	343	45.0%	3.3	1,045	39.7%

2017							
PD Scale	EAD post CRM	Average PD	Number of obligors	Average LGD	Average Maturity (years)	RWA	RWA density
Institutions	£m	%		%		£m	%
	a	b	c	d	e	f	g
0.00 to <0.15	2,609	0.04%	239	45.0%	3.7	912	34.9%
0.15 to <0.25	168	0.18%	45	45.0%	4.3	129	76.9%
0.25 to <0.50	65	0.30%	36	45.0%	4.0	62	95.5%
0.50 to <0.75	3	0.63%	8	45.0%	2.0	2	74.7%
0.75 to <2.50	2	1.57%	9	45.0%	1.1	2	95.7%
2.50 to <10.00	–	2.61%	4	45.0%	1.1	–	138.9%
10.00 to <100.00	4	27.79%	3	45.0%	3.4	12	289.9%
100.00 (Default)	–	–	–	–	–	–	–
Sub-total	2,850	0.10%	344	45.0%	3.7	1,118	39.2%

Pillar 1 Capital requirements: Counterparty credit risk continued

Table 62: CCR corporate exposures subject to supervisory slotting

2018 Specialised lending						
Regulatory Categories	Remaining maturity	On-balance sheet amount £m	Off-balance sheet amount £m	RW %	EAD post CRM £m	RWA £m
1) Strong	Less than 2.5 years	54	–	50%	53	27
	Equal to or more than 2.5 years	2,059	–	70%	1,691	1,183
2) Good	Less than 2.5 years	15	–	70%	15	10
	Equal to or more than 2.5 years	311	–	90%	304	273
3) Satisfactory	Less than 2.5 years	0	–	115%	0	1
	Equal to or more than 2.5 years	63	–	115%	63	72
4) Weak	Less than 2.5 years	–	–	250%	–	–
	Equal to or more than 2.5 years	–	–	250%	–	–
5) Default	Less than 2.5 years	–	–	–	–	–
	Equal to or more than 2.5 years	2	–	–	2	–
Total	Less than 2.5 years	70	–		69	38
	Equal to or more than 2.5 years	2,435	–		2,059	1,530

2017 Specialised lending						
Regulatory Categories	Remaining maturity	On-balance sheet amount £m	Off-balance sheet amount £m	RW %	EAD post CRM £m	RWA £m
1) Strong	Less than 2.5 years	105	–	50%	106	53
	Equal to or more than 2.5 years	1,956	–	70%	1,802	1,261
2) Good	Less than 2.5 years	90	–	70%	90	63
	Equal to or more than 2.5 years	442	–	90%	465	419
3) Satisfactory	Less than 2.5 years	1	–	115%	1	1
	Equal to or more than 2.5 years	67	–	115%	81	93
4) Weak	Less than 2.5 years	–	–	250%	–	–
	Equal to or more than 2.5 years	–	–	250%	–	–
5) Default	Less than 2.5 years	–	–	0%	–	–
	Equal to or more than 2.5 years	13	–	0%	24	–
Total	Less than 2.5 years	196	–		197	117
	Equal to or more than 2.5 years	2,478	–		2,372	1,773

Pillar 1 Capital requirements: Counterparty credit risk continued

Table 63: Standardised approach – CCR exposures by regulatory portfolio and risk (CCR3)

Exposures are classed as ‘rated’ only where an ECAI rating has been used to derive the risk weight. Where a rating is unavailable, or where the risk weight has been determined by application of specific CRR provisions, exposures have been classed as ‘unrated’.

		2018												
		0% £m	2% £m	4% £m	10% £m	20% £m	50% £m	70% £m	75% £m	100% £m	150% £m	Others £m	Total £m	of which: Unrated £m
1	Central governments or central banks	14,578	–	–	–	–	–	–	–	–	–	–	14,578	14,578
4	Multilateral development banks	28	–	–	–	–	–	–	–	–	–	–	28	28
5	International organisations	41	–	–	–	–	–	–	–	–	–	–	41	41
6	Institutions	–	15,488	516	–	5	3	–	–	–	–	–	16,012	16,010
7	Corporates	–	–	–	–	6	759	–	–	113	–	–	878	113
11	Total – Standardised Approach	14,648	15,488	516	–	11	762	–	–	113	–	–	31,538	30,771

2017

		0% £m	2% £m	4% £m	10% £m	20% £m	50% £m	70% £m	75% £m	100% £m	150% £m	Others £m	Total £m	of which: Unrated £m
1	Central governments or central banks	18,319	–	–	–	–	–	–	–	–	–	–	18,319	18,319
4	Multilateral development banks	62	–	–	–	–	–	–	–	–	–	–	62	62
5	International organisations	65	–	–	–	–	–	–	–	–	–	–	65	65
6	Institutions	–	8,556	–	–	–	9	–	–	8	–	–	8,574	8,564
7	Corporates	–	–	–	–	225	659	–	–	116	–	–	1,000	115
11	Total – Standardised Approach	18,447	8,556	–	–	225	668	–	–	124	–	–	28,020	27,126

Key movements

– Exposures to Central governments or central banks decreased by £3.7bn mainly due to Term Funding Scheme related decrease in 2018.

– Exposures to Institutions increased by £7.4bn due to an increase in trading cleared centrally following the establishment of Lloyds Bank Corporate Markets.

Pillar 1 Capital requirements: Counterparty credit risk continued

COUNTERPARTY CREDIT RISK EXPOSURES: ANALYSIS BY CONTRACT TYPE

An analysis of counterparty credit risk exposures by contract type is presented in the table below.

Table 64: CCR: analysis by contract type

	2018 EAD post CRM £m	2017 EAD post CRM £m
Interest rate and inflation contracts	21,509	14,768
Foreign exchange contracts	3,278	3,167
Equity contracts	3	248
Credit derivatives	435	371
Commodity contracts	249	125
Securities financing transactions	16,606	21,143
Contributions to the default fund of a Central Counterparty	404	201
Total	42,484	40,023
of which: central counterparty	16,004	8,556

Key movements

- Interest rate and inflation contracts increased by £6.7bn mainly due to an increase in trading cleared centrally following the establishment of Lloyds Bank Corporate Markets.
- Securities financing transactions decreased by £4.5bn mainly due to Term Funding Scheme related decrease in 2018.

NET DERIVATIVES CREDIT EXPOSURE

The gross positive fair value of contracts, netting benefits, netted current credit exposure, collateral held and resultant 'net derivatives and SFTs credit exposure', as at 31 December 2018, are presented separately in the table below.

Table 65: Impact of netting and collateral held on exposure values (CCR5-A)

		2018				
		Gross positive fair value exposure amount £m	Netting benefits credit £m	Netted current credit exposure £m	Collateral held £m	Net credit exposure £m
		a	b	c	d	e
1	Derivatives	79,270	66,642	12,629	5,778	6,851
2	SFTs	159,659	–	159,659	148,130	11,529
4	Total	238,929	66,642	172,288	153,908	18,380

		2017				
		Gross positive fair value exposure amount £m	Netting benefits credit £m	Netted current credit exposure £m	Collateral held £m	Net credit exposure £m
		a	b	c	d	e
1	Derivatives	75,403	64,667	10,736	4,459	6,277
2	SFTs	163,033	–	163,033	147,754	15,279
4	Total	238,436	64,667	173,769	152,213	21,556

1 The collateral held values for SFTs are reported after taking into account the volatility adjustments for these balances.

2 The net credit exposure value may differ from the EAD value disclosed in Table 55: Analysis of CCR exposure by approach (CCR1), due to the other parameters for the calculation of the regulatory exposure values not being disclosed in this table.

Pillar 1 Capital requirements: Counterparty credit risk continued

NOTIONAL VALUE OF CREDIT DERIVATIVE TRANSACTIONS

The notional value of credit derivative transactions outstanding at 31 December 2018 was £18.0bn (2017: £19.2bn). These transactions relate to CDS, total return swaps and other credit derivatives. All total return swaps, including those with gilts underlying, are classified as credit products and are reported in the table below.

Table 66: Credit derivatives exposures (CCR6)

	2018			2017		
	Credit derivative hedges			Credit derivative hedges		
	Protection bought £m	Protection sold £m	Other credit derivatives £m	Protection bought £m	Protection sold £m	Other credit derivatives £m
	a	b	c	a	b	c
Notionals						
Single-name credit default swaps	2,246	362	–	2,288	463	–
Index credit default swaps	861	94	–	1,381	146	–
Total return swaps	1,455	6,966	–	586	8,879	–
Credit options	–	–	–	–	–	–
Other credit derivatives	–	5,989	–	–	5,443	–
Total notionals	4,562	13,412	–	4,255	14,931	–
Fair values						
Positive fair value (asset)	32	65	–	7	70	–
Negative fair value (liability)	(73)	(145)	–	(169)	(307)	–

Pillar 1 Capital requirements: Market risk

This section details Lloyds Banking Group's market risk profile, focussing in particular on the Group's internally modelled market risk measures.

- Market risk represents a small proportion (1.0%) (2017: 1.4%) of the Group's total risk-weighted assets.
- Details of market value sensitivity and net interest income sensitivity measures provided in respect of banking activities (non-trading book) can be found in the 2018 Lloyds Banking Group plc Annual Report and Accounts on pages 154 to 159.

Table 67: Market risk own funds requirements

	2018 Risk-weighted assets £m	2018 Capital requirements £m	2017 Risk-weighted assets £m	2017 Capital requirements £m
Internal models approach	1,669	134	2,656	212
VaR	220	18	141	11
SVaR	739	59	891	71
Incremental risk charge	150	12	414	33
Comprehensive risk measure	–	–	–	–
Risks not in VaR	561	45	1,210	97
Standardised approach	416	33	395	32
Interest rate risk (general and specific)	253	20	294	24
Equity risk (general and specific)	–	–	–	–
Foreign exchange risk	155	12	73	6
Commodity risk	4	–	–	–
Specific interest rate risk of securitisation position	3	–	28	2
Total	2,085	167	3,051	244

Key movements

- Market risk risk-weighted assets reductions of £1bn were largely due to a reduction in underlying positions and refinements to internal models, partly offset by migrations to Lloyds Bank Corporate Markets (LBCM).

Pillar 1 Capital requirements: Market risk continued

DEFINITION

Market risk is defined as the risk that unfavourable market moves (including changes in and increased volatility of interest rates, market-implied inflation rates, credit spreads and prices for bonds, foreign exchange rates, equity, property and commodity prices and other instruments) lead to reductions in earnings and/or value. Details of risk appetite, measurement, mitigation and monitoring can be found in the Risk Management section of the 2018 Lloyds Banking Group plc Annual Report and Accounts (Market Risk section, pages 154 to 159).

EXPOSURES**Market risk balance sheet linkages**

The information provided in the table below aims to facilitate the understanding of linkages between balance sheet items and the positions disclosed in the Group's market risk disclosures. This breakdown of financial instruments included and not included in trading book VaR provides a linkage with the market risk measures reported later on in the Market Risk section. It is important to highlight that this table does not reflect how the Group manages trading book market risk, since it does not discriminate between assets and liabilities in its VaR model.

The table below presents relevant balance sheet items relating to banking and trading activities. The trading book VaR sensitivity inputs are separately identified. As Insurance undertakings are excluded from the scope of the Group's regulatory consolidation, market risks in respect of the assets and liabilities relating to the Group's insurance operations are covered in more detail in the Market Risk section of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Table 68: Market risk linkages to the balance sheet

		Banking			
	Total £m	Trading book only £m	Non-trading £m	Insurance £m	
2018					Primary market risk factor
Assets					
Cash and balances at central banks	54,663	–	54,663	–	Interest rate
Financial assets at fair value through profit or loss	158,529	35,246	6,380	116,903	Interest rate, foreign exchange, credit spread
Derivative financial instruments	23,595	14,734	6,898	1,963	Interest rate, foreign exchange, credit spread
Financial assets at amortised cost:					
Loans and advances to banks	6,283	–	6,242	41	Interest rate
Loans and advances to customers	484,858	–	484,818	40	Interest rate
Debt securities	5,238	–	5,238	–	Interest rate, credit spread
	496,379	–	496,298	81	
Financial assets at fair value through other comprehensive income	24,815	–	24,815	–	Interest rate, foreign exchange, credit spread
Value of in-force business	4,762	–	–	4,762	Equity
Other assets	34,855	–	19,641	15,214	Interest rate
Total assets	797,598	49,980	608,695	138,923	
Liabilities					
Deposits from banks	30,320	–	30,320	–	Interest rate
Customer deposits	418,066	–	418,066	–	Interest rate
Financial liabilities at fair value through profit or loss	30,547	23,451	7,085	11	Interest rate, foreign exchange
Derivative financial instruments	21,373	10,827	8,406	2,140	Interest rate, foreign exchange, credit spread
Debt securities in issue	91,168	–	91,168	–	Interest rate, credit spread
Liabilities arising from insurance and investment contracts	112,727	–	–	112,727	Credit spread
Subordinated liabilities	17,656	–	15,889	1,767	Interest rate, foreign exchange
Other liabilities	25,542	–	9,605	15,937	Interest rate
Total liabilities	747,399	34,278	580,539	132,582	

Pillar 1 Capital requirements: Market risk continued

The Group's trading book assets and liabilities are originated within the Commercial Banking division. Within the Group's balance sheet these fall under the trading assets and liabilities and derivative financial instruments. The assets and liabilities are classified as trading books if they meet the requirement as set out in the Capital Requirements Regulation, Article 104.

Derivative assets and liabilities are held by the Group for three main purposes: to provide risk management solutions for clients, to manage portfolio risks arising from client business and to manage and hedge the Group's own risks. The majority of derivatives exposure arises within CB Markets.

The Group ensures that it has adequate cash and balances at central banks and stocks of high-quality liquid assets (e.g. Gilts or US Treasury Securities) that can be converted easily into cash to meet liquidity requirements. The majority of these assets are held as financial assets at fair value through other comprehensive income with the remainder held as financial assets at fair value through profit and loss. Further information on these balances can be found under the Risk Management section – Funding and Liquidity risk, pages 147 to 152 of the Lloyds Banking Group plc Annual Report and Accounts.

The majority of debt issuance originates from the issuance, capital vehicles and medium-term notes desks and the interest rate risk of the debt issued is hedged by swapping them into a floating rate.

Trading portfolios

The Group's trading activity is small relative to its peers and the Group does not engage in any proprietary trading activities. The Group's trading activity is undertaken solely to meet the financial requirements of commercial and retail customers for foreign exchange, credit and interest rate products. These activities support customer flow and market making activities.

All trading activities are performed within the Commercial Banking division. While the trading positions taken are generally small, any extreme moves in the main risk factors and other related risk factors could cause significant losses in the trading book depending on the positions at the time.

Trading market risk measures are applied to all the Group's regulatory trading books and they include daily VaR, sensitivity based measures, and stress testing calculations.

Structure and organisation

Market risk follows the Group's Risk Management Framework. For further information refer to 'How risk is managed in Lloyds Banking Group' and 'How risk is managed in Lloyds Banking Group' section on pages 110 to 114 of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Banking activities

The Group's banking activities expose it to the risk of adverse movements in market prices, predominantly interest rates, credit spreads, exchange rates and equity prices. The volatility of market values can be affected by both the transparency of prices and the amount of liquidity in the market for the relevant asset, liability or instrument.

Further details of the Group's risks in the banking book, including market value sensitivity and net interest income sensitivity measures provided in respect of banking activities (non-trading book) are presented in the Market Risk section of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Table 69: Key market risks for the Group by individual business activity (profit before tax impact measured against Group single stress scenarios)

	Risk Type					
	Interest rate	Basis risk	FX	Credit spread	Equity	Inflation
Banking activities ¹	●	●	–	●	●	–
Defined benefit pension schemes ¹	●	–	–	■	–	–
Insurance portfolios ¹	■	–	–	●	●	■
Trading portfolios ²	–	–	–	–	–	–

Key:

Profit before tax:	Loss	Gain
>£500m	●	■
£250m – £500m	●	■
£50m – <£250m	●	■
Immaterial/zero	–	–

1 Banking activities, Pensions and Insurance stresses; Interest rate -100 bps, Basis Risk 3 month London Interbank Offered Rate (LIBOR) +100bps/bank base rate -25bps, Foreign Exchange (FX) -15 per cent GBP, Credit Spread +100 per cent, Equity -30 per cent, Inflation +50 bps.

2 Trading Portfolios; Interest rate +70bps, FX -5 per cent GBP, Credit Spread +20 per cent, Inflation +50bps.

For further information on the key market risks by defined benefit pension schemes and Insurance portfolios refer to pages 157 and 158 of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Pillar 1 Capital requirements: Market risk continued

Review of internal models

The Group's internal market risk model permissions allow it to calculate Pillar 1 market risk capital requirements for the trading book using internal models. The Lloyds Banking Group model permissions cover general interest rate, specific interest rate risk and foreign exchange risk across both the Lloyds Bank, HBoS and LBCM portfolios. The capital charge is based on the 10-day 99 per cent VaR and Stressed VaR calculated by the models. The Stressed VaR is the measure of VaR using a continuous one year window based on a period of market stress. In addition, the model permission covers specific IRR and the capital charge incorporates specific IRR through VaR and Stressed VaR. The VaR model allows diversification across the different risk factors. The Pillar 1 market risk capital requirements also include an Incremental Risk Charge (IRC) for the trading book.

The Group uses a historical simulation methodology to calculate VaR for the trading book. This methodology consists of calculating historical daily price movements for a full range of market risk factors, either proportional or absolute shifts depending on the risk factor. The historical daily price movements are applied to positions to create a distribution of hypothetical daily profit and loss scenarios. The hypothetical daily changes in portfolio value are ranked, and the 95th and 99th percentile worst losses are identified. The same VaR model is applied for both management purposes and regulatory purposes. A 1-day 95th percentile VaR is used for internal management purposes, and a 10-day 99th percentile VaR and Stressed VaR is applied for regulatory capital calculation purposes. The 10-day VaR uses a rolling 10 day history and this is updated daily. The VaR and Stressed VaR are also integrated into the risk management process for efficient capital management and to highlight potentially significant exposures based on previous market volatility.

Stressed VaR uses historical market data from a continuous one year period of significant financial stress which is relevant to the trading book positions. The one year dataset is taken from any period since the beginning of 2007 and therefore potentially includes the market movements experienced during the financial crisis. Stressed VaR is calibrated at least quarterly to the period of stress which generates the highest Stressed VaR with the current exposures in the Group's trading books.

The IRC measures the risks arising from both default and loss-inducing rating migrations in the trading book. The IRC model simulates the impact of ratings transitions by estimating the improvement or deterioration in credit spreads resulting from these transitions. The ratings transition matrices are comprised of historical transitions collated over many decades and are updated annually for both corporates and sovereigns. A Monte Carlo approach is used to simulate the profit and loss changes arising from migration and default for each portfolio position in turn. The profit and loss changes from each position contribute to the overall loss distribution. Correlations between obligors are based on an existing LBG factor model, which consists of industry sectors and geographical regions. The model also allows for idiosyncratic behaviour at obligor level. The asset returns for obligors are computed using a multi-factor Gaussian Copula model framework for which the factor model provides the correlation basis.

LBG ensures that the IRC model is consistent with the soundness standard comparable to that of the internal-ratings based approach for credit risk. The Lloyds IRC model employs a confidence interval of 99.9% and both its liquidity and risk horizons are set to be one year. This is fully consistent with the EBA soundness standard for IRC models. The annual validation of the IRC model ensures that the soundness standard comparable to IRB is maintained.

Any material risk factors that fall within the scope of the trading books using internal models and are insufficiently captured by the VaR model are identified and measured as a Risk Not in VaR (RNIV). Identification of risks is performed at least quarterly and through the new product review process to ensure any additional risks outside of VaR and IRC models are captured as RNIV's. Where risk factors are incorporated into the RNIV framework they are quantified either through a VaR-based RNIV approach or a stress test approach. RNIVs can arise for a number of reasons such as where there is limited historical market data, event risks not captured in the current historical data or limited variability in the market data or risks not captured elsewhere such as cross risks, basis risks and higher-order risks.

Validation of the risk models uses a number of methods including but not limited to stress tests, sensitivity analyses and scenarios analyses. The risk models, including the RNIVs, are reviewed independently of the development team and model adequacy and conservatism is re-assessed should the portfolio change over time. Model performance, including backtesting analysis, is regularly reviewed by the Model Governance Committee.

Key characteristics of market risk models

Component modelled	Significant models and associated capital requirement	Model description and methodology	Number of days of market data	Applicable regulatory thresholds for the industry
VaR	1Model: (£18m)	Historical simulation to create a distribution of potential daily P&Ls from market moves. P&Ls are calculated from a grid of full revaluation based sensitivities to approximate/estimate full revaluation.	300 daily P&Ls, Simple weighting.	Regulatory VaR is computed with 10 day holding period and 99% confidence level. The 10-day VaR is based on rolling 10-day periods.
SVaR	1Model: (£59m)	Same as VaR model.	250 day period of significant stress. Simple weighting. VaR calibration updated quarterly.	Same as VaR model.
IRC	1Model: (£12m)	Monte Carlo approach is used to simulate the profit and loss changes arising from rating migration and default.	Credit Ratings data (1975/1981 – current), CDS long term average data (2006 – current), CDS bond basis data (2006 – current), LGD data (1990 – current).	IRC is computed with a 1 year holding period and 99.9% confidence level.

Pillar 1 Capital requirements: Market risk continued

Stress testing

The Group has a comprehensive trading book stress testing programme. Economic scenarios representing extreme but plausible stressed market events are applied to the trading book. These scenarios stress numerous risk factors including interest rates, interest rate spreads, interest rate volatilities, inflation swap rates, inflation volatilities, FX rates, FX volatilities and credit spreads.

There are two sets of stress-testing applied to the trading book: macro-economic and asset class specific. The macro-economic scenarios apply a set of historical events such as the Lehmans default, possible economic events such as what might happen if the Euro breaks up and also regulator provided scenarios such as the EBA stress tests. The macro-economic scenarios are intended to be severe but holistic and plausible. The asset class specific scenarios, also known as desk specific, are intended to apply extreme events to individual risk factors with stresses being applied in groups and to identify points of weakness at both asset class and trading book level.

The market risk function produce stress testing daily and these are reviewed by CB Markets businesses weekly to facilitate the management of the market risk within their businesses. Limits and triggers apply to stress testing as part of the market risk limit framework. If any of the daily reports show stress testing concerns these are raised with the business immediately.

The stress testing programme is reviewed monthly and new stress tests are introduced when deemed necessary.

Backtesting of VaR models

The Group compares both hypothetical and clean profit or loss with the VaR calculated at a 1-day 99 per cent confidence level on a daily basis. The purpose of this analysis is to provide an indication of how well the VaR model's output, a VaR forecast, has described the corresponding trading outcome. Analysis is performed at the aggregate trading book level, and the business unit level. Hypothetical profit or loss is the change in the valuation of the portfolio due to market moves that would have resulted assuming that the portfolio remains unchanged. Clean profit or loss is hypothetical profit or loss with the additional profit or loss from the change in the portfolio's value due to time. Fees and commissions do not feed into either profit and loss measure.

A backtesting overshoot is generated when loss is greater than the 1-day 99 per cent VaR for a given day. Please see commentary below Table 70 for information on backtesting performance.

Each individual entity is required to have sufficient capital to meet their solo capital requirements. Hence VaR model performance monitoring needs to be performed separately across Lloyds Bank, HBOS and LBCM portfolios. The Group manages its market risk separately across the Lloyds Bank Group (the ring-fenced bank) and LBCM and this is reflected in the Internal Model Approach Market Risk Permissions. Hence backtesting is also done at a consolidated basis for the ring-fenced bank and separately for LBCM to monitor VaR model performance at an Internal Model Approach Market Risk Permission level. Below the entity level there is backtesting performed at business area level.

Table 70: Backtesting results (VaR models)

2018 backtesting results	Number of reported overshoots		
	Multiplier	Hypothetical	Clean
Entity Level			
Lloyds Bank plc	3.00	2	1
BoS	3.00	2	2
Lloyds Bank Group	3.00	3	4
LBCM	3.00	2 ¹	2 ¹

¹ Both LBCM overshoots were driven predominantly by risk factors that are not captured in the VaR model and are capitalised via RNIVs. Both overshoots have subsequently been disregarded by the regulator.

Key movements

- Statistically the Group would expect to see losses in excess of VaR two to three times over a one year period. Details of LBG loss overshoots are provided in the backtesting charts comparing VaR to hypothetical and clean profit and loss (Table 71).
- The number of overshoots across the group has decreased in 2018 due to improvements to the VaR model to better capture relevant risk in the trading portfolio.
- All significant profit and loss events are investigated as part of normal business. In addition, all backtesting overshoots are reported to senior management, internal auditors and the PRA.

Pillar 1 Capital requirements: Market risk continued

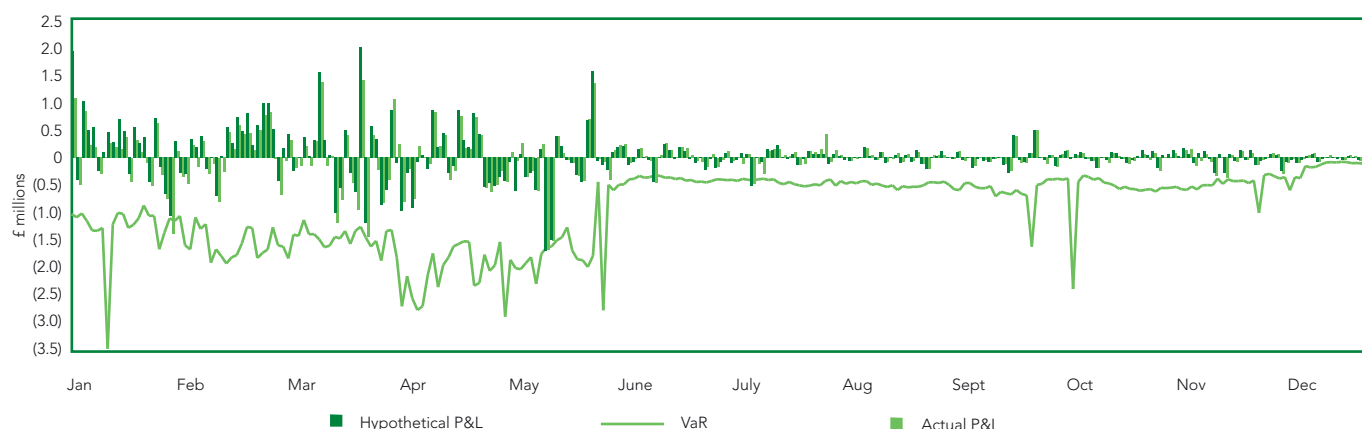
COMPARISON OF VaR TO HYPOTHETICAL AND CLEAN PROFIT AND LOSS

The following charts provide comparisons of VaR (1-day 99 percent confidence level) to the hypothetical and clean profit and loss on a daily basis over the course of 2018 for both Lloyds Bank Group and Lloyds Bank Corporate Markets plc (LBCM).

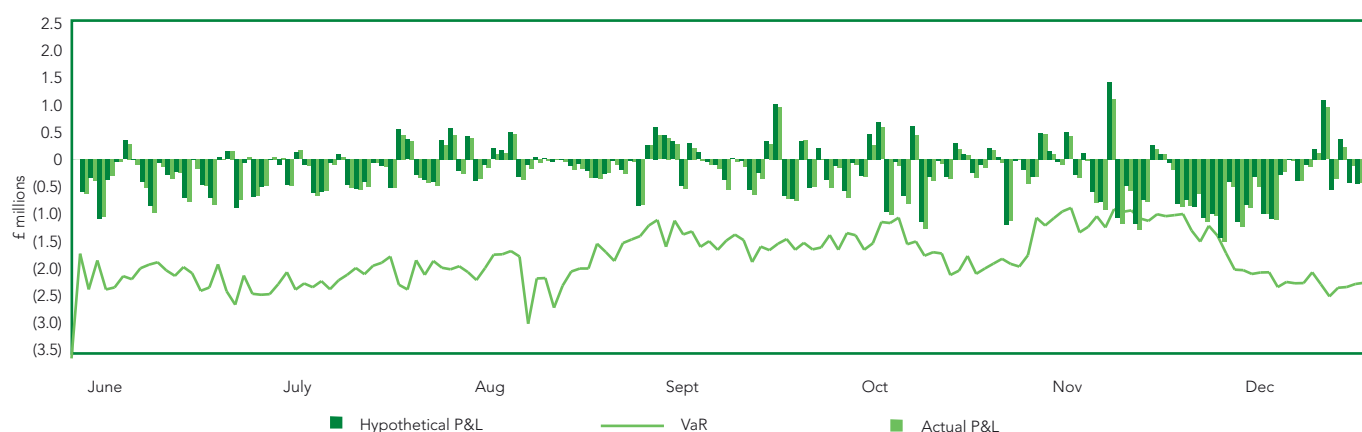
Note that the profit and loss used in back-testing represents gains and losses based on the change in valuation of the portfolio due to market moves and is not reflective of the total profit and loss from the business.

Table 71: Comparison of VaR estimates with gains/losses (MR4)

► LLOYDS BANK GROUP



► LLOYDS BANK CORPORATE MARKETS



Information behind the backtesting overshoots at Lloyds Bank Group and LBCM levels are listed below.

Backtesting Overshoot Date	Entity	Hypothetical/Clean Exception	Key driver(s)
29-Jan-18	LBG	Clean only	Driven by movements in GBP interest rates
15-May-18	LBG	Hypothetical and Clean	Driven by movements in GBP interest rates
14-Jun-18	LBG	Hypothetical and Clean	Driven by movements in short term GBP repo rates
11-Jul-18	LBG	Hypothetical and Clean	Driven by movements in short term GBP repo rates
16-Nov-18*	LBCM	Hypothetical and Clean	Driven by movements in GBP and USD interest rates
20-Nov-18*	LBCM	Hypothetical and Clean	Driven by movements in inflation and interest rates

* Both LBCM overshoots were driven predominately by risk factors that are not captured in the VaR model and are capitalised via RNIVs. Both overshoots have subsequently been disregarded by the regulator.

Valuation principles

Trading securities, other financial assets and liabilities at fair value through profit or loss, financial assets at fair value through other comprehensive income and derivatives are stated at fair value. 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. It is a measure as at a specific date and may be significantly different from the amount which will actually be paid or received on maturity or settlement date.

Wherever possible, fair values have been calculated using unadjusted quoted market prices in active markets for identical instruments held by the Group. Where quoted market prices are not available, or are unreliable because of poor liquidity, fair values have been determined using valuation techniques which, to the extent possible, use market observable inputs, but in some cases use non-market observable inputs. Valuation techniques used include discounted cash flow analysis and pricing models and, where appropriate, comparison to instruments with characteristics similar to those of the instruments held by the Group.

Pillar 1 Capital requirements: Market risk continued

The key elements of the control framework for the valuation of financial instruments include model validation, product implementation review and independent price verification. These functions are carried out by appropriately skilled risk and finance teams, independent of the business area responsible for the products.

Model validation covers both qualitative and quantitative elements relating to new models. In respect of new products, a product implementation review is conducted pre- and post-trading. Pre-trade testing ensures that the new model is integrated into the Group's systems and that the profit and loss and risk reporting are consistent throughout the trade life cycle. Post-trade testing examines the explanatory power of the implemented model, actively monitoring model parameters and comparing in-house pricing to external sources. Independent price verification procedures cover financial instruments carried at fair value. The frequency of the review is matched to the availability of independent data, monthly being the minimum. Valuation differences in breach of established thresholds are escalated to senior management. The results from independent pricing and valuation reserves are reviewed monthly by senior management.

Formal committees, consisting of senior risk, finance and business management, meet at least quarterly to discuss and approve valuations in more judgemental areas, in particular for unquoted equities, structured credit, over-the-counter options and the Credit Valuation Adjustment (CVA) reserve.

Full details on the use of valuation models and related adjustments are provided in Note 49 (Financial Instruments) of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Trading portfolios

The Group internally uses VaR as the primary risk measure for all trading book positions.

The table below provides relevant statistics for the Group's 10-day 99 per cent confidence level VaR that are based on 300 historical consecutive business days to year end 2018 and year end 2017. Also included are statistics for the Incremental Risk Change for 2018 and 2017.

The risk of loss measured by the VaR model is the minimum expected loss in earnings given a 99 per cent confidence. The total and average trading VaR numbers reported below have been obtained after the application of the diversification benefits across the different risk types: interest rate, foreign exchange, credit spread and inflation risk, but does not reflect any diversification between Lloyds Bank Capital Markets and any other entities.

Table 72: IMA values for trading portfolios (MR3)

	2018 £m	2017 £m
VaR (10 day 99%)		
Maximum value	14.9	9.7
Average value	5.4	3.6
Minimum value	2.3	1.7
Period end	6.0	2.6
Stressed VaR (10 day 99%)		
Maximum value	49.3	54.0
Average value	23.5	25.2
Minimum value	10.4	9.3
Period end	19.3	9.3
Incremental Risk Charge (99.9%)		
Maximum value	33.7	79.2
Average value	14.9	21.4
Minimum value	7.4	7.6
Period end	9.0	18.7
Comprehensive Risk capital charge (99.9%)		
Maximum value	–	–
Average value	–	–
Minimum value	–	–
Period end	–	–

Key movements

- The increase in average and period end VaR (10 day 99%) is as a result of more volatile markets due to uncertainty in the UK markets and a lack of diversification between LBCM and other entities.
- The decrease in average value SVaR (10 day 99%) was due to a reduction in the underlying exposures to interest rates.
- The reduction in IRC was due to a decrease in positions in corporate bonds over the year.

Pillar 1 Capital requirements: Market risk continued

Table 73: Market risk under internal models approach (MR2-A)

	2018 RWA £m	2018 Capital requirements £m	2017 RWA £m	2017 Capital requirements £m
1 VaR (higher of values a and b)	220	18	141	11
(a) Previous day's VaR (Article 365(1) (VaRt-1))		6		3
(b) Average of the daily VaR (Article 365(1)) on each of the preceding sixty business days (VaRavg) x multiplication factor ((mc) in accordance with Article 366)		18		11
2 SVaR (higher of values a and b)	739	59	891	71
(a) Latest SVaR (Article 365(2) (sVaRt-1))		19		9
(b) Average of the SVaR (Article 365(2) during the preceding sixty business days (sVaRavg) x multiplication factor (ms) (Article 366)		59		71
3 Incremental risk charge – IRC (higher of values a and b)	150	12	414	33
(a) Most recent IRC value (incremental default and migration risks section 3 calculated in accordance with Section 3 articles 370/371)		9		19
(b) Average of the IRC number over the preceding 12 weeks		12		33
4 Comprehensive Risk Measure – CRM (higher of values a, b and c)	–	–	–	–
(a) Most recent risk number for the correlation trading portfolio (article 377)		–		–
(b) Average of the risk number for the correlation trading portfolio over the preceding 12-weeks		–		–
(c) 8% of the own funds requirement in STA on most recent risk number for the correlation trading portfolio (Article 338(4))		–		–
5 RNIV	561	45	1,210	97
6 Total	1,669	134	2,656	212

Table 74: Risk-weighted assets flow statements of market risk exposures under an IMA (MR2-B)

	VaR £m	SVaR £m	IRC £m	CRM £m	RNIV £m	Total RWA ¹ £m	Total capital requirements £m
Risk-weighted assets as at 31 December 2017	141	891	414	–	1,210	2,656	212
Movement in risk levels	43	(762)	(176)	–	(26)	(922)	(74)
Model updates/changes	(9)	45	(88)	–	(656)	(708)	(57)
Methodology and policy	–	–	–	–	–	–	–
Acquisitions and disposals	–	–	–	–	–	–	–
Other	46	565	–	–	32	643	51
Risk-weighted assets at 31 December 2018	221	739	150	–	559	1,669	134

¹ The table above relates solely to movement in exposures under an IMA approach. Total Market risk risk-weighted assets are disclosed by key driver in Table 7. Note that the asset size driver disclosed therein is encompassed in movement in risk levels above.

Key movements

– The internal models approach risk-weighted assets (RWAs) decreased over the year due to a reduction in exposure impacting IRC and SVaR. As part of model refinements a large risk captured as a Risk Not In VaR (RNIV) moved into the VaR model significantly reducing RWAs contribution from RNIVs. There was a loss of diversification benefit following the establishment of Lloyds Bank Corporate Markets which was portfolio hedged throughout the remainder of the year.

Pillar 1 Capital requirements: Market risk continued

Table 75: Market risk under Standardised approach (MR1)

	2018 Risk-weighted assets £m	2018 Capital requirements £m	2017 Risk-weighted assets £m	2017 Capital requirements £m
Outright Products				
Interest rate risk (general and specific)	231	19	294	24
Equity risk (general and specific)	–	–	–	–
Foreign exchange risk	155	12	73	6
Commodity Risk	4	–	–	–
Securitisation (specific risk)	3	–	28	2
Options	–	–		
Simplified approach	–	–	–	–
Delta-plus method	22	2	–	–
Scenario approach	–	–	–	–
Total	416	33	395	32

Key movements

– Market risk under the Standardised approach remained stable during 2018.

Pillar 1 Capital requirements: Operational risk

Lloyds Banking Group's operational risk capital requirements are determined under the Standardised Approach.

- Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, which can lead to adverse customer impact, reputational damage or financial loss.
- Operational risk is managed across the Group through an operational risk framework and operational risk policies. Details of the Group's Operational Risk profile and Risk Management Framework can be found in the Risk Management section of the 2018 Lloyds Banking Group plc Annual Report and Accounts (pages 136 and 138).
- The Group's strategic review considers the changing risk management requirements, adapting the change delivery model to be more agile and develop the required people skills and capabilities. The Group continues to review and invest in its control environment to ensure it addresses the inherent risks faced.
- Monitoring and reporting of operational risk is undertaken at Board, Group and divisional risk committees.
- The Group calculates its operational risk capital requirements using the Standardised Approach. As at 31 December 2018, the Pillar 1 capital requirement in respect of operational risk amounted to £2,040m (2017: £2,026m).

Liquidity Risk

This section details Lloyds Banking Group's liquidity risk profile, focusing in particular on the Group's weighted average Liquidity Coverage Ratio.

- In March 2017, the EBA published final guidelines to harmonise and specify the public disclosure requirements laid down as part of the CRR in relation to information on liquidity risk management and the Liquidity Coverage Ratio (LCR). In the same month, the Basel Committee on Banking Supervision published final technical standards on Liquidity.

- To fully address these requirements, additional quantitative and qualitative information has been included in this section of the Pillar 3 document, and in the Risk Management section of the 2018 Lloyds Banking Group Annual Report and Accounts (pages 147 to 152) in line with the approach taken in 2017.

- Liquidity risk is defined as the risk that the Group has insufficient financial resources to meet its commitments as they fall due. Liquidity exposure represents the potential stressed outflows in any future period less expected inflows.

- Liquidity risk is managed through a series of measures, tests and reports that are primarily based on contractual maturities with behavioural overlays as appropriate. Additionally, the Group undertakes quantitative and qualitative analysis of behavioural aspects of its assets and liabilities in order to reflect their expected behaviour.

- The Group manages and monitors liquidity risks and ensures that liquidity risk management systems and arrangements are adequate with regard to the internal risk appetite, Group strategy and regulatory requirements.

- Daily monitoring and control processes are in place to address internal and regulatory requirements. In addition, the Group carries out internal stress testing of its liquidity and maintains a Contingency Funding Plan, which is designed to identify emerging liquidity concerns at an early stage.

- The Group's liquidity surplus continues to exceed the regulatory minimum and internal risk appetite, with a weighted average Liquidity Coverage Ratio of 128 per cent at 31 December 2018 (125 per cent at 31 December 2017).

Liquidity Risk continued

LIQUIDITY COVERAGE RATIO (LCR)

The scope of the LCR disclosure is the Consolidation Group which is the primary regulatory liquidity banking group capturing both the ring-fenced and non-ring-fenced banking entities.

The LCR is calculated on significant currency and a consolidated-all currencies basis which are all subject to internal risk appetite. The Group holds additional LCR eligible liquid assets to cover a PRA defined Pillar II buffer capturing liquidity risk not included in the LCR. The LCR is monitored on a daily basis and forms part of a suite of early warning indicators.

The Group's funding and liquidity position is underpinned by its significant customer deposit base, and is supported by strong relationships across customer segments. The composition of the Group's funding results in a low LCR outflow requirement relative to the overall size of the funding base, as a large proportion of this deposit base comes from Retail customers, which in aggregate provide a stable source of funding. The LCR captures both contractual derivative outflows and the impact of an adverse market scenario on derivative outflows and collateral calls. In addition, derivative outflows are subject to internal risk appetite through the Group's stress testing.

Further details on the Group's liquidity portfolio can be found in the Risk Management section of the 2018 Lloyds Banking Group plc Annual Report and Accounts (Funding and Liquidity section, pages 147 to 152).

The table below presents the breakdown of the Group's cash outflows and cash inflows, as well as its available high quality liquid assets, calculated as the simple averages of month end observations over the 12 months preceding the end of each quarter.

Table 76: Liquidity Coverage Ratio (LIQ1)

		2018							
		Total unweighted value (average) £m				Total weighted value (average) £m			
		At 31 Mar	At 30 Jun	At 30 Sep	At 31 Dec	At 31 Mar	At 30 Jun	At 30 Sep	At 31 Dec
High-quality liquid assets									
1	Total HQLA					121,552	121,001	123,498	125,731
Cash outflows									
2	Retail deposits and deposits from small business customers, of which:	274,700	274,674	274,691	274,674	18,013	17,996	18,041	18,100
3	Stable deposits	217,743	218,515	218,328	217,705	10,887	10,926	10,916	10,885
4	Less stable deposits	56,956	56,159	56,364	56,969	7,125	7,071	7,124	7,215
5	Unsecured wholesale funding:	96,232	96,402	97,761	98,610	53,983	54,004	54,954	55,566
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	22,816	23,060	23,107	23,184	5,704	5,765	5,777	5,796
7	Non-operational deposits (all counterparties)	71,411	71,330	72,219	72,590	46,273	46,228	46,741	46,934
8	Unsecured debt	2,006	2,011	2,436	2,836	2,006	2,011	2,436	2,836
9	Secured wholesale funding					35	47	87	107
10	Additional requirements:	75,879	74,668	74,160	73,627	30,963	30,408	29,775	29,210
11	Outflows related to derivative exposures and other collateral requirements	18,773	18,276	17,707	17,261	18,763	18,272	17,707	17,261
12	Outflows related to loss of funding on debt products	1,308	1,217	1,080	1,004	1,308	1,217	1,080	1,004
13	Credit and liquidity facilities	55,798	55,175	55,373	55,361	10,892	10,919	10,988	10,944
14	Other contractual funding obligations	3,011	2,836	2,732	2,103	2,251	2,084	1,999	1,389
15	Other contingent funding obligations	62,007	63,636	68,352	73,406	3,585	3,628	3,655	3,710
16	TOTAL CASH OUTFLOWS					108,829	108,168	108,510	108,082
Cash inflows									
17	Secured lending (eg: reverse repos)	22,039	23,333	25,397	26,001	519	590	655	604
18	Inflows from fully performing exposures	8,080	7,598	6,999	6,235	6,129	5,726	5,136	4,335
19	Other cash inflows	4,724	5,202	5,798	4,824	4,558	5,034	5,629	4,654
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)					–	–	–	–
EU-19b	(Excess inflows from a related specialised credit institution)					–	–	–	–
20	TOTAL CASH INFLOWS	34,843	36,133	38,194	37,060	11,206	11,351	11,420	9,593
EU-20a	Fully exempt flows	–	–	–	–	–	–	–	–
EU-20b	Inflows subject to 90% cap	–	–	–	–	–	–	–	–
EU-20c	Inflows subject to 75% cap	26,914	27,731	29,908	30,140	11,206	11,351	11,420	9,593
						Total adjusted value £m			
21	Liquidity buffer					121,552	121,001	123,498	125,731
22	Total net cash outflows					97,623	96,817	97,091	98,489
23	Liquidity Coverage Ratio (%)					125%	125%	127%	128%

Appendices

Appendix 1: Own Funds, Prudent Valuation Adjustments, Leverage and Countercyclical Capital Buffer

OWN FUNDS DISCLOSURE TEMPLATE

Table 77: Own funds template

	Transitional rules		Fully loaded rules	
	At 31 Dec 2018 £m	At 31 Dec 2017 £m	At 31 Dec 2018 £m	At 31 Dec 2017 £m
Common equity tier 1 (CET1) capital: instruments and reserves				
Capital instruments and related share premium accounts	24,835	24,831	24,835	24,831
of which: called up share capital	7,116	7,197	7,116	7,197
of which: share premium	17,719	17,634	17,719	17,634
Retained earnings	10,055	8,301	10,055	8,301
Accumulated other comprehensive income and other reserves (including unrealised gains and losses)	10,859	11,598	10,859	11,598
Foreseeable dividend	(1,523)	(1,475)	(1,523)	(1,475)
Common equity tier 1 (CET1) capital before regulatory adjustments	44,226	43,255	44,226	43,255
Common equity tier 1 (CET1) capital: regulatory adjustments				
Additional value adjustments	(529)	(556)	(529)	(556)
Intangible assets (net of related tax liability)	(3,667)	(2,966)	(3,667)	(2,966)
Deferred tax assets that rely on future profitability, excluding those arising from temporary differences (net of related tax liability where the conditions in Article 38 (3) of the CRR are met)	(3,037)	(3,255)	(3,037)	(3,255)
Fair value reserves related to gains or losses on cash flow hedges	(1,051)	(1,405)	(1,051)	(1,405)
Negative amounts resulting from the calculation of expected loss amounts	(27)	(498)	(27)	(498)
Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	(337)	83	(337)	83
Defined benefit pension fund assets	(994)	(541)	(994)	(541)
Direct and indirect holdings by the Group of own CET1 instruments	(4)	(29)	(4)	(29)
Direct, indirect and synthetic holdings by the Group of the CET1 instruments of financial sector entities where the Group has a significant investment in those entities (amount above 10% threshold and net of eligible short positions)	(4,222)	(4,250)	(4,222)	(4,250)
Exposure amount of the following items which qualify for a risk weight of 1,250%, where the Group has opted for the deduction alternative	(191)	(191)	(191)	(191)
of which: securitisation positions	(191)	(191)	(191)	(191)
Amount exceeding the 15% threshold	–	–	–	–
of which: direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	–	–	–	–
of which: deferred tax assets arising from temporary differences	–	–	–	–
Total regulatory adjustments applied to common equity tier 1 (CET1)	(14,059)	(13,608)	(14,059)	(13,608)
Common equity tier 1 (CET1) capital	30,167	29,647	30,167	29,647
Additional tier 1 (AT1) capital: instruments				
Capital instruments and related share premium accounts	6,466	5,330	6,466	5,330
of which: classified as equity under applicable accounting standards	6,466	5,330	6,466	5,330
Amount of qualifying items referred to in Article 484 (4) of the CRR and the related share premium accounts subject to phase out from AT1	450	501	–	–
Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in CET1) issued by subsidiaries and held by third parties	1,754	2,254	–	–
of which: instruments issued by subsidiaries subject to phase out	1,754	2,254	–	–
Additional tier 1 (AT1) capital before regulatory adjustments	8,670	8,085	6,466	5,330
Additional tier 1 (AT1) capital: regulatory adjustments				
Residual amounts deducted from AT1 capital with regard to deduction from Tier 2 capital during the transitional period pursuant to Article 475 of the CRR	(1,298)	(1,403)	–	–
of which: significant investments in Tier 2 instruments of other financial sector entities	(1,298)	(1,403)	–	–
Total regulatory adjustments applied to additional tier 1 (AT1) capital	(1,298)	(1,403)	–	–
Additional tier 1 (AT1) capital	7,372	6,682	6,466	5,330
Tier 1 capital	37,539	36,329	36,633	34,977

Appendix 1: Own Funds, Prudent Valuation Adjustments, Leverage and Countercyclical Capital Buffer continued

	Transitional rules		Fully loaded rules	
	At 31 Dec 2018 £m	At 31 Dec 2017 £m	At 31 Dec 2018 £m	At 31 Dec 2017 £m
Tier 2 (T2) capital: Instruments and provisions				
Capital instruments and related share premium accounts	5,486	3,531	5,935	4,032
Amount of qualifying items referred to in Article 484 (5) of the CRR and the related share premium accounts subject to phase out from T2	10	10	–	–
Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in CET1 or AT1) issued by subsidiaries and held by third parties	5,202	6,185	1,993	2,784
of which: instruments issued by subsidiaries subject to phase out	3,160	3,352	–	–
Credit risk adjustments	–	120	–	120
Tier 2 (T2) capital before regulatory adjustments	10,698	9,846	7,928	6,936
Tier (T2) capital: regulatory adjustments				
Direct and indirect holdings by the Group of the T2 instruments and subordinated loans of financial sector entities where the Group has a significant investment in those entities (net of eligible short positions)	(973)	(1,516)	(2,271)	(2,919)
IFRS 9 transitional adjustments	(30)		(30)	
Total regulatory adjustments applied to tier 2 (T2) capital	(1,003)	(1,516)	(2,301)	(2,919)
Tier 2 (T2) capital	9,695	8,330	5,627	4,017
Total capital	47,234	44,659	42,260	38,994
Total risk-weighted assets	206,366	210,919	206,366	210,919
Capital ratios and buffers				
Common Equity Tier 1 (as a percentage of risk exposure amount)	14.6%	14.1%	14.6%	14.1%
Tier 1 (as a percentage of risk exposure amount)	18.2%	17.2%	17.8%	16.6%
Total capital (as a percentage of risk exposure amount)	22.9%	21.2%	20.5%	18.5%
Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	2.759%	1.252%	2.759%	1.252%
of which: capital conservation buffer requirement ¹	1.875%	1.250%	1.875%	1.250%
of which: countercyclical buffer requirement	0.884%	0.002%	0.884%	0.002%
Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount) ²	10.1%	9.6%	10.1%	9.6%
Amounts below the threshold for deduction (before risk weighting)				
Direct and indirect holdings of the capital of financial sector entities where the Group does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	493	921	493	921
Direct and indirect holdings by the Group of the CET1 instruments of financial sector entities where the Group has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	3,439	3,390	3,439	3,390
Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in 38 (3) are met)	572	678	572	678
Applicable caps on the inclusion of provisions in Tier 2				
Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	–	120	–	120
Cap on inclusion of credit risk adjustments in T2 under internal ratings-based approach	844	866	844	866
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)				
Current cap on AT1 instruments subject to phase out arrangements	2,204	2,755	–	–
Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	1,636	1,617	–	–
Current cap on T2 instruments subject to phase out arrangements	5,734	7,167	–	–

1 The capital conservation buffer requirement is the percentage applicable at the reporting date. This will increase to 2.5 per cent by 2019.

2 Excluding CET1 required to meet Pillar 2A requirements.

Appendix 1: Own Funds, Prudent Valuation Adjustments, Leverage and Countercyclical Capital Buffer continued

OWN FUNDS RECONCILIATION

The following table presents certain items from the Group’s consolidated regulatory balance sheet (as presented on pages 7 and 8), for the year ended 31 December 2018, that are used to calculate own funds. Where necessary, the balance sheet components under the regulatory scope of consolidation have been expanded such that the components of the transitional own funds disclosure template appear separately.

Table 78: Items extracted from the consolidated regulatory balance sheet and reconciliation of own funds items to audited financial statements

Lloyds Banking Group balance sheet category	Own funds description	Items extracted from the consolidated regulatory balance sheet (1) £m	Adjustments					Notes	Reversal of IFRS 9 transitional arrangements £m	Transitional own funds (IFRS 9 full impact) (16) £m
			Deferred tax £m	Threshold adjustments £m	Non-eligible instruments £m	Amounts excluded from AT1 due to Cap (13) £m	Regulatory and other adjustments (16) £m			
	Common Equity Tier 1 (CET1) capital: instruments and reserves									
	Capital instruments and related share premium accounts	24,835							24,835	24,835
Share capital	of which: called up share capital	7,116							7,116	7,116
Share premium account	of which: share premium	17,719							17,719	17,719
Retained profits	Retained earnings	9,592					463	2	10,055	9,578
Other reserves	Accumulated other comprehensive income and other reserves (including unrealised gains and losses)	11,296					(437)	2	10,859	10,859
	Common equity tier 1 (CET1) capital: regulatory adjustments									
	Additional value adjustments						(529)	3	(529)	(529)
Goodwill and other intangible assets	Intangible assets (net of related tax liability)	(3,821)	168				(14)	4	(3,667)	(3,667)
Deferred tax assets	Deferred tax assets that rely on future profitability, excluding those arising from temporary differences (net of related tax liability where conditions in Article 38(3) of the CRR are met)	(3,112)	(785)	572			288	5	(3,037)	(3,082)
	Fair value reserves related to gains or losses on cash flow hedges						(1,051)	6	(1,051)	(1,051)
	Negative amounts resulting from the calculation of expected loss amounts						(27)	7	(27)	(27)
	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing						(337)	8	(337)	(337)
Retirement benefit assets	Defined benefit pension fund assets	(1,267)	273					5	(994)	(994)
	Direct and indirect holding by the Group of own CET1 instruments						(4)	9	(4)	(4)
Investment in group undertakings	Direct and indirect holdings by the Group of CET1 instruments in financial sector entities where the Group has a significant investment in those entities (amounts above 10% threshold and net of eligible short positions)	(8,754)		3,439			1,093	10	(4,222)	(4,275)
	Exposures amount of the following items which qualify for a risk weight of 1,250%, where the Group has opted for the deduction alternative (securitisation positions)						(191)	11	(191)	(191)
	Foreseeable dividend						(1,523)	12	(1,523)	(1,523)
	Common Equity Tier 1 (CET1) capital	28,769	(344)	4,011			(2,269)		30,167	29,592
	Additional Tier 1 (AT1) capital: instruments									
Other equity instruments	Capital instruments and the related share premium accounts	6,491					(25)		6,466	6,466
Subordinated liabilities	Amount of qualifying items referred to in Article 484 (4) of the CRR and the related share premium accounts subject to phase out from AT1	789				(334)	(5)	13	450	450
Subordinated liabilities	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in CET1) issued by subsidiaries and held by third parties	3,224			(50)	(1,303)	(117)	13	1,754	1,754
	Additional Tier 1 (AT1) capital: regulatory adjustments									
Financial assets at fair value through profit or loss	Residual amounts deducted from AT1 capital with regard to deduction from T2 capital during the transitional period pursuant to Article 475 of the CRR (significant investments)	(1,383)					85	14	(1,298)	(1,298)
	Additional Tier 1 (AT1) capital	9,121			(50)	(1,637)	(62)		7,372	7,372
	Tier 1 capital	37,890	(344)	4,011	(50)	(1,637)	(2,331)		37,539	36,964
	Tier 2 (T2) capital: instruments and provisions									
Subordinated liabilities	Capital instruments and related share premium accounts	5,206				334	(54)	13	5,486	5,486
Subordinated liabilities	Amount of qualifying items referred to in Article 484 (5) of the CRR and the related share premium accounts subject to phase out from T2	10						13	10	10
Subordinated liabilities	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in CET1 or AT1) issued by subsidiaries and held by third parties	6,741			(133)	1,303	(2,709)	13	5,202	5,202
	Credit risk adjustments							15	506	506
	Tier 2 (T2) capital: regulatory adjustments									
Debt securities	Direct and indirect holdings by the Group of the T2 instruments and subordinated loans of financial sector entities where the Group has a significant investment in those entities (net of eligible short positions)	(584)						14	(584)	(584)
Financial assets at fair value through profit or loss	Direct and indirect holdings by the Group of the T2 instruments and subordinated loans of financial sector entities where the Group has a significant investment in those entities (net of eligible short positions)						(389)	14	(389)	(389)
	IFRS 9 transitional arrangements						(30)		(30)	–
	Tier 2 (T2) capital	11,373			(133)	1,637	(3,182)		9,695	10,231
	Total capital	49,263	(344)	4,011	(183)	–	(5,513)		47,234	47,195

Appendix 1: Own Funds, Prudent Valuation Adjustments, Leverage and Countercyclical Capital Buffer continued

- 1 Assets on the regulatory balance sheet are presented as negative amounts, liabilities and equity are presented as positive amounts.
- 2 The regulatory definition of eligible items for inclusion in retained earnings differs from the statutory reporting definition. The aggregate of retained earnings and accumulated other comprehensive income and other reserves is comparable on both bases but the allocation between categories differs. Retained earnings are further adjusted to reflect the application of the IFRS 9 transitional arrangements - refer to note 16.
- 3 The additional value adjustments of £529m reflect the prudent valuation adjustment for all assets measured at fair value in accordance with Articles 34 and 105 of the CRR. Table 79 on page 116 provides a breakdown of the constituent elements of the Group's prudent valuation adjustment.
- 4 Own funds intangible assets of £3,821m extracted from the consolidated regulatory balance sheet comprise £474m of goodwill and £3,347m of intangible assets. CRD IV rules require the amount to be deducted from own funds to be reduced by the amount of the associated deferred tax liabilities.
- 5 The own funds deduction of £3,037m for deferred tax excludes the deferred tax balances relating to intangible assets, cash flow hedge and the defined benefit pension fund asset. Additionally, only the deferred tax amounts that rely on future profitability are required to be deducted from CET1, and may be reduced by associated deferred tax liabilities where conditions specified in Article 38 of CRR are met. £572m of the deferred tax assets relate to temporary differences that may be risk weighted instead of deducted from capital as presented in the threshold adjustments column. The deferred tax assets that relate to temporary differences include an adjustment to reflect the application of the IFRS 9 transitional arrangements.
- 6 Cash flow hedge reserve forms part of other reserves in the consolidated regulatory balance sheet. Please refer to Note 41 (Other Reserves) in the 2018 Lloyds Banking Group plc Annual Report and Accounts.
- 7 In accordance with Articles 36, 62, 158 and 159 of the CRR the excess of expected losses over specific credit risk adjustments (SCRAs) and eligible additional value adjustments are deducted from CET1. A comparison of regulatory expected losses to SCRAs on loans and receivables, in respect of credit risk exposures subject to the IRB Approach is presented on page 76.
- 8 CRD IV requires the removal of the impact of any gains or losses recorded on liabilities held at fair value through profit or loss or derivative liabilities due to changes in the credit spreads of Lloyds Bank plc and Lloyds Bank Corporate Markets plc.
- 9 The £4m deduction of holdings by the Group of its own CET1 instruments represents the regulatory adjustment required to remove the Group's investment in its own shares, excluding holdings through Open Ended Investment Companies (OEICs) as these shareholdings are held for third party investors through the Group's Insurance operations.
- 10 The investment in group undertakings of £8,754m extracted from the consolidated regulatory balance sheet represents the Group's total equity investment in Insurance subsidiaries as well as joint ventures and associates. The majority of the investment relates to the Group's investment in its Insurance operations headed by Scottish Widows Group Limited. The own funds deduction of £4,222m reflects the regulatory requirement to deduct a portion of the Group's significant investments from CET1, above certain thresholds. In accordance with the CRD IV rules the cost of the Group's investment in the equity of the Insurance business is risk-weighted up to a limit based on the size of the Group's CET1 capital (as presented in the threshold adjustments column), with the remainder deducted from CET1.
- 11 The £191m deduction for securitisation positions reflects those positions that were rated below BB- or that are unrated.
- 12 The £1,523m foreseeable dividend is that recommended by the Board of Directors in respect of 2018 earnings.
- 13 A reconciliation of subordinated liabilities from the consolidated regulatory balance sheet to the amount recognised against each own funds description is presented in the table below.

Own funds description	Consolidated regulatory balance sheet total £m
Amount of qualifying items referred to in Article 484 (4) of the CRR and the related share premium accounts subject to phase out from AT1	789
Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in CET1) issued by subsidiaries and held by third parties	3,224
Capital instruments and related share premium accounts	5,206
Amount of qualifying items referred to in Article 484 (5) of the CRR and the related share premium accounts subject to phase out from T2	10
Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in CET1 or AT1) issued by subsidiaries and held by third parties	6,741
Total subordinated liabilities as presented on the consolidated regulatory balance sheet, page 8	15,970

Adjustments required by regulatory rules to the value of subordinated liabilities presented within the regulatory and other adjustments column on the reconciliation include adjustments for accrued interest and regulatory amortisation.

Additional Tier 1 instruments presented in own funds reflect instruments issued by either Lloyds Banking Group plc or its subsidiaries and held by third parties that qualified as Tier 1 under regulation that preceded CRD IV, subject to certain restrictions, including a cap set at 40 per cent of the value of such instruments that were in issue at 31 December 2012 and net of interest. Any excess over the cap is included in Tier 2 instruments which have been issued in the same manner as Additional Tier 1 instruments and are net of interest and in some instances regulatory amortisation.

14. The £1,383m extracted from the regulatory consolidated balance sheet reflects the Group's investment in the subordinated debt of Scottish Widows held at fair value through profit or loss. The £584m extracted from the regulatory consolidated balance sheet reflects the Group's investment in the subordinated debt of Scottish Widows held at amortised cost and classified as a debt security. In addition, for regulatory capital purposes, a further £305m categorised as an 'other equity' investment in Scottish Widows from an accounting perspective is treated as an investment in subordinated debt.
15. Credit risk adjustments reflect the surplus provisions resulting from the calculation of excess expected loss amounts in accordance with Articles 158 and 159 of the CRR, subject to certain limits. A comparison of regulatory expected losses to SCRAs on loans and receivables, in respect of credit risk exposures subject to the IRB Approach is presented on page 76. Credit risk adjustments are adjusted to reflect the application of the IFRS 9 transitional arrangements - refer to note 16.
16. The application of the IFRS 9 transitional arrangements for capital is reflected through the regulatory and other adjustments column. These comprise of the following:
 - An increase in retained earnings of £477m, predominantly reflecting 95 per cent of the tax adjusted add-back for the increase in non-defaulted impairment provisions at 1 January 2018 that either could not be absorbed by regulatory expected losses (IRB portfolios) or that were netted against gross credit risk exposures (Standardised portfolios).
 - A resultant movement in threshold and DTA deductions of £98m.
 - A consequential adjustment to reduce tier 2 credit risk adjustments by £536m, reflecting the fact that these have been added back through CET1 capital.

As at 31 December 2018, the consequential adjustment applied to tier 2 credit risk adjustments reflects the 'static' adjustment arising under the transitional arrangements on 1 January 2018. As expected credit losses, and the resultant increase in the level of tier 2 eligible provisions, were higher for IRB exposures at 1 January 2018 compared to 31 December 2018, the application of the 'static' consequential adjustment to tier 2 eligible provisions at 31 December 2018 has resulted in no eligible provisions being recognised. The difference between the 'static' adjustment and the tier 2 credit risk adjustment at 31 December 2018 is reflected as an additional adjustment to tier 2 capital of £30m.

Appendix 1: Own Funds, Prudent Valuation Adjustments, Leverage and Countercyclical Capital Buffer continued

PRUDENT VALUATION ADJUSTMENTS

The table below provides a breakdown of the constituent elements of the Group's Prudent Valuation Adjustments (PVA).

Table 79: Prudent valuation adjustments (PV1)

		2018							
		Equity £m	Interest rates £m	FX £m	Credit £m	Commodities £m	Total £m	of which: In the trading book £m	of which: In the banking book £m
		a	b	c	d	e	f	g	h
1	Closeout uncertainty, of which:	224	289	15	125	–	652	306	346
2	Mid-market value	224	125	15	20	–	384	133	251
3	Closeout cost	–	128	–	51	–	179	136	43
4	Concentration	–	36	–	53	–	90	37	53
5	Early termination	–	–	–	–	–	–	–	–
6	Model risk	–	12	5	30	–	47	17	30
7	Operational risk	22	25	1	7	–	56	27	29
8	Investing and funding costs						24	–	24
9	Unearned credit spreads						37	–	37
10	Future administrative costs	–	14	–	5	–	18	9	9
11	Other ¹	(112)	(132)	(10)	(51)	–	(305)	(143)	(162)
12	Total adjustment						529		

		2017							
		Equity £m	Interest rates £m	FX £m	Credit £m	Commodities £m	Total £m	of which: In the trading book £m	of which: In the banking book £m
		a	b	c	d	e	f	g	h
1	Closeout uncertainty, of which:	233	285	20	66	1	604	263	341
2	Mid-market value	202	148	19	20	1	390	120	271
3	Closeout cost	4	109	1	6	–	120	108	12
4	Concentration	27	28	–	40	–	94	36	58
5	Early termination	–	–	–	–	–	–	–	–
6	Model risk	–	30	5	–	–	36	35	1
7	Operational risk	21	26	2	3	–	51	23	28
8	Investing and funding costs						58	–	58
9	Unearned credit spreads						66	–	66
10	Future administrative costs	–	9	–	5	–	14	9	5
11	Other ¹	(103)	(144)	(13)	(13)	–	(273)	(131)	(142)
12	Total adjustment						556		

¹ 'Other' adjustments capture the diversification benefit which is permitted under EBA Regulatory Technical Standards on Prudent Valuation.

Appendix 1: Own Funds, Prudent Valuation Adjustments, Leverage and Countercyclical Capital Buffer continued

LEVERAGE DISCLOSURE TEMPLATE (CRD IV)**Table 80: Leverage ratio common disclosure**

	At 31 Dec 2018 Fully loaded £m	At 31 Dec 2017 Fully loaded £m
On-balance sheet exposures (excluding derivatives and SFTs)		
On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	574,654	596,695
Asset amounts deducted in determining Tier 1 capital	(8,163)	(7,658)
Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)	566,491	589,037
Derivative exposures		
Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	5,967	5,699
Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	18,250	12,335
Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	2,645	1,716
Deductions of receivables assets for cash variation margin provided in derivatives transactions	(5,757)	(4,035)
Adjusted effective notional amount of written credit derivatives	841	997
Adjusted effective notional offsets and add-on deductions for written credit derivatives	(302)	(116)
Total derivative exposures	21,644	16,596
Securities financing transaction exposures		
Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	76,526	56,401
Netted amounts of cash payables and cash receivables of gross SFT assets	(10,754)	(11,911)
Counterparty credit risk exposure for SFT assets	3,082	2,596
Total securities financing transaction exposures	68,854	47,086
Other off-balance sheet exposures		
Off-balance sheet exposures at gross notional amount	145,444	147,814
Adjustments for conversion to credit equivalent amounts	(89,051)	(89,457)
Other off-balance sheet exposures	56,393	58,357
Capital and total exposure measure		
Tier 1 capital	36,633	34,977
Total leverage ratio exposures	713,382	711,076
Leverage ratio		
Leverage ratio	5.1%	4.9%

A description of the factors that had an impact on the leverage ratio during the year is discussed on page 25.

Table 81: Summary reconciliation of accounting assets and leverage ratio exposures

	At 31 Dec 2018 Fully loaded £m	At 31 Dec 2017 Fully loaded £m
Total assets as per published financial statements	797,598	812,109
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(131,911)	(142,515)
Adjustments for derivative financial instruments	(575)	(7,195)
Adjustments for securities financing transactions (SFTs)	40	(2,022)
Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	56,393	58,357
Other adjustments	(8,163)	(7,658)
Total leverage ratio exposure	713,382	711,076

Appendix 1: Own Funds, Prudent Valuation Adjustments, Leverage and Countercyclical Capital Buffer continued

Table 82: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)

	At 31 Dec 2018 Fully loaded £m	At 31 Dec 2017 Fully loaded £m
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	574,654	596,695
Trading book exposures	7,513	10,647
Banking book exposures, of which:	567,141	586,048
Covered bonds	769	727
Exposures treated as sovereigns	77,123	96,589
Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	6	6
Institutions	4,438	2,716
Secured by mortgages of immovable properties	316,580	323,415
Retail exposures	43,487	42,575
Corporates	73,460	74,016
Exposures in default	7,554	7,651
Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	43,724	38,353

Description of the processes used to manage the risk of excessive leverage

Capital is actively managed and regulatory ratios, including leverage, are a key factor in the Group's internal risk appetite assessment, planning processes and stress analyses.

Capital plans include an assessment of leverage requirements over the forecast period, with capital adequacy in respect of both risk-based capital and leverage requirements subjected to a range of stress scenarios. Where relevant the scenarios consider the risk of excessive leverage and potential mitigating actions that could be undertaken in response.

The Group monitors its leverage position through a combination of actual and projected ratios, including those under stressed scenarios, ensuring that the ratio exceeds regulatory minimums and internal risk appetite and reports these on a regular basis to the Group Asset and Liability Committee, the Group Executive Committee, the Group Risk Committee, Board Risk Committee and the Board.

Further details on the process by which the Group manages its capital position in respect of both risk-based capital and leverage requirements is discussed in the Capital Risk section on pages 139 to 147 of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Appendix 1: Own Funds, Prudent Valuation Adjustments, Leverage and Countercyclical Capital Buffer continued

Table 83: Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

Breakdown by Country	2018 General credit exposures ^{2,3}		2018 Trading book exposures ²		2018 Securitisation exposures ³		2018 Own funds requirements				2018 Own funds requirement weights	2018 Countercyclical capital buffer rate
	Exposure Value for STA	Exposure Value for IRB	Sum of long and short positions of trading book exposures for STA	Value of trading book exposures for internal models	Exposure Value for STA	Exposure Value for IRB	of which: General credit exposures ^{2,3}	of which: Trading book exposures ²	of which: Securitisation exposures ³	Total		
United Kingdom	28,031	477,862	3	63	937	18,478	11,349	7	278	11,634	88.11%	1.000%
Hong Kong	156	103	–	–	–	–	6	–	–	6	0.04%	1.875%
Norway	3	46	–	1	–	–	6	–	–	6	0.04%	2.000%
Sweden	30	39	–	–	–	–	5	–	–	5	0.04%	2.000%
Czech Republic	–	–	–	–	–	–	–	–	–	–	0.00%	1.000%
Iceland	–	–	–	–	–	–	–	–	–	–	0.00%	1.250%
Slovakia	–	–	–	–	–	–	–	–	–	–	0.00%	1.250%
Lithuania	–	–	–	–	–	–	–	–	–	–	0.00%	0.500%
i) Total ¹	28,220	478,050	3	64	937	18,478	11,366	7	278	11,651	88.23%	
United States of America	1,791	10,342	4	100	–	6,423	525	10	44	579	4.39%	–
Netherlands	985	7,663	–	8	–	547	160	1	3	164	1.25%	–
ii) Total ¹	2,776	18,005	4	108	–	6,970	685	11	47	743	5.64%	
iii) Rest of the World ¹	3,611	14,645	3	70	–	1,053	780	7	21	808	6.13%	
Total	34,607	510,700	10	242	937	26,501	12,831	25	346	13,202	100.00%	

Breakdown by Country	2017 General credit exposures ^{2,3}		2017 Trading book exposures ^{2,4}		2017 Securitisation exposures ³		2017 Own funds requirements				2017 Own funds requirement weights	2017 Countercyclical capital buffer rate
	Exposure Value for STA	Exposure Value for IRB	Sum of long and short positions of trading book exposures for STA	Value of trading book exposures for internal models	Exposure Value for STA	Exposure Value for IRB	of which: General credit exposures ^{2,3}	of which: Trading book exposures ^{2,4}	of which: Securitisation exposures ³	Total		
Hong Kong	178	27	–	–	–	–	7	–	–	7	0.05%	1.250%
Norway	3	50	–	–	–	–	7	–	–	7	0.05%	2.000%
Sweden	30	54	–	–	–	–	5	–	–	5	0.04%	2.000%
Czech Republic	–	8	–	–	–	–	–	–	–	–	0.00%	0.500%
Iceland	–	–	–	–	–	–	–	–	–	–	0.00%	1.250%
Slovakia	–	–	–	–	–	–	–	–	–	–	0.00%	0.500%
i) Total ¹	211	139	–	–	–	–	19	–	–	19	0.14%	
United Kingdom	27,181	479,808	376	332	1,067	18,494	11,094	43	283	11,420	85.17%	n/a
United States of America	2,559	11,983	–	–	–	5,733	572	–	42	614	4.58%	n/a
Ireland	932	4,081	–	–	–	10	374	–	4	378	2.81%	n/a
Netherlands	866	6,823	–	–	–	29	155	–	–	155	1.15%	n/a
ii) Total ¹	31,538	502,695	376	332	1,067	24,266	12,195	43	329	12,567	93.71%	
iii) Rest of the World ¹	3,566	15,582	–	–	–	1,107	807	–	14	821	6.15%	
Total	35,315	518,416	376	332	1,067	25,373	13,021	43	343	13,407	100.00%	

Amount of institution specific countercyclical capital buffer	2018	2017
Total risk exposure amount	£206,366m	£210,919m
Institution specific countercyclical buffer rate	0.884%	0.002%
Institution specific countercyclical buffer requirement	£1,821m	£5.2m

1 The breakdown by country is disclosed on the following basis:
i) those countries for which a countercyclical capital buffer rate has been set.
ii) those countries for which a countercyclical capital buffer rate has not been set and have an own funds requirement weighting of greater than or equal to one per cent, the threshold having been determined by the Group in accordance with the EBA guidelines on materiality for Pillar 3.
iii) the aggregate of all remaining countries for which a countercyclical buffer rate has not been set and individually have an own funds requirement weighting of less than one per cent.

2 For the purposes of the calculation of the countercyclical capital buffer, general credit risk and trading book exposures exclude exposures to central governments, central banks, regional governments, local authorities, public sector entities, multilateral development banks, international organisations and institutions. In addition, trading book exposures are limited to those that are subject to the own funds requirement for specific risk or incremental default and migration risk.

3 General credit and securitisation exposures include counterparty credit risk and are stated on a post CRM basis.

4 In 2017, trading book exposures were allocated in full to the United Kingdom in accordance with the threshold criteria set out under the EBA Regulatory Technical Standard on the identification of the geographical location of the relevant credit exposures for the calculation of the countercyclical capital buffer. For 2018, the exposures have been allocated by geographical location.

Appendix 2: Asset encumbrance

Table 84: Asset Encumbrance

The values reported in the tables below represent the median of the values reported to the regulator via quarterly supervisory returns over the period 31 March 2018 to 31 December 2018.

	2018								2017							
	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets		Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
	of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA	
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Encumbered and unencumbered assets																
Total assets	121,137	18,901			560,885	76,945			149,653					528,516		
Equity instruments	–	–			2,204	–			–					2,044		
Debt securities ¹	17,822	14,378	17,822	14,378	32,575	15,098	32,575	15,098	30,267		30,267			39,691		39,691
of which: covered bonds	–	–	–	–	817	817	817	817	3		3			866		866
of which: asset-backed securities	2,167	–	2,167	–	2,000	1,628	2,000	1,628	1,113		1,113			2,042		2,042
of which: issued by general governments	14,151	14,151	14,151	14,151	17,319	13,386	17,319	13,386	29,699		29,699			23,802		23,802
of which: issued by financial corporations	2,463	227	2,463	227	12,945	1,475	12,945	1,475	1,569		1,569			13,009		13,009
of which: issued by non-financial corporations	1	–	1	–	1,901	72	1,901	72	10		10			2,155		2,155
Other assets ²	105,415	4,523			526,846	62,061			118,293					485,736		

	2018				2017			
	Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance		Fair value of encumbered collateral received or own debt securities issued		Fair value of collateral received or own debt securities issued available for encumbrance	
	of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA	
	£m	£m	£m	£m	£m	£m	£m	£m
Collateral received	47,957	47,934	52,822	49,930	47,460		51,943	
Loans on demand	–	–	–	–	–		–	
Equity Instruments	–	–	–	–	–		–	
Debt securities¹	47,957	47,934	50,211	49,930	47,460		48,309	
of which: covered bonds	–	–	12	–	7		7	
of which: asset-backed securities	3	–	289	–	–		–	
of which: issued by general governments	47,750	47,750	49,296	49,014	47,251		48,134	
of which: issued by financial corporations	14	1	760	36	208		120	
of which: issued by non-financial corporations	179	179	202	195	1		67	
Loans and advances other than loans on demand	–	–	3,224	–	–		3,793	
Other collateral received	–	–	–	–	–		–	
Own debt securities issued other than own covered bonds or asset-backed securities	–	–	–	–	–		–	
Own covered bonds and asset-backed securities issued and not yet pledged			10,494	–			13,377	
Total assets, collateral received and own debt securities issued	164,113	66,835			197,721			

Appendix 2: Asset encumbrance continued

Sources of Encumbrance	2018 Matching liabilities, contingent liabilities or securities lent £m	2018 Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered £m	2017 Matching liabilities, contingent liabilities or securities lent £m	2017 Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered £m
Carrying amount of selected financial liabilities ³	121,529	99,070	133,266	122,738

- 1 Includes debt securities accounted for as financial assets at fair value through profit or loss, financial assets at amortised cost and financial assets at fair value through other comprehensive income.
- 2 All remaining regulatory balance sheet assets, including loans on demand and other loans and advances. The carrying amount of other encumbered assets predominantly reflects other loans and advances.
- 3 Consists of derivatives, deposits and debt securities issued.

Asset encumbrance

The Board and Group Asset and Liability Committee monitor and manage total balance sheet encumbrance via a number of risk appetite metrics. The amount of encumbered assets has fallen during 2018. The vast majority of assets encumbered are in the UK banking entities, with the Group primarily encumbering mortgages, unsecured lending and credit card receivables through the issuance programmes (covered bonds and securitisation) and tradable securities through securities financing activity (repo and stock lending). In some transactions (i.e. covered bonds and securitisations) the Group will encumber assets in excess of the matching liabilities to provide greater security for investors. The Group also separately identifies unencumbered assets which are available to meet any future possible funding requirements, further details are included on pages 151 and 152 of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

The Group provides collateralised security financing services to its clients, providing them with cash financing or specific securities. Collateralised security financing is also used to manage the Group's own short-term cash and collateral needs. For securities accepted as collateral, mandates are credit rating driven with appropriate notional limits per rating, asset and individual bond concentration. The vast majority of collateral the Group uses in repo/reverse repo and stock lending/stock borrowing transactions is investment grade government issued, primarily UK Government debt.

Appendix 3: Differences in the accounting and regulatory scopes of consolidation

Table 85: Outline of the differences between the accounting and regulatory scopes of consolidation (LI3)^{1,2}

2018						
Name of the entity	Method of accounting consolidation	Method of regulatory consolidation				Description of entity
		Full consolidation	Proportional consolidation	Neither consolidated nor deducted	Deducted	
	a	b	c	d	e	f
Associates³						
MOTABILITY OPERATIONS GROUP PLC	Equity				X	Rental and leasing activities
Securitisation SPEs⁴						
CANCARA ASSET SECURITISATION LTD	Full Consolidation			X		Special Purpose Entity
CHELTENHAM SECURITIES 2017 LIMITED	Full Consolidation			X		Special Purpose Entity
FONTWELL SECURITIES 2016 LIMITED	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 1) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 3) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 10) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO.11) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 12) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO.13) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO.14) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 15) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO.16) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 19) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 20) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 21) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 22) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 23) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 24) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 25) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 26) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 27) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 28) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 29) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 30) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 31) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 32) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 33) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 34) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 35) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 36) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 37) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 38) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 39) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 40) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 41) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 42) LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 44) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 45) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 46) UK LTD	Full Consolidation			X		Special Purpose Entity
GRESHAM RECEIVABLES (NO. 47) UK LIMITED	Full Consolidation			X		Special Purpose Entity
HART 2014-1 LTD	Full Consolidation			X		Special Purpose Entity
LEICESTER SECURITIES 2014 LTD	Full Consolidation			X		Special Purpose Entity
SALISBURY II SECURITIES 2016 LTD	Full Consolidation			X		Special Purpose Entity
SALISBURY II-A SECURITIES 2017 LIMITED	Full Consolidation			X		Special Purpose Entity
SALISBURY SECURITIES 2015 LTD	Full Consolidation			X		Special Purpose Entity
WETHERBY SECURITIES 2017 LIMITED	Full Consolidation			X		Special Purpose Entity
WETHERBY II SECURITIES 2018 DAC	Full Consolidation			X		Special Purpose Entity
Insurance subsidiaries⁵						
SCOTTISH WIDOWS GROUP LTD	Full Consolidation				X	Activities of head offices; management consultancy activities
SCOTTISH WIDOWS LTD	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
CLERICAL MEDICAL (DARTFORD NUMBER 2) LTD	Full Consolidation				X	Non-Trading Company
CLERICAL MEDICAL (DARTFORD NUMBER 3) LTD	Full Consolidation				X	Non-Trading Company
CLERICAL MEDICAL FORESTRY LTD	Full Consolidation				X	Financial service activities, except insurance and pension funding

Appendix 3: Differences in the accounting and regulatory scopes of consolidation continued

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation			Deducted	Description of entity
		Full consolidation	Proportional consolidation	Neither consolidated nor deducted		
	a	b	c	d	e	f
CLERICAL MEDICAL INTERNATIONAL HOLDINGS B.V.	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
CLERICAL MEDICAL MANAGED FUNDS LTD	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
CLERICAL MEDICAL NON STERLING PROPERTY COMPANY SARL	Full Consolidation				X	Financial service activities, except insurance and pension funding
CLERICAL MEDICAL PROPERTIES LTD	Full Consolidation				X	Real estate activities
CM VENTURE INVESTMENTS LTD	Full Consolidation				X	Financial service activities, except insurance and pension funding
CMI INSURANCE (LUXEMBOURG) S.A.	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
DALKEITH CORPORATION	Full Consolidation				X	Financial service activities, except insurance and pension funding
FONTVIEW LTD	Full Consolidation				X	Non-Trading Company
FRANCE INDUSTRIAL PREMISES HOLDING COMPANY	Full Consolidation				X	Financial service activities, except insurance and pension funding
HALIFAX EQUITABLE LTD	Full Consolidation				X	Non-Trading Company
HALIFAX GENERAL INSURANCE SERVICES LTD	Full Consolidation				X	Financial service activities, except insurance and pension funding
HALIFAX LIFE LTD	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
HBOS INTERNATIONAL FINANCIAL SERVICES HOLDINGS LTD	Full Consolidation				X	Activities of head offices; management consultancy activities
INDUSTRIAL REAL ESTATE (GENERAL PARTNER) LTD	Full Consolidation				X	Financial service activities, except insurance and pension funding
INDUSTRIAL REAL ESTATE (NOMINEE) LTD	Full Consolidation				X	Financial service activities, except insurance and pension funding
LLOYDS BANK GENERAL INSURANCE HOLDINGS LTD	Full Consolidation				X	Activities of head offices; management consultancy activities
LLOYDS BANK GENERAL INSURANCE LTD	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
LLOYDS BANK INSURANCE SERVICES (DIRECT) LTD	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
LLOYDS BANK INSURANCE SERVICES LTD	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
NEWFONT LTD	Full Consolidation				X	Non-Trading Company
OYSTERCATCHER NOMINEES LTD	Full Consolidation				X	Office administrative, office support and other business support activities
OYSTERCATCHER RESIDENTIAL LTD	Full Consolidation				X	Office administrative, office support and other business support activities
PENSIONS MANAGEMENT (S.W.F.) LTD	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
SAINT MICHEL HOLDING COMPANY NO1	Full Consolidation				X	Financial service activities, except insurance and pension funding
SAINT MICHEL INVESTMENT PROPERTY	Full Consolidation				X	Financial service activities, except insurance and pension funding
SAINT WITZ 2 HOLDING COMPANY NO1	Full Consolidation				X	Financial service activities, except insurance and pension funding
SAINT WITZ 2 INVESTMENT PROPERTY	Full Consolidation				X	Financial service activities, except insurance and pension funding
SCOTTISH WIDOWS (PORT HAMILTON) LTD	Full Consolidation				X	Real estate activities
SCOTTISH WIDOWS ADMINISTRATION SERVICES (NOMINEES) LTD	Full Consolidation				X	Non-Trading Company
SCOTTISH WIDOWS ANNUITIES LTD	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
SCOTTISH WIDOWS AUTO ENROLMENT SERVICES LTD	Full Consolidation				X	Office administrative, office support and other business support activities
SCOTTISH WIDOWS EUROPE	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
SCOTTISH WIDOWS FINANCIAL SERVICES HOLDINGS	Full Consolidation				X	Activities of head offices; management consultancy activities
SCOTTISH WIDOWS' FUND AND LIFE ASSURANCE SOCIETY	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
SCOTTISH WIDOWS INDUSTRIAL PROPERTIES EUROPE B.V.	Full Consolidation				X	Real estate activities

Appendix 3: Differences in the accounting and regulatory scopes of consolidation continued

Name of the entity	Method of accounting consolidation	Method of regulatory consolidation			Deducted	Description of entity
		Full consolidation	Proportional consolidation	Neither consolidated nor deducted		
	a	b	c	d	e	f
SCOTTISH WIDOWS PROPERTY MANAGEMENT LTD	Full Consolidation				X	Real estate activities
SCOTTISH WIDOWS TRUSTEES LTD	Full Consolidation				X	Office administrative, office support and other business support activities
SCOTTISH WIDOWS UNIT FUNDS LTD	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
ST ANDREW'S GROUP LTD	Full Consolidation				X	Financial service activities, except insurance and pension funding
ST ANDREW'S INSURANCE PLC	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
ST ANDREW'S LIFE ASSURANCE PLC	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
SW FUNDING PLC	Full Consolidation				X	Insurance, reinsurance and pension funding, except compulsory social security
SW NO.1 LTD	Full Consolidation				X	Financial service activities, except insurance and pension funding
SWAMF (GP) LTD	Full Consolidation				X	Office administrative, office support and other business support activities
SWAMF NOMINEE (1) LTD	Full Consolidation				X	Office administrative, office support and other business support activities
SWAMF NOMINEE (2) LTD	Full Consolidation				X	Office administrative, office support and other business support activities
UNIVERSE, THE CMI GLOBAL NETWORK FUND	Full Consolidation				X	Financial service activities, except insurance and pension funding
WAVERLEY - FUND II INVESTOR LLC	Full Consolidation				X	Financial service activities, except insurance and pension funding
WAVERLEY - FUND III INVESTOR LLC	Full Consolidation				X	Financial service activities, except insurance and pension funding
CELSIUS EUROPEAN LUX 2 SARL	Full Consolidation				X	Special Purpose Entity
CLERICAL MEDICAL NON STERLING ARTS FSA	Full Consolidation				X	Special Purpose Entity
CLERICAL MEDICAL NON STERLING ARTS LSA	Full Consolidation				X	Special Purpose Entity
CLERICAL MEDICAL NON STERLING GUADALIX HOLD CO BV	Full Consolidation				X	Special Purpose Entity
CLERICAL MEDICAL NON STERLING GUADALIX SPANISH PROP CO SL	Full Consolidation				X	Special Purpose Entity
CLERICAL MEDICAL NON STERLING MEGAPARK HOLD CO BV	Full Consolidation				X	Special Purpose Entity
CLERICAL MEDICAL NON STERLING MEGAPARK PROP CO SA	Full Consolidation				X	Special Purpose Entity
SARL COLISEUM	Full Consolidation				X	Special Purpose Entity
SARL FONCIERE DE RIVES	Full Consolidation				X	Special Purpose Entity
SARL HIRAM	Full Consolidation				X	Special Purpose Entity
SAS COMPAGNIE FONCIERE DE FRANCE	Full Consolidation				X	Special Purpose Entity
SCI ASTORIA INVEST	Full Consolidation				X	Special Purpose Entity
SCI DE L'HORLOGE	Full Consolidation				X	Special Purpose Entity
SCI EQUINOXE	Full Consolidation				X	Special Purpose Entity
SCI MERCURY INVEST	Full Consolidation				X	Special Purpose Entity
SCI MILLENIUM AP1	Full Consolidation				X	Special Purpose Entity
SCI NORLI	Full Consolidation				X	Special Purpose Entity
SCI RAMBUTEAU CFF	Full Consolidation				X	Special Purpose Entity
THISTLE INVESTMENTS (AMC) LTD	Full Consolidation				X	Special Purpose Entity
THISTLE INVESTMENTS (ERM) LTD	Full Consolidation				X	Special Purpose Entity

- The regulatory treatment of all entities listed as subsidiaries in the 2018 Lloyds Banking Group plc Annual Report and Accounts, pages 289 to 291, follows the accounting treatment unless otherwise stated in the table above.
- Collective Investment Vehicles, as listed in the 2018 Lloyds Banking Group plc Annual Report and Accounts, page 294, are excluded from the regulatory scope of consolidation.
- Associated undertakings, as listed in the 2018 Lloyds Banking Group plc Annual Report and Accounts, pages 292 to 293, are, unless otherwise stated in the list above, predominantly a mix of private equity investments, to which the venture capital exemption applies, and associates and joint ventures that are excluded from the regulatory scope of consolidation. The private equity investments are accounted for as FVTPL for accounting purposes and are equity risk weighted for regulatory purposes.
- The Group's capital-efficient securitisations and conduit vehicles are fully consolidated for accounting purposes. The underlying assets of the capital-efficient securitisations have been de-recognised from the regulatory balance sheet and replaced with the retained securitisation positions, risk weighted in line with the securitisation framework. The conduit vehicles are deconsolidated for regulatory purposes and the corresponding liquidity lines are risk-weighted, as further described in the Securitisation section, pages 78 to 86.
- All Insurance subsidiaries, other than those identified as investment firms or asset management companies, are excluded from the regulatory scope of consolidation and are classified as 'deducted', as they form part of the Insurance Group headed by Scottish Widows Group Limited. The debt and equity investments held by the Group in Scottish Widows Group Limited are deducted from capital, subject to thresholds, as described on page 115, Notes 10 and 14.

Appendix 4: EBA and BCBS adopted templates

Table	Abbreviation	Full Name	Year template adopted	
			2016	2017
1	KM1	Key Metrics		x
2	LI1	Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories	x	
3	LI2	Main sources of differences between regulatory exposure amounts and carrying values in financial statements	x	
7	OV1	Overview of risk-weighted assets	x	
9	CR8	Risk-weighted assets flow statements of credit risk exposures	x	
11	CR3	CRM techniques – Overview		x
15	CR9	Back-testing of PD per portfolio – Mortgages	x	
16	CR9	Back-testing of PD per portfolio – QRRE	x	
17	CR9	Back-testing of PD per portfolio – Retail Other (Non SME)	x	
18	CR9	Back-testing of PD per portfolio – Retail SME	x	
19	CR9	Back-testing of PD per portfolio – Corporate Main	x	
20	CR9	Back-testing of PD per portfolio – Corporate SME	x	
21	CRB-B	Total and average net amount of exposures		x
22	CR6	IRB – Credit risk exposures by portfolio and PD range – Central governments or central banks	x	
23	CR6	IRB – Credit risk exposures by portfolio and PD range – Institutions	x	
24	CR6	IRB – Credit risk exposures by portfolio and PD range – Corporate Main	x	
25	CR6	IRB – Credit risk exposures by portfolio and PD range – Corporate SME	x	
26	CR6	IRB – Credit risk exposures by portfolio and PD range – Residential mortgages (SME)	x	
27	CR6	IRB – Credit risk exposures by portfolio and PD range – Residential mortgages (non-SME)	x	
29	CR6	IRB – Credit risk exposures by portfolio and PD range – QRRE	x	
30	CR6	IRB – Credit risk exposures by portfolio and PD range – Other SME	x	
31	CR6	IRB – Credit risk exposures by portfolio and PD range – Other non-SME	x	
32A	CR10	IRB – Specialised lending	x	
32B	CR10	Equity exposures subject to the simple risk weight method	x	
34	CR4	Standardised approach – credit risk exposure and Credit Risk Mitigation (CRM) effects	x	
35	CR5	Standardised approach – exposures by asset class	x	
36	CRB-C	Geographical breakdown of exposures		x
38	CRB-D	Concentration of exposures by industry		x
39	CRB-E	Maturity of exposures		x
40	CR1-A	Credit quality of exposures by exposure class and instrument		x
41	CR1-B	Credit quality of exposures by industry types		x
42	CR1-C	Credit quality of exposures by geography		x
43	CR1-D (hybrid)	Ageing of performing and non-performing exposures		x
44	CR1-E	Non-performing and foreborne exposures		x
55	CCR1	Analysis of CCR exposure by approach		x
56	CCR8	Exposures to CCPs		x
57	CCR2	Credit valuation adjustment (CVA) capital charge	x	
59	CCR4	IRB – CCR exposure by portfolio and PD scale – Corporate Main	x	
60	CCR4	IRB – CCR exposure by portfolio and PD scale – Central governments or central banks exposures	x	
61	CCR4	IRB – CCR exposure by portfolio and PD scale – Institutions	x	
63	CCR3	Standardised approach – CCR exposures by regulatory portfolio and risk	x	
65	CCR5-A	Impact of netting and collateral held on exposure values		x
66	CCR6	Credit derivatives exposures	x	
71	MR4	Comparison of VaR estimates with gains/losses	x	
72	MR3	IMA values for trading portfolios	x	
73	MR2-A	Market risk under internal models approach	x	
74	MR2-B	Risk-weighted assets flow statements of market risk exposures under an IMA	x	
75	MR1	Market risk under Standardised approach	x	
76	LIQ1	Liquidity Coverage Ratio		x
79	PV1	Prudent valuation adjustments		x
85	LI3	Outline of the differences between the accounting and regulatory scopes of consolidation		x

Appendix 4: EBA and BCBS adopted templates continued

Of the quantitative EBA templates required to be disclosed in full at 31 December 2018 there are some that are not applicable to the Group. These include INS1 (Non-deducted participations in insurance undertakings), CCR7 (RWA flow statements of CCR exposures under the IMM) and CCR5-B (Composition of collateral for exposures to CCR). Regarding CCR5-B template, the PRA introduced a waiver for firms where the fair value of collateral received or the fair value of collateral posted in the form of debt securities does not exceed £100 billion (using quarterly data) and the Group is below this threshold. CR2-A template (Changes in the stock of general and specific credit risk adjustments) and CR2-B template (Changes in stock of defaulted and impaired loans and debt securities) requirement is met through the disclosure of Note 20 (Allowance for impairment losses) and Note 18 (Financial assets at amortised cost) respectively of the 2018 Lloyds Banking Group plc Annual Report and Accounts.

Appendix 5: CRR mapping

CRR ref	High-level summary	Pillar 3	ARA	Compliance reference
Scope of disclosure requirements				
431 (1)	Requirement to publish Pillar 3 disclosures.	x		Lloyds Banking Group publishes Pillar 3 disclosures.
431 (2)	Firms with permission to use specific operational risk methodologies must disclose operational risk information.		x	Pages 136 to 138 (Operational Risk) The Group's operational risk systems, mitigation and approach are disclosed in the Risk Management section.
431 (3)	Institution must have a policy covering frequency of disclosures, their verification, comprehensiveness and appropriateness. Institution must also have policies for assessing whether their disclosures convey their risk profile comprehensively to market participants.	x		Page 5 (Disclosure Policy) Lloyds Banking Group has a Pillar 3 Disclosure Policy. Pages 10 and 11 (The Group's Approach to Risk)
431 (4)	Explanation of ratings decision upon request.			Not applicable
Non-material, proprietary or confidential information				
432 (1)	Institutions may omit information that is not material if certain conditions are respected.	x		Page 5 (Basis of Preparation) Limited disclosure on Trading Book securitisations given its relative materiality.
432 (2)	Institutions may omit information that is proprietary or confidential if certain conditions are respected.			Not applicable
432 (3)	Where 432 (2) applies this must be stated in the disclosures, and more general information must be disclosed.			Not applicable
432 (4)	Use of 432 (1), (2) or (3) is without prejudice to scope of liability for failure to disclose material information.			Not applicable
Frequency of disclosure				
433	Disclosures must be published once a year at a minimum and more frequently if necessary.	x		Page 5 (Frequency, media and location)
Means of disclosure				
434 (1)	To include all disclosures in one appropriate medium, or provide clear cross-references.	x		Page 5 (Frequency, media and location) Most disclosures are contained within this document.
434 (2)	Disclosures made under other requirements (e.g. accounting) can be used to satisfy Pillar 3 if appropriate.	x		Any cross-references to accounting or other disclosures are clearly signposted in this document where appropriate.
Risk management objectives and policies				
435 (1)	Disclose information on:			
435 (1) (a)	The strategies and processes to manage risks.		x	Pages 105 to 159 (Risk Management section)
435 (1) (b)	Structure and organisation of risk management function.		x	Page 110 (How risk is managed in Lloyds Banking Group)
435 (1) (c)	Risk reporting and measurement systems.		x	Pages 105 to 159 (Risk Management section)
435 (1) (d)	Hedging and mitigating risk – policies and processes.		x	Pages 105 to 159 (Risk Management section)
435 (1) (e)	A declaration of adequacy of risk management arrangements approved by the Board.		x	Page 64 (Corporate Governance Report) Reference to this is made on page 4 of the Pillar 3 disclosures (Introduction).
435 (1) (f)	Concise risk statement approved by the Board.			
435 (2)	Information on governance arrangements, including information on Board composition and recruitment and risk committees.		x	Pages 56 to 77 (Corporate Governance Report) Page 112 (Risk Governance)
435 (2) (a)	Number of directorships held by Board members.		x	Pages 52 and 53 (Board of Directors)
435 (2) (b)	Recruitment policy for selection of Board members, their actual knowledge, skills and expertise.		x	Pages 52 and 53 (Board of Directors)
435 (2) (c)	Policy on diversity of Board membership and results against targets.		x	Page 69 (Corporate Governance Report)
435 (2) (d)	Disclosure of whether a dedicated risk committee is in place, and number of meeting in the year.		x	Page 74 (Board Risk Committee Report)
435 (2) (e)	Description of information flow on risk to Board.		x	Pages 112 to 114 (Risk Governance)
Scope of application				
436 (a)	Name of institution.	x		Page 4 (Introduction)
436 (b)	Difference in basis of consolidation for accounting and prudential purposes, describing entities that are:			Page 6 (Scope of Consolidation)
436 (b) (i)	Fully consolidated;	x		Details of the scope of consolidation applied to Lloyds Banking Group are outlined in the diagram referred to on page 6.
436 (b) (ii)	Proportionally consolidated;			
436 (b) (iii)				Pages 122 to 124: Appendix 3
436 (b) (iv)	Deducted from own funds;			
436 (c)	Impediments to transfer of own funds between parent and subsidiaries.			Not applicable
436 (d)	Capital shortfalls in any subsidiaries outside the scope of consolidation.		x	Pages 139 to 147 (Capital Risk) The Group actively manages the capital of its subsidiaries to ensure these remain appropriately capitalised.

Appendix 5: CRR mapping continued

CRR ref	High-level summary	Pillar 3	ARA	Compliance reference
436 (e)	Making use of articles on derogations from a) prudential requirements or b) liquidity requirements for individual subsidiaries/entities.	x		Page 6 (Scope of Consolidation) LBG makes use of these provisions according to its waiver from the PRA.
Own funds				
437 (1)	Disclose the following information regarding own funds:			
437 (1) (a)	a full reconciliation of Common Equity Tier 1 items, Additional Tier 1 items, Tier 2 items and filters and deductions applied pursuant to Articles 32 to 35, 36, 56, 66 and 79 to own funds of the institution and the balance sheet in the audited financial statements of the institution;	x		Pages 114 and 115 (Own funds reconciliation)
437 (1) (b)	a description of the main features of the Common Equity Tier 1 and Additional Tier 1 instruments and Tier 2 instruments issued by the institution;			Separately disclosed on Group website http://www.lloydsbankinggroup.com/investors/financial-performance/other-disclosures/
437 (1) (c)	the full terms and conditions of all Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments;			Separately disclosed on Group website http://www.lloydsbankinggroup.com/investors/financial-performance/other-disclosures/
437 (1) (d)	disclosure of the nature and amounts of the following:	x		Pages 114 and 115 (Own funds reconciliation)
437 (1) (d) (i)	each prudential filter applied pursuant to Articles 32 to 35.	x		
437 (1) (d) (ii)	each deduction made pursuant to Articles 36, 56 and 66;	x		
437 (1) (d) (iii)	items not deducted in accordance with	x		
	Articles 47, 48, 56, 66 and 79;	x		
437 (1) (e)	a description of all restrictions applied to the calculation of own funds in accordance with this Regulation and the instruments, prudential filters and deductions to which those restrictions apply;	x		
437 (1) (f)	where institutions disclose capital ratios calculated using elements of own funds determined on a different basis.			Not applicable
Capital requirements				
438 (a)	Summary of institution's approach to assessing adequacy of capital levels.	x		Page 20 (The Group's approach to Capital Risk)
438 (b)	Result of ICAAP on demand from authorities.			Not applicable
438 (c)	Capital requirements for each Standardised approach credit risk exposure class.	x		Page 46 (Table 21: Total and average net amount of exposures – CRB-B)
438 (d)	Capital requirements for each Internal Ratings Based Approach credit risk exposure class.			
438 (e)	Capital requirements for market risk or settlement risk.	x		Page 99 (Table 67: Market risk own funds requirements)
438 (f)	Capital requirements for operational risk, separately for the Basic Indicator Approach, the Standardised Approach, and the Advanced Measurement Approaches as applicable.	x		Page 108 (Operational Risk)
438 (endnote)	Requirement to disclose specialised lending exposures and equity exposures in the banking book falling under the simple risk weight approach.	x		Page 59 (Table 32A: IRB – Specialised lending (CR10)) and Page 60 (Table 32B: Equity exposures subject to the simple risk weight method (CR10))
Exposure to counterparty credit risk (CCR)				
439 (a)	Description of process to assign internal capital and credit limits to CCR exposures.	x		Page 88 (Internal capital and credit limits)
439 (b)	Discussion of policies for securing collateral and establishing credit reserves.	x		Page 88 (Securing collateral and establishing credit reserves)
439 (c)	Discussion of management of wrong-way risk exposures.	x		Page 88 (Correlation (Wrong Way) Risk)
439 (d)	Disclosure of collateral to be provided (outflows) in the event of a ratings downgrade.	x		Page 88 (Collateral requirements in the event of a downgrade in credit rating)
439 (e)	Derivation of net derivative credit exposure.	x		Page 97 (Net derivatives credit exposure, including Table 65: Impact of netting and collateral held on exposure value (CCR5-A))
439 (f)	Exposure values for mark-to-market, original exposure, standardised and internal model methods.	x		Page 89 (Table 55: Analysis of CCR exposure by approach (CCR1))
439 (g)	Notional value of credit derivative hedges and current credit exposure by type of exposure.	x		Page 98 (Notional value of credit derivative transactions, including Table 66: Credit derivatives exposures (CCR6))
439 (h)	Notional amounts of credit derivative transactions.	x		
439 (i)	Estimate of alpha, if applicable.			Not applicable

Appendix 5: CRR mapping continued

CRR ref	High-level summary	Pillar 3	ARA	Compliance reference
Capital buffers				
440 (1) (a)	Geographical distribution of relevant credit exposures for calculation of countercyclical capital buffer.	x		Page 119 (Table 83: Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer)
440 (1) (b)	Amount of the institution specific countercyclical capital buffer.			
Indicators of global systemic importance				
441 (1)	Disclosure of the indicators of global systemic importance.			The Group's G-SIB metrics are separately disclosed on the Group's website. http://www.lloydsbankinggroup.com/investors/financial-performance/other-disclosures/
Credit risk adjustments				
442 (a)	Disclosure of bank's definitions of past due and impaired.	x	x	Pillar 3: Page 70 (Impairment and credit quality of exposures Pillar 3: Page 74 (Analysis of past due, non-performing and forborne exposures) ARA: Pages 180 and 181 (Note 2: Accounting policies, Impairment of Financial assets)
442 (b)	Approaches for calculating specific and general credit risk adjustments.	x	x	Pillar 3: Page 75 (Comparison of expected losses to specific credit risk adjustments) ARA: Pages 185 to 188 (Note 3: Critical accounting estimates, Impairment of Financial assets)
442 (c)	Disclosure of pre-CRM EAD by exposure class.	x		Page 46 (Table 21: Total and average net amount of exposures (CRB-B))
442 (d)	Disclosure of pre-CRM EAD by geography and exposure class.	x		Page 63 (Table 36: Geographical breakdown of exposures (CRB-C))
442 (e)	Disclosure of pre-CRM EAD by industry and exposure class.	x		Page 66 (Table 38: Concentration of exposures by industry (CRB-D))
442 (f)	Disclosure of pre-CRM EAD by residual maturity and exposure class.	x		Page 68 (Table 39: Maturity of exposures (CRB-E))
442 (g) (i), (ii), (iii)	Breakdown of impaired, past due, specific and general credit risk adjustments, and impairment charges for the period, by industry.	x		Page 72 (Table 41: Credit quality of exposures by industry types (CR1-B))
442 (h)	Impaired, past due exposures, by geographical area, and amounts of specific and general impairment for each geography.	x		Page 73 (Table 42: Credit quality of exposures by geography (CR1-C)) Page 74 (Analysis of past due, non-performing and forborne exposures)
442 (i), (ii), (iii), (iv), (v)	Reconciliation of changes in specific and general credit risk adjustments for impaired exposures.		x	Page 208 (Note 20: Allowance for impairment losses)
442 (endnote)	Specific credit risk adjustments recorded to income statement are disclosed separately.			
Unencumbered assets				
443	Disclosures on unencumbered assets.	x		Pages 120 and 121 (Appendix 2: Asset encumbrance)
Use of ECAIs				
444 (a)	Names of the ECAIs used in the calculation of Standardised approach risk-weighted assets and reasons for any changes.	x		Page 62 (Table 35: Standardised approach – exposures by asset class (CR5))
444 (b)	Exposure classes associated with each ECAI.	x		
444 (c)	Description of the process used to transfer credit assessments to non-trading book items.	x		
444 (d)	Mapping of external rating to CQS.			Not applicable. The Group complies with the standard association published on the EBA website
444 (e)	Exposure value pre and post-credit risk mitigation, by CQS.	x		Page 61 (Table 34: Standardised approach – credit risk exposures and Credit Risk Mitigation (CRM) effects (CR4)) Page 62 (Table 35: Standardised approach – exposures by asset class (CR5))
Exposure to market risk				
445	Disclosure of position risk, large exposures exceeding limits, FX, settlement and commodities risk.	x		Pages 99 to 107 (Market risk)
Operational risk				
446	Scope of approaches used to calculate operational risk.	x		Page 14 (Pillar 1 Capital Requirements)

Appendix 5: CRR mapping continued

CRR ref	High-level summary	Pillar 3	ARA	Compliance reference
Exposure in equities not included in the trading book				
447 (a)	Differentiation of exposures based on objectives and an overview of accounting techniques and valuation methodologies.	x		Page 60 (Non-trading book exposures in equities) The appropriate cross referencing to the ARA is outlined in this section.
447 (b)	The balance sheet value, the fair value and, for those exchange-traded, a comparison to the market price where it is materially different from the fair value.	x		Page 60 (Table 33: Analysis of non-trading book exposures in equities)
447 (c)	The types, nature and amounts of exchange-traded exposures, private equity exposures in sufficiently diversified portfolios, and other exposures.	x		Page 60 (Non-trading book exposures in equities)
447 (d)	Realised gains or losses arising from sales and liquidations in the period.	x		Page 60 (Table 33: Analysis of non-trading book exposures in equities)
447 (e)	Total unrealised gains or losses, the total latent revaluation gains or losses, and any of these amounts included in the original or additional own funds.	x		
Exposure to interest rate risk on positions not included in the trading book				
448 (a)	Nature of the interest rate risk and the key assumptions, and frequency of measurement of the interest rate risk.		x	Pages 155 to 157 (Banking activities)
448 (b)	Variation in earnings, economic value or other relevant measure used by the bank for upward and downward rate shocks according to the banks method for measuring the interest rate risk, broken down by currency.			
Exposure to securitisation positions				
449 (a)	Objectives in relation to securitisation activity.	x		Page 79 (Banking book securitisation strategy and roles)
449 (b)	Nature of other risks in securitised assets, including liquidity.	x		Page 79 (Trading book securitisation strategy and roles) and Page 81 (Risks inherent in banking book securitised assets)
449 (c)	Risks in re-securitisation activity stemming from seniority of underlying securitisations and ultimate underlying assets.			Not applicable
449 (d)	The roles played by the institution in the securitisation process.	x		Page 79 (Banking book securitisation strategy and roles)
449 (e)	Indication of the extent of involvement in roles.	x		Page 80 (Table 46: Summary of securitisation exposures and capital requirements)
449 (f)	Processes in place to monitor changes in credit and market risks of securitisation exposures, and how the processes differ for re-securitisation exposures.	x		Page 81 (Monitoring changes in the credit risk of securitised exposures and Monitoring changes in the credit risk of ABS portfolios)
449 (g)	Description of the institution's policies with respect to hedging and unfunded protection, and identification of material hedge counterparties.	x		Page 84 (Use of credit derivatives and guarantees)
449 (h)	Approaches to the calculation of risk-weighted assets for securitisations mapped to types of exposures.	x		Page 80 (Table 46: Summary of securitisation exposures and capital requirements)
449 (i)	Types of SSPEs used to securitise third-party exposures as a sponsor.	x		Page 84 (Sponsored and invested securitisations)
449 (j) (i-vi)	Summary of accounting policies for securitisations.	x		Page 83 (Accounting treatment)
449 (k)	Names of ECAIs used for securitisations and type.	x		Page 82 (Originated securitisations – regulatory treatment) Page 85 (Capital assessment)
449 (l)	Full description of Internal Assessment Approach.	x		Page 85 (Capital assessment)
449 (m)	Explanation of significant changes in quantitative disclosures.	x		Key movements explained where applicable under relevant tables
449 (n)	As appropriate, separately for the Banking and trading book securitisation exposures:			
449 (n) (i)	Amount of outstanding exposures securitised;	x		Page 80 (Table 46: Summary of securitisation exposures and capital requirements)
449 (n) (ii)	On balance sheet securitisation retained or purchased, and off balance sheet exposures;	x		Page 82 and 83 (Table 49: Analysis of originated positions under the RBA by risk weight category and Table 50: Analysis of originated positions under Standardised approach by risk weight category) Page 85 (Table 51: Analysis of sponsored positions by risk weight category) Page 86 (Table 52: Analysis of invested positions by risk weight category)
449 (n) (iii)	Amount of assets awaiting securitisation;	x		Page 84 (Assets awaiting securitisation)
449 (n) (iv)	Early amortisation treatment; aggregate drawn exposures, capital requirements.			Not applicable

Appendix 5: CRR mapping continued

CRR ref	High-level summary	Pillar 3	ARA	Compliance reference
449 (n) (v)	Deducted or 1,250%-weighted securitisation positions.	x		Page 80 (Table 46: Summary of securitisation exposures and capital requirements)
449 (n) (vi)	Securitisation activity including the amount of exposures securitised and recognised gains or losses on sales;	x		Page 80 (Securitisation programmes and activity)
449 (o)	Banking and trading book securitisations.	x		Pages 82 and 83 (Table 49: Analysis of originated positions under the RBA by risk weight category and Table 50: Analysis of originated positions under Standardised approach by risk weight category)
449 (o) (i)	Retained and purchased positions and associated capital requirements, broken down by risk-weight bands.	x		Page 85 (Table 51: Analysis of sponsored positions by risk weight category) Page 86 (Table 52: Analysis of invested positions by risk weight category)
449 (o) (ii)	Retained and purchased re-securitisation positions before and after hedging and insurance; exposure to financial guarantors broken down by guarantor credit worthiness.			Not applicable
449 (p)	Impaired assets and recognised losses related to banking book securitisations, by exposure type.	x		Page 82 (Table 48: Analysis of gross securitised exposures on a regulatory basis)
449 (q)	Exposure and capital requirements for trading book securitisations, separated into traditional and synthetic.	x		Page 81 (Table 47: Value of exposures of retained and purchased positions in the banking and trading book by exposure type)
449 (r)	Whether the institution has provided non-contractual financial support to securitisation vehicles.			Not applicable
Remuneration disclosure				
450	Remuneration disclosures (Material Risk Takers).		x	Pages 97 to 99 (Directors' remuneration policy) and pages 100 to 104 (Other remuneration disclosures)
Leverage				
451 (1) (a) 451 (1) (b) 451 (1) (c)	Leverage ratio, and breakdown of total exposure measure, including reconciliation to financial statements, and derecognised fiduciary items.	x		Page 25 (Table 6: Leverage ratio) Page 117 (Table 80: Leverage ratio common disclosure and Table 81: Summary reconciliation of accounting assets and leverage ratio exposures) Page 118 (Table 82: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures))
451 (1) (d) 451 (1) (e)	Description of the processes used to manage the risk of excessive leverage, and factors that impacted the leverage ratio during the year.	x		Page 118 (Description of the processes used to manage the risk of excessive leverage)
Use of the IRB approach to credit risk				
452 (a)	Permission for use of the IRB approach from the competent authority.	x		Page 35 (Scope of the IRB permission)
452 (b)	Explanation of:			
452 (b) (i)	Internal rating scales, mapped to external ratings;	x		Page 34 (Internal Ratings Scales)
452 (b) (ii)	Use of internal ratings for purposes other than capital requirement calculations;	x		Page 37 (Other application of IRB model outputs)
452 (b) (iii)	Management and recognition of credit risk mitigation;	x		Pages 30 to 33 (Credit risk mitigation)
452 (b) (iv)	Controls around ratings systems.	x		Page 36 (Internal development and monitoring of IRB models)
452 (c) (i)-(v)	Description of ratings processes for each IRB asset class, provided separately.	x		Page 35 (Scope of the IRB permission) and Page 36 (Internal development and monitoring of IRB models)
452 (d)	Exposure values by IRB exposure class, separately for Advanced and Foundation IRB.	x		Page 46 (Table 21: Total and average net amount of exposures (CRB-B)). This is also shown in other tables throughout the document.
452 (e)-(f)	For each exposure class, disclosed separately by obligor grade:	x		Pages 49 to 59 (Analysis of Credit Risk Exposures subject to the Foundation IRB approach including Tables 22-27 and 29-32A)
	Total exposure, separating loans and undrawn exposures where applicable, and exposure-weighted average risk weight.			
452 (g)	Actual specific risk adjustments for the period and explanation of changes.	x		Page 75 (Comparison of expected losses to Specific credit risk adjustments)
452 (h)	Commentary on drivers of losses in preceding period.	x		Page 76 (Table 45: Regulatory expected losses and specific credit risk adjustments)
452 (i)	Estimates against actual losses for sufficient period, and historical analysis to help assess the performance of the rating system over a sufficient period.	x		Pages 38 to 45 (Model performance, including Table 14: Model performance and Tables 15-20: Back-testing of PD per portfolio for different asset classes)
452 (j)	For all IRB exposure classes:			
452 (j) (i)-(ii)	Where applicable, PD and LGD by each country where the bank operates.	x		Page 65 (Table 37: Exposures subject to the IRB approach analysed by geographical region)

Appendix 5: CRR mapping continued

CRR ref	High-level summary	Pillar 3	ARA	Compliance reference
Use of credit risk mitigation techniques				
453 (a)	Use of on and off-balance sheet netting.	x		Pages 30 to 34 (Credit risk mitigation)
453 (b)	How collateral valuation is managed.	x		Please note additional information with regards to balance sheet netting and derivatives is included in Counterparty Credit Risk section of Pillar 3 (Pages 87 to 98)
453 (c)	Description of types of collateral used by the institution.	x		
453 (d)	Main types of guarantor and credit derivative counterparty, creditworthiness.	x		
453 (e)	Market or credit risk concentrations within risk mitigation exposures.		x	Page 115 (Credit Risk)
453 (f)	Standardised or Foundation IRB Approach, exposure value covered by eligible collateral.	x		Page 32 (Table 11: CRM Techniques – Overview (CR3))
453 (g)	Exposures covered by guarantees or credit derivatives.			
Use of the Advanced Measurement Approaches to Operational Risk				
454	Description of the use of insurance or other risk transfer mechanisms to mitigate operational risk.			Not applicable
Use of Internal Market Risk Models				
455 (a) (i)	Disclosure of the characteristics of the market risk models.	x		Page 102 (Key characteristics of market risk models)
455 (a) (ii)	Disclosure of the methodologies used to measure incremental default and migration risk.	x		Page 102 (Review of internal models)
455 (a) (iii)	Descriptions of stress tests applied to the portfolios.	x		Page 103 (Stress Testing)
455 (a) (iv)	Methodology for back-testing and validating the models.	x		Page 103 (Back testing of VaR models, including Table 70: Backtesting results (VaR models))
455 (b)	Scope of permission for use of the models.	x		Page 102 (Review of internal models)
455 (c)	Policies and processes to determine trading book classification, and to comply with prudential valuation requirements.	x		Page 104 (Valuation principles)
455 (d) (i)-(iii)	High/Low/Mean values over the year of VaR, SVaR and incremental risk charge.	x	x	Annual Report: Page 159 (Table 1.48: Trading portfolios: VaR (1-day 95 per cent confidence level)) Pillar 3: Page 105 (Table 72: IMA values for trading portfolios (MR3))
455 (e)	The elements of the own fund calculation.	x		Page 99 (Table 67: Market risk own funds requirements)
455 (f)	Weighted average liquidity horizons of portfolios covered by models.	x		Page 102 (Review of internal models)
455 (g)	Comparison of end-of-day VaR measures compared with one-day changes in the portfolio's value.	x		Page 104 (Comparison of VaR estimates to hypothetical and clean profit and loss)

Abbreviations

Abbreviation	Brief description
A	
ABCP	Asset-backed commercial paper
ABS	Asset-backed securities
AFS	Available-for-sale (prior to 2018)
AIRB	Advanced Internal Ratings-Based Approach
ALRB	Additional Leverage Ratio Buffer
AMA	Advanced Measurement Approach
ARA	Annual Report and Accounts
AT1	Additional Tier 1 capital
B	
BCBS	Basel Committee on Banking Supervision
BEEL	Best estimate of expected losses
BoE	Bank of England
BRC	Board Risk Committee
C	
CCB	Capital Conservation Buffer
CCF	Credit conversion factor
CCLB	Countercyclical Leverage Buffer
CCP	Central counterparty
CCR	Counterparty credit risk
CCyB	Countercyclical Capital Buffer
CDS	Credit default swap
CET1	Common equity tier 1 capital
CLN	Credit linked notes
CP	Commercial paper
CRD IV	Capital Requirements Directive & Regulation
CRM	Credit risk mitigation
CRR	Capital Requirements Regulation
CSA	Credit support annex
CVA	Credit valuation adjustment
D	
DVA	Debit valuation adjustment
E	
EAD	Exposure at default
EBA	European Banking Authority
ECAI	External Credit Assessment Institutions
EEL	Excess expected loss
EL	Expected loss
EU	European Union
F	
FCCM	Financial Collateral Comprehensive Method
FII	Financial Institutions Interconnectedness
FIRB	Foundation Internal Ratings-Based Approach
Fitch	Fitch Ratings
FPC	Financial Policy Committee (UK)
FRTB	Fundamental review of the trading book (BCBS)
G	
GALCO	Group Asset and Liability Committee
GEC	Group Executive Committee
GRC	Group Risk Committee
Group	Lloyds Banking Group plc together with its subsidiary undertakings on a consolidated basis
G-SIB	Global Systemically Important Bank
H	
HPI	House price index
HQLA	High quality liquid assets
I	
IAA	Internal Assessment Approach
IAS	International Accounting Standard
ICAAP	Internal Capital Adequacy Assessment Process
ICG	Individual Capital Guidance
IFRS	International Financial Reporting Standards
IMM	Internal Model Method
IRB	Internal Ratings-Based Approach
IRRBB	Interest rate risk in the banking book
IRC	Incremental risk charge
ISDA	International Swaps and Derivatives Association
L	
LCR	Liquidity coverage ratio
LGD	Loss given default
LIBOR	London Interbank Offer Rate
LTV	Loan-to-value
M	
MGC	Model Governance Committee
Moody's	Moody's Investors Service
MTM	Mark-to-market
O	
OTC	Over-the-counter
P	
PD	Probability of default
PFE	Potential future exposure
PIT	Point-in-time
PRA	Prudential Regulation Authority (UK)
PRR	Position risk requirement
PVA	Prudent valuation adjustment
Q	
QCCP	Qualifying Central Counterparty
QRRE	Qualifying revolving retail exposure

Abbreviations continued

R	
RBA	Ratings Based Approach
Retail IRB	Retail Internal Ratings Based Approach
RMBS	Residential mortgage-backed security
RNIV	Risks not in VaR
S	
STA	Standardised Approach
S&P	Standard and Poor's
SCRA	Specific credit risk adjustment
SE	Structured entity
SFTs	Securities financing transactions
SME	Small and medium-sized enterprise
SRB	Systemic risk buffer
SRT	Significant risk transfer
T	
TTC	Through-the-cycle
T1	Tier 1 capital
T2	Tier 2 capital
U	
UK	United Kingdom
US	United States of America
V	
VaR	Value-at-risk

Contacts

For further information please contact:

INVESTORS AND ANALYSTS

Douglas Radcliffe
Group Investor Relations Director
020 7356 1571
douglas.radcliffe@lloydsbanking.com

Edward Sands
Director of Investor Relations
020 7356 1585
edward.sands@lloydsbanking.com

Nora Thoden
Director of Investor Relations
020 7356 2334
nora.thoden@lloydsbanking.com

CORPORATE AFFAIRS

Grant Ringshaw
Director of Media Relations
020 7356 2362
grant.ringshaw@lloydsbanking.com

Matt Smith
Head of Corporate Media
020 7356 3522
matt.smith@lloydsbanking.com