Our common Purpose is ‘Creating opportunities to rise’. We are a company of opportunity makers working together to help people rise – customers, clients, colleagues and society.

For further information and a fuller understanding of the results and the state of affairs of the Group, please refer to the full Barclays PLC Annual Report 2018 suite of documents available at home.barclays.com/annualreport

- **Barclays PLC Strategic Report 2018**
  - An overview of our 2018 performance, a focus on our strategic direction, and a review of the businesses underpinning our strategy.

- **Barclays PLC Annual Report 2018**
  - A detailed review of Barclays 2018 performance with disclosures that provide useful insight and go beyond reporting requirements.

- **Barclays PLC Country Snapshot 2018**
  - An overview of our tax contribution country by country as well as our broader approach to tax, including our UK tax strategy.

- **Barclays PLC Environmental Social Governance (ESG) Report 2018**
  - Our ESG strategic priorities and performance, reported against a range of quantitative and qualitative indicators.

- **Barclays PLC Pillar 3 Disclosures 2018**
  - A summary of our risk profile, its interaction with the Group’s risk appetite, and risk management.
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See page 221 for an index of all risk disclosures in the Pillar 3 and Annual Reports

A glossary of terms and remuneration disclosures can be found at: home.barclays.com/annualreport
Barclays PLC Pillar 3 Report

Capital position and risk management in 2018

Our annual disclosures contain extensive information on risk as well as capital management. The Pillar 3 report provides a detailed breakdown of Barclays’ regulatory capital adequacy and how this relates to Barclays’ risk management. During 2018, Barclays made strong progress against its strategic objectives and successfully established its ring-fenced bank, Barclays Bank UK PLC.

- Barclays Group’s CET1 ratio ended the year at 13.2% (December 2017: 13.3%), at our end state target of c.13% as a £0.5bn capital decrease to £41.1bn was partially offset by a £1.1bn RWA decrease to £311.9bn.
- The UK leverage ratio remained flat at 5.1% (December 2017: 5.1%), whilst the average UK leverage ratio decreased to 4.5% (December 2017: 4.9%).
Summary of risk profile

This section presents a high-level summary of Barclays’ risk profile and its interaction with the Group’s risk appetite. Please see page 221 for a comprehensive index of all risk disclosures.

The Board makes use of the Risk Appetite Framework to set appetite, and continuously monitors existing and emerging risks.

The Group sets its risk appetite in terms of performance metrics as well as a set of mandate and scale limits to monitor risks. During 2018, the Group’s performance was in line with its risk appetite. The following risk metrics reflect the Group’s risk profile:

<table>
<thead>
<tr>
<th>Risk Metric</th>
<th>Value</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Equity Tier 1 ratio</td>
<td>13.2%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Common Equity Tier 1 capital</td>
<td>£41.1bn</td>
<td>£41.6bn</td>
</tr>
<tr>
<td>Risk weighted assets</td>
<td>£311.9bn</td>
<td>£313.0bn</td>
</tr>
<tr>
<td>UK leverage ratio</td>
<td>5.1%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Average UK leverage ratio</td>
<td>4.5%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Loan loss rate</td>
<td>44bps</td>
<td>57bps</td>
</tr>
<tr>
<td>Management Value at Risk</td>
<td>£21m</td>
<td>£19m</td>
</tr>
<tr>
<td>Liquidity coverage ratio</td>
<td>169%</td>
<td>154%</td>
</tr>
</tbody>
</table>

(see page 19)
(see page 19)
(see page 27)
(see page 145)
(see page 117)
(see page 34)
Summary of risk profile

- CET1 capital decreased £0.5bn to £41.1bn as underlying profit generation of £4.2bn was more than offset by £2.1bn, of litigation and conduct charges, as the Barclays Group resolved legacy matters, £1.7bn for ordinary dividends and Additional Tier 1 (AT1) coupon paid and forgiven, £0.1bn from the redemption of capital instruments and £0.5bn of pension contributions.

- RWAs remained broadly stable at £311.9bn (December 2017: £313.0bn). The Group continued to actively manage capital allocation to businesses during the year, including the redeployment of RWAs within CIB to higher returning businesses, while targeting growth in selected consumer businesses in Barclays UK and Consumer, Cards and Payments. Within Barclays UK, the increase in RWAs included the impact of a change in the regulatory methodology for the Education, Social Housing and Local Authority (ESHLA) portfolio which was partly offset by a reduction in Head Office due to the regulatory deconsolidation of Barclays Africa Group Limited (BAGL).

- The UK leverage ratio remained flat at 5.1% (December 2017: 5.1%). The leverage exposure increased marginally to £999bn (December 2017: £985bn) including securities financing transactions (SFTs), due to the CIB utilising leverage balance sheet more efficiently within high returning financing businesses. The average UK leverage ratio decreased to 4.5% (December 2017: 4.9%).

- Credit Impairment charges and other provisions for Barclays Group decreased 37% to £1.468bn (December 2017: £2.336bn) primarily driven by improvements in consensus-based macroeconomic forecasts in the UK and US, non-recurrence of single name charges in 2017, portfolio adjustments as IFRS9 has continued to embed, and the impact of repositioning the US cards portfolio towards a lower risk mix, partially offset by a £150m charge for the impact of current economic uncertainty in the UK. Overall this resulted in decrease of 13bps in the loan loss rate to 44bps.

- Average management value at risk remained relatively stable in 2018 at £21m (December 2017: £19m).

- The liquidity coverage ratio (LCR) increased to 169% (December 2017: 154%), equivalent to a surplus of £90bn (December 2017: £75bn) to the 100% regulatory requirement. The Group also continued to maintain surpluses to its internal liquidity requirements. The strong liquidity position reflects the Group’s prudent approach given the continued macroeconomic uncertainty.

- Another component of the Group’s risk appetite is a set of mandate and scale limits to help mitigate concentration risk, keep business activities within our mandate and allow Barclays to remain of an appropriate scale. During 2018, Barclays has made enhancements in the management of Structured Credit and Leveraged Lending including a revised framework of notional and stress loss limits and triggers to control concentration risk.

Please see page 136 for a discussion of risk appetite, and page 131 of the annual report for a discussion of material and emerging risks.

RWAs decreased £1.1bn to £311.9bn (2017: £313.0bn):

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit risk</td>
<td>£195.6bn</td>
<td>£190.0bn</td>
</tr>
<tr>
<td>Counterparty credit risk</td>
<td>£28.8bn</td>
<td>£38.0bn</td>
</tr>
<tr>
<td>Market risk</td>
<td>£30.8bn</td>
<td>£28.3bn</td>
</tr>
<tr>
<td>Operational risk</td>
<td>£56.7bn</td>
<td>£56.7bn</td>
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Please see page 41, market (page 115), and operational (page 132) for details. See pages 29-30 for the main drivers of movements for each of these risk types.

- Barclays UK increased £4.3bn to £75.2bn primarily due to growth in the mortgage and UK cards books and regulatory methodology changes for the ESHLA portfolio.

- Barclays International increased £0.4bn to £210.7bn primarily driven by business growth in Credit Cards & Payments as well as trading activity and appreciation of period end USD against GBP, partially offset by an extended regulatory permission to use the modelled exposure approach.

- Head Office RWAs decreased £5.8bn to £26.0bn reflecting the net reduction due to the regulatory deconsolidation of BAGL.

- Credit risk increased £5.6bn to £195.6bn primarily driven by business growth within Barclays International and Barclays UK, the appreciation of period end USD against GBP, as well as the impact of a change in the regulatory methodology for the ESHLA portfolio within Barclays UK; this was partially offset by an improvement in the risk profile within Barlays International and a reduction in Head Office due to the regulatory deconsolidation of Barclays Africa Group Limited (BAGL).

- Counterparty credit risk decreased £9.2bn to £28.8bn primarily driven by an extended regulatory permission to use the modelled exposure approach and changes to the regulatory treatment for assets associated with high risk.

- Market risk increased £2.5bn to £30.8bn primarily driven by trading activity.

- Operational risk remained unchanged at £56.7bn (2017: £56.7bn).
Notes on basis of preparation

Pillar 3 report regulatory framework

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

Barclays has fully adopted disclosures as per the European Banking Authority (EBA) guidelines on disclosure requirements under Part Eight of the Regulations (EU) No 575/2013 since 31 December 2017.

Presentation of risk data in the Pillar 3 disclosures vs. the Annual Report and Accounts

This document discloses Barclays’ assets in terms of exposures and capital requirements. For the purposes of this document:

Credit losses
Where impairment or losses are disclosed within this document, Barclays has followed the IFRS definitions used in the Annual Report.

Scope of application
Where this document discloses credit exposures or capital requirements, Barclays has followed the scope and application of its Pillar 1 capital adequacy calculations (unless noted otherwise).

Definition of credit exposures

- Credit exposure, or ‘Exposure at Default’ (EAD) is defined as the estimate of the amount at risk in the event of a default (before any recoveries) or through the decline in value of an asset. This estimate takes account of contractual commitments related to undrawn amounts.
- In contrast, an asset in the Group’s balance sheet is reported as a drawn balance only. This is one of the reasons why exposure values in the Pillar 3 report will differ from asset values as reported in the Annual Report.

Policy, validation and sign-off

Throughout the year ended 31 December 2018, and to date, Barclays has operated a framework of disclosure controls and procedures in place to support the approval of the Group’s Pillar 3 disclosure.

Barclays is committed to operating within a strong system of internal controls. A framework of disclosure controls and procedures are in place to support the approval of the Group’s external financial disclosures. Specific governance committees are responsible for examining the Group’s reports and disclosures so that they have been subject to adequate verification and comply with applicable standards and legislation. These Committees report their conclusions to the Board Audit Committee (BAC) which debates its conclusions and provides further challenge. Finally, the Board scrutinises and approves the Pillar 3 disclosures.

This governance process is in place to provide both management and the Board with sufficient opportunity to debate and challenge the Group’s disclosures before they are made public.

“We confirm that Barclays’ Pillar 3 disclosures, to the best of our knowledge, comply with Part Eight of the CRR and have been prepared in compliance with Barclays’ internal control framework. In addition, we have made every effort to comply with the EBA’s Guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013” dated 14 December 2016, as advised by the EBA under paragraph 2.4 of such Guidelines.”

C.S Venkatakrishnan
Chief Risk Officer

Tushar Morzaria
Group Finance Director
**Scope and application of Basel rules**

This section explains the scope of application of Basel rules in relation to capital adequacy.

- Figure 1 shows a representation of Barclays’ entities within the scope of regulatory consolidation and how this differs from IFRS consolidation.
- Table 1 shows how IFRS balances contribute to the regulatory scope of consolidation on a line-by-line basis.
- Tables 2 and 3 show the scope of permission of calculation approaches that summarises the various approaches to calculate risk weighted assets, and Barclays’ permission to use them.
- Tables 4 and 5 show the mapping of financial statement categories to regulatory risk types and a reconciliation of financial statement carrying values against regulatory exposures.
- Table 6 shows the entities which have a different method of consolidation between accounting and regulatory balance sheets.
Scope of application of Basel rules

Application of the Basel framework

Overview of Pillar 3

The Pillar 3 requirements as defined by the Basel Committee have been implemented by the European Union as part of the Capital Requirement Regulation and Capital Requirement Directive, (“CRR” and “CRDIV” also known as the “CRDIV legislative package”). Barclays has applied the Basel framework since its implementation. The framework is made up of three pillars:

Pillar 1: covers the calculation of risk weighted assets for credit risk, counterparty credit risk, market risk and operational risk

Pillar 2: covers the consideration of whether additional capital is required over and above the Pillar 1 risk calculations. A firm’s own internal models and assessments support this process

Pillar 3: covers external communication of risk and capital information by banks as specified in the Basel rules to promote transparency and good risk management

Pillar 3 requires the disclosure of exposures and associated risk weighted assets for each risk type and approach to calculating capital requirements for Pillar 1.

Distinct regulatory capital approaches are followed for each of the following risk and exposure types:
- credit risk (including certain non-traded equity exposures)
- counterparty credit risk (CCR)
- credit valuation adjustment (CVA)
- market risk
- securitisations
- operational risk

Approaches to calculating capital requirements under CRD IV and the Capital Requirements Regulations (CRR)

Calculation of capital for credit risk

The credit risk weighted assets calculation is based on an estimate of the Exposure at Default (EAD). In addition, where Barclays has the necessary regulatory permissions, it estimates Posteriors of Default (PD) and Loss Given Default (LGD) (see page 151 and the online glossary for definitions):
- Standardised approach: assesses capital requirements using standard industry-wide risk weightings based on a detailed classification of asset types, ratings and maturity
- Internal Ratings-Based approach (IRB): assesses capital requirements using the Group’s specific data and internal models to calculate risk weightings. As such internal calculations of PD, LGD and credit conversion factors are used to model risk exposures (AIRB)

Calculation of capital for counterparty credit risk

CCR differs from credit risk, above, in how the EAD is calculated and applies to derivative and SFT exposures. It arises where a counterparty default may lead to losses of an uncertain nature as the values of any resulting claims are market driven. This uncertainty is factored into the valuation of the Group’s credit exposure arising from such transactions. The Group uses three methods under the regulatory framework to calculate CCR exposure:
- the Mark to Market method (MTM, also known as Current Exposure Method) used for derivatives which is the sum of the current market value of the instrument plus an add-on (dependent on potential future exposure, or PFE) that accounts for the potential change in the value of the contract over its residual maturity
- the Internal Model Method (“IMM”), subject to regulatory approval, allows the use of internal models to calculate an effective expected positive exposure (EEPE), multiplied by a factor stipulated by the regulator called alpha. For Barclays this is set at 1.4. Barclays uses this approach for certain derivatives and SFT exposures
- the Financial Collateral Comprehensive Method (FCCM), which is the net position of SFT exposures after the application of volatility adjustments prescribed by CRR

Calculation of capital for market risk

Risk weighted assets calculations for market risk assess the losses from extreme movements in the prices of financial assets and liabilities:
- Standardised approach: a calculation is prescribed that depends on the type of contract, the net position at portfolio level, and other inputs that are relevant to the position. For instance, for equity positions a general market risk component captures changes in the market (systematic risk), while specific market risk is calculated based on features of the specific security (idiosyncratic risk)
- Model-based approach: with their regulator’s permission, firms can use proprietary value at risk (VaR) models to calculate capital requirements. Under the Basel framework, stressed VaR, incremental risk charge and all-price risk models must also be used to ensure that sufficient levels of capital are maintained

Calculation of capital for securitisation exposures

A separate regulatory framework exists for the calculation of securitisations risk weighted asset exposures, the scope of which is defined by the CRR. Securitisations give rise to credit, market and other risks. Whilst CRR prescribes a standardised and advanced approach for the calculation of risk weights, Barclays has approval to use, and therefore applies the IRB approach, which includes:
- the Ratings Based Approach, where external ratings are available
- for unrated transactions and where certain criteria is met the ‘look through’ approach can be used, which considers the risk of the underlying assets
- the Internal Assessment Approach, which is also used for unrated asset backed commercial paper programmes, which applies a similar methodology to rating agency models
- Where exposures do not meet one of the above criteria a 1250% risk weight is applied

Calculation of capital for credit valuation adjustment capital charge

The CVA is the capital charge accounting for potential MTM losses due to credit quality deterioration of a counterparty (that does not necessarily default). As for CCR, two approaches can be used to calculate the adjustment:
- Standardised approach: takes account of the external credit rating of each counterparty, and incorporates the effective maturity and EAD from the CCR calculation (outlined above)
- Advanced approach: this approach requires the calculation of the charge as: a) a 10-day 99% value at risk (VaR) measure for the current one-year period; and b) the same measure for a stressed period. The sum of the two VaR measures is tripled to yield the capital charge

See page 96 for more details on capital requirements for counterparty credit risk exposures.

See page 114 for more details on CVA
Scope of application of Basel rules
Application of the Basel framework

Calculation of capital for operational risk
Capital set aside for operational risk is deemed to cover the losses or costs resulting from human factors, inadequate or failed internal processes and systems or external events.

To assess capital requirements for operational risk, the following methods apply:
- Standardised approach: the capital requirement is calculated as a percentage of the income, averaged over the last three years
- Basic Indicator approach (BIA): sets the capital requirement as 15% of the net interest and non-interest income, averaged over the last three years. If the income in any year is negative or zero, that year is not considered in the average
- Advanced Management approach (AMA): under the AMA, and subject to the regulatory approval, the capital requirement is calculated using the Group’s own models

As at 31 December 2018, Barclays uses the Standardised Approach.

Calculation of capital for large exposures
Barclays has not exceeded the large exposure limit set in CRR, and as such no capital charge applies.

Regulatory minimum capital and leverage requirements
Capital
As at 31 December 2018, Barclays’ transitional CET1 ratio was 13.2% which exceeded the 2018 transitional minimum requirement of 10.4% (containing a 4.5% Pillar 1 minimum, a 1.9% Capital Conservation Buffer (CCB), a 1.1% Global Systemically Important Institution (G-SII) buffer, a 0.5% Countercyclical Capital Buffer (CCyB) and a 2.4% Pillar 2A requirement.

Barclays’ fully loaded CET1 regulatory requirement is 11.7% comprising a 4.5% Pillar 1 minimum, a 2.5% CCyB, a 1.5% G-SII buffer, a 2.7% Pillar 2A requirement applicable from 1 January 2019, and a 0.5% CCyB.

Leverage
Barclays is subject to a UK leverage ratio requirement that is implemented on a phased basis, with a transitional requirement of 3.8% as at 31 December 2018. The fully loaded UK leverage requirement is expected to be 4.0%.

The leverage disclosure requirements reflected in the report are based on CRR, Barclays’ CRR leverage ratio at 31 December 2018 was 4.3%.

Impact of new regulations
Structural reform of banking groups
Recent developments in banking law and regulation in the UK have included legislation designed to ring-fence the retail and smaller business deposit-taking businesses of large banks. The Financial Services (Banking Reform) Act 2013 put in place a framework for this ring-fencing and secondary legislation passed in 2014 elaborated on the operation and application of the ring-fence. Ring-fencing requires, amongst other things, the separation of the retail and smaller business deposit-taking activities of UK banks in the UK and branches 2015 with the risks in the European Economic Area (EEA) into a legally distinct, operationally separate and economically independent entity, which will not be permitted to undertake a range of activities from 1 January 2019. Ring-fencing rules have been published by the FCA, further determining how ring-fenced banks will be permitted to operate, and setting out detailed reporting. Further rules published by the FCA set out the disclosures that non-ring-fenced banks are required to make to prospective account holders.

Further to the implementation of the UK structural reform legislation and the establishment of Barclays’ ring-fenced bank, and in accordance with Article 13 of the Capital Requirements Regulation (CRR), the Pillar 3 disclosures include information related to Barclays’ significant subsidiaries or those that are significant within their local market. Barclays defines its significant subsidiaries as those entities with RWAs that account for 5% or more of Barclays PLC’s total RWAs. The information related to subsidiaries that are subject to similar local disclosure requirements are not included in this report.

Barclays PLC’s significant subsidiaries as at 31 December 2018 are Barclays Bank PLC and Barclays Bank UK PLC.

Please see page 220 of the Annual Report for a more complete discussion of structural reform.

IFRS 9 – Financial instruments
IFRS 9 (an accounting standard that covers accounting for financial instruments), which was adopted into EU law, came into force on 1 January 2018. On 28 December 2017, an EU Regulation came into force to provide transitional arrangements for mitigating the impact of the introduction of IFRS 9, in large part, on the potential impact on CET1 capital arising from the expected credit loss accounting measures set out in IFRS 9. The Regulation has applied since 1 January 2018.

Further to implementation of IFRS 9, this report includes for the first time at year end a table (pages 25-26) designed to show the impact the IFRS9 transitional arrangements on own funds and leverage measures.

BCBS Standards
In December 2017, the BCBS finalised ‘Basel III’ (the BCBS international regulatory framework for banks), with the majority of these changes expected to be implemented by 1 January 2022, including by regulators in many jurisdictions where Barclays operates.

The BCBS’s finalisation of Basel III, noted above, among other things, eliminated model-based approaches for certain categories of risk-weighted assets (RWAs) (for example, operational risk RWAs, CVA volatility and credit risk RWAs for equity exposures), revised the standardised approach’s risk weights for a variety of exposure categories, replaced the four current approaches for operational risk (including the advanced measurement approach) with a single standardised measurement approach, established 72.5% of standardised approach RWAs for exposure categories as a floor for RWAs calculated under advanced approaches (referred to as the “output floor”, with a five-year phase-in period), and for G-SIBs introduced a leverage ratio buffer in an amount equal to 50% of the applicable G-SIB buffer used for RWA purposes (meaning, for Barclays, a leverage ratio buffer of 0.75%).

In January 2019, the BCBS issued an update to the new market risk framework, including rules made as a result of its “fundamental review of the trading book” (FRTB). The implementation of this framework will be 1 January 2022.

The BCBS has also published final standards on the securitisation framework, which took effect in the EU from 01 January 2019, with a one year grandfathering period for existing transactions.

The final standards for measuring and controlling large exposures were published by the BCBS in April 2014 to take effect in 2019.

In November 2016 the European Commission adopted a proposal (commonly referred to as CRD VI) to begin the legislative process for introducing these standards within the EU.

Political agreement on this ‘Risk Reduction Measures’ package was reached in December 2018. These proposals, would, among other things, implement FRTB by overhauling existing rules relating to standardised and advanced market risk and the rules governing the inclusion of positions in the regulatory trading book. The proposals would also enhance rules for counterparty credit risk, in line with BCBS proposals finalised in 2014, strengthen requirements relating to leverage and large exposures and introduce a net stable funding ratio (NSFR), requiring banks to fund their assets with stable sources of funds.

CRD V also proposes to require that where (i) two or more credit institutions or investment firms established in the EU have a common parent undertaking established outside the EU and (ii) the group has been identified as a G-SIB or has entities in the EU (whether subsidiaries or branches) with total assets of at least €30 billion, the group must establish an intermediate parent undertaking (‘IPU’), authorised and established in, and subject to the supervision of, an EU member state.

Political agreement permitting two IPUs, where structural reform within the head office jurisdiction would not enable a single IPU to operate, was agreed in December 2018.

Please see page 216 of the Annual Report for a more complete discussion of prudential developments.
Scope of application of Basel rules

Scope of consolidation

In this report, Barclays PLC is presented on a consolidated basis. All disclosures are published for Barclays PLC for the year ended 31 December 2018. The consolidation basis used is the same as that used for reporting regulatory capital adequacy to the UK Prudential Regulation Authority. This scope of consolidation is similar to that used for statutory accounting reporting for most of the Group’s activities, except for:

- subsidiaries engaged in non-financial activities such as insurance and securitisation vehicles that are fully consolidated for statutory purposes but are not consolidated for regulatory purposes (exposures to securitisation vehicles are subject to a specific capital treatment, see page 121 for further details). Entities not consolidated for regulatory purposes are adequately capitalised
- associates, joint ventures and participations, that are financial in nature and accounted for on an equity basis in the statutory accounts, are consolidated in proportion to the participation for regulatory calculations
- entities that are not financial in nature, as well as private equity investments treated as associates, are accounted for on an equity basis in the statutory accounts, but are deducted from capital for regulatory calculations

Significant subsidiaries disclosures are included in this report for Barclays Bank PLC and Barclays Bank UK PLC. The scope of these disclosures reflects the level that these entities are regulated at; this differs from the accounting disclosures, where both entities are disclosed on a Group consolidated basis.

Barclays Bank PLC
Barclays Bank PLC (BB PLC) is regulated by the Prudential Regulation Authority (PRA) on a solo consolidated basis and comprises Barclays Bank PLC as well as certain additional subsidiaries, subject to PRA approval. The disclosures provided in this document for BB PLC are based on this regulatory scope of consolidation. This differs from the accounting disclosures, where Barclays Bank PLC Group relates to Barclays Bank PLC and all its subsidiaries.

Barclays Bank UK PLC
Throughout 2018, Barclays Bank UK PLC (BBUK PLC) was regulated by the Prudential Regulation Authority (PRA) on an individual basis. The disclosures provided in this document for BBUK PLC are based on this regulatory scope of consolidation. This differs from the accounting disclosures, where Barclays Bank UK PLC Group relates to Barclays Bank UK PLC and all its subsidiaries. BBUK PLC Group became regulated by the PRA from 1 January 2019.

BBUK PLC is the UK ring-fenced bank largely comprising Personal Banking, Barclaycard Consumer UK and Business Banking. These are part of Barclays UK business segment that is included within Barclays PLC Group.

A list of the tables included in this report as part of the significant subsidiaries disclosures is shown on page 223.

The chart below summarises Barclays’ structure with an indication of the sizes of material subsidiaries in terms of their respective contribution to total assets.

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**Figure 1: Summary of regulatory scope of consolidation as at 31 December 2018**

### Entities included in Pillar 3 Consolidation Groups and IFRS

<table>
<thead>
<tr>
<th>Barclays PLC Consolidated Group</th>
<th>Total assets £1,133bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barclays Services Ltd</td>
<td>Total assets £71bn</td>
</tr>
<tr>
<td>Barclays Bank PLC</td>
<td>Total assets £772.5bn</td>
</tr>
<tr>
<td>Barclays PLC</td>
<td>Total assets £1.1bn</td>
</tr>
<tr>
<td>Barclays Bank UK PLC</td>
<td>Total assets £249.7bn</td>
</tr>
<tr>
<td>Barclays Bank Delaware</td>
<td>Total assets £18.1bn</td>
</tr>
<tr>
<td>Barclays Securities Japan Ltd</td>
<td>Total assets £18.2bn</td>
</tr>
<tr>
<td>Barclays Bank Ireland PLC</td>
<td>Total assets £10.2bn</td>
</tr>
<tr>
<td>Aggregate of less significant entities</td>
<td>Total assets £23.9bn</td>
</tr>
</tbody>
</table>

### Entities included in the regulatory scope of consolidation and excluded from the IFRS scope of consolidation

- Consolidation of banking associates/other entities | Total assets £2.5bn

### Entities included in the IFRS scope of consolidation and excluded from regulatory scope of consolidation

- Deconsolidation of insurance/other entities | Total assets £4.7bn
## Scope of application of Basel rules

## Scope of consolidation

### Table 1: Barclays PLC balance sheet - statutory versus regulatory view

This table shows the reconciliation between Barclays PLC balance sheet for statutory and regulatory purposes. Please note that the amount shown under the regulatory scope of consolidation is not a risk weighted asset measure; it is based on an accounting measure and cannot be directly reconciled to other tables in this report.

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Accounting balance sheet per published financial statements £m</th>
<th>Deconsolidation of insurance/other entities £m</th>
<th>Consolidation of banking associates/other entities £m</th>
<th>Balance sheet per regulatory scope of consolidation £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and balances at central banks</td>
<td>177,069 (14)</td>
<td>(77)</td>
<td>176,978</td>
<td></td>
</tr>
<tr>
<td>Cash collateral and settlement balances</td>
<td>77,222</td>
<td>–</td>
<td>–</td>
<td>77,222</td>
</tr>
<tr>
<td>Loans and advances at amortised cost</td>
<td>326,406 (6,104)</td>
<td>207</td>
<td>320,509</td>
<td></td>
</tr>
<tr>
<td>Reverse repurchase agreements and other similar secured lending</td>
<td>2,308</td>
<td>–</td>
<td>–</td>
<td>2,308</td>
</tr>
<tr>
<td>Trading portfolio assets</td>
<td>104,187</td>
<td>–</td>
<td>2,713</td>
<td>106,900</td>
</tr>
<tr>
<td>Financial assets at fair value through the income statement</td>
<td>149,648 (445)</td>
<td>283</td>
<td>149,466</td>
<td></td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>222,538</td>
<td>–</td>
<td>(97)</td>
<td>222,441</td>
</tr>
<tr>
<td>Financial investments</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Financial assets at fair value through other comprehensive income</td>
<td>52,816</td>
<td>–</td>
<td>109</td>
<td>52,925</td>
</tr>
<tr>
<td>Investments in associates and joint ventures</td>
<td>762</td>
<td>165</td>
<td>(643)</td>
<td>284</td>
</tr>
<tr>
<td>Goodwill and intangible assets</td>
<td>7,973</td>
<td>–</td>
<td>27</td>
<td>8,000</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>2,335</td>
<td>–</td>
<td>10</td>
<td>2,545</td>
</tr>
<tr>
<td>Current tax assets</td>
<td>798</td>
<td>–</td>
<td>–</td>
<td>798</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>3,828</td>
<td>(10)</td>
<td>–</td>
<td>3,818</td>
</tr>
<tr>
<td>Retirement benefit assets</td>
<td>1,768</td>
<td>–</td>
<td>–</td>
<td>1,768</td>
</tr>
<tr>
<td>Other assets</td>
<td>3,425</td>
<td>1,692</td>
<td>(19)</td>
<td>5,098</td>
</tr>
<tr>
<td>Assets included in disposal groups classified as held for sale</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total assets</td>
<td>1,133,283 (4,716)</td>
<td>2,513</td>
<td>1,131,080</td>
<td></td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposits at amortised cost</td>
<td>394,838</td>
<td>–</td>
<td>(78)</td>
<td>394,760</td>
</tr>
<tr>
<td>Cash collateral and settlement balances</td>
<td>67,522</td>
<td>–</td>
<td>–</td>
<td>67,522</td>
</tr>
<tr>
<td>Repurchase agreements and other similar secured borrowing</td>
<td>18,578</td>
<td>–</td>
<td>–</td>
<td>18,578</td>
</tr>
<tr>
<td>Debt securities in issue</td>
<td>82,286 (6,901)</td>
<td>–</td>
<td>75,385</td>
<td></td>
</tr>
<tr>
<td>Subordinated liabilities</td>
<td>20,559</td>
<td>–</td>
<td>–</td>
<td>20,559</td>
</tr>
<tr>
<td>Trading portfolio liabilities</td>
<td>37,882</td>
<td>–</td>
<td>2,543</td>
<td>40,425</td>
</tr>
<tr>
<td>Financial liabilities designated at fair value</td>
<td>216,834</td>
<td>–</td>
<td>–</td>
<td>216,834</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>219,643</td>
<td>–</td>
<td>–</td>
<td>219,643</td>
</tr>
<tr>
<td>Current tax liabilities</td>
<td>628</td>
<td>(9)</td>
<td>2</td>
<td>621</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>51</td>
<td>–</td>
<td>–</td>
<td>51</td>
</tr>
<tr>
<td>Retirement benefit liabilities</td>
<td>315</td>
<td>–</td>
<td>–</td>
<td>315</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>7,716</td>
<td>2,080</td>
<td>54</td>
<td>9,850</td>
</tr>
<tr>
<td>Provisions</td>
<td>2,652</td>
<td>(1)</td>
<td>–</td>
<td>2,651</td>
</tr>
<tr>
<td>Liabilities included in disposal groups classified as held for sale</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>1,069,504 (4,831)</td>
<td>2,521</td>
<td>1,067,194</td>
<td></td>
</tr>
<tr>
<td><strong>Total equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Called up share capital and share premium</td>
<td>4,311</td>
<td>–</td>
<td>–</td>
<td>4,311</td>
</tr>
<tr>
<td>Other equity instruments</td>
<td>9,632</td>
<td>–</td>
<td>–</td>
<td>9,632</td>
</tr>
<tr>
<td>Other reserves</td>
<td>5,153</td>
<td>7</td>
<td>82</td>
<td>5,242</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>43,460</td>
<td>108</td>
<td>(90)</td>
<td>43,478</td>
</tr>
<tr>
<td>Total equity excluding non-controlling interests</td>
<td>62,556</td>
<td>115</td>
<td>(8)</td>
<td>62,663</td>
</tr>
<tr>
<td>Non-controlling interests</td>
<td>1,223</td>
<td>–</td>
<td>–</td>
<td>1,223</td>
</tr>
<tr>
<td>Total equity</td>
<td>63,779</td>
<td>115</td>
<td>(8)</td>
<td>63,886</td>
</tr>
<tr>
<td>Total liabilities and equity</td>
<td>1,133,283 (4,716)</td>
<td>2,513</td>
<td>1,131,080</td>
<td></td>
</tr>
</tbody>
</table>
Scope of application of Basel rules

Scope of permission for calculation approaches

Barclays seeks permission from its regulators to use modelled approaches where possible, to enable risk differentiation.

Barclays has regulatory approval to use its internal credit models in the calculation of the majority of its credit risk and counterparty credit risk exposures. The following table summarises the principal portfolios within Barclays that use the Standardised and Advanced IRB approaches as at 31 December 2018.

Table 2: The scope of the Standardised and IRB approaches for credit and counterparty credit risk excluding CVA

<table>
<thead>
<tr>
<th>Business as at 31 December 2018</th>
<th>Credit risk (see Tables 29 &amp; 30)</th>
<th>Counterparty credit risk excl. CVA (see Tables 62 &amp; 63)</th>
<th>Advanced Internal Ratings Based (IRB) approaches</th>
<th>Standardised approach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RWA £m</td>
<td>Average risk weight</td>
<td>EAD post-CRM £m</td>
<td>RWA £m</td>
</tr>
<tr>
<td>Barclays UK</td>
<td>63,019</td>
<td>20%</td>
<td>311,592</td>
<td>229</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Barclays International</td>
<td>122,546</td>
<td>29%</td>
<td>420,408</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Head Office</td>
<td>10,116</td>
<td>60%</td>
<td>16,832</td>
</tr>
<tr>
<td></td>
<td>Group Total</td>
<td>195,681</td>
<td>26%</td>
<td>748,832</td>
</tr>
</tbody>
</table>

Barclays’ AIRB roll-out plans are discussed with regulators and updated on an agreed schedule.

Barclays has permission to use the Internal Model Method (IMM) to calculate its counterparty credit risk exposures. The permission is comprehensive and applies to the majority of its trades and portfolios. Exceptions include certain contracts entered into by Barclays Capital Inc, for instance exchange traded derivatives.
### Scope of application of Basel rules

### Scope of permission for calculation approaches

#### Table 3: Summary of the scope of application of regulatory methodologies for CVA, market and operational risk

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Risk weighted assets</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit value adjustment</strong></td>
<td>3,409</td>
<td>Barclays calculates Credit Valuation Adjustment (CVA) risk for all contracts in scope as defined by article 382 of the Capital Requirements Regulation. Barclays has permission to use an internal model for the specific risk of debt instruments and therefore is allowed to use the Advanced method for CVA for such instruments where applicable. The Standardised method for CVA is used otherwise.</td>
</tr>
<tr>
<td><strong>Market risk</strong></td>
<td>30,821</td>
<td>As explained on page 165, the risk of loss from changes in the prices of assets in the trading book are captured by a combined RWA calculation for general and specific market risks. The regulatory permission for Barclays to use models considers risk types and legal entities; see table 12 on page 27 for capital requirements related to each approach and risk factor. Barclays has regulatory approval for VaR modelling for general market risk, which is designed to capture the risk of loss arising from changes in market interest rates, along with the risk of losses arising from changes in foreign exchange, commodities and equity market value. The capital charge for specific market risk is designed to protect against losses from adverse movements in the price of an individual security owing to factors related to the individual issuer. Barclays has permission to model specific market risk, including credit spread, migration, and default risks, for certain legal entities and product types. Where the Group does not have permission to use a model (notably in Barclays Capital Inc), the Standardised approach is applied.</td>
</tr>
<tr>
<td><strong>Operational risk</strong></td>
<td>56,660</td>
<td>Following submission of an application to the PRA, Barclays Group received the PRA’s approval to use the Standardised Approach (TSA) for operational risk regulatory capital purposes with effect from 1 April 2018. Barclays Group has conservatively elected to retain its previous operational risk RWA amount unchanged for 2018.</td>
</tr>
</tbody>
</table>
### Scope of application of Basel rules

#### Linkage between financial statements and regulatory risk

**Table 4: LI1– Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories**

This table shows an outline of the differences in the basis of consolidation for accounting and regulatory purposes. It provides the allocation of the amounts reported under the scope of regulatory consolidation to the different risk categories.

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Carrying values as reported in published financial statements £m</th>
<th>Carrying values under scope of regulatory consolidation £m</th>
<th>Subject to the credit risk framework £m</th>
<th>Subject to the CCR framework £m</th>
<th>Subject to the securitisation framework £m</th>
<th>Subject to the market risk framework £m</th>
<th>Not subject to capital requirements or subject to deduction from capital £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and balances at central banks</td>
<td>177,069</td>
<td>176,978</td>
<td>176,978</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Cash collateral and settlement balances</td>
<td>77,222</td>
<td>77,222</td>
<td>12,583</td>
<td>43,856</td>
<td>–</td>
<td>–</td>
<td>16,913</td>
</tr>
<tr>
<td>Loans and advances at amortised cost</td>
<td>326,406</td>
<td>320,509</td>
<td>316,887</td>
<td>–</td>
<td>3,622</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Reverse repurchase agreements and other similar secured lending</td>
<td>2,308</td>
<td>2,308</td>
<td>–</td>
<td>2,308</td>
<td>–</td>
<td>–</td>
<td>48</td>
</tr>
<tr>
<td>Trading portfolio assets</td>
<td>104,187</td>
<td>106,900</td>
<td>6,279</td>
<td>–</td>
<td>197</td>
<td>100,425</td>
<td>–</td>
</tr>
<tr>
<td>Financial assets at fair value through the income statement</td>
<td>149,648</td>
<td>149,486</td>
<td>12,485</td>
<td>130,799</td>
<td>–</td>
<td>–</td>
<td>136,992</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>222,538</td>
<td>222,441</td>
<td>5</td>
<td>220,583</td>
<td>93</td>
<td>221,850</td>
<td>1,730</td>
</tr>
<tr>
<td>Financial investments</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Financial assets at fair value through other comprehensive income</td>
<td>52,816</td>
<td>52,925</td>
<td>52,876</td>
<td>–</td>
<td>–</td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td>Investments in associates and joint ventures</td>
<td>762</td>
<td>284</td>
<td>284</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Goodwill and intangible assets</td>
<td>7,973</td>
<td>8,000</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>8,000</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>2,535</td>
<td>2,545</td>
<td>2,545</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Current tax assets</td>
<td>798</td>
<td>798</td>
<td>798</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>3,828</td>
<td>3,818</td>
<td>3,298</td>
<td>–</td>
<td>–</td>
<td>520</td>
<td></td>
</tr>
<tr>
<td>Retirement benefit assets</td>
<td>1,768</td>
<td>1,768</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1,768</td>
</tr>
<tr>
<td>Other assets</td>
<td>3,425</td>
<td>5,098</td>
<td>5,098</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Assets included in disposal groups classified as held for sale</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>1,133,283</td>
<td>1,131,080</td>
<td>590,116</td>
<td>397,546</td>
<td>3,961</td>
<td>476,228</td>
<td>32,801</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposits at amortised cost</td>
<td>394,838</td>
<td>394,760</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1,346</td>
</tr>
<tr>
<td>Cash collateral and settlement balances</td>
<td>67,522</td>
<td>67,522</td>
<td>–</td>
<td>53,159</td>
<td>–</td>
<td>–</td>
<td>23,639</td>
</tr>
<tr>
<td>Repurchase agreements and other similar secured borrowing</td>
<td>18,578</td>
<td>18,578</td>
<td>–</td>
<td>2,552</td>
<td>–</td>
<td>1,569</td>
<td>14,457</td>
</tr>
<tr>
<td>Debt securities in issue</td>
<td>82,286</td>
<td>75,385</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>75,385</td>
</tr>
<tr>
<td>Subordinated liabilities</td>
<td>20,559</td>
<td>20,559</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>20,559</td>
</tr>
<tr>
<td>Trading portfolio liabilities</td>
<td>37,882</td>
<td>40,425</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>37,884</td>
<td>2,541</td>
</tr>
<tr>
<td>Financial liabilities designated at fair value</td>
<td>216,834</td>
<td>216,834</td>
<td>–</td>
<td>152,708</td>
<td>–</td>
<td>209,242</td>
<td>9,809</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>219,643</td>
<td>219,643</td>
<td>–</td>
<td>214,656</td>
<td>1,255</td>
<td>218,909</td>
<td>3,712</td>
</tr>
<tr>
<td>Current tax liabilities</td>
<td>628</td>
<td>621</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>621</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>51</td>
<td>51</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>51</td>
</tr>
<tr>
<td>Retirement benefit liabilities</td>
<td>315</td>
<td>315</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>315</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>7,716</td>
<td>9,850</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>9,850</td>
</tr>
<tr>
<td>Provisions</td>
<td>2,652</td>
<td>2,651</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>2,651</td>
</tr>
<tr>
<td>Liabilities included in disposal groups classified as held for sale</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>1,069,504</td>
<td>1,067,194</td>
<td>–</td>
<td>423,075</td>
<td>1,255</td>
<td>492,589</td>
<td>547,726</td>
</tr>
</tbody>
</table>

The following points should be considered in conjunction with table LI1:

a. The balances shown in column “Carrying values under scope of regulatory consolidation” do not equal the sum of those in the columns relating to the regulatory framework, as certain assets can be in scope for more than one regulatory framework. As such, assets included in line items for “Cash collateral and settlement balances”, “Reverse repurchase agreements and other similar secured lending”, “Financial assets at fair value through the income statement”, and “Derivative financial instruments”, “can be subject to credit risk, counterparty credit risk and market risk.

b. The column “subject to market risk framework” is based on trading book asset, as shown in the table “balance sheet split by trading and banking books” see page 116

c. The column “subject to securitisation framework” includes non-trading book positions only. Trading book securitisation positions are included in the “subject to the market risk framework” column.

d. For liabilities, balances shown in column “Not subject to capital requirements or subject deduction from capital” are balancing amount so that “Carrying values under scope of regulatory consolidation” at least equals to the sum of those in the columns relating to the regulatory framework.

Information regarding the market risk valuation methodologies, independent price verifications process and procedures for valuation adjustments or reserves can be found in the Management of Market risk section from page 164
Scope of application of Basel rules
Linkage between financial statements and regulatory risk

Table 5: LI2 – Main sources of differences between regulatory exposure amounts and carrying values in financial statements
This table provides the main sources of differences between the financial statement amounts and the exposure amount used for regulatory purposes as shown in table 4 above.

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Total(a) £m</th>
<th>Subject to the credit risk framework £m</th>
<th>Subject to the CCR framework £m</th>
<th>Subject to the securitisation framework £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets carrying value amount under the scope of regulatory consolidation (as per template LI1)</td>
<td>991,623</td>
<td>590,116</td>
<td>397,546</td>
<td>3,961</td>
</tr>
<tr>
<td>Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)</td>
<td>(424,330)</td>
<td>–</td>
<td>(423,075)</td>
<td>(1,255)</td>
</tr>
<tr>
<td>Total net amount under the regulatory scope of consolidation</td>
<td>567,293</td>
<td>590,116</td>
<td>(25,529)</td>
<td>2,706</td>
</tr>
<tr>
<td>Off-balance sheet amounts(b)</td>
<td>885,755</td>
<td>129,990</td>
<td>541,718</td>
<td>1,537</td>
</tr>
<tr>
<td>Differences in valuations</td>
<td>2,075</td>
<td>231</td>
<td>1,087</td>
<td>757</td>
</tr>
<tr>
<td>Differences in netting rules</td>
<td>(446,931)</td>
<td>–</td>
<td>(446,931)</td>
<td>–</td>
</tr>
<tr>
<td>Differences due to consideration of provisions</td>
<td>3,920</td>
<td>3,920</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Differences due to prudential filters</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Differences between input balance and modelled regulatory output</td>
<td>41,142</td>
<td>14,110</td>
<td>27,032</td>
<td>–</td>
</tr>
<tr>
<td>Regulatory exclusion – CCP trades for a client where Barclays acts as a counterparty on behalf of a counterparty</td>
<td>(360)</td>
<td>–</td>
<td>(360)</td>
<td>–</td>
</tr>
<tr>
<td>Credit Enhancement Exposure for Sponsor trades</td>
<td>6,679</td>
<td>–</td>
<td>–</td>
<td>6,679</td>
</tr>
<tr>
<td>Exposure of Synthetic Securitisation trades</td>
<td>20,086</td>
<td>(3,417)</td>
<td>–</td>
<td>23,503</td>
</tr>
<tr>
<td>Other</td>
<td>(81)</td>
<td>177</td>
<td>–</td>
<td>(258)</td>
</tr>
<tr>
<td>Exposure amounts considered for regulatory purposes</td>
<td>1,079,578</td>
<td>735,127</td>
<td>97,017</td>
<td>34,924</td>
</tr>
</tbody>
</table>

The following points should be considered in conjunction with table LI2:
\(a\) The total column cannot be directly reconciled back to the carrying values under scope of consolidation shown in table 4 - LI1, as it excludes balances "subject to the market risk framework" and items "not subject to capital requirements or subject to deduction from capital".
\(b\) In line item "off-balance sheet amounts", the amounts shown in the Total column, which relates to exposures pre-CCF, do not equal the sum of the amounts shown in the remaining columns, as these are post-CCF.

Table 6: LI3 Outline of the differences in the scopes of consolidation (entity by entity)

<table>
<thead>
<tr>
<th>Name of the entity</th>
<th>Method of accounting consolidation</th>
<th>Method of regulatory consolidation</th>
<th>Description of the entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barclays Insurance Services Company Limited</td>
<td>Fully consolidated</td>
<td>•</td>
<td>Activities auxiliary to financial services and insurance activities</td>
</tr>
<tr>
<td>Barclays Insurance Guernsey PCC Limited</td>
<td>Fully consolidated</td>
<td>•</td>
<td>Insurance, reinsurance and pension funding, except compulsory social security</td>
</tr>
<tr>
<td>Care Principles PropCo1 Limited</td>
<td>Fully consolidated</td>
<td>•</td>
<td>Other services activities</td>
</tr>
<tr>
<td>Care Principles PropCo2 Limited</td>
<td>Fully consolidated</td>
<td>•</td>
<td>Other services activities</td>
</tr>
<tr>
<td>CP Topco Limited</td>
<td>Fully consolidated</td>
<td>•</td>
<td>Other services activities</td>
</tr>
<tr>
<td>Salisbury Receivables Company LLC</td>
<td>Fully consolidated</td>
<td>•</td>
<td>Financial service activities, except insurance and pension funding</td>
</tr>
<tr>
<td>Barclays Insurance U.S. Inc.</td>
<td>Fully consolidated</td>
<td>•</td>
<td>Insurance, reinsurance and pension funding, except compulsory social security</td>
</tr>
<tr>
<td>CP Flower Exempt Co (UK) Limited</td>
<td>Fully consolidated</td>
<td>•</td>
<td>Other services activities</td>
</tr>
<tr>
<td>Sheffield Receivables Company LLC</td>
<td>Fully consolidated</td>
<td>•</td>
<td>Financial service activities, except insurance and pension funding</td>
</tr>
<tr>
<td>Sunderland Receivables Company LLC</td>
<td>Fully consolidated</td>
<td>•</td>
<td>Financial service activities, except insurance and pension funding</td>
</tr>
<tr>
<td>Vaultex UK Limited</td>
<td>Proportionally consolidated</td>
<td>•</td>
<td>Activities auxiliary to financial services and insurance activities</td>
</tr>
<tr>
<td>Crescent Legacy LLC</td>
<td>Equity</td>
<td>•</td>
<td>Real estate activities</td>
</tr>
<tr>
<td>Intelligent Processing Solutions Limited</td>
<td>Equity</td>
<td>•</td>
<td>Activities auxiliary to financial services and insurance activities</td>
</tr>
<tr>
<td>Sabine Oil &amp; Gas Holdings, Inc</td>
<td>Equity</td>
<td>•</td>
<td>Extraction of crude petroleum and natural gas</td>
</tr>
<tr>
<td>EnterCard Group AB</td>
<td>Equity</td>
<td>•</td>
<td>Financial service activities, except insurance and pension funding</td>
</tr>
<tr>
<td>BGF Limited</td>
<td>Equity</td>
<td>•</td>
<td>Financial service activities, except insurance and pension funding</td>
</tr>
<tr>
<td>RS2 Software PLC</td>
<td>Equity</td>
<td>•</td>
<td>Financial service activities, except insurance and pension funding</td>
</tr>
<tr>
<td>Palomino Limited</td>
<td>Not consolidated</td>
<td>•</td>
<td>Financial service activities, except insurance and pension funding</td>
</tr>
</tbody>
</table>

Note
\(a\) Column “neither consolidated nor deducted” is subject to capital requirements.
## Contents

| Analysis of treasury and capital risk | 17 |
| Analysis of credit risk | 41 |
| Analysis of counterparty credit risk | 96 |
| Analysis of market risk | 115 |
| Analysis of securitisation exposures | 121 |
| Analysis of operational risk | 132 |
Risk and capital position review

Analysis of treasury and capital risk

This section details Barclays’ capital position providing information on capital resources, requirements, leverage and liquidity.

Key Metrics in 2018

- **Common Equity Tier 1 ratio**
  - 13.2%

- **UK leverage ratio**
  - 5.1%

- **Average UK leverage ratio**
  - 4.5%

- **CRR leverage ratio**
  - 4.3%

- **Liquidity Coverage ratio**
  - 169%
### Risk and capital position review

#### Analysis of treasury and capital risk

**Table 7: KM1 - Key metrics and movements**

<table>
<thead>
<tr>
<th>Available capital (amounts)</th>
<th>As at 31.12.18 £m</th>
<th>As at 30.09.18 £m</th>
<th>As at 30.06.18 £m</th>
<th>As at 31.03.18 £m</th>
<th>As at 31.12.17 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Common Equity Tier 1 (CET1)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>41,100</td>
<td>41,744</td>
<td>41,398</td>
<td>40,246</td>
<td>41,565</td>
</tr>
<tr>
<td>1a Fully loaded Expected Credit Loss (ECL) accounting model&lt;sup&gt;b&lt;/sup&gt;</td>
<td>39,815</td>
<td>40,458</td>
<td>40,096</td>
<td>38,932</td>
<td>41,565</td>
</tr>
<tr>
<td>2 Tier 1&lt;sup&gt;c&lt;/sup&gt;</td>
<td>52,998</td>
<td>55,202</td>
<td>53,049</td>
<td>52,110</td>
<td>53,914</td>
</tr>
<tr>
<td>2a Fully loaded ECL accounting model Tier 1&lt;sup&gt;d&lt;/sup&gt;</td>
<td>49,317</td>
<td>51,171</td>
<td>48,904</td>
<td>47,743</td>
<td>50,376</td>
</tr>
<tr>
<td>3 Total capital&lt;sup&gt;e&lt;/sup&gt;</td>
<td>64,594</td>
<td>67,195</td>
<td>65,421</td>
<td>64,548</td>
<td>67,175</td>
</tr>
<tr>
<td>3a Fully loaded ECL accounting model total capital&lt;sup&gt;f&lt;/sup&gt;</td>
<td>61,848</td>
<td>64,519</td>
<td>62,813</td>
<td>61,560</td>
<td>64,646</td>
</tr>
</tbody>
</table>

**Risk-weighted assets (amounts)**

| 4 Total risk-weighted assets (RWA)<sup>g</sup> | 311,926 | 316,167 | 319,299 | 317,946 | 317,946 |
| 4a Fully loaded ECL accounting model total risk-weighted assets (RWA)<sup>h</sup> | 311,798 | 316,039 | 319,171 | 317,970 | 313,033 |

#### Risk-based capital ratios as a percentage of RWA

| 5 Common Equity Tier 1 ratio (%) | 13.2% | 13.2% | 13.0% | 12.7% | 13.3% |
| 5a Fully loaded ECL accounting model Common Equity Tier 1 (%) | 12.8% | 12.8% | 12.6% | 12.2% | 13.3% |
| 6 Tier 1 ratio (%) | 17.0% | 17.5% | 16.6% | 16.4% | 17.2% |
| 6a Fully loaded ECL accounting model Tier 1 ratio (%) | 15.8% | 16.2% | 15.3% | 15.0% | 16.1% |
| 7 Total capital ratio (%) | 20.7% | 21.3% | 20.5% | 20.3% | 21.5% |
| 7a Fully loaded ECL accounting model total capital ratio (%) | 19.8% | 20.4% | 19.7% | 19.4% | 20.7% |

#### Additional CET1 buffer requirements as a percentage of RWA

| 8 Capital conservation buffer requirement (%) | 1.9% | 1.9% | 1.9% | 1.9% | 1.3% |
| 9 Countercyclical buffer requirement (%) | 0.5% | 0.3% | 0.3% | 0.0% | 0.0% |
| 10 Bank G-SIB and/or D-SIB additional requirements (%) | 1.1% | 1.1% | 1.1% | 1.1% | 1.0% |
| 11 Total of bank CET1 specific buffer requirements(%) (row 8 + 9 + 10) | 3.5% | 3.3% | 3.3% | 3.0% | 2.3% |
| 12 CET1 available after meeting the bank’s minimum capital requirements (%) | 8.7% | 8.7% | 8.5% | 8.2% | 8.8% |

#### CRR leverage ratio

| 13 Total CRR leverage ratio exposure measure | 1,142,520 | 1,191,085 | 1,163,773 | 1,169,217 | 1,124,521 |
| 14 Fully loaded CRR leverage ratio (%) | 4.3% | 4.3% | 4.2% | 4.1% | 4.5% |
| 14a Average UK leverage ratio (Transitional)<sup>l</sup> | 4.5% | 4.6% | 4.6% | 4.6% | 4.9% |
| 13a Total average UK leverage ratio exposure measure<sup>g</sup> | 1,109,988 | 1,119,044 | 1,081,840 | 1,089,910 | 1,044,560 |
| 14a Transitional average UK leverage ratio (%) | 4.5% | 4.6% | 4.6% | 4.6% | 4.9% |
| 13b Total UK leverage ratio exposure measure | 998,556 | 1,063,472 | 1,030,145 | 1,030,784 | 984,710 |
| 14b Transitional UK leverage ratio (%) | 5.1% | 4.9% | 4.9% | 4.8% | 5.1% |

#### Liquidity Coverage Ratio

| 15 Total HQLA | 218,766 | 210,681 | 207,989 | 203,591 | 214,637 |
| 16 Total net cash outflows | 129,172 | 130,925 | 134,712 | 138,436 | 139,760 |
| 17 LCR ratio (%) | 169% | 161% | 154% | 147% | 154% |

Notes

- CET1 capital and RWAs are calculated applying the transitional arrangements of the CRR. This includes IFRS 9 transitional arrangements.
- Fully loaded CET1 capital and RWAs are calculated without applying the transitional arrangements of the CRR.
- Tier 1 and Total capital include AT1 and T2 capital that are calculated applying the grandfathering of CRR non-compliant capital instruments.
- Fully loaded Tier 1 and Total capital include AT1 and T2 capital that are calculated without applying the grandfathering of CRR non-compliant capital instruments.
- Fully loaded UK leverage ratios are calculated applying the IFRS 9 transitional arrangements and in line with the PRA Handbook, which excludes grandfathered AT1 instruments allowed under CRR.
- Average UK leverage exposure uses an exposure measure for each day in the quarter. For periods prior to 1 January 2018 the exposure measure was based on the last day of each month in the quarter.
Risk and capital position review

Analysis of treasury and capital risk

Capital

Barclays' fully loaded CET1 regulatory requirement is 11.7% comprising a 4.5% Pillar 1 minimum, a 2.5% Capital Conservation Buffer (CCB), a 1.5% Global Systemically Important Institution (G-SII) buffer, a 2.7% Pillar 2A requirement applicable from 1 January 2019, and a 0.5% Countercyclical Capital Buffer (CCyB).

The CCB and the G-SII buffer, determined by the PRA in line with guidance from the Financial Stability Board (FSB), are subject to phased implementation at 25% per annum from 2016 with full effect from 2019. The CCB has been set at 2.5% with 1.9% applicable for 2018. The G-SII buffer for 2018 has been set at 1.5% with 1.1% applicable for 2018. The FSB confirmed that the G-SII buffer will remain at 1.5% applicable for 2019 and 2020.

The Barclays CCyB is based on the buffer rate applicable for each jurisdiction in which Barclays have exposures. On 28 November 2018, the Financial Policy Committee (FPC) increased the CCyB rate for UK exposures from 0.5% to 1%. The buffer rates set by other national authorities for our non-UK exposures are not currently material. Overall, this results in a 0.5% CCyB for Barclays for Q418.

Barclays’ Pillar 2A requirement as per the PRA’s Individual Capital Requirement for 2018 is 4.3%, of which at least 56.25% needs to be met in CET1 form, equating to approximately 2.4% of RWAs. Certain elements of the Pillar 2A requirement are a fixed quantum whilst others are a proportion of RWAs and are based on a point in time assessment. The Pillar 2A requirement is subject to at least annual review.

As at 31 December 2018, Barclays’ transitional CET1 ratio was 13.2% which exceeded the 2018 transitional minimum requirement of 10.4% comprising a 4.5% Pillar 1 minimum, a 1.9% CCB, a 1.1% G-SII buffer, a 0.5% CCyB and a 2.4% Pillar 2A requirement.

Table 8: Capital resources

This table shows the Group’s capital resources. Table 10 presents the components of regulatory capital on both a transitional and fully loaded basis as at 31 December 2018.

<table>
<thead>
<tr>
<th>Capital ratios</th>
<th>As at 31.12.18</th>
<th>As at 31.12.17</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET1</td>
<td>13.2%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Tier 1 (T1)</td>
<td>17.0%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Total regulatory capital</td>
<td>20.7%</td>
<td>21.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capital resources</th>
<th>£m</th>
<th>£m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total equity excluding non-controlling interests per the balance sheet</td>
<td>62,556</td>
<td>63,905</td>
</tr>
<tr>
<td>Less: other equity instruments (recognised as AT1 capital)</td>
<td>(9,632)</td>
<td>(8,941)</td>
</tr>
<tr>
<td>Adjustment to retained earnings for foreseeable dividends</td>
<td>(731)</td>
<td>(392)</td>
</tr>
<tr>
<td>Other regulatory adjustments and deductions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional value adjustments (PVA)</td>
<td>(1,746)</td>
<td>(1,385)</td>
</tr>
<tr>
<td>Goodwill and intangible assets</td>
<td>(7,983)</td>
<td>(7,908)</td>
</tr>
<tr>
<td>Deferred tax assets that rely on future profitability excluding temporary differences</td>
<td>(520)</td>
<td>(593)</td>
</tr>
<tr>
<td>Fair value reserves related to gains or losses on cash flow hedges</td>
<td>(660)</td>
<td>(1,161)</td>
</tr>
<tr>
<td>Excess of expected losses over impairment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gains or losses on liabilities at fair value resulting from own credit</td>
<td>(52)</td>
<td>83</td>
</tr>
<tr>
<td>Defined benefit pension fund assets</td>
<td>(1,335)</td>
<td>(732)</td>
</tr>
<tr>
<td>Direct and indirect holdings by an institution of own CET1 instruments</td>
<td>(50)</td>
<td>(50)</td>
</tr>
<tr>
<td>Adjustment under IFRS 9 transitional arrangements</td>
<td>1,285</td>
<td>–</td>
</tr>
<tr>
<td>Other regulatory adjustments</td>
<td>(32)</td>
<td>(22)</td>
</tr>
<tr>
<td>CET1 capital</td>
<td>41,100</td>
<td>41,565</td>
</tr>
<tr>
<td>AT1 capital</td>
<td>9,632</td>
<td>8,941</td>
</tr>
<tr>
<td>Qualifying AT1 capital (including minority interests) issued by subsidiaries</td>
<td>2,396</td>
<td>3,538</td>
</tr>
<tr>
<td>Other regulatory adjustments and deductions</td>
<td>(130)</td>
<td>(130)</td>
</tr>
<tr>
<td>AT1 capital</td>
<td>11,898</td>
<td>12,349</td>
</tr>
<tr>
<td>T1 capital</td>
<td>52,998</td>
<td>53,914</td>
</tr>
<tr>
<td>T2 capital</td>
<td>6,566</td>
<td>6,472</td>
</tr>
<tr>
<td>Qualifying T2 capital (including minority interests) issued by subsidiaries</td>
<td>5,275</td>
<td>7,040</td>
</tr>
<tr>
<td>Credit risk adjustments (excess of impairment over expected losses)</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Other regulatory adjustments and deductions</td>
<td>(250)</td>
<td>(251)</td>
</tr>
<tr>
<td>Total regulatory capital</td>
<td>64,594</td>
<td>67,175</td>
</tr>
<tr>
<td>Total RWAs</td>
<td>311,926</td>
<td>313,033</td>
</tr>
</tbody>
</table>

Notes

a CET1, T1 and T2 capital, and RWAs are calculated applying the transitional arrangements of the CRR. This includes IFRS 9 transitional arrangements and the grandfathering of CRR non-compliant capital instruments.

b The fully loaded CET1 ratio, as is relevant for assessing against the conversion trigger in Barclays PLC additional tier 1 (AT1) securities, was 12.8%, with £39.8bn of CET1 capital and £311.8bn of RWAs calculated without applying the transitional arrangements of the CRR.

c The Barclays PLC CET1 ratio, as is relevant for assessing against the conversion trigger in Barclays Bank PLC T2 Contingent Capital Notes, was 13.2%. For this calculation CET1 capital and RWAs are calculated applying the transitional arrangements under the CRR, including the IFRS 9 transitional arrangements. The benefit of the Financial Services Authority (FSA) October 2012 interpretation of the transitional provisions, relating to the implementation of CRD IV, expired in December 2017.
Risk and capital position review

Analysis of treasury and capital risk

Table 9: Summary of movements in capital resources

<table>
<thead>
<tr>
<th>Movement in CET1 capital</th>
<th>Year ended 31.12.18 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening CET1 capital</td>
<td>41,565</td>
</tr>
<tr>
<td>Effects of changes in accounting policies</td>
<td></td>
</tr>
<tr>
<td>Profit for the period attributable to equity holders</td>
<td>2,146</td>
</tr>
<tr>
<td>Own credit relating to derivative liabilities</td>
<td>(77)</td>
</tr>
<tr>
<td>Dividends paid and foreseen</td>
<td>(1,656)</td>
</tr>
<tr>
<td>Increase in retained regulatory capital generated from earnings</td>
<td>413</td>
</tr>
<tr>
<td>Net impact of share schemes</td>
<td>90</td>
</tr>
<tr>
<td>Fair value through other comprehensive income reserve</td>
<td>(486)</td>
</tr>
<tr>
<td>Currency translation reserve</td>
<td>834</td>
</tr>
<tr>
<td>Other reserves</td>
<td>(1,027)</td>
</tr>
<tr>
<td>Decrease in other qualifying reserves</td>
<td>(589)</td>
</tr>
<tr>
<td>Pension remeasurements within reserves</td>
<td>313</td>
</tr>
<tr>
<td>Defined benefit pension fund asset deduction</td>
<td>(603)</td>
</tr>
<tr>
<td>Net impact of pensions</td>
<td>(290)</td>
</tr>
<tr>
<td>Additional value adjustments (PVA)</td>
<td>(361)</td>
</tr>
<tr>
<td>Goodwill and intangible assets</td>
<td>(75)</td>
</tr>
<tr>
<td>Deferred tax assets that rely on future profitability excluding those arising from temporary differences</td>
<td>73</td>
</tr>
<tr>
<td>Excess of expected loss over impairment</td>
<td>1,239</td>
</tr>
<tr>
<td>Adjustment under IFRS 9 transitional arrangements</td>
<td>1,285</td>
</tr>
<tr>
<td>Other regulatory adjustments</td>
<td>(10)</td>
</tr>
<tr>
<td>Increase in regulatory capital due to adjustments and deductions</td>
<td>2,151</td>
</tr>
<tr>
<td>Closing CET1 capital</td>
<td>41,100</td>
</tr>
</tbody>
</table>

CET1 capital decreased £0.5bn to £41.1bn.

£4.2bn of organic capital generated from profits was more than offset by £2.1bn of litigation and conduct charges, as the Barclays Group resolved legacy matters, as well as the following significant items:

- £1.7bn of dividends paid and foreseen for ordinary dividends and AT1 coupons
- A £1bn decrease in other qualifying reserves following the redemption of the legacy $2.65bn 8.125% Series Non-Cumulative Callable Dollar Preference Shares and $2bn 8.25% AT1 securities due to these instruments being held on the balance sheet at historical FX rates
- A £0.3bn decrease as a result of movements relating to pensions, largely due to deficit contribution payments of £0.25bn in April 2018 and £0.25bn in September 2018

The implementation of IFRS 9 resulted in a net increase in CET1 capital as the initial decrease in shareholders’ equity of £2.2bn on implementation was more than offset by the transitional relief of £1.3bn and the removal of £1.2bn of regulatory deduction for the excess of expected loss over impairment.
### Analysis of treasury and capital risk

**Table 10: Regulatory capital**

This table shows the components of regulatory capital presented on both a transitional and fully loaded basis as at 31 December 2018.

This disclosure has been prepared using the format set out in Annex IV and Annex VI of the final ‘Implementing technical standards with regard to disclosure of own funds requirements for institution’ (Commission implementing regulation- EU 1423/2013).

#### Common Equity Tier 1 (CET1) capital: instruments and reserves

<table>
<thead>
<tr>
<th></th>
<th>Barclays Group</th>
<th>Barclays Bank PLC</th>
<th>Barclays Bank UK PLC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As at 31.12.18</td>
<td>As at 31.12.18</td>
<td>As at 31.12.18</td>
</tr>
<tr>
<td></td>
<td>Transitional position</td>
<td>Fully loaded position</td>
<td>Transitional position</td>
</tr>
<tr>
<td></td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
</tr>
<tr>
<td>1 Capital instruments and the related share premium accounts of which: ordinary shares</td>
<td>4,311</td>
<td>4,311</td>
<td>2,343</td>
</tr>
<tr>
<td>2 Retained earnings</td>
<td>43,460</td>
<td>43,460</td>
<td>30,021</td>
</tr>
<tr>
<td>3 Accumulated other comprehensive income (and other reserves)</td>
<td>5,153</td>
<td>5,153</td>
<td>383</td>
</tr>
<tr>
<td>5a Independently reviewed interim net profits net of any foreseeable charge or dividend(^a)</td>
<td>(731)</td>
<td>(731)</td>
<td>(38)</td>
</tr>
<tr>
<td>Scope of consolidation adjustment</td>
<td>(32)</td>
<td>(32)</td>
<td>316</td>
</tr>
<tr>
<td>6 Common Equity Tier 1 (CET1) capital before regulatory adjustments</td>
<td>52,161</td>
<td>52,161</td>
<td>33,025</td>
</tr>
</tbody>
</table>

#### Notes

\(^a\) Adjustment to retained earnings for foreseeable dividends only.

\(^b\) Group of which static £1,212m, of which modified £73m; BB PLC of which static £456m, of which modified £0m; BBUK PLC of which static £0m, of which modified £250m.

For more information, see page 24
## Analysis of treasury and capital risk

### Table 10: Regulatory capital (continued)

<table>
<thead>
<tr>
<th></th>
<th>Barclays Group</th>
<th>Barclays Bank PLC</th>
<th>Barclays Bank UK PLC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As at 31.12.18</td>
<td>As at 31.12.18</td>
<td>As at 31.12.18</td>
</tr>
<tr>
<td></td>
<td>Transitional</td>
<td>Fully loaded</td>
<td>Transitional</td>
</tr>
<tr>
<td></td>
<td>position £m</td>
<td>position £m</td>
<td>position £m</td>
</tr>
<tr>
<td></td>
<td>As at 31.12.18</td>
<td>As at 31.12.18</td>
<td>As at 31.12.18</td>
</tr>
<tr>
<td></td>
<td>Transitional</td>
<td>Fully loaded</td>
<td>Transitional</td>
</tr>
<tr>
<td></td>
<td>position £m</td>
<td>position £m</td>
<td>position £m</td>
</tr>
<tr>
<td>Additional Tier 1 (AT1) capital: instruments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 Capital instruments and the related share</td>
<td>9,632</td>
<td>7,595</td>
<td>2,070</td>
</tr>
<tr>
<td>premium accounts</td>
<td>9,632</td>
<td>7,595</td>
<td>2,070</td>
</tr>
<tr>
<td>31 of which: classified as equity under IFRS</td>
<td>9,632</td>
<td>7,595</td>
<td>2,070</td>
</tr>
<tr>
<td>33 Amount of qualifying items referred to in Article</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>484 (4) and the related share premium accounts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subject to phase out from AT1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34 Qualifying Tier 1 capital included in consolidated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT1 capital (including minority interests) issued</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>by subsidiaries and held by third parties</td>
<td>3,065</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>35 of which: instruments issued by subsidiaries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subject to phase out</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 Additional Tier 1 (AT1) capital before regulatory</td>
<td>12,028</td>
<td>10,660</td>
<td>2,070</td>
</tr>
<tr>
<td>adjustments</td>
<td>9,632</td>
<td>7,595</td>
<td>2,070</td>
</tr>
<tr>
<td>Additional Tier 1 (AT1) capital: regulatory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adjustments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37 Direct and indirect holdings by an institution of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>own AT1 instruments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 Direct, indirect and synthetic holdings of the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT1 instruments of financial sector entities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>where the institution has a significant investment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in those entities (amount above 10% threshold and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>net of eligible short positions) (negative amount)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43 Total regulatory adjustments to Additional Tier 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(AT1) capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44 Additional Tier 1 (AT1) capital</td>
<td>11,898</td>
<td>8,508</td>
<td>2,070</td>
</tr>
<tr>
<td>45 Tier 1 capital (T1 = CET1 + AT1)</td>
<td>52,998</td>
<td>31,902</td>
<td>12,769</td>
</tr>
<tr>
<td>46 Tier 1 capital before regulatory adjustments</td>
<td>49,317</td>
<td>26,741</td>
<td>12,519</td>
</tr>
<tr>
<td>Tier 2 (T2) capital: instruments and provisions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47 Amount of qualifying items referred to in Article</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>484 (5) and the related share premium accounts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subject to phase out from T2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48 Qualifying own funds instruments included in T2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>capital (including minority interests) issued by</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subsidiaries and held by third parties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49 of which: instruments issued by subsidiaries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subject to phase out</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 Credit risk adjustments</td>
<td>450</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>51 Tier 2 capital before regulatory adjustments</td>
<td>11,846</td>
<td>9,814</td>
<td>3,286</td>
</tr>
<tr>
<td>52 Tier 2 capital</td>
<td>12,781</td>
<td>10,107</td>
<td>3,531</td>
</tr>
<tr>
<td>53 Tier 2 capital: regulatory adjustments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54 Direct and indirect holdings of own T2 instruments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and subordinated loans</td>
<td>12,028</td>
<td>10,660</td>
<td>2,070</td>
</tr>
<tr>
<td>55 Direct and indirect holdings of the T2 instruments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and subordinated loans of financial sector entities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>where the institution does not have a significant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>investment in those entities (amount above 10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>threshold and net of eligible short positions)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(negative amount)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57 Total regulatory adjustments to Tier 2 capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58 Tier 2 capital</td>
<td>11,596</td>
<td>6,537</td>
<td>3,286</td>
</tr>
<tr>
<td>59 Total capital (TC = T1 + T2)</td>
<td>64,594</td>
<td>38,439</td>
<td>16,055</td>
</tr>
</tbody>
</table>
Table 10: Regulatory capital (continued)

<table>
<thead>
<tr>
<th></th>
<th>Barclays Group As at 31.12.18</th>
<th>Barclays Bank PLC As at 31.12.18</th>
<th>Barclays Bank UK PLC As at 31.12.18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transitional position £m</td>
<td>Fully loaded position £m</td>
<td>Transitional position £m</td>
</tr>
<tr>
<td>60 Total risk weighted assets</td>
<td>311,926</td>
<td>311,798</td>
<td>173,200</td>
</tr>
<tr>
<td>61 Capital ratios and buffers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61 Common Equity Tier 1</td>
<td>13.2%</td>
<td>12.8%</td>
<td>13.5%</td>
</tr>
<tr>
<td>62 Tier 1</td>
<td>17.0%</td>
<td>15.8%</td>
<td>18.4%</td>
</tr>
<tr>
<td>63 Total capital</td>
<td>20.7%</td>
<td>19.8%</td>
<td>22.2%</td>
</tr>
<tr>
<td>64 Institution specific buffer</td>
<td>8.0%</td>
<td>9.0%</td>
<td>6.8%</td>
</tr>
<tr>
<td>65 of which: capital</td>
<td>1.9%</td>
<td>2.5%</td>
<td>1.9%</td>
</tr>
<tr>
<td>66 of which: countercyclical</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td>67a of which: Global Systemically</td>
<td>1.1%</td>
<td>1.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>68 Common Equity Tier 1 available</td>
<td></td>
<td>8.7%</td>
<td>9.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.3%</td>
<td>8.1%</td>
</tr>
<tr>
<td></td>
<td>Amounts below the thresholds</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>for deduction (before risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>weighting)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62 Direct and indirect holdings</td>
<td>2,732</td>
<td>2,732</td>
<td>2,395</td>
</tr>
<tr>
<td>63 Direct and indirect holdings</td>
<td>1,248</td>
<td>1,248</td>
<td>3,039</td>
</tr>
<tr>
<td>65 Deferred tax assets</td>
<td>3,229</td>
<td>3,587</td>
<td>1,174</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3,587</td>
<td>1,332</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3,587</td>
<td>721</td>
</tr>
<tr>
<td></td>
<td>Applicable caps on the inclusion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>of provisions in Tier 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67 Cap on inclusion of credit</td>
<td>917</td>
<td>904</td>
<td>672</td>
</tr>
<tr>
<td>68 Credit risk adjustments</td>
<td>5</td>
<td>164</td>
<td>–</td>
</tr>
<tr>
<td>69 Cap for inclusion of credit</td>
<td>885</td>
<td>891</td>
<td>459</td>
</tr>
<tr>
<td></td>
<td></td>
<td>459</td>
<td>357</td>
</tr>
<tr>
<td></td>
<td></td>
<td>358</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Capital instruments subject to</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>phase out arrangements (only</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>applicable between 1 Jan 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and 1 Jan 2022)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62 Current cap on AT1 instruments</td>
<td>3,703</td>
<td>–</td>
<td>3,703</td>
</tr>
<tr>
<td>63 Current cap on T2 instruments</td>
<td>1,107</td>
<td>–</td>
<td>1,107</td>
</tr>
</tbody>
</table>
Risk and capital position review
Analysis of treasury and capital risk

IFRS 9
On 1 January 2018, IFRS9 transitional capital arrangements were implemented by Regulation (EU) 2017/2395. Barclays elected to apply the transitional arrangements at both consolidated and individual entity levels and will disclose both transitional and fully loaded CET1 ratios until the end of the transitional period. The transitional benefit is phased out over a 5 year period with 95% applicable for 2018; 85% for 2019; 70% for 2020; 50% for 2021; 25% for 2022 and with no transitional benefit from 2023.

The transitional arrangements, implemented under a modified static approach, allow for transitional relief on the “day 1” impact on adoption of IFRS 9 (static element) and for the increase between “day 1” and the reporting date (modified element), subject to eligibility. For the static element, stage 1, stage 2 and stage 3 provisions are eligible for transition, whereas for the modified element, stage 3 provisions are excluded.

Separate calculations are performed for standardised and advanced IRB portfolios, reflecting the different ways these frameworks take account of provisions. Under the standardised approach, increases in provisions for both the static and modified elements are eligible for transition. Under the advanced approach, for both the static and modified elements, provisions are only eligible for transitional relief to the extent that they exceed regulatory expected loss.

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

For regulatory Internal Ratings Based (IRB) exposures, the calculation of capital takes account of the expected loss via a comparison with the impairment allowances. Where regulatory expected losses exceed impairment allowances, the shortfall is deducted from CET1 capital. Where the impairment allowance is higher than expected loss, the excess is added back to tier 2 capital and capped at an amount of 0.6% of IRB RWAs.

The DTAs created from the increase of impairment are also accounted for in the CET1 ratio. When DTAs arising from temporary differences are above the 10% CET1 capital threshold, any excess above the threshold is deducted and those below the threshold are risk weighted at 250% up to the point they reach the 10% CET1 capital threshold.

Standardised RWAs decrease due to the increase in impairment being offset against the Standardised Credit Risk exposures.
Analysis of treasury and capital risk

Table 11: IFRS-FL - Comparison of institutions’ own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs

<table>
<thead>
<tr>
<th>Available capital (amounts)</th>
<th>Barclays Group</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As at 31.12.18</td>
<td>As at 30.09.18</td>
<td>As at 30.06.18</td>
<td>As at 31.03.18</td>
</tr>
<tr>
<td>1 Common Equity Tier 1 (CET1) capital</td>
<td>41,100</td>
<td>41,744</td>
<td>41,398</td>
<td>40,246</td>
</tr>
<tr>
<td>2 Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>39,815</td>
<td>40,458</td>
<td>40,096</td>
<td>38,932</td>
</tr>
<tr>
<td>3 Tier 1 capital</td>
<td>52,998</td>
<td>55,202</td>
<td>53,049</td>
<td>52,110</td>
</tr>
<tr>
<td>4 Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>51,713</td>
<td>53,916</td>
<td>51,747</td>
<td>50,796</td>
</tr>
<tr>
<td>5 Total capital</td>
<td>64,594</td>
<td>67,195</td>
<td>65,421</td>
<td>64,548</td>
</tr>
<tr>
<td>6 Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>63,468</td>
<td>65,972</td>
<td>64,277</td>
<td>63,431</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk-weighted assets (amounts)</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Total risk-weighted assets</td>
<td>311,926</td>
<td>316,167</td>
<td>319,299</td>
<td>317,946</td>
</tr>
<tr>
<td>8 Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>311,798</td>
<td>316,039</td>
<td>319,171</td>
<td>317,970</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capital ratios</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Common Equity Tier 1 (as a percentage of risk exposure amount)</td>
<td>13.2%</td>
<td>13.2%</td>
<td>13.0%</td>
<td>12.7%</td>
</tr>
<tr>
<td>10 Common Equity Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>12.8%</td>
<td>12.8%</td>
<td>12.6%</td>
<td>12.2%</td>
</tr>
<tr>
<td>11 Tier 1 (as a percentage of risk exposure amount)</td>
<td>17.0%</td>
<td>17.5%</td>
<td>16.6%</td>
<td>16.4%</td>
</tr>
<tr>
<td>12 Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>16.6%</td>
<td>17.1%</td>
<td>16.2%</td>
<td>16.0%</td>
</tr>
<tr>
<td>13 Total capital (as a percentage of risk exposure amount)</td>
<td>20.7%</td>
<td>21.3%</td>
<td>20.5%</td>
<td>20.3%</td>
</tr>
<tr>
<td>14 Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>20.4%</td>
<td>20.9%</td>
<td>20.1%</td>
<td>19.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leverage ratio</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15 Leverage ratio total exposure measure</td>
<td>1,142,520</td>
<td>1,191,085</td>
<td>1,163,773</td>
<td>1,169,217</td>
</tr>
<tr>
<td>16 Leverage ratio</td>
<td>4.3%</td>
<td>4.3%</td>
<td>4.2%</td>
<td>4.1%</td>
</tr>
<tr>
<td>17 Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>4.3%</td>
<td>4.3%</td>
<td>4.2%</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

Notes:

a. Transitional CET1 capital and RWAs are calculated applying the transitional arrangements of the CRR. This includes IFRS 9 transitional arrangements.
b. Transitional Tier 1 and Total capital are calculated applying the transitional arrangements of the CRR. This includes the grandfathering of CRR non-compliant capital instruments and IFRS 9 transitional arrangements.
c. Leverage ratio is calculated applying the fully phased in treatment of the CRR.
## Analysis of treasury and capital risk

### Table 11a: IFRS 9-FL – Comparison of institutions’ own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs for significant subsidiaries

<table>
<thead>
<tr>
<th></th>
<th>Barclays Bank PLC</th>
<th></th>
<th>Barclays Bank UK PLC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As at 31.12.18 £m</td>
<td>As at 30.06.18 £m</td>
<td>As at 31.12.18 £m</td>
<td>As at 30.06.18 £m</td>
</tr>
<tr>
<td><strong>Available capital (amounts)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Common Equity Tier 1 (CET1) capitala</td>
<td>23,394</td>
<td>24,311</td>
<td>10,699</td>
<td>10,670</td>
</tr>
<tr>
<td>2 Common Equity Tier 1 (CET1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>22,673</td>
<td>23,586</td>
<td>10,449</td>
<td>10,437</td>
</tr>
<tr>
<td>3 Tier 1 capitalb</td>
<td>31,902</td>
<td>33,015</td>
<td>12,769</td>
<td>12,740</td>
</tr>
<tr>
<td>4 Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>31,181</td>
<td>32,289</td>
<td>12,519</td>
<td>12,507</td>
</tr>
<tr>
<td>5 Total capitalb</td>
<td>38,439</td>
<td>41,036</td>
<td>16,055</td>
<td>16,062</td>
</tr>
<tr>
<td>6 Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>37,718</td>
<td>40,310</td>
<td>16,050</td>
<td>16,032</td>
</tr>
<tr>
<td><strong>Risk-weighted assets (amounts)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Total risk-weighted assetsa</td>
<td>173,200</td>
<td>187,584</td>
<td>75,327</td>
<td>75,640</td>
</tr>
<tr>
<td>8 Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>172,559</td>
<td>186,929</td>
<td>75,429</td>
<td>75,769</td>
</tr>
<tr>
<td><strong>Capital ratios</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Common Equity Tier 1 (as a percentage of risk exposure amount)</td>
<td>13.5%</td>
<td>13.0%</td>
<td>14.2%</td>
<td>14.1%</td>
</tr>
<tr>
<td>10 Common Equity Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>13.1%</td>
<td>12.6%</td>
<td>13.9%</td>
<td>13.8%</td>
</tr>
<tr>
<td>11 Tier 1 (as a percentage of risk exposure amount)</td>
<td>18.4%</td>
<td>17.6%</td>
<td>17.0%</td>
<td>16.8%</td>
</tr>
<tr>
<td>12 Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>18.1%</td>
<td>17.3%</td>
<td>16.6%</td>
<td>16.5%</td>
</tr>
<tr>
<td>13 Total capital (as a percentage of risk exposure amount)</td>
<td>22.2%</td>
<td>21.9%</td>
<td>21.3%</td>
<td>21.2%</td>
</tr>
<tr>
<td>14 Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>21.9%</td>
<td>21.6%</td>
<td>21.3%</td>
<td>21.2%</td>
</tr>
<tr>
<td><strong>Leverage ratio</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Leverage ratio total exposure measure</td>
<td>791,406</td>
<td>807,743</td>
<td>258,091</td>
<td>252,055</td>
</tr>
<tr>
<td>16 Leverage ratioc</td>
<td>4.0%</td>
<td>4.1%</td>
<td>4.9%</td>
<td>5.1%</td>
</tr>
<tr>
<td>17 Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied</td>
<td>4.0%</td>
<td>4.0%</td>
<td>4.9%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

**Notes**

a Transitional CET1 capital and RWAs are calculated applying the transitional arrangements of the CRR. This includes IFRS 9 transitional arrangements.
b Transitional T1 and Total capital are calculated applying the transitional arrangements of the CRR. This includes the grandfathering of CRR non-compliant capital instruments and IFRS 9 transitional arrangements.
c Leverage ratio is calculated applying the grandfathering of CRR non-compliant capital instruments and with the application of the IFRS9 transitional arrangements.
Risk and capital position review

Analysis of treasury and capital risk

Table 12: Risk weighted assets by risk type and business
This table shows risk weighted assets by business and risk type.

<table>
<thead>
<tr>
<th>Risk weighted assets (RWAs) by risk type and business</th>
<th>Credit risk</th>
<th>Counterparty credit risk</th>
<th>Market risk</th>
<th>Operational risk</th>
<th>Total RWAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31.12.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barclays International</td>
<td>55,591</td>
<td>66,955</td>
<td>9,887</td>
<td>15,049</td>
<td>170</td>
</tr>
<tr>
<td>Head Office</td>
<td>4,339</td>
<td>5,777</td>
<td>7</td>
<td>13</td>
<td>–</td>
</tr>
<tr>
<td>Barclays Group</td>
<td>63,215</td>
<td>132,466</td>
<td>10,123</td>
<td>15,062</td>
<td>170</td>
</tr>
<tr>
<td>As at 31.12.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barclays UK</td>
<td>3,811</td>
<td>54,955</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Barclays International</td>
<td>49,058</td>
<td>69,520</td>
<td>17,000</td>
<td>17,243</td>
<td>101</td>
</tr>
<tr>
<td>Head Office</td>
<td>2,907</td>
<td>9,766</td>
<td>65</td>
<td>633</td>
<td>–</td>
</tr>
<tr>
<td>Barclays Group</td>
<td>55,776</td>
<td>134,241</td>
<td>17,065</td>
<td>17,876</td>
<td>101</td>
</tr>
</tbody>
</table>

For commentary on the movement in risk weighted assets see Table 30, 63, 75, 80 and 92.

Table 12a: Risk weighted assets by significant subsidiaries

<table>
<thead>
<tr>
<th>Risk weighted assets (RWAs) by significant subsidiaries</th>
<th>Credit risk</th>
<th>Counterparty credit risk</th>
<th>Market risk</th>
<th>Operational risk</th>
<th>Total RWAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31.12.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barclays Bank</td>
<td>45,837</td>
<td>63,153</td>
<td>7,927</td>
<td>13,349</td>
<td>314</td>
</tr>
<tr>
<td>Barclays Bank</td>
<td>45,837</td>
<td>63,153</td>
<td>7,927</td>
<td>13,349</td>
<td>314</td>
</tr>
<tr>
<td>UK PLC</td>
<td>3,985</td>
<td>59,484</td>
<td>266</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

BB PLC primarily consists of the Corporate and Investment Bank (CIB), Consumer, Cards and Payments and Head Office. These are part of Barclays International business segment that is included within Barclays PLC Group. The difference between BB PLC and Barclays International is largely due to subsidiaries of BB PLC Group that are not included within the regulatory scope of BB PLC.

BBUK PLC is the UK ring-fenced bank largely comprising Personal Banking, Barclaycard Consumer UK and Business Banking. These are part of Barclays UK business segment that is included within Barclays PLC Group.
## Risk and capital position review

### Analysis of treasury and capital risk

#### Table 13: OV1 - Overview of risk weighted assets by risk type and capital requirements

The table shows RWAs, split by risk type and approach. For credit risk, RWAs are shown by credit exposure class.

<table>
<thead>
<tr>
<th>RWA</th>
<th>Minimum Capital Requirements</th>
<th>As at 31 December 2018</th>
<th>As at 31 December 2017</th>
<th>As at December 2018</th>
<th>As at December 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Credit risk (excluding counterparty credit risk) (CCR)</td>
<td></td>
<td>179,816</td>
<td>177,869</td>
<td>14,306</td>
<td>14,230</td>
</tr>
<tr>
<td>2 Of which standardised approach</td>
<td></td>
<td>60,096</td>
<td>55,437</td>
<td>4,808</td>
<td>4,435</td>
</tr>
<tr>
<td>3 Of which the foundation IRB (FIRB) approach</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4 Of which the advanced IRB (AIRB) approach</td>
<td></td>
<td>119,720</td>
<td>122,432</td>
<td>9,499</td>
<td>9,795</td>
</tr>
<tr>
<td>5 Of which Equity IRB under the Simple risk-weight or the internal models approach</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6 CCR</td>
<td></td>
<td>28,472</td>
<td>37,843</td>
<td>2,271</td>
<td>3,027</td>
</tr>
<tr>
<td>7 Of which mark to market</td>
<td></td>
<td>2,152</td>
<td>2,515</td>
<td>172</td>
<td>201</td>
</tr>
<tr>
<td>8 Of which original exposure</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>9 Of which standardised approach</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>9a Of which financial collateral comprehensive method</td>
<td></td>
<td>3,287</td>
<td>9,768</td>
<td>263</td>
<td>781</td>
</tr>
<tr>
<td>10 Of which internal model method</td>
<td></td>
<td>18,669</td>
<td>21,299</td>
<td>1,494</td>
<td>1,704</td>
</tr>
<tr>
<td>11 Of which risk exposure amount for contributions to the default fund of a CCP</td>
<td></td>
<td>955</td>
<td>1,261</td>
<td>76</td>
<td>101</td>
</tr>
<tr>
<td>12 Of which CVA</td>
<td></td>
<td>3,409</td>
<td>3,001</td>
<td>273</td>
<td>240</td>
</tr>
<tr>
<td>13 Settlement risk</td>
<td></td>
<td>170</td>
<td>101</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>14 Securitisation exposures in banking book (after cap)</td>
<td></td>
<td>4,809</td>
<td>4,169</td>
<td>385</td>
<td>333</td>
</tr>
<tr>
<td>14a Of which capital deduction approach (CAPD)</td>
<td></td>
<td>26</td>
<td>39</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14b Of which look through approach (KIRB)</td>
<td></td>
<td>346</td>
<td>621</td>
<td>28</td>
<td>50</td>
</tr>
<tr>
<td>15 Of which IRB approach</td>
<td></td>
<td>3,933</td>
<td>3,017</td>
<td>315</td>
<td>249</td>
</tr>
<tr>
<td>16 Of which IRB supervisory formula approach (SFA)</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>17 Of which internal assessment approach (IAA)</td>
<td></td>
<td>504</td>
<td>401</td>
<td>40</td>
<td>32</td>
</tr>
<tr>
<td>18 Of which standardised approach</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>19 Market risk</td>
<td></td>
<td>30,821</td>
<td>28,313</td>
<td>2,466</td>
<td>2,265</td>
</tr>
<tr>
<td>20 Of which the standardised approach</td>
<td></td>
<td>13,976</td>
<td>13,401</td>
<td>1,118</td>
<td>1,072</td>
</tr>
<tr>
<td>21 Of which IMA</td>
<td></td>
<td>16,845</td>
<td>14,912</td>
<td>1,348</td>
<td>1,193</td>
</tr>
<tr>
<td>22 Large exposures</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>23 Operational risk</td>
<td></td>
<td>56,660</td>
<td>56,660</td>
<td>4,533</td>
<td>4,533</td>
</tr>
<tr>
<td>24 Of which basic indicator approach</td>
<td></td>
<td>—</td>
<td>3,252</td>
<td>—</td>
<td>260</td>
</tr>
<tr>
<td>25 Of which standardised approach</td>
<td></td>
<td>56,660</td>
<td>—</td>
<td>4,533</td>
<td>—</td>
</tr>
<tr>
<td>26 Of which advanced measurement approach</td>
<td></td>
<td>—</td>
<td>53,408</td>
<td>—</td>
<td>4,273</td>
</tr>
<tr>
<td>27 Amounts below the thresholds for deduction (subject to 250% risk weight)</td>
<td></td>
<td>11,178</td>
<td>8,079</td>
<td>973</td>
<td>646</td>
</tr>
<tr>
<td>28 Floor Adjustments</td>
<td></td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>29 Total</td>
<td></td>
<td>311,926</td>
<td>313,033</td>
<td>24,955</td>
<td>25,043</td>
</tr>
</tbody>
</table>

For further detail on movements in RWAs for each risk type please see Analysis of credit risk (page 41), Analysis of counterparty credit risk (page 96), Analysis of market risk (page 115), Analysis of securitisation exposures (page 121) and Analysis of operational risk (page 132).
**Risk and capital position review**

**Analysis of treasury and capital risk**

### Table 14: Movements in risk weighted assets

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

<table>
<thead>
<tr>
<th>Movement analysis of risk weighted assets</th>
<th>Counterparty Credit Risk</th>
<th>Market Risk</th>
<th>Operational Risk</th>
<th>Total £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 1 January 2018</td>
<td>190.0</td>
<td>38.0</td>
<td>28.3</td>
<td>313.0</td>
</tr>
<tr>
<td>Book size</td>
<td>6.8</td>
<td>(0.6)</td>
<td>2.2</td>
<td>–</td>
</tr>
<tr>
<td>Acquisitions and disposals</td>
<td>(3.6)</td>
<td>(0.3)</td>
<td>(0.2)</td>
<td>–</td>
</tr>
<tr>
<td>Book quality</td>
<td>(2.9)</td>
<td>(0.5)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Model updates</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Methodology and policy</td>
<td>2.2</td>
<td>(7.8)</td>
<td>0.5</td>
<td>–</td>
</tr>
<tr>
<td>Foreign exchange movement</td>
<td>3.1</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>As at 31 December 2018</td>
<td>195.6</td>
<td>28.8</td>
<td>30.8</td>
<td>311.9</td>
</tr>
</tbody>
</table>

Notes:
- RWAs in relation to default fund contributions are included in counterparty credit risk.
- Foreign exchange movement does not include FX for counterparty risk or market risk.

**Total RWA movement**

RWAs decreased £1.1bn to £311.9bn:
- Book size increased RWAs £8.4bn primarily due to increased lending activity within the Investment Banking and Consumer, Cards & Payments businesses
- Acquisitions and disposals decreased RWAs £4.1bn primarily due to the regulatory deconsolidation of BAGL
- Book quality decreased RWAs £3.4bn primarily due to changes in risk profile within Barclays International
- Methodology and policy decreased RWAs £5.1bn primarily due to an extended regulatory permission to use the modelled exposure measurement approach
- Foreign exchange movements increased RWAs £3.1bn primarily due to the appreciation of period end USD against GBP

Tables 15, 16 and 17 below show a subset of the information included in table 14, focused on positions captured under modelled treatment.

### Table 15: CR8 - RWA flow statement of credit risk exposures under the AIRB approach

<table>
<thead>
<tr>
<th></th>
<th>RWA amount £bn</th>
<th>Capital requirements £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>As at 1 January 2018</td>
<td>134.2</td>
</tr>
<tr>
<td>2</td>
<td>Asset size</td>
<td>–</td>
</tr>
<tr>
<td>3</td>
<td>Asset quality</td>
<td>(2.5)</td>
</tr>
<tr>
<td>4</td>
<td>Model updates</td>
<td>–</td>
</tr>
<tr>
<td>5</td>
<td>Methodology and policy</td>
<td>2.7</td>
</tr>
<tr>
<td>6</td>
<td>Acquisitions and disposals</td>
<td>(3.9)</td>
</tr>
<tr>
<td>7</td>
<td>Foreign exchange movements</td>
<td>2.0</td>
</tr>
<tr>
<td>8</td>
<td>Other</td>
<td>–</td>
</tr>
<tr>
<td>9</td>
<td>As at 31 December 2018</td>
<td>132.5</td>
</tr>
</tbody>
</table>

**Total RWA movement**

Advanced credit risk RWAs decreased RWAs £1.7bn to £132.5bn driven by:
- Asset quality decreased RWAs £2.5bn primarily due to changes in risk profile within Barclays International
- Methodology and policy increased RWAs £2.7bn primarily due to changes in the regulatory methodology for the ESHLA portfolio
- Acquisitions and disposals decreased RWAs £3.9bn primarily due to the regulatory deconsolidation of BAGL
- FX movements increased RWAs £2.0bn primarily due to appreciation of period end USD against GBP
Risk and capital position review

Analysis of treasury and capital risk

Table 16: CCR7 - RWA flow statement of counterparty credit risk exposures under the IMM
The total in this table shows the contribution of IMM exposures to CCR RWAs (under both standardised and AIRB) and will not directly reconcile to CCR AIRB RWAs in table 14.

<table>
<thead>
<tr>
<th></th>
<th>RWA amount</th>
<th>Capital requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£bn</td>
<td>£bn</td>
</tr>
<tr>
<td>1</td>
<td>As at 1 January 2018</td>
<td>21.4</td>
</tr>
<tr>
<td>2</td>
<td>Asset size</td>
<td>(2.6)</td>
</tr>
<tr>
<td>3</td>
<td>Credit quality of counterparties</td>
<td>(0.5)</td>
</tr>
<tr>
<td>4</td>
<td>Model updates (IMM only)</td>
<td>–</td>
</tr>
<tr>
<td>5</td>
<td>Methodology and policy (IMM only)</td>
<td>0.5</td>
</tr>
<tr>
<td>6</td>
<td>Acquisitions and disposals</td>
<td>–</td>
</tr>
<tr>
<td>7</td>
<td>Foreign exchange movements</td>
<td>–</td>
</tr>
<tr>
<td>8</td>
<td>Other</td>
<td>–</td>
</tr>
<tr>
<td>9</td>
<td>As at 31 December 2018</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Total RWA movement
IMM RWAs decreased £2.6bn to £18.8bn primarily due to a reduction in SFT exposures.

Table 17: MR2-B - RWA flow statement of market risk exposures under the IMA

<table>
<thead>
<tr>
<th></th>
<th>VaR £bn</th>
<th>SVaR £bn</th>
<th>IRC £bn</th>
<th>CRM £bn</th>
<th>Other £bn</th>
<th>Total RWA £bn</th>
<th>Total Capital requirements £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>As at 1 January 2018</td>
<td>2.8</td>
<td>6.8</td>
<td>3.0</td>
<td>–</td>
<td>2.3</td>
<td>14.9</td>
</tr>
<tr>
<td>2</td>
<td>Movement in risk levels</td>
<td>0.4</td>
<td>2.2</td>
<td>(1.2)</td>
<td>–</td>
<td>0.5</td>
<td>1.9</td>
</tr>
<tr>
<td>3</td>
<td>Model updates/changes</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>4</td>
<td>Methodology and policy</td>
<td>0.1</td>
<td>(0.1)</td>
<td>0.2</td>
<td>–</td>
<td>–</td>
<td>0.1</td>
</tr>
<tr>
<td>5</td>
<td>Acquisitions and disposals</td>
<td>(0.1)</td>
<td>(0.1)</td>
<td>–</td>
<td>–</td>
<td>(0.2)</td>
<td>–</td>
</tr>
<tr>
<td>6</td>
<td>Other</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>7</td>
<td>As at 31 December 2018</td>
<td>3.2</td>
<td>8.8</td>
<td>1.8</td>
<td>–</td>
<td>2.8</td>
<td>16.8</td>
</tr>
</tbody>
</table>

Total RWA movement
Internal Model Approach RWAs increased £1.9bn due to an increase in trading activities partially offset by the reduction in Incremental Risk Charge (IRC).

Basis of preparation for movements in risk weighted assets
This analysis splits RWA movement by credit, counterparty credit, market and operational risk. Seven categories of drivers have been identified and are described below. Not all the drivers are applicable to all risk types, however all categories have been listed below for completeness purposes.

Book size
Credit risk and counterparty risk (inc CVA)
This represents RWA movements driven by changes in the size and composition of underlying positions, measured using EAD values for existing portfolios over the period. This includes, but is not exclusive to:

- new business and maturing loans
- changes in product mix and exposure growth for existing portfolios
- book size reductions owing to risk mitigation and write-offs.

Market risk
This represents RWA movements owing to the changes in trading positions and volumes driven by business activity.

Book quality
Credit risk and counterparty risk (inc CVA)
This represents RWA movements driven by changes in the underlying credit quality and recoverability of portfolios and reflected through model calibrations or realignments where applicable. This includes, but is not exclusive to:

- PD migration and LGD changes driven by economic conditions
- ratings migration for standardised exposures

Market risk
This is the movement in RWAs owing to changing risk levels in the trading book, caused by fluctuations in market conditions.

Model updates
Credit risk and counterparty risk (inc CVA)
This is the movement in RWAs as a result of both internal and external model updates. This includes, but is not exclusive to:

- updates to existing model inputs driven by both internal and external review
- model enhancements to improve models performance.

Market risk
This is the movement in RWAs reflecting change in model scope, changes to market data levels, volatilities, correlations, liquidity and ratings used as input for the internal modelled RWA calculations.
**Risk and capital position review**

**Analysis of treasury and capital risk**

**Methodology and policy**

**Credit risk and counterparty risk (inc CVA)**
This is the movement in RWAs as a result of both internal and external methodology, policy and regulatory changes. This includes, but is not exclusive to:
- updates to RWA calculation methodology, communicated by the regulator
- the implementation of credit risk mitigation to a wider scope of portfolios.

**Market risk**
This is the movement in RWAs as a result of both internal and external methodology, policy and regulatory changes for market risk.

**Acquisitions and disposals**
This is the movement in RWAs as a result of the disposal or acquisition of business operations impacting the size of banking and trading portfolios. This includes credit RWA reductions relating to Non-Core.

**Foreign exchange movements**
This is the movement in RWAs as a result of changes in the exchange rate between the functional currency of the Barclays business area or portfolio and our presentational currency for consolidated reporting. It should be noted that foreign exchange movements shown in table 14 do not include the impact of foreign exchange for the counterparty credit risk or market risk RWAs.

**Other**
This is the movement in RWAs driven by items that cannot be reasonably assigned to the other driver categories. In relation to market risk RWAs, this includes changes in measurement that are not driven by methodology, policy or model updates. This category had a nil balance for the year ended 31 December 2018.

**Analysis of treasury and capital risk**

**Leverage ratio and exposures**

The following leverage tables show the components of the leverage ratio using the CRR definition for the leverage exposure and Tier 1 capital. This disclosure has been prepared using the format set out in Annex I and Annex II of the final ‘Implementing technical standards with regard to disclosure of the leverage ratio for institutions (Commission implementing regulation-EU 2016/200). Barclays is not subject to binding leverage ratio requirements under CRR.

Barclays manages the risk of excessive leverage through the Group’s Capital Management process which is outlined in the Annual Report. Leverage Exposure forecasts are regularly monitored against early warning indicators and internal limits which trigger actions to mitigate risk. The Group’s leverage exposure is also subject to regular internal and external stress testing.

**Table 18: Summary reconciliation of accounting assets and leverage ratio exposures**

This table is a summary of the total leverage exposure and comprises of total IFRS assets used for statutory purposes, regulatory consolidation and other leverage adjustments.

<table>
<thead>
<tr>
<th></th>
<th>As at 31.12.18</th>
<th>As at 31.12.17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Barclays Group</td>
<td>Barclays Bank PLC</td>
</tr>
<tr>
<td></td>
<td>£bn</td>
<td>£bn</td>
</tr>
<tr>
<td>1</td>
<td>1,133</td>
<td>893</td>
</tr>
<tr>
<td>2</td>
<td>Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation</td>
<td>(2)</td>
</tr>
<tr>
<td>4</td>
<td>Adjustments for derivative financial instruments</td>
<td>(102)</td>
</tr>
<tr>
<td>5</td>
<td>Adjustments for securities financing transactions (SFTs)</td>
<td>17</td>
</tr>
<tr>
<td>6</td>
<td>Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)</td>
<td>108</td>
</tr>
<tr>
<td>EU-6a (Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in accordance with Article 429 (7) of Regulation (EU) No 575/2013)</td>
<td>–</td>
<td>(136)</td>
</tr>
<tr>
<td>7</td>
<td>Other adjustments</td>
<td>(12)</td>
</tr>
<tr>
<td>8</td>
<td>Total leverage ratio exposure</td>
<td>1,143</td>
</tr>
</tbody>
</table>
### Analysis of treasury and capital risk

#### Table 19: Leverage ratio common disclosure

This table shows the leverage ratio calculation and includes additional breakdowns for the leverage exposure measure.

<table>
<thead>
<tr>
<th>Barclays Group</th>
<th>As at 31.12.18 £bn</th>
<th>As at 31.12.17 £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-balance sheet exposures (excluding derivatives and SFTs)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)</td>
<td>746</td>
<td>749</td>
</tr>
<tr>
<td>2 Asset amounts deducted in determining tier 1 capital</td>
<td>(12)</td>
<td>(13)</td>
</tr>
<tr>
<td><strong>3 Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)</strong></td>
<td>734</td>
<td>736</td>
</tr>
<tr>
<td><strong>Derivative exposures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>5 Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)</td>
<td>123</td>
<td>120</td>
</tr>
<tr>
<td>7 Deductions of receivables assets for cash variation margin provided in derivatives transactions</td>
<td>(31)</td>
<td>(33)</td>
</tr>
<tr>
<td>8 Exempted CCP leg of client-cleared trade exposures</td>
<td>(2)</td>
<td>(1)</td>
</tr>
<tr>
<td>9 Adjusted effective notional amount of written credit derivatives</td>
<td>297</td>
<td>278</td>
</tr>
<tr>
<td>10 Adjusted effective notional offsets and add-on deductions for written credit derivatives</td>
<td>(278)</td>
<td>(264)</td>
</tr>
<tr>
<td><strong>11 Total derivative exposures</strong></td>
<td>163</td>
<td>154</td>
</tr>
<tr>
<td><strong>Securities financing transaction exposures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions</td>
<td>357</td>
<td>336</td>
</tr>
<tr>
<td>13 Netted amounts of cash payables and cash receivables of gross SFT assets</td>
<td>(236)</td>
<td>(223)</td>
</tr>
<tr>
<td>14 Counterparty credit risk exposure for SFT assets</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td><strong>16 Total securities financing transaction exposures</strong></td>
<td>138</td>
<td>132</td>
</tr>
<tr>
<td><strong>Other off-balance sheet exposures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Off-balance sheet exposures at gross notional amount</td>
<td>338</td>
<td>322</td>
</tr>
<tr>
<td>18 Adjustments for conversion to credit equivalent amounts</td>
<td>(230)</td>
<td>(219)</td>
</tr>
<tr>
<td><strong>19 Other off-balance sheet exposures</strong></td>
<td>108</td>
<td>103</td>
</tr>
<tr>
<td><strong>Capital and total exposures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Tier 1 capital</td>
<td>49.3</td>
<td>50.4</td>
</tr>
<tr>
<td><strong>21 Total leverage ratio exposures</strong></td>
<td>1,143</td>
<td>1,125</td>
</tr>
<tr>
<td><strong>Leverage ratio</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Leverage ratio</td>
<td>4.3%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

**Choice on transitional arrangements and amount of derecognised fiduciary items**

EU-23 Choice on transitional arrangements for the definition of the capital measure Fully phased in

The CRR leverage ratio decreased to 4.3% (December 2017: 4.5%) driven by a £1.1bn decrease in fully loaded tier 1 capital to £49.3bn and a £18bn increase in leverage exposure to £1,143bn.

- Total derivative exposures increased £9bn to £163bn primarily within net written credit derivatives, driven by trading activity
- Total SFTs increased £6bn to £138bn primarily driven by the CIB utilising leverage balance sheet more efficiently within high returning financing businesses
- Total off-balance sheet exposures increased £5bn to £108bn primarily driven by increase in new facilities
## Risk and capital position review

### Analysis of treasury and capital risk

#### Table 19a: Leverage ratio common disclosure for significant subsidiaries

<table>
<thead>
<tr>
<th>On-balance sheet exposures (excluding derivatives and SFTs)</th>
<th>Barclays Bank PLC £bn</th>
<th>Barclays Bank UK PLC £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)</td>
<td>485</td>
<td>249</td>
</tr>
<tr>
<td>2 Asset amounts deducted in determining tier 1 capital</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>3 Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets)</td>
<td>473</td>
<td>245</td>
</tr>
</tbody>
</table>

**Derivative exposures**

| 4 Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin) | 52 | – |
| 5 Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method) | 112 | 1 |
| 7 Deductions of receivables assets for cash variation margin provided in derivatives transactions | 31 | – |
| 8 Exempted CCP leg of client-cleared trade exposures | 1 | – |
| 9 Adjusted effective notional amount of written credit derivatives | 297 | – |
| 10 Adjusted effective notional offsets and add-on deductions for written credit derivatives | 278 | – |
| 11 Total derivative exposures | 151 | 1 |

**Securities financing transaction exposures**

| 12 Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions | 398 | 2 |
| 13 Netted amounts of cash payables and cash receivables of gross SFT assets | 249 | – |
| 14 Counterparty credit risk exposure for SFT assets | 39 | – |
| 16 Total securities financing transaction exposures | 188 | 2 |

**Other off-balance sheet exposures**

| 17 Off-balance sheet exposures at gross notional amount | 253 | 69 |
| 18 Adjustments for conversion to credit equivalent amounts | 138 | (59) |
| 19 Other off-balance sheet exposures | 115 | 10 |

**Exempted exposures in accordance with CRR Article 429 (7) and (14) (on and off balance sheet)**

| EU-19a Exemption of intragroup exposures (solo basis) in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet) | (136) | – |

**Capital and total exposures**

| 20 Tier 1 capital | 31.9 | 12.8 |
| 21 Total leverage ratio exposures | 791 | 258 |

**Leverage ratio**

| 22 Leverage ratio | 4.0% | 4.9% |

#### Choice on transitional arrangements and amount of derecognised fiduciary items

| EU-23 Choice on transitional arrangements for the definition of the capital measure | Transitional | Transitional |

#### Table 20: Split-up of on balance sheet exposures (excluding derivatives, SFTs, and exempted exposures)

The table shows a breakdown of the on-balance sheet exposures excluding derivatives, SFTs and exempted exposures, by asset class.

<table>
<thead>
<tr>
<th>EU-1 Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:</th>
<th>As at 31.12.18 £bn</th>
<th>As at 31.12.17 £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-2 Trading book exposures</td>
<td>135</td>
<td>149</td>
</tr>
<tr>
<td>EU-3 Banking book exposures, of which:</td>
<td>611</td>
<td>600</td>
</tr>
<tr>
<td>EU-4 Covered bonds</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>EU-5 Exposures treated as sovereigns</td>
<td>242</td>
<td>237</td>
</tr>
<tr>
<td>EU-6 Exposures to regional governments, MDB, international organisations and PSE NOT treated as sovereigns</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>EU-7 Institutions</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>EU-8 Secured by mortgages of immovable properties</td>
<td>149</td>
<td>149</td>
</tr>
<tr>
<td>EU-9 Retail exposures</td>
<td>60</td>
<td>57</td>
</tr>
<tr>
<td>EU-10 Corporate</td>
<td>82</td>
<td>80</td>
</tr>
<tr>
<td>EU-11 Exposures in default</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>EU-12 Other exposures (eg equity, securitisations, and other non-credit obligation assets)</td>
<td>41</td>
<td>46</td>
</tr>
</tbody>
</table>

Further information on the key movements during the period are disclosed on page 32.
## Analysis of treasury and capital risk

### Table 21: LIQ1 - Liquidity Coverage ratio

This table shows the level and components of the Liquidity Coverage Ratio. This disclosure has been prepared in accordance with the requirements set out in the 'Guidelines on LCR disclosure to complement the disclosure of liquidity risk management under Article 435 of Regulation (EU) No 575/2013' as specified in Annexure II which complements Article 435(1)(f) of Regulation (EU) No 575/2013.

<table>
<thead>
<tr>
<th>Liquidity coverage ratio (period end)</th>
<th>Total period end value</th>
<th>31.12.18</th>
<th>30.09.18</th>
<th>30.06.18</th>
<th>30.03.18</th>
<th>31.12.17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquidity buffer</td>
<td>218,766</td>
<td>210,681</td>
<td>207,989</td>
<td>203,591</td>
<td>214,637</td>
<td></td>
</tr>
<tr>
<td>Total net cash outflows</td>
<td>129,172</td>
<td>130,925</td>
<td>134,712</td>
<td>138,436</td>
<td>139,760</td>
<td></td>
</tr>
<tr>
<td>Liquidity coverage ratio (%) (period end)</td>
<td>169%</td>
<td>161%</td>
<td>154%</td>
<td>147%</td>
<td>147%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIQ1 – Liquidity coverage ratio (average)</th>
<th>Total unweighted value (average)</th>
<th>Total weighted value (average)</th>
<th>31.12.18</th>
<th>30.09.18</th>
<th>30.06.18</th>
<th>30.03.18</th>
<th>31.12.17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of data points used in calculation of averages</td>
<td>12 12 12 12 12</td>
<td>12 12 12 12 12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High–quality liquid assets (£m)</td>
<td>£m £m £m £m £m</td>
<td>£m £m £m £m £m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Total high–quality liquid assets (HQLA)</td>
<td>220,996 218,285 218,475 213,064 203,944</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Note
a 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.
Risk and capital position review
Analysis of treasury and capital risk

As at 31 December 2018, the Barclays Group LCR was 169% (December 2017: 154%), equivalent to a surplus of £90bn (December 2017: £75bn) to 100% regulatory requirement, as shown on Table 7. The average LCR for the 12 months to 31 December 2018 increased to 153%, as growth in the liquidity buffer exceeded growth in stresses. Growth in the average liquidity buffer during the 12 month period is largely driven by net deposit growth across businesses. The strong liquidity position reflects the Group’s prudent approach given the continued macroeconomic uncertainty. The Barclays Group also continued to maintain surpluses to its internal liquidity requirements.

The composition of the liquidity pool is subject to limits set by the Barclays PLC Board and the independent liquidity risk, credit risk, and market risk functions. In addition, the investment of the liquidity pool is monitored for concentration risk by issuer, currency and asset type. Given the incremental returns generated by these highly liquid assets, the risk and reward profile is continuously managed.

As at 31 December 2018, 90% (December 2017: 93%) of the liquidity pool was located in Barclays Bank PLC and Barclays Bank UK PLC. The residual portion of the liquidity pool is held outside of these entities, predominantly in the US subsidiaries, to meet entity specific stress outflows and regulatory requirements. To the extent the use of this portion of the liquidity pool is restricted due to regulatory requirements, it is assumed to be unavailable to the rest of the Group in calculating the LCR.

The strong deposit franchises in Barclays Bank Group and Barclays Bank UK Group are primary funding sources for Barclays Group. Issuances to meet Minimum Requirements for Own Funds and Eligible Liabilities (MREL) from Barclays PLC also provide a long term stable source of funding for the Barclays Group.

Barclays Bank Group and Barclays Bank UK Group maintain access to a variety of sources of wholesale funding in major currencies, including those available from term investors across a range of distribution channels and geographies, short-term funding markets and repo markets. In addition, Barclays Bank Group has direct access to US, European and Asian capital markets through its global investment banking operations and to long-term investors through its clients worldwide. As a result, wholesale funding is well diversified by product, maturity, geography and currency across the Barclays Group.

Key sources of wholesale funding for Barclays Bank Group include money markets, certificates of deposit, commercial paper, medium-term issuances (including structured notes) and securitisations. Key sources of wholesale funding for Barclays Bank UK Group include money markets, certificates of deposit, commercial paper, covered bonds and other securitisations. Barclays Bank Group and Barclays Bank UK Group also support various central bank monetary initiatives including participation in the Bank of England’s Term Funding Scheme.
Analysis of treasury and capital risk

Foreign exchange risk

The Group is exposed to two sources of foreign exchange risk.

a) Transactional foreign currency exposure

Transactional foreign currency exposures represent exposure on banking assets and liabilities, denominated in currencies other than the functional currency of the transacting entity.

The Group’s risk management policies prevent the holding of significant open positions in foreign currencies outside the trading portfolio managed by Barclays International which is monitored through VaR.

Banking book transactional foreign exchange risk outside of Barclays International is monitored on a daily basis by the market risk function and minimised by the businesses.

b) Translational foreign exchange exposure

The Group’s investments in overseas subsidiaries and branches create capital resources denominated in foreign currencies, principally USD and EUR. Changes in the GBP value of the net investments due to foreign currency movements are captured in the currency translation reserve, resulting in a movement in CET1 capital.

The Group’s strategy is to minimise the volatility of the capital ratios caused by foreign exchange movements, by matching the CET1 capital movements to the revaluation of the Group’s foreign currency RWA exposures.

Table 22: Functional currency of operations

<table>
<thead>
<tr>
<th>Foreign currency</th>
<th>Borrowings which hedge the net investments £m</th>
<th>Derivatives which hedge the net investments £m</th>
<th>Structural currency exposures pre-economic hedges £m</th>
<th>Economic hedges £m</th>
<th>Remaining structural currency exposures £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD</td>
<td>28,857</td>
<td>(12,322)</td>
<td>(2,931)</td>
<td>13,604</td>
<td>(4,827)</td>
</tr>
<tr>
<td>EUR</td>
<td>2,672</td>
<td>(3)</td>
<td>–</td>
<td>2,669</td>
<td>(2,146)</td>
</tr>
<tr>
<td>JPY</td>
<td>489</td>
<td>–</td>
<td>–</td>
<td>489</td>
<td>–</td>
</tr>
<tr>
<td>Other</td>
<td>2,026</td>
<td>–</td>
<td>(37)</td>
<td>1,989</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>34,044</td>
<td>(12,325)</td>
<td>(2,968)</td>
<td>18,751</td>
<td>(6,973)</td>
</tr>
</tbody>
</table>

As at 31 December 2018

<table>
<thead>
<tr>
<th>Foreign currency</th>
<th>Borrowings which hedge the net investments £m</th>
<th>Derivatives which hedge the net investments £m</th>
<th>Structural currency exposures pre-economic hedges £m</th>
<th>Economic hedges £m</th>
<th>Remaining structural currency exposures £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD</td>
<td>27,848</td>
<td>(12,404)</td>
<td>(540)</td>
<td>14,904</td>
<td>(6,153)</td>
</tr>
<tr>
<td>EUR</td>
<td>2,489</td>
<td>(3)</td>
<td>–</td>
<td>2,486</td>
<td>(2,127)</td>
</tr>
<tr>
<td>JPY</td>
<td>467</td>
<td>(152)</td>
<td>(301)</td>
<td>14</td>
<td>–</td>
</tr>
<tr>
<td>Other</td>
<td>2,483</td>
<td>–</td>
<td>(1,299)</td>
<td>1,184</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>33,287</td>
<td>(12,559)</td>
<td>(2,140)</td>
<td>18,588</td>
<td>(8,280)</td>
</tr>
</tbody>
</table>

As at 31 December 2017

The economic hedges primarily represent the USD and EUR preference shares and Additional Tier 1 (AT1) instruments that are held as equity. These are accounted for at historic cost under IFRS and do not qualify as hedges for accounting purposes.

During 2018, total structural currency exposure net of hedging instruments increased by £1.5bn to £11.8bn (2017: £10.3bn). Foreign currency net investments increased by £0.8bn to £34.0bn (2017: £33.3bn) driven predominantly by a £1bn increase in US Dollars and a £0.2bn increase in Euro offset ny a £0.5bn decrease in other currencies. The hedging associated with these investments increased by £0.6bn to £15.3bn (2017: £14.7bn),
Pension risk review

The UK Retirement Fund (UKRF) represents approximately 97% (2017: 96%) of Barclays Group's total retirement benefit obligations globally. As such this risk review section focuses exclusively on the UKRF. The UKRF is closed to new entrants and there is no new final salary benefit being accrued. Existing active members accrue a combination of a cash balance benefit and a defined contribution element. Pension risk arises as the market value of the pension fund assets may decline, investment returns may reduce or the estimated value of the pension liabilities may increase. Refer to page 179 of this report for more information on how pension risk is managed.

Assets

The Trustee Board of the UKRF defines its overall long-term investment strategy with investments across a broad range of asset classes. This results in an appropriate mix of return seeking assets as well as liability matching assets to better match future pension obligations. The main market risks within the asset portfolio are interest rates and equities. The split of scheme assets is shown within Note 33 on page 331 of the Barclays PLC Annual Report 2018. The fair value of the UKRF assets was £29.0bn as at 31 December 2018 (2017: £30.1bn).

Liabilities

The UKRF retirement benefit obligations are a series of future cash flows with relatively long duration. On an IAS 19 basis these cash flows are sensitive to changes in the expected long-term price inflation rate (RPI) and the discount rate (AA corporate bond yield):

- an increase in long-term expected inflation corresponds to an increase in liabilities;
- a decrease in the discount rate corresponds to an increase in liabilities.

Pension risk is generated through Barclays Group's defined benefit schemes and this risk is set to reduce over time as the main defined benefit scheme is closed to new entrants. The chart below outlines the shape of the UKRF's liability cash flow profile as at 31 December 2018 that takes account of the future inflation indexing of payments to beneficiaries. The majority of the cash flows (approximately 92%) fall between 0 and 40 years, peaking between 11 and 20 years and reducing thereafter. The shape may vary depending on changes to inflation and longevity expectations and any members who elect to transfer out. Transfers out will bring forward the liability cash flows.

For more detail on the UKRF’s financial and demographic assumptions refer to Note 33 on page 331 of the Barclays PLC Annual Report 2018.

Proportion of liability cash flows

<table>
<thead>
<tr>
<th>Years</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>23.2%</td>
</tr>
<tr>
<td>11-20</td>
<td>29.1%</td>
</tr>
<tr>
<td>21-30</td>
<td>25.2%</td>
</tr>
<tr>
<td>31-40</td>
<td>14.5%</td>
</tr>
<tr>
<td>41-50</td>
<td>6.6%</td>
</tr>
<tr>
<td>51 Years+</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

The graph above shows the UKRF’s net IAS 19 pension position at each month-end for the past two years. During 2017 and 2018 the net improvement in the IAS 19 position was largely driven by bank contributions and credit spreads widening. Changes from other market levels, in particular equity prices and interest rates, were offset by updates to demographic assumptions.

Please refer to Note 33 on page 331 of the Barclays PLC Annual Report 2018 for the sensitivity of the UKRF to changes in key assumptions.

Risk measurement

In line with Barclays’ risk management framework the assets and liabilities of the UKRF are modelled within a VaR framework to show the volatility of the pension position at a total portfolio level. This enables the risks, diversification and liability matching characteristics of the UKRF obligations and investments to be adequately captured. VaR is measured and monitored on a monthly basis. Risks are reviewed and reported regularly at forums including the Barclays Group Board Risk Committee, the Group Risk Committee, the Pensions Management Group and the Pension Executive Board. The VaR model takes into account the valuation of the liabilities on an IAS 19 basis (refer to Note 33 of the Barclays PLC Annual Report 2018). The Trustee receives quarterly VaR measures on a funding basis.

The pension liability is also sensitive to post-retirement mortality assumptions which are reviewed regularly. Refer to Note 33 on page 331 of the Barclays PLC Annual Report 2018 for more details.

In addition, the impact of pension risk to Barclays Group is taken into account as part of the stress testing process. Stress testing is performed internally on at least an annual basis. The UKRF exposure is also included as part of regulatory stress tests.

Barclays Group defined benefit pension schemes affects capital in two ways:

- An IAS 19 deficit is treated as a liability on Barclays Group’s balance sheet. Movement in a deficit due to remeasurements, including actuarial losses, are recognised immediately through Other Comprehensive Income and as such reduces shareholders’ equity and CET1 capital. An IAS 19 surplus is treated as an asset on the balance sheet and increases shareholders’ equity; however, it is deducted for the purposes of determining CET1 capital.
- In Barclays Group's statutory balance sheet an IAS 19 surplus or deficit is partially offset by a deferred tax liability or asset respectively. These may or may not be recognised for calculating CET1 capital depending on the overall deferred tax position of Barclays Group at the particular time.

Pension risk is taken into account in the Pillar 2A capital assessment undertaken by the PRA at least annually. The Pillar 2A requirement forms part of Barclays Group’s overall regulatory minimum requirement for CET1 capital, Tier 1 capital and total capital. More detail on minimum regulatory requirements can be found on pages 178-179 of this report.

Analysis of treasury and capital risk
Risk and capital position review
Analysis of treasury and capital risk

Interest rate risk in the banking book

Net interest income sensitivity
The table below shows a sensitivity analysis on pre-tax net interest income for non-trading financial assets and financial liabilities, including the effect of any hedging. The sensitivity has been measured using the Annual Earnings at Risk (AEaR) methodology as described on page 180. Note that this metric assumes an instantaneous parallel change to interest rate forward curves. The model floors shocked market rates at zero; changes in Net Interest Income (NII) sensitivity are only observed where forward rates are greater than zero. The main model assumptions are: (i) one year time horizon; (ii) balance sheet is held constant; (iii) balances are adjusted for assumed behavioural profiles (i.e. considers that customers may remortgage before the contractual maturity); and (iv) behavioural assumptions are kept unchanged in all rate scenarios.

Table 23: Net interest income sensitivity (AEaR) by business unit

<table>
<thead>
<tr>
<th>Business Unit</th>
<th>+100bps £m</th>
<th>+25bps £m</th>
<th>-25bps £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barclays UK</td>
<td>124</td>
<td>89</td>
<td>213</td>
<td></td>
</tr>
<tr>
<td>Barclays Int.</td>
<td>30</td>
<td>23</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>112</td>
<td>266</td>
<td></td>
</tr>
</tbody>
</table>

Note
a Excludes investment banking business.
b Excludes Treasury operations, which are driven by the firm’s investments in the liquidity pool, which are risk managed using value-based risk measures described on page 39 of this report. Treasury’s NII (AEaR) sensitivity to a +25/-25bps move is +£23m / -£29m respectively.
c Expected fixed rate mortgage pipeline completions in Barclays UK assumed to be consistent with level and timing of pipeline hedging.

Nil asymmetry arises due to the current low level of interest rates. Modelled NII sensitivity to a -25bp shock to rates has increased year on year as a result of maturity of hedging which provided an offset to the exposure to falling interest rates. Modelled NII sensitivity to +25bp and +100bp shocks to rates also increased as a result.

Table 24: Net interest income sensitivity (AEaR) by currency

<table>
<thead>
<tr>
<th>Currency</th>
<th>+25 basis points £m</th>
<th>-25 basis points £m</th>
<th>+25 basis points £m</th>
<th>-25 basis points £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBP</td>
<td>43</td>
<td>99</td>
<td>12</td>
<td>62</td>
</tr>
<tr>
<td>USD</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>EUR</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Other currencies</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>108</td>
<td>20</td>
<td>83</td>
</tr>
<tr>
<td>As percentage of net interest income</td>
<td>0.58%</td>
<td>2.19%</td>
<td>0.20%</td>
<td>(0.84%)</td>
</tr>
</tbody>
</table>

Note
a Barclays UK and Barclays International sensitivity (excluding Investment Banking business and Treasury).

Analysis of equity sensitivity
Equity sensitivity table measures the overall impact of a +/- 25bps movement in interest rates on retained earnings, fair value through other comprehensive income (FVOCI) and cash flow hedge reserves. This data is captured using DV01 metric which is an indicator of the shift in value for a 1 basis point in the yield curve.

Table 25: Analysis of equity sensitivity

<table>
<thead>
<tr>
<th>As at 31 December</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+25 basis points £m</td>
<td>-25 basis points £m</td>
</tr>
<tr>
<td>Net interest income</td>
<td>53</td>
<td>(108)</td>
</tr>
<tr>
<td>Taxation effects on the above</td>
<td>(13)</td>
<td>27</td>
</tr>
<tr>
<td>Effect on profit for the year</td>
<td>40</td>
<td>(81)</td>
</tr>
<tr>
<td>As percentage of net profit after tax</td>
<td>1.69%</td>
<td>(3.41%)</td>
</tr>
<tr>
<td>Effect on profit for the year (per above)</td>
<td>40</td>
<td>(81)</td>
</tr>
<tr>
<td>Fair value through other comprehensive income</td>
<td>(143)</td>
<td>256</td>
</tr>
<tr>
<td>Cash flow hedge reserve</td>
<td>(574)</td>
<td>544</td>
</tr>
<tr>
<td>Taxation effects on the above</td>
<td>179</td>
<td>(200)</td>
</tr>
<tr>
<td>Effect on equity</td>
<td>(498)</td>
<td>519</td>
</tr>
<tr>
<td>As percentage of equity</td>
<td>(0.78%)</td>
<td>0.81%</td>
</tr>
</tbody>
</table>

As discussed in relation to the net interest income sensitivity table above, the increase in impact of a 25bps movement in rates is a result of maturity of hedging.

Movements in the FVOCI reserve would impact CET1 capital, however the movement in the cash flow hedge reserve would not impact CET1 capital.
Volatility of the FVOCI portfolio in the liquidity pool

Changes in value of FVOCI exposures flow directly through capital via the FVOCI reserve. The volatility of the value of the FVOCI investments in the liquidity pool is captured and managed through a value measure rather than an earning measure, i.e. the non-traded market risk VaR.

Although the underlying methodology to calculate the non-traded VaR is identical to the one used in traded management VaR, the two measures are not directly comparable. The non-traded VaR represents the volatility to capital driven by the FVOCI exposures. These exposures are in the banking book and do not meet the criteria for trading book treatment.

### Analysis of volatility of the FVOCI portfolio in the liquidity pool

<table>
<thead>
<tr>
<th>For the year ended 31 December</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average £m</td>
<td>High £m</td>
</tr>
<tr>
<td>Non-traded market value at risk (daily, 95%)</td>
<td>45</td>
<td>61</td>
</tr>
</tbody>
</table>

The volatility in the FVOCI portfolio was primarily driven by changes in interest rate risk exposure taken in the liquid asset buffer.
## Analysis of treasury and capital risk

### Table 26: PV1 - Prudent valuation adjustment

This table below provides a granular breakdown of the Prudent Valuation Adjustment (PVA) reported by Barclays. PVA is a Common Equity Tier 1 capital deduction.

EU CRR Articles 34 & 105 define regulatory principles that are applied to all fair valued assets and liabilities in order to determine a prudent valuation. The Prudent Valuation Adjustment (PVA) is the difference between the financial statement fair valuation and the prudent valuation.

<table>
<thead>
<tr>
<th>Equity £m</th>
<th>Interest rates £m</th>
<th>FX £m</th>
<th>Credit £m</th>
<th>Commodities £m</th>
<th>Total £m</th>
<th>Of which in the trading book £m</th>
<th>Of which in the banking book £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>543</td>
<td>271</td>
<td>22</td>
<td>332</td>
<td>–</td>
<td>1,168</td>
<td>1,142</td>
<td>27</td>
</tr>
<tr>
<td>342</td>
<td>159</td>
<td>15</td>
<td>198</td>
<td>–</td>
<td>713</td>
<td>687</td>
<td>26</td>
</tr>
<tr>
<td>15</td>
<td>78</td>
<td>2</td>
<td>21</td>
<td>–</td>
<td>116</td>
<td>115</td>
<td>1</td>
</tr>
<tr>
<td>187</td>
<td>34</td>
<td>5</td>
<td>113</td>
<td>–</td>
<td>339</td>
<td>339</td>
<td>–</td>
</tr>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>31</td>
<td>14</td>
<td>–</td>
<td>8</td>
<td>–</td>
<td>54</td>
<td>54</td>
<td>–</td>
</tr>
<tr>
<td>36</td>
<td>39</td>
<td>2</td>
<td>41</td>
<td>–</td>
<td>117</td>
<td>97</td>
<td>20</td>
</tr>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>8</td>
<td>28</td>
<td>2</td>
<td>16</td>
<td>–</td>
<td>54</td>
<td>54</td>
<td>–</td>
</tr>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>618</td>
<td>511</td>
<td>26</td>
<td>591</td>
<td>–</td>
<td>1,746</td>
<td>1,521</td>
<td>225</td>
</tr>
</tbody>
</table>

### Notes

- a Barclays’ implementation of PVA means that amounts cannot be easily classified as banking book or trading book. As such, an assumption has been made that the most material contributor to banking book PVA is a portfolio of longer dated non-asset backed loans made to Education, Social Housing and Local Authority (ESHLA) counterparties. The ESHLA PVA numbers are presented in the “Credit” column of the table.
- b Significant contributors to PVA include trading book derivative portfolios, equity investments and non-asset backed loans held at fair value
- c Unearned credit spread uncertainty was previously disclosed in closeout uncertainty and model risk. For 2018 it has been disclosed separately and comparatives updated.
- d A diversification reduction factor of 50% is applied to uncertainty after all regulatory exclusions and offsets, where permitted by EU CRR.

PVA has increased from £1.4bn to £1.7bn in 2018 driven by:

- **Mid-market value** – mid market value increased by £0.2bn primarily by wider uncertainty spreads. This was skewed toward the 4th quarter as market conditions deteriorated.

- **Operational Risk AVA** – this increased from zero to £0.1bn. As per the PVA regulatory technical standard, AMA attracts a zero Operational Risk AVA. As we moved from the advanced to standardized operational risk approach, we were required to take an operational risk AVA charge (the change happened at the end of Q1 2018).
This section details Barclays’ credit risk profile, focusing on regulatory measures such as exposure at default and risk weighted assets. The risk profile is analysed by business segment, country and industry concentrations, residual maturities, probabilities of default and actual losses.

**Key Metrics**

Risk weighted assets for credit risk increased in the year

**Total RWA**

£5.7bn

**Driven by:**

£6.8bn
Business growth within Barclays International and Barclays UK

£3.1bn
Foreign exchange movement due to the appreciation of period end USD against GBP

£2.9bn
Improvements in the asset quality within Barclays International

£2.8bn
Regulatory deconsolidation of BAGL
Analysis of capital requirements and exposures for credit risk

Table 27: Credit risk exposures – Note on pre- and post- credit risk mitigation (CRM) EAD

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

RWAs and post-CRM exposures are analysed by business on pages 45 to 49. Pre-CRM exposures are further analysed by geography on page 50, industry on page 54 and residual maturity on page 58. Information on the impact of CRM on EAD is set out on pages 65 - 66.

### Credit exposure class

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>EAD pre-CRM</th>
<th>Average$</th>
<th>EAD post-CRM</th>
<th>Average$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year end £m</td>
<td>Year end £m</td>
<td>Average £m</td>
<td>Average £m</td>
</tr>
<tr>
<td><strong>Standardised approach</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>203,292</td>
<td>199,724</td>
<td>203,292</td>
<td>197,246</td>
</tr>
<tr>
<td>Regional governments or local authorities</td>
<td>845</td>
<td>726</td>
<td>606</td>
<td>534</td>
</tr>
<tr>
<td>Public sector entities</td>
<td>5,688</td>
<td>2,978</td>
<td>5,686</td>
<td>2,965</td>
</tr>
<tr>
<td>Multilateral development banks</td>
<td>4,091</td>
<td>3,861</td>
<td>4,091</td>
<td>3,861</td>
</tr>
<tr>
<td>International organisations</td>
<td>920</td>
<td>807</td>
<td>920</td>
<td>807</td>
</tr>
<tr>
<td>Institutions</td>
<td>4,162</td>
<td>4,622</td>
<td>4,134</td>
<td>4,590</td>
</tr>
<tr>
<td>Corporates</td>
<td>40,369</td>
<td>37,502</td>
<td>26,984</td>
<td>25,020</td>
</tr>
<tr>
<td>Retail</td>
<td>30,753</td>
<td>28,162</td>
<td>30,060</td>
<td>27,467</td>
</tr>
<tr>
<td>Secured by mortgages</td>
<td>8,875</td>
<td>9,939</td>
<td>8,875</td>
<td>9,939</td>
</tr>
<tr>
<td>Exposures in default</td>
<td>2,584</td>
<td>2,422</td>
<td>2,530</td>
<td>2,378</td>
</tr>
<tr>
<td>Items associated with high risk</td>
<td>3,160</td>
<td>2,724</td>
<td>3,160</td>
<td>2,642</td>
</tr>
<tr>
<td>Covered bonds</td>
<td>122</td>
<td>91</td>
<td>122</td>
<td>91</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Collective investment undertakings</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Equity positions</td>
<td>–</td>
<td>13</td>
<td>–</td>
<td>13</td>
</tr>
<tr>
<td>Other items</td>
<td>2,699</td>
<td>4,019</td>
<td>2,699</td>
<td>4,019</td>
</tr>
<tr>
<td><strong>Total Standardised Approach Credit Risk Exposure</strong></td>
<td>307,560</td>
<td>295,112</td>
<td>293,159</td>
<td>281,571</td>
</tr>
</tbody>
</table>

| **Advanced IRB approach** | | | |
|--------------------------| | | |
| Central governments or central banks | 74,298 | 70,873 | 74,131 | 70,705 |
| Institutions | 26,529 | 25,029 | 26,462 | 24,962 |
| Corporates | 112,230 | 118,577 | 105,649 | 111,996 |
| Retail | – | – | – | – |
| – Small and medium-sized enterprises (SMEs) | 8,898 | 8,952 | 8,989 | 8,952 |
| – Secured by real estate collateral | 148,396 | 148,357 | 148,396 | 148,357 |
| – Qualifying revolving retail | 41,922 | 42,253 | 41,922 | 42,253 |
| – Other retail | 6,296 | 6,531 | 6,296 | 6,531 |
| Equity | – | – | – | – |
| Securitisation positions | 34,924 | 31,023 | 34,923 | 31,023 |
| Non-credit obligation assets | 8,996 | 9,181 | 8,996 | 9,181 |
| **Total advanced IRB credit risk exposure** | 462,489 | 460,956 | 455,673 | 453,959 |
| **Total credit exposure** | 770,051 | 756,068 | 748,832 | 735,712 |

**Notes**

a Collateral and guarantees for advanced IRB are not included within EAD as these are incorporated in loss given default (LGD) calculations.

b Averages are calculated from the past four quarters.
**Risk and capital position review**

**Analysis of credit risk**

Table 27: Credit risk exposures – Note on pre- and post- credit risk mitigation (CRM) EAD continued

<table>
<thead>
<tr>
<th>As at 31 December 2017</th>
<th>EAD pre-CRM</th>
<th></th>
<th>EAD post-CRM</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year end £m</td>
<td>Average £m</td>
<td>Year end £m</td>
<td>Average £m</td>
</tr>
<tr>
<td><strong>Standardised approach</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>170,016</td>
<td>156,468</td>
<td>170,016</td>
<td>156,357</td>
</tr>
<tr>
<td>Regional governments or local authorities</td>
<td>594</td>
<td>791</td>
<td>580</td>
<td>786</td>
</tr>
<tr>
<td>Public sector entities</td>
<td>347</td>
<td>339</td>
<td>347</td>
<td>332</td>
</tr>
<tr>
<td>Multilateral development banks</td>
<td>3,863</td>
<td>4,805</td>
<td>3,863</td>
<td>4,805</td>
</tr>
<tr>
<td>International organisations</td>
<td>981</td>
<td>1,235</td>
<td>981</td>
<td>1,235</td>
</tr>
<tr>
<td>Institutions</td>
<td>4,523</td>
<td>5,278</td>
<td>4,472</td>
<td>5,247</td>
</tr>
<tr>
<td>Corporates</td>
<td>35,032</td>
<td>37,042</td>
<td>23,796</td>
<td>25,969</td>
</tr>
<tr>
<td>Secured by mortgages</td>
<td>28,776</td>
<td>28,618</td>
<td>28,130</td>
<td>27,947</td>
</tr>
<tr>
<td>Exposures in default</td>
<td>8,905</td>
<td>10,078</td>
<td>8,905</td>
<td>10,078</td>
</tr>
<tr>
<td>Items associated with high risk</td>
<td>1,741</td>
<td>1,868</td>
<td>1,627</td>
<td>1,752</td>
</tr>
<tr>
<td>Covered bonds</td>
<td>–</td>
<td>104</td>
<td>–</td>
<td>104</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Collective investment undertakings</td>
<td>–</td>
<td>1</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>Equity positions</td>
<td>38</td>
<td>150</td>
<td>38</td>
<td>150</td>
</tr>
<tr>
<td>Other items</td>
<td>4,282</td>
<td>3,880</td>
<td>4,282</td>
<td>3,880</td>
</tr>
<tr>
<td><strong>Total Standardised Approach Credit Risk Exposure</strong></td>
<td>261,418</td>
<td>252,917</td>
<td>249,333</td>
<td>240,872</td>
</tr>
<tr>
<td><strong>Advanced IRB approach Credit Risk Exposure</strong></td>
<td>249,333</td>
<td>240,872</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>89,242</td>
<td>79,758</td>
<td>89,096</td>
<td>79,613</td>
</tr>
<tr>
<td>Institutions</td>
<td>24,172</td>
<td>23,150</td>
<td>23,535</td>
<td>22,512</td>
</tr>
<tr>
<td>Corporates</td>
<td>117,737</td>
<td></td>
<td>138,791</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>– Small and medium-sized enterprises (SMEs)</td>
<td>9,221</td>
<td>8,932</td>
<td>9,221</td>
<td>8,932</td>
</tr>
<tr>
<td>– Secured by real estate collateral</td>
<td>148,764</td>
<td>150,317</td>
<td>148,764</td>
<td>150,317</td>
</tr>
<tr>
<td>– Qualifying revolving retail</td>
<td>43,956</td>
<td>44,733</td>
<td>43,956</td>
<td>44,733</td>
</tr>
<tr>
<td>– Other retail</td>
<td>6,948</td>
<td>8,121</td>
<td>6,948</td>
<td>8,121</td>
</tr>
<tr>
<td>Equity</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>29,926</td>
<td>25,799</td>
<td>29,926</td>
<td>25,799</td>
</tr>
<tr>
<td>Non-credit obligation assets</td>
<td>9,062</td>
<td>10,398</td>
<td>9,062</td>
<td>10,398</td>
</tr>
<tr>
<td><strong>Total advanced IRB credit risk exposure</strong></td>
<td>479,028</td>
<td>489,999</td>
<td>471,692</td>
<td>482,664</td>
</tr>
<tr>
<td><strong>Total credit exposure</strong></td>
<td>740,446</td>
<td>742,916</td>
<td>721,025</td>
<td>723,536</td>
</tr>
</tbody>
</table>

The key movements by business are shown in Table 29 while further details are provided on Table 31 to 54.

Exposure at default pre-CRM increased £29.6bn to £770.1bn, primarily driven by a £18.3bn increase in the central governments or central banks exposure as the Group strengthened its liquidity position.
## Risk and capital position review

### Analysis of credit risk

#### Table 28: CRB-B Total and average net amount of exposures

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

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Net value of exposures as at 31 December 2018 £m</th>
<th>Average net exposures as at the 31 December 2018 £m</th>
<th>Net value of exposures as at 31 December 2017 £m</th>
<th>Average net exposures as at the 31 December 2017 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Central governments or central banks</td>
<td>74,339</td>
<td>71,148</td>
<td>89,273</td>
<td>80,271</td>
</tr>
<tr>
<td>2 Institutions</td>
<td>29,970</td>
<td>28,523</td>
<td>27,301</td>
<td>24,781</td>
</tr>
<tr>
<td>3 Corporates</td>
<td>164,665</td>
<td>172,527</td>
<td>171,450</td>
<td>201,382</td>
</tr>
<tr>
<td>4 Of Which: Specialised Lending</td>
<td>7,684</td>
<td>7,280</td>
<td>6,799</td>
<td>9,558</td>
</tr>
<tr>
<td>5 Of Which: SMEs</td>
<td>17,856</td>
<td>18,697</td>
<td>20,648</td>
<td>22,055</td>
</tr>
<tr>
<td>6 Retail</td>
<td>236,599</td>
<td>236,834</td>
<td>237,808</td>
<td>242,330</td>
</tr>
<tr>
<td>7 Secured by real estate property</td>
<td>150,172</td>
<td>150,656</td>
<td>151,112</td>
<td>153,138</td>
</tr>
<tr>
<td>8 SME</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>9 Non-SMEs</td>
<td>150,172</td>
<td>150,656</td>
<td>151,112</td>
<td>153,138</td>
</tr>
<tr>
<td>10 Qualifying Revolving</td>
<td>72,741</td>
<td>72,212</td>
<td>71,998</td>
<td>72,962</td>
</tr>
<tr>
<td>11 Other Retail</td>
<td>13,686</td>
<td>13,966</td>
<td>14,697</td>
<td>16,252</td>
</tr>
<tr>
<td>12 SME</td>
<td>7,388</td>
<td>7,436</td>
<td>7,767</td>
<td>8,172</td>
</tr>
<tr>
<td>13 Non-SMEs</td>
<td>6,298</td>
<td>6,530</td>
<td>6,930</td>
<td>8,080</td>
</tr>
<tr>
<td>14 Equity</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>15 Total IRB Approach</td>
<td>505,573</td>
<td>509,032</td>
<td>525,832</td>
<td>548,764</td>
</tr>
<tr>
<td>16 Central governments or central banks</td>
<td>197,935</td>
<td>192,895</td>
<td>166,932</td>
<td>155,163</td>
</tr>
<tr>
<td>17 Regional governments or local authorities</td>
<td>950</td>
<td>837</td>
<td>666</td>
<td>854</td>
</tr>
<tr>
<td>18 Public sector entities</td>
<td>5,897</td>
<td>3,083</td>
<td>389</td>
<td>364</td>
</tr>
<tr>
<td>19 Multilateral development banks</td>
<td>4,091</td>
<td>3,861</td>
<td>3,863</td>
<td>4,805</td>
</tr>
<tr>
<td>20 International organisations</td>
<td>920</td>
<td>807</td>
<td>981</td>
<td>1,235</td>
</tr>
<tr>
<td>21 Institutions</td>
<td>5,045</td>
<td>5,307</td>
<td>5,096</td>
<td>5,746</td>
</tr>
<tr>
<td>22 Corporates</td>
<td>60,592</td>
<td>56,384</td>
<td>52,565</td>
<td>54,462</td>
</tr>
<tr>
<td>23 Of Which: SMEs</td>
<td>5,727</td>
<td>5,577</td>
<td>5,666</td>
<td>6,679</td>
</tr>
<tr>
<td>24 Retail</td>
<td>107,025</td>
<td>102,565</td>
<td>105,240</td>
<td>105,244</td>
</tr>
<tr>
<td>25 Of Which: SMEs</td>
<td>3,746</td>
<td>3,677</td>
<td>3,421</td>
<td>3,345</td>
</tr>
<tr>
<td>26 Secured by mortgages on immovable property</td>
<td>8,892</td>
<td>9,692</td>
<td>8,924</td>
<td>10,094</td>
</tr>
<tr>
<td>27 Of Which: SMEs</td>
<td>271</td>
<td>110</td>
<td>492</td>
<td>436</td>
</tr>
<tr>
<td>28 Exposures in default</td>
<td>2,779</td>
<td>2,530</td>
<td>2,359</td>
<td>2,382</td>
</tr>
<tr>
<td>29 Items associated with particularly high risk</td>
<td>3,173</td>
<td>2,739</td>
<td>1,762</td>
<td>1,939</td>
</tr>
<tr>
<td>30 Covered bonds</td>
<td>122</td>
<td>91</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>31 Claims on institutions and corporates with a short-term credit assessment</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>32 Collective investments undertakings</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>33 Equity exposures</td>
<td>–</td>
<td>13</td>
<td>38</td>
<td>150</td>
</tr>
<tr>
<td>34 Other exposures</td>
<td>2,699</td>
<td>4,019</td>
<td>4,282</td>
<td>3,880</td>
</tr>
<tr>
<td>35 Total standardised approach</td>
<td>400,120</td>
<td>385,093</td>
<td>353,097</td>
<td>346,423</td>
</tr>
<tr>
<td>36 Total</td>
<td>905,693</td>
<td>894,125</td>
<td>878,929</td>
<td>895,186</td>
</tr>
</tbody>
</table>

This table includes exposures subject to the IRB and Standardised approach only. For details of key movements in these exposure classes please see Table 27.
Credit risk exposures
The following tables analyse credit risk exposures and risk weighted assets.

Table 29: Detailed view of exposure at default, post-CRM by business
This table shows exposure at default post-CRM by business and credit exposure class for credit risk.

<table>
<thead>
<tr>
<th>EAD post-CRM credit exposure class</th>
<th>Barclays UK £m</th>
<th>Barclays International £m</th>
<th>Head Office £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Credit risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standardised approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>81,798</td>
<td>118,671</td>
<td>2,823</td>
<td>203,292</td>
</tr>
<tr>
<td>Regional governments or local authorities</td>
<td>105</td>
<td>501</td>
<td></td>
<td>606</td>
</tr>
<tr>
<td>Public sector entities</td>
<td>618</td>
<td>5,068</td>
<td></td>
<td>5,686</td>
</tr>
<tr>
<td>Multilateral development banks</td>
<td>489</td>
<td>3,602</td>
<td></td>
<td>4,091</td>
</tr>
<tr>
<td>International organisations</td>
<td>103</td>
<td>817</td>
<td></td>
<td>920</td>
</tr>
<tr>
<td>Institutions</td>
<td>363</td>
<td>3,736</td>
<td>35</td>
<td>4,134</td>
</tr>
<tr>
<td>Corporates</td>
<td>390</td>
<td>26,548</td>
<td>46</td>
<td>26,984</td>
</tr>
<tr>
<td>Retail</td>
<td>1,312</td>
<td>28,746</td>
<td>2</td>
<td>30,060</td>
</tr>
<tr>
<td>Secured by mortgages</td>
<td>2,648</td>
<td>6,227</td>
<td></td>
<td>8,875</td>
</tr>
<tr>
<td>Exposures in default</td>
<td>276</td>
<td>2,186</td>
<td>68</td>
<td>2,530</td>
</tr>
<tr>
<td>Items associated with high risk</td>
<td>8</td>
<td>1,113</td>
<td>2,039</td>
<td>3,160</td>
</tr>
<tr>
<td>Covered bonds</td>
<td>88</td>
<td>34</td>
<td></td>
<td>122</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Collective investment undertakings</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Equity positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other items</td>
<td>1,564</td>
<td>1,051</td>
<td>84</td>
<td>2,699</td>
</tr>
<tr>
<td><strong>Total Standardised approach credit risk exposure</strong></td>
<td>89,762</td>
<td>198,300</td>
<td>5,097</td>
<td>293,159</td>
</tr>
<tr>
<td><strong>Advanced IRB approach</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>125</td>
<td>74,006</td>
<td></td>
<td>74,131</td>
</tr>
<tr>
<td>Institutions</td>
<td>6,914</td>
<td>19,532</td>
<td>16</td>
<td>26,462</td>
</tr>
<tr>
<td>Corporates</td>
<td>18,472</td>
<td>87,004</td>
<td>172</td>
<td>105,648</td>
</tr>
<tr>
<td>Retail</td>
<td>193,128</td>
<td>3,944</td>
<td>8,415</td>
<td>205,512</td>
</tr>
<tr>
<td>– Small and medium-sized enterprises (SMEs)</td>
<td>8,898</td>
<td>–</td>
<td>–</td>
<td>8,898</td>
</tr>
<tr>
<td>– Secured by real estate collateral</td>
<td>139,981</td>
<td>–</td>
<td>8,415</td>
<td>148,396</td>
</tr>
<tr>
<td>– Qualifying revolving retail</td>
<td>37,978</td>
<td>3,944</td>
<td></td>
<td>41,922</td>
</tr>
<tr>
<td>– Other retail</td>
<td>6,271</td>
<td>25</td>
<td></td>
<td>6,296</td>
</tr>
<tr>
<td>Equity</td>
<td>–</td>
<td>–</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>1,494</td>
<td>33,430</td>
<td></td>
<td>34,924</td>
</tr>
<tr>
<td>Non-credit obligation assets</td>
<td>1,697</td>
<td>4,167</td>
<td>3,132</td>
<td>8,996</td>
</tr>
<tr>
<td><strong>Total Advanced IRB credit risk exposure</strong></td>
<td>221,830</td>
<td>222,108</td>
<td>11,735</td>
<td>455,673</td>
</tr>
<tr>
<td><strong>Total credit risk exposure</strong></td>
<td>311,592</td>
<td>420,408</td>
<td>16,832</td>
<td>748,832</td>
</tr>
</tbody>
</table>
Analysis of credit risk

Table 29: Detailed view of exposure at default, post-CRM by business continued

<table>
<thead>
<tr>
<th>As at 31 December 2017</th>
<th>Barclays UK £m</th>
<th>Barclays International £m</th>
<th>Head Office £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standardised approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>22,810</td>
<td>119,322</td>
<td>27,884</td>
<td>170,016</td>
</tr>
<tr>
<td>Regional governments or local authorities</td>
<td>95</td>
<td>484</td>
<td>–</td>
<td>579</td>
</tr>
<tr>
<td>Public sector entities</td>
<td>–</td>
<td>330</td>
<td>17</td>
<td>347</td>
</tr>
<tr>
<td>Multilateral development banks</td>
<td>666</td>
<td>3,197</td>
<td>–</td>
<td>3,863</td>
</tr>
<tr>
<td>International organisations</td>
<td>172</td>
<td>809</td>
<td>–</td>
<td>981</td>
</tr>
<tr>
<td>Institutions</td>
<td>586</td>
<td>3,724</td>
<td>162</td>
<td>4,472</td>
</tr>
<tr>
<td>Corporates</td>
<td>403</td>
<td>22,737</td>
<td>656</td>
<td>23,796</td>
</tr>
<tr>
<td>Retail</td>
<td>1,461</td>
<td>26,228</td>
<td>441</td>
<td>28,130</td>
</tr>
<tr>
<td>Secured by mortgages</td>
<td>2,890</td>
<td>5,939</td>
<td>77</td>
<td>8,906</td>
</tr>
<tr>
<td>Items associated with high risk</td>
<td>67</td>
<td>742</td>
<td>818</td>
<td>1,627</td>
</tr>
<tr>
<td>Covered bonds</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Collective investment undertakings</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Equity positions</td>
<td>–</td>
<td>–</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Other items</td>
<td>1,765</td>
<td>2,367</td>
<td>150</td>
<td>4,282</td>
</tr>
<tr>
<td>Total Standardised approach credit risk exposure</td>
<td>31,408</td>
<td>187,526</td>
<td>30,399</td>
<td>249,333</td>
</tr>
</tbody>
</table>

| Advanced IRB approach |                |                           |                |         |
| Central governments or central banks | 15,066 | 73,378 | 652 | 89,096 |
| Institutions          | 8,173 | 15,168 | 194 | 23,535 |
| Corporates           | 18,541 | 88,766 | 3,877 | 111,184 |
| Retail               | – | – | – | – |
| – Small and medium-sized enterprises (SMEs) | 8,931 | 75 | 215 | 9,221 |
| – Secured by real estate collateral | 137,186 | – | 11,577 | 148,763 |
| – Qualifying revolving retail | 39,572 | 3,857 | 527 | 43,956 |
| – Other retail        | 6,168 | – | 781 | 6,949 |
| Equity                | – | – | – | – |
| Securitisation positions | 1,676 | 28,227 | 23 | 29,926 |
| Non-credit obligation assets | 1,377 | 5,248 | 2,437 | 9,062 |
| Total Advanced IRB credit risk exposure | 236,690 | 214,719 | 20,283 | 471,692 |
| Total credit risk exposure | 268,098 | 402,245 | 50,682 | 721,025 |

Exposure at default post-CRM increased by £27.8bn to £748.8bn. The key movements by business were as follows:

- Barclays UK increased by £43.5bn to £311.6bn, primarily driven by reallocation of the Group liquidity pool post ring-fencing
- Barclays International increased by £18.2bn to £420.4bn, primarily driven by increase in lending activity within the Investment Banking and Consumer, Cards & Payments businesses and appreciation of period end USD against GBP
- Head Office decreased by £33.9bn to £16.8bn, primarily driven by the reallocation of liquidity pool post ring-fencing and the regulatory deconsolidation of BACL
Risk and capital position review

Analysis of credit risk

Table 30: Detailed view of credit risk RWAs and Capital Requirement
This table shows RWAs for credit risk by credit exposure class for credit risk in the banking book.

<table>
<thead>
<tr>
<th>Risk weighted assets credit exposure class</th>
<th>Barclays UK £m</th>
<th>Barclays International £m</th>
<th>Head Office £m</th>
<th>Total £m</th>
<th>Capital requirements £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Credit risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standardised approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>–</td>
<td>155</td>
<td>24</td>
<td>179</td>
<td>14</td>
</tr>
<tr>
<td>Regional governments or local authorities</td>
<td>–</td>
<td>15</td>
<td>–</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Public sector entities</td>
<td>4</td>
<td>59</td>
<td>–</td>
<td>63</td>
<td>5</td>
</tr>
<tr>
<td>Multilateral development banks</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>International organisations</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Institutions</td>
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<td>6</td>
<td>1,357</td>
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<td>Securitisation positions</td>
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<td>–</td>
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<td>Collective investment undertakings</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Equity positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Other items</td>
<td>445</td>
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<td>709</td>
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<td><strong>Total standardised approach credit risk exposure</strong></td>
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<td>55,591</td>
<td>4,339</td>
<td>63,215</td>
<td>5,057</td>
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<tr>
<td><strong>Advanced IRB approach</strong></td>
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<td></td>
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<td></td>
</tr>
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<td>Central governments or central banks</td>
<td>20</td>
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<td>4,335</td>
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<td>–</td>
<td>3,931</td>
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<td>20,205</td>
<td>1,617</td>
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<td>–</td>
<td>19,867</td>
<td>1,589</td>
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<tr>
<td>– Qualifying revolving retail</td>
<td>6,172</td>
<td>18</td>
<td>–</td>
<td>6,190</td>
<td>495</td>
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<tr>
<td>Equity</td>
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<td>–</td>
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<td>Securitisation positions</td>
<td>155</td>
<td>4,532</td>
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<td>4,687</td>
<td>375</td>
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<tr>
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<td>2,680</td>
<td>7,646</td>
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<td>1,076</td>
</tr>
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<td><strong>Total advanced IRB credit risk exposure</strong></td>
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<td>66,955</td>
<td>5,777</td>
<td>132,466</td>
<td>10,597</td>
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<td><strong>Total credit risk weighted assets</strong></td>
<td>63,019</td>
<td>122,546</td>
<td>10,116</td>
<td>195,681</td>
<td>15,654</td>
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</table>
Risk and capital position review

Analysis of credit risk

Table 30: Detailed view of credit risk RWAs and Capital Requirement continued

<table>
<thead>
<tr>
<th>Risk weighted assets credit exposure class</th>
<th>Barclays UK £m</th>
<th>Barclays International £m</th>
<th>Head Office £m</th>
<th>Total £m</th>
<th>Capital requirements £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Credit risk</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Standardised approach</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>–</td>
<td>3</td>
<td>405</td>
<td>408</td>
<td>32</td>
</tr>
<tr>
<td>Regional governments or local authorities</td>
<td>–</td>
<td>9</td>
<td>–</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Public sector entities</td>
<td>–</td>
<td>88</td>
<td>17</td>
<td>105</td>
<td>8</td>
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<tr>
<td>Multilateral development banks</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>International organisations</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Institutions</td>
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<td>38</td>
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<td>Corporates</td>
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<td>559</td>
<td>22,575</td>
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<td>Retail</td>
<td>1,095</td>
<td>19,765</td>
<td>226</td>
<td>21,086</td>
<td>1,687</td>
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<td>1,140</td>
<td>2,527</td>
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<td>3,712</td>
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<td>Exposures in default</td>
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<td>1,946</td>
<td>200</td>
<td>2,773</td>
<td>222</td>
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<td>1,178</td>
<td>1,274</td>
<td>2,553</td>
<td>204</td>
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<tr>
<td>Covered bonds</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>Securitisation positions</td>
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<td>Collective investment undertakings</td>
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<tr>
<td>Equity positions</td>
<td>–</td>
<td>–</td>
<td>94</td>
<td>94</td>
<td>8</td>
</tr>
<tr>
<td>Other items</td>
<td>326</td>
<td>484</td>
<td>49</td>
<td>859</td>
<td>69</td>
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<tr>
<td><strong>Total standardised approach credit risk exposure</strong></td>
<td>3,811</td>
<td>49,058</td>
<td>2,907</td>
<td>55,776</td>
<td>4,462</td>
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<tr>
<td><strong>Advanced IRB approach</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>567</td>
<td>2,909</td>
<td>87</td>
<td>3,563</td>
<td>285</td>
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<td>Corporates</td>
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<td>48,057</td>
<td>2,168</td>
<td>55,612</td>
<td>4,449</td>
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<tr>
<td>Retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Small and medium-sized enterprises (SMEs)</td>
<td>3,729</td>
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<td>123</td>
<td>3,881</td>
<td>310</td>
</tr>
<tr>
<td>– Secured by real estate collateral</td>
<td>16,327</td>
<td>–</td>
<td>3,706</td>
<td>20,033</td>
<td>1,603</td>
</tr>
<tr>
<td>– Qualifying revolving retail</td>
<td>18,190</td>
<td>1,528</td>
<td>291</td>
<td>20,099</td>
<td>1,601</td>
</tr>
<tr>
<td>– Other retail</td>
<td>6,121</td>
<td>–</td>
<td>518</td>
<td>6,639</td>
<td>531</td>
</tr>
<tr>
<td>Equity</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>Securitisation positions</td>
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<td>3,893</td>
<td>4</td>
<td>4,068</td>
<td>325</td>
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<tr>
<td>Non-credit obligation assets</td>
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<td>8,918</td>
<td>2,769</td>
<td>13,538</td>
<td>1,083</td>
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<tr>
<td><strong>Total advanced IRB credit risk exposure</strong></td>
<td>54,955</td>
<td>69,520</td>
<td>9,766</td>
<td>134,241</td>
<td>10,739</td>
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<tr>
<td><strong>Total credit risk weighted assets</strong></td>
<td>58,766</td>
<td>118,578</td>
<td>12,673</td>
<td>190,017</td>
<td>15,201</td>
</tr>
</tbody>
</table>

Risk weighted assets increased by £5.7bn to £195.7bn. The key movements by business were as follows:

- Barclays UK’s RWAs increased £4.3bn to £63.0bn primarily due to regulatory methodology changes for the ESHLA portfolio and increase in mortgage lending
- Barclays International’s RWAs increased £4.0bn to £122.5bn primarily due to increased lending activity in the Investment Banking, Consumer, Cards and Payments businesses and appreciation of period end USD against GBP
- Head Office’s RWAs decreased £2.6bn to £10.1bn primarily driven by the regulatory deconsolidation of BAGL
## Analysis of credit risk

### Table 30a: Detailed view of credit risk RWAs and Capital Requirement by significant subsidiaries

<table>
<thead>
<tr>
<th></th>
<th>Barclays Bank PLC</th>
<th></th>
<th>Barclays Bank UK PLC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RWA £m</td>
<td>Capital requirements £m</td>
<td>RWA £m</td>
<td>Capital requirements £m</td>
</tr>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Standardised approach</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>174</td>
<td>14</td>
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<td>Regional governments or local authorities</td>
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<td>–</td>
</tr>
<tr>
<td>Public sector entities</td>
<td>59</td>
<td>5</td>
<td>4</td>
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</tr>
<tr>
<td>Multilateral development banks</td>
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<td>–</td>
<td>–</td>
<td>–</td>
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<td>International organisations</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Institutions</td>
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<td>Corporates</td>
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<tr>
<td>Retail</td>
<td>816</td>
<td>65</td>
<td>1,079</td>
<td>86</td>
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<tr>
<td>Secured by mortgages</td>
<td>2,241</td>
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<td>1,009</td>
<td>81</td>
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<td>1</td>
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<td>Securitisation positions</td>
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<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Collective investment undertakings</td>
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<td>–</td>
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<td>–</td>
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<tr>
<td>Equity positions</td>
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<tr>
<td>Other items</td>
<td>53</td>
<td>4</td>
<td>445</td>
<td>36</td>
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<tr>
<td><strong>Total standardised approach credit risk exposure</strong></td>
<td>45,837</td>
<td>3,667</td>
<td>3,985</td>
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<td><strong>Advanced IRB approach</strong></td>
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<td></td>
</tr>
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<td>Central governments or central banks</td>
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<td>671</td>
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<td>Retail</td>
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<td>–</td>
<td>3,931</td>
<td>314</td>
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<td>1,416</td>
</tr>
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<td>2,496</td>
<td>200</td>
<td>18,347</td>
<td>1,468</td>
</tr>
<tr>
<td>– Qualifying revolving retail</td>
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<td>–</td>
<td>6,111</td>
<td>489</td>
</tr>
<tr>
<td>– Other retail</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Equity</td>
<td>–</td>
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<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
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<td>155</td>
<td>12</td>
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<td>Non-credit obligation assets</td>
<td>3,430</td>
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<td>2,441</td>
<td>195</td>
</tr>
<tr>
<td><strong>Total advanced IRB credit risk exposure</strong></td>
<td>63,153</td>
<td>5,052</td>
<td>59,484</td>
<td>4,759</td>
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<td><strong>Total credit risk weighted assets</strong></td>
<td>108,990</td>
<td>8,719</td>
<td>63,469</td>
<td>5,077</td>
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</table>
## Analysis of credit risk

### Table 31: CRB-C Geographic analysis of credit exposure
This table shows exposure at default pre-CCF and pre-CRM, broken down by credit exposure class and geographic location of the counterparty.

#### Barclays Group

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>United Kingdom £m</th>
<th>Europe £m</th>
<th>France £m</th>
<th>Germany £m</th>
<th>Italy £m</th>
<th>Luxembourg £m</th>
<th>Switzerland £m</th>
<th>Americas £m</th>
<th>United States £m</th>
<th>Asia £m</th>
<th>Japan £m</th>
<th>Middle East £m</th>
<th>South Africa £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central governments or central banks</td>
<td>394</td>
<td>21,635</td>
<td>–</td>
<td>5,089</td>
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<td>–</td>
<td>16,062</td>
<td>41,132</td>
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<td>2,598</td>
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<td>830</td>
<td>97</td>
<td>29,970</td>
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<td>10,935</td>
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</table>
Analysis of credit risk

Exposures at default pre-CCF and CRM increased by £26.8bn to £905.7bn. The key movements by geographical area were as follows:

- **United Kingdom** increased £26.4bn to £478.6bn primarily driven by an increase in cash held at central banks as the Group strengthened its liquidity position, offset by a reduction in corporate exposure mainly due to securitisation activity
- **Europe** increased £9.8bn to £149.3bn primarily driven by an increase in cash at central bank in France offset by a reduction in central bank exposure in Germany reflecting changes in the Group liquidity pool composition
- **Americas** decreased £7.8bn to £246.8bn primarily driven by a decrease in exposure to the Government of the United States reflecting changes in the Group liquidity pool composition
- **Africa and Middle East** decreased £7.8bn to £8.0bn primarily driven by the regulatory deconsolidation of BAGL
- **Asia** increased £6.2bn to £23.0bn primarily driven by an increase in central bank balances reflecting changes in the Group liquidity pool composition
## Analysis of credit risk

### Risk and capital position review

#### Table 31a: CRB-C Geographic analysis of credit exposure for significant subsidiaries

**Barclays Bank PLC**

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>United Kingdom £m</th>
<th>Europe £m</th>
<th>France £m</th>
<th>Germany £m</th>
<th>Italy £m</th>
<th>Luxembourg £m</th>
<th>Switzerland £m</th>
<th>Americas £m</th>
<th>Asia £m</th>
<th>Japan £m</th>
<th>Africa and Middle East £m</th>
<th>South Africa £m</th>
<th>Total £m</th>
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<td>75,270</td>
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<td>602</td>
<td>793</td>
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**Risk and capital position review**
### Analysis of credit risk

#### Risk and capital position review

**Table 31b: CRB-C Geographic analysis of credit exposure for significant subsidiaries**

<table>
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<th>Barclays Bank UK PLC</th>
<th>United Kingdom £m</th>
<th>Europe £m</th>
<th>Germany £m</th>
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<td>3,202</td>
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<td>342,656</td>
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</table>
## Analysis of credit risk

### Table 32: CRB-D – Concentration of exposures by industry

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

<table>
<thead>
<tr>
<th>Barclays Group</th>
<th>Agriculture, forestry and fishing</th>
<th>Mining and quarrying</th>
<th>Manufacturing</th>
<th>Electricity, gas, steam and air conditioning</th>
<th>Water supply</th>
<th>Construction</th>
<th>Wholesale and retail trade</th>
<th>Transport and storage</th>
<th>Accommodation and food service activities</th>
<th>Information and communication</th>
<th>Real estate activities</th>
<th>Professional, scientific and technical activities</th>
<th>Administrative and support service activities</th>
<th>Public administration, defence, compulsory social security</th>
<th>Education</th>
<th>Human health services and social work activities</th>
<th>Arts, entertainment and recreation</th>
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<td><strong>£m</strong></td>
<td><strong>£m</strong></td>
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<td>32 Collective investments undertakings (CIU)</td>
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<td>33 Equity exposures</td>
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<td>34 Other exposures</td>
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</table>
## Analysis of credit risk

### Risk and capital position review

Exposures at default pre-CCF and CRM increased by £26.8bn to £905.7bn. The key movements by industry sector were as follows:

- **Public administration and defence, compulsory social security** increased by £21.4bn to £282.8bn primarily driven by an increase in cash held at central banks as the Group strengthened its liquidity position
- **Other Services** increased £8.1bn to £422.8bn primarily driven by the BAGL equity holding

### Table 32: CRB-D – Concentration of exposures by industry continued

**Barclays Group**

<table>
<thead>
<tr>
<th>As at 31 December 2017</th>
<th>Agriculture, forestry and fishing</th>
<th>Mining and quarrying</th>
<th>Manufacturing</th>
<th>Electricity, gas, steam and air conditioning supply</th>
<th>Water supply</th>
<th>Construction</th>
<th>Wholesale and retail trade</th>
<th>Transport and storage</th>
<th>Accommodation and food services</th>
<th>Information and communication</th>
<th>Real estate activities</th>
<th>Professional, scientific and technical activities</th>
<th>Administrative and support service activities</th>
<th>Public administration and defence, compulsory social security</th>
<th>Education</th>
<th>Human health services and social work activities</th>
<th>Arts, entertainment and recreation</th>
<th>Other services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>1 Central governments or central banks</td>
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<td>–</td>
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<td>Total IRB Approach</td>
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### Analysis of credit risk

#### Risk and capital position review

Table 32a: CRB-D – Concentration of exposures by industry for significant subsidiaries

Barclays Bank PLC

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<td>Collective investments undertakings (CIU)</td>
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</table>

**Total Standardised approach**                                      21 | 2,740 | 8,395 | 1,304 | 286 | 870 | 5,011 | 2,279 | 812 | 520 | 1,872 | 3,273 | 952 | 121,449 | 812 | 544 | 453 | 184,055 | 335,648 |

**Total**                                                           141 | 12,360 | 39,373 | 14,392 | 2,287 | 4,883 | 16,461 | 9,873 | 4,044 | 6,385 | 15,886 | 17,197 | 952 | 194,678 | 3,588 | 10,184 | 3,711 | 219,052 | 575,447 |
### Analysis of credit risk

#### Risk and capital position review

**Table 32b: CRB-D – Concentration of exposures by industry for significant subsidiaries**

<table>
<thead>
<tr>
<th>Barclays Bank UK PLC</th>
<th>Agriculture, forestry and fishing</th>
<th>Mining and quarrying</th>
<th>Manufacturing</th>
<th>Electricity, gas, steam and air conditioning supply</th>
<th>Water supply</th>
<th>Construction</th>
<th>Wholesale and retail trade</th>
<th>Transport and storage</th>
<th>Accommodation and food services</th>
<th>Real estate activities</th>
<th>Professional, scientific and technical activities</th>
<th>Administrative and support services</th>
<th>Public administration and defence, compulsory social security</th>
<th>Education</th>
<th>Human health services and social work activities</th>
<th>Arts, entertainment and recreation</th>
<th>Other services</th>
<th>Total</th>
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<td>31 December 2018</td>
<td>£m</td>
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<td>£m</td>
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<td>£m</td>
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<td>30 Covered bonds</td>
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<td>6,801</td>
<td>1,295</td>
<td>374</td>
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</table>
Analysis of credit risk

Table 33: CRB-E – Residual maturity analysis credit exposures
This table shows exposure at default pre-CCF and pre-CRM, broken down by credit exposure class and residual maturity. Residual maturity is the remaining number of years before an obligation becomes due according to the existing terms of the agreement.

<table>
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<th>Barclays Group</th>
<th>Net Exposure Value</th>
<th>On Demand</th>
<th>&lt;= 1 year</th>
<th>&gt; 1 year</th>
<th>&gt;= 5 years</th>
<th>&gt; 5 years</th>
<th>No stated maturity</th>
<th>Total</th>
</tr>
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<td><strong>As at 31 December 2018</strong></td>
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<td></td>
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<td>1 Central Governments or central banks</td>
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<td>5,134</td>
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<td>134,696</td>
<td>180,160</td>
<td>291</td>
<td>505,573</td>
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</tr>
<tr>
<td>6 Central governments or central banks</td>
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<td>28,145</td>
<td>16,609</td>
<td>12</td>
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<td>197,935</td>
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<tr>
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<td>261</td>
<td>183</td>
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<td>950</td>
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<td>1,080</td>
<td>–</td>
<td>4,091</td>
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<tr>
<td>11 International organisations</td>
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<td>589</td>
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<td>920</td>
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<td>117</td>
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<tr>
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</tr>
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<td>1,143</td>
<td>3,173</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>20 Collective investments undertakings</td>
<td>–</td>
<td>–</td>
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<td>–</td>
<td>–</td>
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<td>21 Equity exposures</td>
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<td>2,699</td>
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<td>54,143</td>
<td>63,869</td>
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<td>1,425</td>
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</table>
## Risk and capital position review

### Analysis of credit risk

#### Table 33: CRB-E – Residual maturity analysis of credit exposures continued

<table>
<thead>
<tr>
<th>Barclays Group</th>
<th>Net Exposure Value</th>
<th>On Demand</th>
<th>&lt;= 1 year</th>
<th>&lt;= 5 years</th>
<th>&gt; 5 years</th>
<th>No stated maturity</th>
<th>Total</th>
</tr>
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<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td>–</td>
<td>89,273</td>
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<td>5,464</td>
<td>7,523</td>
<td>10,528</td>
<td>–</td>
<td>–</td>
<td>27,301</td>
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<tr>
<td>3 Corporates</td>
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<td>22,225</td>
<td>106,639</td>
<td>25,645</td>
<td>–</td>
<td>–</td>
<td>171,450</td>
</tr>
<tr>
<td>4 Retail</td>
<td>74,595</td>
<td>2,999</td>
<td>15,906</td>
<td>144,308</td>
<td>–</td>
<td>–</td>
<td>237,808</td>
</tr>
<tr>
<td>5 Equity</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>6 Total IRB Approach</strong></td>
<td>167,381</td>
<td>35,524</td>
<td>135,268</td>
<td>187,659</td>
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<td>–</td>
<td>525,832</td>
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<td>166,932</td>
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<tr>
<td>8 Regional governments or local authorities</td>
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<td>43</td>
<td>533</td>
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<td>666</td>
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<td>12 Institutions</td>
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<td>210</td>
<td>202</td>
<td>–</td>
<td>–</td>
<td>5,096</td>
</tr>
<tr>
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<td>202</td>
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<td>–</td>
<td>52,565</td>
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<tr>
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<td>2,129</td>
<td>78</td>
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<td>4,798</td>
<td>21</td>
<td>–</td>
<td>8,924</td>
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<td>456</td>
<td>–</td>
<td>899</td>
<td>–</td>
<td>1,762</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>19 Claims on institutions and corporate with a short–term credit assessment</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>20 Collective investments undertakings</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>21 Equity exposures</td>
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<td>–</td>
<td>38</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>87</td>
<td>1,983</td>
<td>902</td>
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<td>4,282</td>
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<td>44,935</td>
<td>36,939</td>
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<td>353,097</td>
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<td><strong>24 Total</strong></td>
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<td>129,536</td>
<td>180,203</td>
<td>224,598</td>
<td>1,973</td>
<td>–</td>
<td>878,929</td>
</tr>
</tbody>
</table>

Exposures at default pre-CCF and CRM increased by £26.8bn to £905.7bn. The key movements in On Demand, less than 1 year and 1 to 5 years residual maturity primarily driven by changes in cash held at central bank as the Group strengthened its liquidity position.
Risk and capital position review

Analysis of credit risk

Table 33a: CRB-E – Residual maturity analysis of credit exposures for significant subsidiaries

Barclays Bank PLC

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Net Exposure Value</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On Demand £m</td>
<td>≤ 1 year £m</td>
</tr>
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</tr>
<tr>
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<td>22,447</td>
</tr>
<tr>
<td>4 Retail</td>
<td>–</td>
<td>305</td>
</tr>
<tr>
<td>5 Equity</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6 Total IRB Approach</td>
<td>73,523</td>
<td>27,802</td>
</tr>
<tr>
<td>7 Central governments or central banks</td>
<td>78,951</td>
<td>13,631</td>
</tr>
<tr>
<td>8 Regional governments or local authorities</td>
<td>379</td>
<td>126</td>
</tr>
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<td>9 Public sector entities</td>
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</tr>
<tr>
<td>10 Multilateral development banks</td>
<td>–</td>
<td>171</td>
</tr>
<tr>
<td>11 International organisations</td>
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<td>–</td>
</tr>
<tr>
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<td>18 Covered bonds</td>
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</tr>
<tr>
<td>19 Claims on institutions and corporate with a short-term credit assessment</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>20 Collective investments undertakings</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>21 Equity exposures</td>
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<tr>
<td>22 Other exposures</td>
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<td>23 Total standardised approach</td>
<td>97,873</td>
<td>116,579</td>
</tr>
<tr>
<td>24 Total</td>
<td>171,396</td>
<td>144,381</td>
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</table>
## Analysis of credit risk

### Table 33b: CRB-E – Residual maturity analysis of credit exposures for significant subsidiaries

<table>
<thead>
<tr>
<th>Barclays Bank UK PLC</th>
<th>Net Exposure Value</th>
<th>On Demand £m</th>
<th>≤ 1 year £m</th>
<th>&gt; 1 year ≤ 5 years £m</th>
<th>&gt; 5 years £m</th>
<th>No stated maturity £m</th>
<th>Total £m</th>
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<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>1 Central Governments or central banks</td>
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<td>104</td>
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<td>6,920</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
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<td>5,439</td>
<td>19,995</td>
<td>1,646</td>
<td>–</td>
<td>78,121</td>
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<td>–</td>
<td>105</td>
<td>–</td>
<td>–</td>
<td>105</td>
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<td>258</td>
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<td>–</td>
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<td>1,949</td>
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<td>2,647</td>
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<tr>
<td>16 Exposures in default</td>
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<td>54</td>
<td>31</td>
<td>138</td>
<td>69</td>
<td>–</td>
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<td>45</td>
<td>–</td>
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<td>88</td>
</tr>
<tr>
<td>19 Claims on institutions and corporate with a short-term credit assessment</td>
<td></td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>20 Collective investments undertakings</td>
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<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>21 Equity exposures</td>
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<td>–</td>
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<td>342,656</td>
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</tbody>
</table>
Credit risk mitigation

Barclays employs a range of techniques and strategies to actively mitigate credit risks. Within the regulatory framework this is commonly referred to as credit risk mitigation (CRM) and is fully discussed on pages 161 of this document. In the case of collateral, the recognition of the mitigant is reflected through regulatory calculations in several different ways. This is dependent on the nature of the collateral and the underlying approach applied to the exposure.

Table 34: Exposures covered by guarantees and credit derivatives

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

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

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

Financial collateral includes, but is not exclusive of, cash, debt securities, equities and gold, that can be used to directly reduce credit exposures subject to the Standardised approach. The impact of financial collateral CRM can be observed on pages 42 and 43, as a component of the difference between EAD pre-CRM and EAD-post CRM.

<table>
<thead>
<tr>
<th>Credit exposure class</th>
<th>Barclays Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposures covered by unfunded credit protection</td>
</tr>
<tr>
<td></td>
<td>Standardised £m</td>
</tr>
<tr>
<td>As at 31 December 2018</td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>–</td>
</tr>
<tr>
<td>Institutions</td>
<td>197</td>
</tr>
<tr>
<td>Corporates</td>
<td>283</td>
</tr>
<tr>
<td>Retail</td>
<td>4</td>
</tr>
<tr>
<td>Exposures in default</td>
<td>2</td>
</tr>
<tr>
<td>Items associated with high risk</td>
<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
</tr>
<tr>
<td>Non-credit obligation assets</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>486</td>
</tr>
<tr>
<td>As at 31 December 2017*</td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>–</td>
</tr>
<tr>
<td>Institutions</td>
<td>–</td>
</tr>
<tr>
<td>Corporates</td>
<td>65</td>
</tr>
<tr>
<td>Retail</td>
<td>–</td>
</tr>
<tr>
<td>Exposures in default</td>
<td>–</td>
</tr>
<tr>
<td>Items associated with high risk</td>
<td>–</td>
</tr>
<tr>
<td>Equity</td>
<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
</tr>
<tr>
<td>Non-credit obligation assets</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
</tr>
</tbody>
</table>

Note
\* Prior year information has been revised to reflect the exposure value (rather than the value of the underlying collateral)

The exposures covered by funded credit protection decreased by £2.1bn to £35.7bn primarily driven by the regulatory deconsolidation of BACL.
### Risk and capital position review

#### Analysis of credit risk

**Table 34a: Exposures covered by guarantees and credit derivatives for significant subsidiaries**

<table>
<thead>
<tr>
<th>Credit exposure class</th>
<th>Barclays Bank PLC</th>
<th>Exposures covered by unfunded credit protection</th>
<th>Exposures covered by funded credit protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Standardised £m</td>
<td>Advanced IRB £m</td>
</tr>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>–</td>
<td>101</td>
<td>168</td>
</tr>
<tr>
<td>Institutions</td>
<td>–</td>
<td>427</td>
<td>167</td>
</tr>
<tr>
<td>Corporates</td>
<td>121</td>
<td>2,846</td>
<td>17,093</td>
</tr>
<tr>
<td>Retail</td>
<td>–</td>
<td>3,798</td>
<td>–</td>
</tr>
<tr>
<td>Exposures in default</td>
<td>2</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Items associated with high risk</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Non-credit obligation assets</td>
<td></td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>123</td>
<td>7,172</td>
<td>17,428</td>
</tr>
</tbody>
</table>

**Table 34b: Exposures covered by guarantees and credit derivatives for significant subsidiaries**

<table>
<thead>
<tr>
<th>Credit exposure class</th>
<th>Barclays Bank UK PLC</th>
<th>Exposures covered by unfunded credit protection</th>
<th>Exposures covered by funded credit protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Standardised £m</td>
<td>Advanced IRB £m</td>
</tr>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Institutions</td>
<td>197</td>
<td>–</td>
<td>13,450</td>
</tr>
<tr>
<td>Corporates</td>
<td>–</td>
<td>36</td>
<td>4,834</td>
</tr>
<tr>
<td>Retail</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Exposures in default</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Items associated with high risk</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Non-credit obligation assets</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>197</td>
<td>146</td>
<td>18,309</td>
</tr>
</tbody>
</table>
## Analysis of credit risk

### Table 35: CR3 – CRM techniques

This table shows the use of CRM techniques broken down by loans and debt securities. This table includes unsecured and secured exposures including collateral, financial guarantees and credit derivatives for both Standardised and Internal rating based approach.

<table>
<thead>
<tr>
<th></th>
<th>Exposures unsecured – Carrying amount £m</th>
<th>Exposures to be secured £m</th>
<th>Exposures secured by collateral £m</th>
<th>Exposures secured by financial guarantees £m</th>
<th>Exposures secured by credit derivatives £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Total loans</td>
<td>338,042</td>
<td>184,797</td>
<td>184,153</td>
<td>603</td>
<td>40</td>
</tr>
<tr>
<td>2 Total debt securities</td>
<td>49,138</td>
<td>595</td>
<td>–</td>
<td>595</td>
<td>–</td>
</tr>
<tr>
<td>3 Total exposures</td>
<td>387,180</td>
<td>185,392</td>
<td>184,153</td>
<td>1,198</td>
<td>40</td>
</tr>
<tr>
<td>4 Of which defaulted</td>
<td>3,516</td>
<td>3,295</td>
<td>3,293</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Total loans</td>
<td>325,074</td>
<td>187,311</td>
<td>186,080</td>
<td>1,209</td>
<td>22</td>
</tr>
<tr>
<td>2 Total debt securities</td>
<td>44,723</td>
<td>1,340</td>
<td>–</td>
<td>1,340</td>
<td>–</td>
</tr>
<tr>
<td>3 Total exposures</td>
<td>369,797</td>
<td>188,651</td>
<td>186,080</td>
<td>2,549</td>
<td>22</td>
</tr>
<tr>
<td>4 Of which defaulted</td>
<td>3,822</td>
<td>2,849</td>
<td>2,848</td>
<td>1</td>
<td>–</td>
</tr>
</tbody>
</table>

**Note**

Prior year figures have been revised to reflect on-balance sheet exposures

- The total unsecured and secured exposure increased £14.1bn to £572.6bn as the Group strengthened its liquidity position
- Exposures secured by collateral decreased by £1.9bn to £184.2bn primarily due to regulatory deconsolidation of BAGL partially offset by increased mortgage lending during the year
Table 36: CR4 Standardised – Credit Risk exposure and CRM effect

This table shows the impact of CRM and credit conversion factors (CCF) on exposure values, broken down by credit exposure class. This table includes exposures subject to the Standardised approach only.

The term ‘before CCF and CRM’ means the original gross exposures before the application of credit conversion factor and before the application of risk mitigation techniques.

<table>
<thead>
<tr>
<th>Credit Exposure Class</th>
<th>Exposures before CCF and CRM</th>
<th>Exposures post-CCF and CRM</th>
<th>RWA and RWA density</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On-balance sheet amount £m</td>
<td>Off-balance sheet amount £m</td>
<td>On-balance sheet amount £m</td>
</tr>
<tr>
<td>1 Central governments or central banks</td>
<td>158,783</td>
<td>39,152</td>
<td>159,029</td>
</tr>
<tr>
<td>2 Regional governments or local authorities</td>
<td>845</td>
<td>105</td>
<td>605</td>
</tr>
<tr>
<td>3 Public sector entities</td>
<td>5,609</td>
<td>288</td>
<td>5,621</td>
</tr>
<tr>
<td>4 Multilateral development banks</td>
<td>4,091</td>
<td>–</td>
<td>4,091</td>
</tr>
<tr>
<td>5 International Organisations</td>
<td>920</td>
<td>–</td>
<td>920</td>
</tr>
<tr>
<td>6 Institutions</td>
<td>3,447</td>
<td>1,598</td>
<td>3,396</td>
</tr>
<tr>
<td>7 Corporates</td>
<td>24,926</td>
<td>35,666</td>
<td>15,967</td>
</tr>
<tr>
<td>8 Retail</td>
<td>30,563</td>
<td>76,462</td>
<td>29,914</td>
</tr>
<tr>
<td>9 Secured by mortgages on immovable property</td>
<td>8,869</td>
<td>23</td>
<td>8,868</td>
</tr>
<tr>
<td>10 Exposures in default</td>
<td>2,394</td>
<td>385</td>
<td>2,338</td>
</tr>
<tr>
<td>11 Items associated with particularly high risk</td>
<td>3,148</td>
<td>25</td>
<td>3,147</td>
</tr>
<tr>
<td>12 Covered Bonds</td>
<td>122</td>
<td>–</td>
<td>122</td>
</tr>
<tr>
<td>13 Claims on institutions and corporate with a short-term credit assessment</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>14 Claims in the form of CIU</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>15 Equity exposures</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>16 Other items</td>
<td>2,699</td>
<td>–</td>
<td>2,699</td>
</tr>
<tr>
<td>17 Total</td>
<td>246,416</td>
<td>153,704</td>
<td>236,717</td>
</tr>
</tbody>
</table>

As at 31 December 2018

Further information about the key drivers for pre-CCF and pre-CRM exposures are provided in Tables 31, 32 and 33, and post-CCF and post-CRM exposures are provided in Table 29.
Analysis of credit risk

Table 37: CR7 – Effect on RWA of credit derivatives used as CRM techniques (IRB)
This table shows the effect of credit derivatives on the IRB approach to capital requirements’ calculations. It assumes the absence of recognition of credit derivative as a CRM technique (pre – credit derivatives RWAs).

<table>
<thead>
<tr>
<th>Pre-credit derivatives RWAs</th>
<th>Actual RWAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018 £m</td>
<td>As at 31 December 2017 £m</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>1 Exposures under Foundation IRB</td>
<td>–</td>
</tr>
<tr>
<td>2 Central governments and central banks</td>
<td>2,682</td>
</tr>
<tr>
<td>3 Institutions</td>
<td>7,259</td>
</tr>
<tr>
<td>4 Corporates – SME</td>
<td>9,380</td>
</tr>
<tr>
<td>5 Corporates – Specialised Lending</td>
<td>4,721</td>
</tr>
<tr>
<td>6 Corporates – Other</td>
<td>40,123</td>
</tr>
<tr>
<td>7 Exposures under Advanced IRB</td>
<td>127,810</td>
</tr>
<tr>
<td>8 Central governments and central banks</td>
<td>20,205</td>
</tr>
<tr>
<td>9 Institutions</td>
<td>19,867</td>
</tr>
<tr>
<td>10 Corporates – Specialised Lending</td>
<td>3,931</td>
</tr>
<tr>
<td>11 Corporates – Other non-SME</td>
<td>6,190</td>
</tr>
<tr>
<td>12 Equity IRB</td>
<td>13,452</td>
</tr>
<tr>
<td>13 Total</td>
<td>127,810</td>
</tr>
</tbody>
</table>

The decrease in pre-credit derivative RWAs and Actual RWAs was primarily driven by a change in the Group’s liquidity pool composition and securitisation of corporate loans.
Credit quality analysis of Standardised exposures

Credit rating agencies
Under the Standardised approach, ratings assigned by External Credit Assessment Institutions (ECAIs) are used in the calculation of RWAs. The PRA determines which agencies may be used to determine the correct risk weight. Barclays uses ratings assigned by the following agencies for credit risk calculations:

- Standard & Poor’s
- Moody’s
- Fitch

These ratings are used in the calculation of risk weights for the central governments and central banks, institutions and corporate exposure classes.

Rated and unrated counterparties
The following section summarises the rules governing standardised calculations.

Each exposure must be assigned to one of six credit quality steps if a rating is available, as defined in the table below. After assignment to a quality step, exposure class and maturity are then used to determine the risk weight percentage. Exposures cannot be assigned a risk weight lower than that of the sovereign risk of the country in which the asset is located. The following table is a simplified version of the risk weight allocation process.

Where a credit rating is not available, a default treatment is applied as specified by regulatory guidance. In most cases this default risk weight equates to that which is applied to credit quality step 3.

Table 38: Relationship of long-term external credit ratings to credit quality steps under the Standardised approach

<table>
<thead>
<tr>
<th>Credit Quality Step</th>
<th>Standard and Poor’s</th>
<th>Moody’s</th>
<th>Fitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Quality Step 1</td>
<td>AAA to AA-</td>
<td>Aaa to Aa3</td>
<td>AAA to AA-</td>
</tr>
<tr>
<td>Credit Quality Step 2</td>
<td>A+ to A-</td>
<td>A1 to A3</td>
<td>A+ to A-</td>
</tr>
<tr>
<td>Credit Quality Step 3</td>
<td>BBB+ to BBB-</td>
<td>Baa1 to Baa3</td>
<td>BBB+ to BBB-</td>
</tr>
<tr>
<td>Credit Quality Step 4</td>
<td>BB+ to BB-</td>
<td>Ba1 to Ba3</td>
<td>BB+ to BB-</td>
</tr>
<tr>
<td>Credit Quality Step 5</td>
<td>B+ to B-</td>
<td>B1 to B3</td>
<td>B+ to B-</td>
</tr>
<tr>
<td>Credit Quality Step 6</td>
<td>CCC+ and below</td>
<td>Caa1 and below</td>
<td>CCC+ and below</td>
</tr>
</tbody>
</table>

Table 39: Credit quality steps and risk weights under the standardised approach

<table>
<thead>
<tr>
<th>Credit Quality Step</th>
<th>Institution (includes banks)</th>
<th>Sovereign method</th>
<th>Credit assessment method</th>
<th>Central governments or central banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Quality Step 1</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Credit Quality Step 2</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>Credit Quality Step 3</td>
<td>100%</td>
<td>100%</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>Credit Quality Step 4</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>50%</td>
</tr>
<tr>
<td>Credit Quality Step 5</td>
<td>150%</td>
<td>100%</td>
<td>100%</td>
<td>50%</td>
</tr>
<tr>
<td>Credit Quality Step 6</td>
<td>150%</td>
<td>150%</td>
<td>150%</td>
<td>150%</td>
</tr>
</tbody>
</table>

Exposures to international organisations are generally assigned a risk weight of 0%.

If considered fully and completely secured by residential property, measured on the basis of the Loan-to-value ratio, a retail exposure is assigned a risk weight of 35%. If only partially secured, a more complex framework is applied. Other retail exposures are generally assigned a risk weight of 75%.

The unsecured portion of a past due exposure is assigned a risk weight of either 150% or 100%, depending on the specific credit risk adjustments recognised.

Items of high risk are assigned a risk weight of 150%, whereas Equity positions not subject to threshold calculations are generally assigned a risk weight of 100%.

Other items are assigned a risk weight of 100%, unless they relate to cash in hand (0%) or items in the course of collection (20%).

Notes

a DBRS is used to calculate risk weight for securitisation exposures only. Please see page 172 for further details.
b The mapping of external ratings to credit quality steps applicable as at year-end 2018 is found in Supervisory Statement SS10/13, published by the Prudential Regulation Authority in December 2013 (see http://www.bankofengland.co.uk/pra/Documents/publications/SS/2013/SS1013.pdf. Implementing technical standards that will update these mappings have been finalised by the Joint Committee of the three European Supervisory Authorities (EBA, ESMA and EIOPA) and are awaiting endorsement by the European Commission (see eba.europa.eu/regulation-and-policy/external-credit-assessment-institutions-ecai).
Risk and capital position review

Analysis of credit risk

Table 40: CR5-A Analysis of exposures by asset classes and risk weight pre-CCF and CRM under the standardised approach

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

<table>
<thead>
<tr>
<th>EAD by asset classes and risk weights pre CCF and CRM</th>
<th>0%</th>
<th>2%</th>
<th>4%</th>
<th>10%</th>
<th>20%</th>
<th>35%</th>
<th>50%</th>
<th>70%</th>
<th>75%</th>
<th>100%</th>
<th>150%</th>
<th>250%</th>
<th>370%</th>
<th>1250%</th>
<th>Others</th>
<th>De-ducted</th>
<th>Total</th>
<th>£m</th>
<th>Unrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Central governments or central banks</td>
<td>197,722</td>
<td>12</td>
<td>48</td>
<td>153</td>
<td>199,935</td>
<td>1,641</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Regional governments or local authorities</td>
<td>534</td>
<td>415</td>
<td>24</td>
<td>22</td>
<td>5,897</td>
<td>269</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Public sector entities</td>
<td>5,605</td>
<td>247</td>
<td>24</td>
<td>22</td>
<td>5,897</td>
<td>269</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Multilateral development banks</td>
<td>4,091</td>
<td>2</td>
<td>107,025</td>
<td>920</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 International organisations</td>
<td>920</td>
<td>2</td>
<td>107,025</td>
<td>920</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6 Institutions</td>
<td>–</td>
<td>857</td>
<td>463</td>
<td>–</td>
<td>5,045</td>
<td>791</td>
<td></td>
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</tr>
<tr>
<td>7 Corporates</td>
<td>–</td>
<td>3,256</td>
<td>55,059</td>
<td>952</td>
<td>50,875</td>
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</tr>
<tr>
<td>8 Retail</td>
<td>–</td>
<td>107,025</td>
<td>920</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9 Secured by mortgages on immovable property</td>
<td>–</td>
<td>178</td>
<td>514</td>
<td>–</td>
<td>8,892</td>
<td>8,892</td>
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</tr>
<tr>
<td>10 Exposures in default</td>
<td>–</td>
<td>1,611</td>
<td>1,168</td>
<td>–</td>
<td>2,779</td>
<td>2,498</td>
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</tr>
<tr>
<td>11 Items associated with particularly high risk</td>
<td>–</td>
<td>1,899</td>
<td>1,274</td>
<td>–</td>
<td>3,173</td>
<td>3,170</td>
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<tr>
<td>12 Covered Bonds</td>
<td>–</td>
<td>122</td>
<td>–</td>
<td>–</td>
<td>122</td>
<td></td>
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</tr>
<tr>
<td>13 Claims on institutions and corporate with a short-term credit assessment</td>
<td>–</td>
<td>–</td>
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</tr>
<tr>
<td>14 Claims in the form of CIU</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>–</td>
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<tr>
<td>15 Equity exposures</td>
<td>–</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Other items</td>
<td>1,408</td>
<td>725</td>
<td>566</td>
<td>–</td>
<td>2,699</td>
<td>2,681</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>17 Total</td>
<td>210,280</td>
<td>6,565</td>
<td>8,192</td>
<td>107,208</td>
<td>58,388</td>
<td>4,019</td>
<td>2,779</td>
<td>2,498</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

As at 31 December 2017

| 1 Central governments or central banks               | 166,417 | 20 | 175 | 289 | 166,932 | 5,443 |
| 2 Regional governments or local authorities         | 545 | 112 | 9 | 389 | 284 |
| 3 Public sector entities                             | – | 300 | 39 | – | 389 | 284 |
| 4 Multilateral development banks                    | 3,863 | – | – | – | 3,863 |
| 5 International organisations                       | 981 | – | – | – | 981 |
| 6 Institutions                                      | – | 3,232 | 1,360 | 502 | 5,096 | 970 |
| 7 Corporates                                        | – | 694 | 3,759 | 47,454 | 52,564 | 43,520 |
| 8 Retail                                             | – | 105,238 | 105,240 |
| 9 Secured by mortgages on immovable property        | – | 7,856 | 2 | 806 | 8,924 | 8,924 |
| 10 Exposures in default                              | – | 1,354 | 1,005 | – | 2,339 | 2,312 |
| 11 Items associated with particularly high risk      | – | 1,649 | 113 | – | 1,762 | 1,755 |
| 12 Covered Bonds                                    | – | – | – | – | – |
| 13 Claims on institutions and corporate with a short-term credit assessment | – | – | – | – | – |
| 14 Claims in the form of CIU                         | – | – | – | – | – |
| 15 Equity exposures                                 | – | – | – | – | – |
| 16 Other items                                       | 1,674 | 2,190 | 418 | 38 | 4,282 | 4,276 |
| 17 Total                                            | 173,480 | 6,548 | 7,856 | 5,346 | 105,498 | 50,873 | 3,340 | 151 | 4 | 353,096 | 172,885 |

Standardised credit risk exposure pre-CRM increased by £47.0bn to £400.1bn primarily driven by:

- An increase in cash held at central banks as the Group strengthened its liquidity position
- An increase in the corporate exposures primarily due to lending activity and appreciation of period end USD against GBP
Analysis of credit risk

Table 41: CR5-B Analysis of exposures by asset classes and risk weight post-CCF and CRM under the standardised approach

The difference between exposure at default pre-CRM set out in Table 40 and exposure at default post-CRM below is the impact of financial collateral and CCF as described in Table 36.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>0% £m</th>
<th>2% £m</th>
<th>4% £m</th>
<th>10% £m</th>
<th>20% £m</th>
<th>35% £m</th>
<th>50% £m</th>
<th>70% £m</th>
<th>75% £m</th>
<th>100% £m</th>
<th>150% £m</th>
<th>250% £m</th>
<th>375% £m</th>
<th>Others £m</th>
<th>Deducted £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>203,079</td>
<td>–</td>
<td>–</td>
<td>12</td>
<td>–</td>
<td>–</td>
<td>48</td>
<td>–</td>
<td>–</td>
<td>153</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>203,292</td>
</tr>
<tr>
<td>Regional governments or local authorities</td>
<td>530</td>
<td>–</td>
<td>–</td>
<td>76</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>–</td>
<td>–</td>
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<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Public sector entities</td>
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<td>–</td>
<td>–</td>
<td>190</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>16</td>
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<td>–</td>
<td>–</td>
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<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Multilateral development banks</td>
<td>4,091</td>
<td>–</td>
<td>–</td>
<td>–</td>
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</tr>
<tr>
<td>International Organisations</td>
<td>920</td>
<td>–</td>
<td>–</td>
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</tr>
<tr>
<td>Institutions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>3,024</td>
<td>–</td>
<td>681</td>
<td>–</td>
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<td>429</td>
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<tr>
<td>Corporates</td>
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<td>–</td>
<td>1,554</td>
<td>–</td>
<td>–</td>
<td>24,108</td>
<td>521</td>
<td>–</td>
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<td>5</td>
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<tr>
<td>Retail</td>
<td>–</td>
<td>–</td>
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<td>–</td>
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<td>–</td>
<td>30,060</td>
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</tr>
<tr>
<td>Secured by mortgages on immovable property</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>8,180</td>
<td>2</td>
<td>180</td>
<td>513</td>
<td>–</td>
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<tr>
<td>Exposures in default</td>
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<td>–</td>
<td>1,497</td>
<td>1,033</td>
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<tr>
<td>Items associated with particularly high risk</td>
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<td>–</td>
<td>1,888</td>
<td>1,272</td>
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<td>–</td>
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</tr>
<tr>
<td>Covered Bonds</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>122</td>
<td>–</td>
<td>–</td>
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</tr>
<tr>
<td>Claims on institutions and corporate with a short-term credit assessment</td>
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<tr>
<td>Claims in the form of CIU</td>
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<tr>
<td>Equity exposures</td>
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<td>–</td>
</tr>
<tr>
<td>Other items</td>
<td>1,408</td>
<td>–</td>
<td>–</td>
<td>725</td>
<td>–</td>
<td>–</td>
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<td>566</td>
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<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>215,491</td>
<td>–</td>
<td>–</td>
<td>4,944</td>
<td>8,180</td>
<td>2,301</td>
<td>–</td>
<td>30,240</td>
<td>27,283</td>
<td>3,442</td>
<td>1,272</td>
<td>–</td>
<td>5</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

| As at 31 December 2017 |
| Central governments or central banks | 169,519 | – | – | 20 | – | 175 | – | 271 | 31 | – | – | – | – | – | – | 170,016 | 4,736 |
| Regional governments or local authorities | 545 | – | – | 32 | – | – | – | 2 | – | – | – | – | – | – | – | – | 579 | 36 |
| Public sector entities | – | – | – | 288 | – | 23 | – | – | 36 | – | – | – | – | – | – | – | 347 | 269 |
| Multilateral development banks | 3,863 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 3,863 | – |
| International Organisations | 981 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 981 | – |
| Institutions | – | – | – | 2,919 | – | 1,063 | – | 488 | – | – | 2 | – | – | – | – | – | 4,472 | 798 |
| Corporates | – | – | – | 350 | – | 1,762 | – | 21,353 | 329 | – | 2 | – | – | – | – | – | 23,796 | 19,408 |
| Retail | – | – | – | – | – | – | – | 28,128 | 2 | – | – | – | – | – | – | – | 28,130 | 28,130 |
| Secured by mortgages on immovable property | – | – | – | – | 7,850 | 2 | 257 | 797 | – | – | – | – | – | – | – | – | 8,905 | 8,905 |
| Exposures in default | – | – | – | – | – | – | – | 1,341 | 955 | – | – | – | – | – | – | – | – | 2,296 | 2,265 |
| Items associated with particularly high risk | – | – | – | – | – | – | – | 1,516 | 111 | – | – | – | – | – | – | – | – | 1,627 | 1,620 |
| Covered Bonds | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Claims on institutions and corporate with a short-term credit assessment | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Claims in the form of CIU | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Equity exposures | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Other items | 1,674 | – | – | 2,190 | – | – | – | – | 418 | – | – | – | – | – | – | – | – | 4,282 | 4,276 |
| Total | 176,582 | – | – | 5,799 | 7,850 | 3,025 | – | 28,385 | 24,708 | 2,831 | 149 | – | 4 | – | – | – | 249,333 | 70,481 |

Standardised credit risk exposure post-CRM increased by £43.8bn to £293.2bn primarily driven by:

- An increase in cash held at central banks as the Group strengthened its liquidity position
- An increase in the corporate exposures primarily due to lending activity and appreciation of period end USD against GBP
Risk and capital position review

Analysis of credit risk

Credit quality analysis of IRB exposures

The following section provides breakdowns of inputs into risk weighted asset calculations. Please note that risk weights and risk factors may be volatile in granular breakdowns of wholesale exposures, especially in categories that are more sparsely populated. This is often due to the addition or removal of a relatively large exposure to or from narrow categories when its risk factors are different to the category average. This happens in the normal course of business, for instance, following new lending, repayments, or syndications. See page 151 for a discussion of IRB models.

Table 42: Internal default grade probabilities and mapping to external ratings

The table below illustrates the approximate relationship between external rating agency grades and the PD bands for wholesale exposures. The EBA and internal Default Grade (DG) bands are based on TTC PD. Note that this relationship is dynamic, and therefore, varies over time, region and industry.

<table>
<thead>
<tr>
<th>EBA PD Range %</th>
<th>Internal DG Band</th>
<th>Default Probability</th>
<th>Financial statements description</th>
<th>Moody’s</th>
<th>Standard and Poor’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>1</td>
<td>0.00%</td>
<td>0.01%</td>
<td>0.02%</td>
<td>Strong</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aaa, Aa1, Aa2, Aa3</td>
<td>AAA, AA+,AA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.02%</td>
<td>0.03%</td>
<td>0.03%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A1</td>
<td>AAA-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.03%</td>
<td>0.04%</td>
<td>0.05%</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A2,A3</td>
<td>A+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.05%</td>
<td>0.08%</td>
<td>0.10%</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A3, Baa1</td>
<td>A, A-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.10%</td>
<td>0.13%</td>
<td>0.15%</td>
<td>5</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Baa2</td>
<td>BBB+</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>6</td>
<td>0.15%</td>
<td>0.18%</td>
<td>0.20%</td>
<td>Strong</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Baa2</td>
<td>BBB+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.20%</td>
<td>0.23%</td>
<td>0.25%</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Baa3</td>
<td>BBB</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>8</td>
<td>0.25%</td>
<td>0.28%</td>
<td>0.30%</td>
<td>Strong</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Baa3</td>
<td>BBB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.30%</td>
<td>0.35%</td>
<td>0.40%</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Baa3</td>
<td>BBB-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.40%</td>
<td>0.45%</td>
<td>0.50%</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B1</td>
<td>BBB-</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>11</td>
<td>0.30%</td>
<td>0.35%</td>
<td>0.60%</td>
<td>Strong</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ba1</td>
<td>BBB-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.50%</td>
<td>0.55%</td>
<td>0.60%</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ba2</td>
<td>BBB+</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>12</td>
<td>–</td>
<td>0.90%</td>
<td>1.20%</td>
<td>Satisfactory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ba2</td>
<td>BB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.20%</td>
<td>1.38%</td>
<td>1.55%</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ba3</td>
<td>BB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.55%</td>
<td>1.85%</td>
<td>2.15%</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ba3</td>
<td>BB-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.15%</td>
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<td>–</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B1</td>
<td>BB-</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>15</td>
<td>–</td>
<td>2.60%</td>
<td>3.05%</td>
<td>Satisfactory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B1</td>
<td>BB-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.05%</td>
<td>3.75%</td>
<td>4.45%</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B2</td>
<td>B+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.45%</td>
<td>5.40%</td>
<td>6.35%</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B2</td>
<td>B+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.35%</td>
<td>7.50%</td>
<td>8.65%</td>
<td>18</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>B3</td>
<td>B</td>
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<td>8.65%</td>
<td>10.00%</td>
<td>–</td>
<td>19</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>B3</td>
<td>B</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>19</td>
<td>–</td>
<td>11.35%</td>
<td>15.00%</td>
<td>Higher risk</td>
</tr>
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<td>B3</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.35%</td>
<td>15.00%</td>
<td>18.65%</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Caa1</td>
<td>B-</td>
</tr>
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<td></td>
<td></td>
<td>18.65%</td>
<td>30.00%</td>
<td>99.99%</td>
<td>21</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>Caa2, Caa3, Ca, C</td>
<td>B+, CCC+, CCC, CCC-, CC+, CC, C</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>22</td>
<td>100.00%</td>
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<td>–</td>
<td>D</td>
</tr>
</tbody>
</table>

Note that this relationship is dynamic, and therefore, varies over time, region and industry.
Analysis of credit risk

IRB obligor grade disclosure

The following tables show credit risk exposure at default post-CRM for the advanced IRB approach and foundation IRB approach for portfolios within both the trading and banking books. Separate tables are provided for the following credit exposure classes: central governments and central banks (Table 43), institutions (Table 44), corporates (Table 45), corporates subject to slotting (Table 47), Retail SME (Table 48), secured retail (Table 49), revolving retail (Table 50) and other retail (Table 51).

Barclays’ Model Risk Management group reviews and approves the application of post model adjustments to models that do not fully reflect the risk of the underlying exposures.

Table 43: CR6 Credit risk exposures by exposure class and PD range for central governments and central banks IRB

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures £m</th>
<th>Average EAD pre CCF £m</th>
<th>Average EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>Average Maturity Years</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>73,733</td>
<td>101</td>
<td>31.5%</td>
<td>73,627</td>
<td>0.0%</td>
<td>26</td>
<td>45.0%</td>
<td>1.4</td>
<td>2,469</td>
<td>3.4%</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>504</td>
<td>1</td>
<td>–</td>
<td>504</td>
<td>0.3%</td>
<td>4</td>
<td>36.2%</td>
<td>1.6</td>
<td>213</td>
<td>42.2%</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>74,237</td>
<td>102</td>
<td>31.6%</td>
<td>74,131</td>
<td>0.0%</td>
<td>30</td>
<td>45.0%</td>
<td>1.4</td>
<td>2,682</td>
<td>3.6%</td>
<td>3</td>
<td>(5)</td>
</tr>
</tbody>
</table>

As at 31 December 2017

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures £m</th>
<th>Average EAD pre CCF £m</th>
<th>Average EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>Average Maturity Years</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>87,706</td>
<td>836</td>
<td>87.8%</td>
<td>88,372</td>
<td>0.0%</td>
<td>85</td>
<td>45.0%</td>
<td>1.5</td>
<td>3,250</td>
<td>3.7%</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>2</td>
<td>1</td>
<td>49.8%</td>
<td>2</td>
<td>0.2%</td>
<td>7</td>
<td>45.3%</td>
<td>5.4</td>
<td>1</td>
<td>52.3%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>710</td>
<td>–</td>
<td>4%</td>
<td>710</td>
<td>0.4%</td>
<td>7</td>
<td>31.8%</td>
<td>1.7</td>
<td>298</td>
<td>42.0%</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>5</td>
<td>6</td>
<td>50.9%</td>
<td>8</td>
<td>1.4%</td>
<td>4</td>
<td>45.0%</td>
<td>0.8</td>
<td>7</td>
<td>91.3%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>3</td>
<td>5</td>
<td>0%</td>
<td>4</td>
<td>5.4%</td>
<td>7</td>
<td>45.2%</td>
<td>9.7</td>
<td>7</td>
<td>193.3%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>–</td>
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<td>–</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>88,426</td>
<td>848</td>
<td>83.2%</td>
<td>89,096</td>
<td>0.0%</td>
<td>110</td>
<td>44.9%</td>
<td>1.5</td>
<td>3,563</td>
<td>4.0%</td>
<td>4</td>
<td>–</td>
</tr>
</tbody>
</table>

The exposure weighted average risk weight associated with advanced IRB exposure to central governments and central banks decrease by 0.4% to 3.6%. This was primarily driven by a change in the Group’s liquidity pool composition.

The decrease in number of obligors is primarily driven by the regulatory deconsolidation of BAGL.
### Analysis of credit risk

#### Table 44: CR6 Credit risk exposures by exposure class and PD range for institutions

<table>
<thead>
<tr>
<th>Exposure Range</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>Average Maturity Years</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>21,498</td>
<td>6,383</td>
<td>55.6%</td>
<td>24,580</td>
<td>0.0%</td>
<td>693</td>
<td>41.3%</td>
<td>16.0</td>
<td>5,219</td>
<td>21.3%</td>
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<td>4</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>278</td>
<td>25</td>
<td>79.9%</td>
<td>297</td>
<td>0.2%</td>
<td>73</td>
<td>48.6%</td>
<td>0.8</td>
<td>125</td>
<td>42.1%</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>379</td>
<td>163</td>
<td>71.8%</td>
<td>488</td>
<td>0.4%</td>
<td>155</td>
<td>48.9%</td>
<td>3.5</td>
<td>373</td>
<td>76.4%</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>85</td>
<td>13</td>
<td>79.7%</td>
<td>90</td>
<td>0.6%</td>
<td>52</td>
<td>44.7%</td>
<td>4.4</td>
<td>83</td>
<td>91.6%</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>265</td>
<td>113</td>
<td>81.8%</td>
<td>351</td>
<td>1.8%</td>
<td>131</td>
<td>42.9%</td>
<td>1.2</td>
<td>398</td>
<td>113.2%</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>393</td>
<td>182</td>
<td>63.7%</td>
<td>475</td>
<td>4.4%</td>
<td>114</td>
<td>45.0%</td>
<td>9.7</td>
<td>850</td>
<td>178.9%</td>
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<td>9</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>28</td>
<td>27</td>
<td>134.6%</td>
<td>44</td>
<td>11.9%</td>
<td>20</td>
<td>11.2%</td>
<td>10.1</td>
<td>26</td>
<td>58.7%</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>26</td>
<td>113</td>
<td>98.4%</td>
<td>137</td>
<td>100.0%</td>
<td>25</td>
<td>14.2%</td>
<td>1.4</td>
<td>186</td>
<td>135.4%</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>22,951</td>
<td>7,019</td>
<td>60.4%</td>
<td>26,462</td>
<td>0.7%</td>
<td>1,263</td>
<td>41.4%</td>
<td>15.2</td>
<td>7,260</td>
<td>27.5%</td>
<td>23</td>
<td>(39)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exposure Range</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>Average Maturity Years</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>18,857</td>
<td>6,023</td>
<td>57.5%</td>
<td>21,475</td>
<td>0.0%</td>
<td>1,003</td>
<td>41.6%</td>
<td>19.4</td>
<td>4,851</td>
<td>22.6%</td>
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<td>4</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>452</td>
<td>87</td>
<td>18.3%</td>
<td>408</td>
<td>0.2%</td>
<td>82</td>
<td>30.9%</td>
<td>3.0</td>
<td>141</td>
<td>34.5%</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>399</td>
<td>100</td>
<td>59.2%</td>
<td>449</td>
<td>0.4%</td>
<td>132</td>
<td>51.3%</td>
<td>4.3</td>
<td>354</td>
<td>78.8%</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>148</td>
<td>65</td>
<td>46.5%</td>
<td>193</td>
<td>0.6%</td>
<td>76</td>
<td>43.5%</td>
<td>4.2</td>
<td>156</td>
<td>80.6%</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>298</td>
<td>36</td>
<td>54.4%</td>
<td>318</td>
<td>1.4%</td>
<td>201</td>
<td>48.0%</td>
<td>2.4</td>
<td>388</td>
<td>122.1%</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>366</td>
<td>160</td>
<td>53.0%</td>
<td>442</td>
<td>3.9%</td>
<td>124</td>
<td>40.1%</td>
<td>8.3</td>
<td>653</td>
<td>147.6%</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>18</td>
<td>49</td>
<td>39.5%</td>
<td>32</td>
<td>21.5%</td>
<td>33</td>
<td>32.0%</td>
<td>4.1</td>
<td>54</td>
<td>168.9%</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>198</td>
<td>46</td>
<td>56.7%</td>
<td>218</td>
<td>100.0%</td>
<td>29</td>
<td>18.1%</td>
<td>9.2</td>
<td>301</td>
<td>138.1%</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>20,736</td>
<td>6,566</td>
<td>52.7%</td>
<td>23,335</td>
<td>1.1%</td>
<td>1,680</td>
<td>41.5%</td>
<td>18.1</td>
<td>6,898</td>
<td>29.3%</td>
<td>31</td>
<td>(2)</td>
</tr>
</tbody>
</table>

The exposure weighted average risk weight associated with advanced IRB exposures to financial institutions decreased 1.8% to 27.5%. This was primarily driven by an increase in exposures in the highest quality default band. The decrease in number of obligors is primarily driven by the regulatory deconsolidation of BAGL.
### Analysis of credit risk

#### Table 45: CR6 Credit risk exposures by exposure class and PD range for corporates

<table>
<thead>
<tr>
<th></th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>Average Maturity Years</th>
<th>RWA £m</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>24,892</td>
<td>69,184</td>
<td>51.9%</td>
<td>56,573</td>
<td>0.1%</td>
<td>9,063</td>
<td>37.0%</td>
<td>7.3</td>
<td>15,285</td>
<td>27.1%</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>5,087</td>
<td>5,462</td>
<td>44.8%</td>
<td>6,448</td>
<td>0.2%</td>
<td>4,604</td>
<td>42.2%</td>
<td>4.3</td>
<td>3,349</td>
<td>51.9%</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>6,186</td>
<td>9,370</td>
<td>56.3%</td>
<td>10,767</td>
<td>0.4%</td>
<td>9,664</td>
<td>38.7%</td>
<td>3.8</td>
<td>6,431</td>
<td>59.7%</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>3,148</td>
<td>3,557</td>
<td>53.4%</td>
<td>4,525</td>
<td>0.6%</td>
<td>4,378</td>
<td>37.5%</td>
<td>9.1</td>
<td>3,239</td>
<td>71.6%</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>6,033</td>
<td>6,614</td>
<td>53.2%</td>
<td>8,698</td>
<td>1.4%</td>
<td>10,480</td>
<td>31.5%</td>
<td>4.7</td>
<td>6,716</td>
<td>77.2%</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>4,266</td>
<td>7,447</td>
<td>51.3%</td>
<td>7,322</td>
<td>4.5%</td>
<td>6,243</td>
<td>31.6%</td>
<td>4.6</td>
<td>7,858</td>
<td>107.3%</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>1,467</td>
<td>2,493</td>
<td>54.9%</td>
<td>2,704</td>
<td>19.2%</td>
<td>2,032</td>
<td>31.9%</td>
<td>3.0</td>
<td>4,414</td>
<td>163.2%</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>1,344</td>
<td>430</td>
<td>63.9%</td>
<td>1,520</td>
<td>100.0%</td>
<td>966</td>
<td>27.4%</td>
<td>3.8</td>
<td>2,180</td>
<td>143.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52,423</strong></td>
<td><strong>104,557</strong></td>
<td><strong>52.1%</strong></td>
<td><strong>98,557</strong></td>
<td><strong>2.6%</strong></td>
<td><strong>47,430</strong></td>
<td><strong>36.4%</strong></td>
<td><strong>6.2</strong></td>
<td><strong>49,472</strong></td>
<td><strong>50.2%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>Average Maturity Years</th>
<th>RWA £m</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>23,814</td>
<td>66,890</td>
<td>49.0%</td>
<td>54,960</td>
<td>0.1%</td>
<td>8,096</td>
<td>36.2%</td>
<td>7.5</td>
<td>12,380</td>
<td>22.6%</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>5,693</td>
<td>8,006</td>
<td>46.5%</td>
<td>9,059</td>
<td>0.2%</td>
<td>4,066</td>
<td>41.2%</td>
<td>5.0</td>
<td>4,325</td>
<td>47.7%</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>7,061</td>
<td>9,488</td>
<td>49.3%</td>
<td>11,350</td>
<td>0.4%</td>
<td>11,212</td>
<td>42.1%</td>
<td>3.5</td>
<td>7,143</td>
<td>62.9%</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>3,718</td>
<td>4,095</td>
<td>51.7%</td>
<td>5,451</td>
<td>0.6%</td>
<td>6,359</td>
<td>37.2%</td>
<td>5.8</td>
<td>3,786</td>
<td>69.5%</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>8,249</td>
<td>8,784</td>
<td>39.0%</td>
<td>11,243</td>
<td>1.4%</td>
<td>23,408</td>
<td>31.9%</td>
<td>4.0</td>
<td>8,852</td>
<td>78.7%</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>5,535</td>
<td>7,963</td>
<td>43.0%</td>
<td>9,017</td>
<td>4.4%</td>
<td>62,251</td>
<td>32.0%</td>
<td>3.9</td>
<td>9,437</td>
<td>104.7%</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>1,576</td>
<td>2,137</td>
<td>44.5%</td>
<td>2,379</td>
<td>20.4%</td>
<td>3,598</td>
<td>33.9%</td>
<td>3.4</td>
<td>3,795</td>
<td>159.6%</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>1,312</td>
<td>330</td>
<td>54.2%</td>
<td>1,518</td>
<td>100.0%</td>
<td>1,887</td>
<td>35.3%</td>
<td>4.5</td>
<td>1,686</td>
<td>111.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56,958</strong></td>
<td><strong>107,693</strong></td>
<td><strong>47.0%</strong></td>
<td><strong>104,977</strong></td>
<td><strong>2.6%</strong></td>
<td><strong>120,877</strong></td>
<td><strong>36.4%</strong></td>
<td><strong>6.0</strong></td>
<td><strong>51,404</strong></td>
<td><strong>49.0%</strong></td>
</tr>
</tbody>
</table>

The exposure weighted average risk weight associated with IRB exposures to corporates increased 1.2% to 50.2%. This was primarily due to an increase in the RWA density within lower default band, partially offset by corporate loans reductions within the 0.75 < 10.00 default bands as well as the regulatory deconsolidation of BAGL.

The decrease in number of obligors is primarily driven by the regulatory deconsolidation of BAGL.
### Analysis of credit risk

#### Table 46: CR6 Credit risk exposures by exposure class and PD range for corporate of which: SMEs

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>Average Maturity Years</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>3,806</td>
<td>1,068</td>
<td>58.6%</td>
<td>4,415</td>
<td>0.1%</td>
<td>5,440</td>
<td>24.5%</td>
<td>11.8</td>
<td>1,300</td>
<td>29.5%</td>
<td>1</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>1,076</td>
<td>309</td>
<td>40.5%</td>
<td>1,194</td>
<td>0.2%</td>
<td>3,496</td>
<td>34.0%</td>
<td>10.4</td>
<td>457</td>
<td>38.2%</td>
<td>1</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>1,932</td>
<td>512</td>
<td>54.2%</td>
<td>2,163</td>
<td>0.4%</td>
<td>7,562</td>
<td>32.1%</td>
<td>6.3</td>
<td>915</td>
<td>42.3%</td>
<td>2</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>1,151</td>
<td>281</td>
<td>47.2%</td>
<td>1,248</td>
<td>0.6%</td>
<td>3,321</td>
<td>32.6%</td>
<td>5.5</td>
<td>627</td>
<td>50.2%</td>
<td>3</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>2,774</td>
<td>664</td>
<td>47.8%</td>
<td>3,066</td>
<td>1.4%</td>
<td>7,334</td>
<td>30.8%</td>
<td>4.8</td>
<td>1,805</td>
<td>58.9%</td>
<td>13</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>2,090</td>
<td>469</td>
<td>61.5%</td>
<td>2,328</td>
<td>4.6%</td>
<td>4,488</td>
<td>32.3%</td>
<td>7.9</td>
<td>2,083</td>
<td>89.5%</td>
<td>35</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>721</td>
<td>82</td>
<td>51.2%</td>
<td>751</td>
<td>24.4%</td>
<td>1,586</td>
<td>33.5%</td>
<td>4.3</td>
<td>993</td>
<td>132.2%</td>
<td>67</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>873</td>
<td>48</td>
<td>59.6%</td>
<td>858</td>
<td>100.0%</td>
<td>695</td>
<td>20.8%</td>
<td>4.6</td>
<td>1,200</td>
<td>139.9%</td>
<td>101</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14,423</td>
<td>3,433</td>
<td>53.4%</td>
<td>16,023</td>
<td>7.6%</td>
<td>33,922</td>
<td>29.4%</td>
<td>7.8</td>
<td>9,380</td>
<td>58.5%</td>
<td>223 (257)</td>
</tr>
</tbody>
</table>

As at 31 December 2017

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>Average Maturity Years</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>4,419</td>
<td>1,202</td>
<td>50.0%</td>
<td>4,989</td>
<td>0.1%</td>
<td>4,338</td>
<td>22.9%</td>
<td>14.1</td>
<td>862</td>
<td>17.3%</td>
<td>1</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>1,368</td>
<td>318</td>
<td>48.2%</td>
<td>1,488</td>
<td>0.2%</td>
<td>2,812</td>
<td>33.0%</td>
<td>15.5</td>
<td>558</td>
<td>37.5%</td>
<td>1</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>1,900</td>
<td>564</td>
<td>53.0%</td>
<td>2,112</td>
<td>0.4%</td>
<td>8,736</td>
<td>33.8%</td>
<td>5.8</td>
<td>858</td>
<td>40.6%</td>
<td>3</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>1,280</td>
<td>314</td>
<td>56.0%</td>
<td>1,436</td>
<td>0.6%</td>
<td>5,073</td>
<td>32.1%</td>
<td>5.4</td>
<td>678</td>
<td>47.2%</td>
<td>3</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>3,437</td>
<td>696</td>
<td>50.5%</td>
<td>3,746</td>
<td>1.4%</td>
<td>17,372</td>
<td>31.7%</td>
<td>5.3</td>
<td>2,265</td>
<td>60.5%</td>
<td>17</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>2,736</td>
<td>624</td>
<td>36.2%</td>
<td>3,009</td>
<td>4.4%</td>
<td>58,125</td>
<td>34.4%</td>
<td>4.9</td>
<td>2,627</td>
<td>87.3%</td>
<td>45</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>1,054</td>
<td>136</td>
<td>49.6%</td>
<td>917</td>
<td>24.4%</td>
<td>2,990</td>
<td>35.4%</td>
<td>5.4</td>
<td>1,229</td>
<td>134.1%</td>
<td>85</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>549</td>
<td>52</td>
<td>14.0%</td>
<td>556</td>
<td>100.0%</td>
<td>1,594</td>
<td>27.3%</td>
<td>3.6</td>
<td>791</td>
<td>142.3%</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16,743</td>
<td>3,906</td>
<td>46.5%</td>
<td>18,253</td>
<td>5.4%</td>
<td>101,040</td>
<td>30.2%</td>
<td>8.3</td>
<td>9,868</td>
<td>54.1%</td>
<td>266 (218)</td>
</tr>
</tbody>
</table>

Movements are consistent with Table 45
### Analysis of credit risk

**Table 47: CR10 Corporate exposures subject to the slotting approach**

Slotting, also known as specialised lending, is an approach that is applied to financing of individual projects where the repayment is highly dependent on the performance of the underlying pool or collateral. It uses a standard set of rules for the calculation of RWAs, based upon an assessment of factors such as the financial strength of the counterparty. The requirements for the application of the Slotting approach are detailed in CRR article 153.

<table>
<thead>
<tr>
<th>Regulatory categories</th>
<th>Remaining maturity</th>
<th>On-balance sheet amount £m</th>
<th>Off-balance sheet amount £m</th>
<th>Risk weight %</th>
<th>Exposure amount £m</th>
<th>RWA £m</th>
<th>Expected losses £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 1 Strong</td>
<td>Less than 2.5 years</td>
<td>1,566</td>
<td>721</td>
<td>50%</td>
<td>2,020</td>
<td>1,010</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>2,050</td>
<td>495</td>
<td>70%</td>
<td>2,373</td>
<td>1,662</td>
<td>9</td>
</tr>
<tr>
<td>Category 2 Good</td>
<td>Less than 2.5 years</td>
<td>1,281</td>
<td>208</td>
<td>70%</td>
<td>1,418</td>
<td>992</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>557</td>
<td>91</td>
<td>90%</td>
<td>639</td>
<td>575</td>
<td>9</td>
</tr>
<tr>
<td>Category 3 Satisfactory</td>
<td>Less than 2.5 years</td>
<td>53</td>
<td>17</td>
<td>115%</td>
<td>67</td>
<td>77</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>203</td>
<td>2</td>
<td>115%</td>
<td>205</td>
<td>235</td>
<td>6</td>
</tr>
<tr>
<td>Category 4 Weak</td>
<td>Less than 2.5 years</td>
<td>40</td>
<td>–</td>
<td>250%</td>
<td>40</td>
<td>99</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>28</td>
<td>–</td>
<td>250%</td>
<td>28</td>
<td>71</td>
<td>2</td>
</tr>
<tr>
<td>Category 5 Default</td>
<td>Less than 2.5 years</td>
<td>303</td>
<td>6</td>
<td>–</td>
<td>248</td>
<td>–</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>52</td>
<td>7</td>
<td>–</td>
<td>54</td>
<td>–</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Less than 2.5 years</td>
<td>3,243</td>
<td>952</td>
<td></td>
<td>3,793</td>
<td>2,178</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>2,890</td>
<td>595</td>
<td></td>
<td>3,299</td>
<td>2,543</td>
<td>54</td>
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<tr>
<td><strong>As at 31 Deceber 2017</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 1 Strong</td>
<td>Less than 2.5 years</td>
<td>1,312</td>
<td>452</td>
<td>50%</td>
<td>1,538</td>
<td>769</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>2,124</td>
<td>369</td>
<td>70%</td>
<td>2,361</td>
<td>1,653</td>
<td>9</td>
</tr>
<tr>
<td>Category 2 Good</td>
<td>Less than 2.5 years</td>
<td>789</td>
<td>142</td>
<td>70%</td>
<td>855</td>
<td>598</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>536</td>
<td>249</td>
<td>90%</td>
<td>698</td>
<td>628</td>
<td>6</td>
</tr>
<tr>
<td>Category 3 Satisfactory</td>
<td>Less than 2.5 years</td>
<td>168</td>
<td>9</td>
<td>115%</td>
<td>171</td>
<td>196</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>222</td>
<td>2</td>
<td>115%</td>
<td>222</td>
<td>255</td>
<td>6</td>
</tr>
<tr>
<td>Category 4 Weak</td>
<td>Less than 2.5 years</td>
<td>13</td>
<td>–</td>
<td>250%</td>
<td>13</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>31</td>
<td>–</td>
<td>250%</td>
<td>31</td>
<td>77</td>
<td>2</td>
</tr>
<tr>
<td>Category 5 Default</td>
<td>Less than 2.5 years</td>
<td>205</td>
<td>14</td>
<td>0%</td>
<td>196</td>
<td>–</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>120</td>
<td>5</td>
<td>0%</td>
<td>122</td>
<td>–</td>
<td>61</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Less than 2.5 years</td>
<td>2,487</td>
<td>617</td>
<td></td>
<td>2,773</td>
<td>1,595</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>3,033</td>
<td>625</td>
<td></td>
<td>3,434</td>
<td>2,613</td>
<td>84</td>
</tr>
</tbody>
</table>

The RWAs subject to specialised lending for IRB approach remained broadly stable at £4.7bn (2017: £4.2bn)
## Analysis of credit risk

### Table 47a: CR10 – Corporate exposures subject to specialised lending IRB for significant subsidiaries

**Barclays Bank PLC**

<table>
<thead>
<tr>
<th>Regulatory categories</th>
<th>Remaining maturity</th>
<th>On-balance sheet amount £m</th>
<th>Off-balance sheet amount £m</th>
<th>Risk weight %</th>
<th>Exposure amount £m</th>
<th>RWA £m</th>
<th>Expected losses £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 1</td>
<td>Strong</td>
<td>Less than 2.5 years</td>
<td>1,254</td>
<td>660</td>
<td>50</td>
<td>1,677</td>
<td>839</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>1,696</td>
<td>450</td>
<td>70</td>
<td>1,992</td>
<td>1,395</td>
</tr>
<tr>
<td>Category 2</td>
<td>Good</td>
<td>Less than 2.5 years</td>
<td>1,147</td>
<td>168</td>
<td>70</td>
<td>1,258</td>
<td>881</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>325</td>
<td>91</td>
<td>90</td>
<td>405</td>
<td>365</td>
</tr>
<tr>
<td>Category 3</td>
<td>Satisfactory</td>
<td>Less than 2.5 years</td>
<td>325</td>
<td>17</td>
<td>115</td>
<td>165</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>165</td>
<td>2</td>
<td>115</td>
<td>167</td>
<td>192</td>
</tr>
<tr>
<td>Category 4</td>
<td>Weak</td>
<td>Less than 2.5 years</td>
<td>39</td>
<td>–</td>
<td>250</td>
<td>39</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>8</td>
<td>–</td>
<td>250</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>Category 5</td>
<td>Default</td>
<td>Less than 2.5 years</td>
<td>251</td>
<td>3</td>
<td>–</td>
<td>195</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>26</td>
<td>7</td>
<td>–</td>
<td>28</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>Less than 2.5 years</td>
<td>2,729</td>
<td>848</td>
<td></td>
<td>3,221</td>
<td>1,877</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>2,220</td>
<td>550</td>
<td></td>
<td>2,600</td>
<td>1,571</td>
</tr>
</tbody>
</table>

### Table 47b: CR10 – Corporate exposures subject to specialised lending IRB for significant subsidiaries

**Barclays Bank UK PLC**

<table>
<thead>
<tr>
<th>Regulatory categories</th>
<th>Remaining maturity</th>
<th>On-balance sheet amount £m</th>
<th>Off-balance sheet amount £m</th>
<th>Risk weight %</th>
<th>Exposure amount £m</th>
<th>RWA £m</th>
<th>Expected losses £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 1</td>
<td>Strong</td>
<td>Less than 2.5 years</td>
<td>123</td>
<td>30</td>
<td>50</td>
<td>133</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>290</td>
<td>–</td>
<td>70</td>
<td>290</td>
<td>204</td>
</tr>
<tr>
<td>Category 2</td>
<td>Good</td>
<td>Less than 2.5 years</td>
<td>133</td>
<td>17</td>
<td>70</td>
<td>137</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>233</td>
<td>–</td>
<td>90</td>
<td>234</td>
<td>211</td>
</tr>
<tr>
<td>Category 3</td>
<td>Satisfactory</td>
<td>Less than 2.5 years</td>
<td>15</td>
<td>–</td>
<td>115</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>38</td>
<td>–</td>
<td>115</td>
<td>38</td>
<td>43</td>
</tr>
<tr>
<td>Category 4</td>
<td>Weak</td>
<td>Less than 2.5 years</td>
<td>1</td>
<td>–</td>
<td>250</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>21</td>
<td>–</td>
<td>250</td>
<td>21</td>
<td>51</td>
</tr>
<tr>
<td>Category 5</td>
<td>Default</td>
<td>Less than 2.5 years</td>
<td>53</td>
<td>3</td>
<td>–</td>
<td>53</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>26</td>
<td>–</td>
<td>–</td>
<td>26</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>Less than 2.5 years</td>
<td>325</td>
<td>50</td>
<td></td>
<td>339</td>
<td>182</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>608</td>
<td>–</td>
<td></td>
<td>609</td>
<td>509</td>
</tr>
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</table>
## Analysis of credit risk

### Risk and capital position review

#### Table 48: CR6 Credit risk exposures by exposure class and PD range for retail SME

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>85</td>
<td>21</td>
<td>3264%</td>
<td>764</td>
<td>0.1%</td>
<td>367,276</td>
<td>51.2%</td>
<td>75</td>
<td>9.8%</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>135</td>
<td>51</td>
<td>482%</td>
<td>379</td>
<td>0.2%</td>
<td>120,768</td>
<td>47.3%</td>
<td>65</td>
<td>17.1%</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>456</td>
<td>183</td>
<td>219%</td>
<td>858</td>
<td>0.4%</td>
<td>203,216</td>
<td>43.2%</td>
<td>194</td>
<td>22.7%</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>452</td>
<td>170</td>
<td>145%</td>
<td>697</td>
<td>0.6%</td>
<td>120,392</td>
<td>37.5%</td>
<td>177</td>
<td>25.4%</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>1,759</td>
<td>588</td>
<td>123%</td>
<td>2,482</td>
<td>1.5%</td>
<td>307,428</td>
<td>36.4%</td>
<td>881</td>
<td>35.5%</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>1,353</td>
<td>377</td>
<td>137%</td>
<td>1,872</td>
<td>4.8%</td>
<td>241,945</td>
<td>41.3%</td>
<td>952</td>
<td>50.9%</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>844</td>
<td>71</td>
<td>231%</td>
<td>1,009</td>
<td>27.2%</td>
<td>107,118</td>
<td>34.3%</td>
<td>620</td>
<td>61.5%</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>805</td>
<td>40</td>
<td>81%</td>
<td>838</td>
<td>100.0%</td>
<td>33,564</td>
<td>19.4%</td>
<td>967</td>
<td>115.4%</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5,889</td>
<td>1,501</td>
<td>201%</td>
<td>8,899</td>
<td>14.0%</td>
<td>1,501,797</td>
<td>38.1%</td>
<td>3,931</td>
<td>44.2%</td>
<td>226 (75)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>45</td>
<td>37</td>
<td>1302%</td>
<td>738</td>
<td>0.1%</td>
<td>467,205</td>
<td>52.2%</td>
<td>71</td>
<td>9.6%</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>128</td>
<td>65</td>
<td>363%</td>
<td>369</td>
<td>0.2%</td>
<td>120,361</td>
<td>44.4%</td>
<td>58</td>
<td>15.7%</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>465</td>
<td>217</td>
<td>172%</td>
<td>863</td>
<td>0.4%</td>
<td>227,859</td>
<td>39.4%</td>
<td>171</td>
<td>19.8%</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>490</td>
<td>188</td>
<td>126%</td>
<td>734</td>
<td>0.6%</td>
<td>125,325</td>
<td>33.8%</td>
<td>165</td>
<td>22.5%</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>1,926</td>
<td>631</td>
<td>118%</td>
<td>2,704</td>
<td>1.5%</td>
<td>371,796</td>
<td>35.3%</td>
<td>920</td>
<td>34.0%</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>1,521</td>
<td>382</td>
<td>124%</td>
<td>2,036</td>
<td>4.8%</td>
<td>285,568</td>
<td>40.2%</td>
<td>1,016</td>
<td>49.9%</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>918</td>
<td>68</td>
<td>244%</td>
<td>1,095</td>
<td>26.7%</td>
<td>118,064</td>
<td>34.6%</td>
<td>692</td>
<td>63.2%</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>654</td>
<td>33</td>
<td>80%</td>
<td>682</td>
<td>100.0%</td>
<td>46,313</td>
<td>32.3%</td>
<td>788</td>
<td>115.5%</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6,147</td>
<td>1,621</td>
<td>174%</td>
<td>9,221</td>
<td>12.2%</td>
<td>1,762,491</td>
<td>37.4%</td>
<td>3,881</td>
<td>42.1%</td>
<td>283 (98)</td>
<td></td>
</tr>
</tbody>
</table>

The exposure weighted average risk weight associated with advanced IRB exposure to retail SMEs remained broadly stable at 44.2%.

The decrease in number of obligors is primarily driven by the regulatory deconsolidation of BAGL.
### Analysis of credit risk

#### Risk and capital position review

Table 49: CR6 Credit risk exposures by exposure class and PD range for secured retail

<table>
<thead>
<tr>
<th>Exposure Range</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>26,419</td>
<td>1,574</td>
<td>99.2%</td>
<td>27,782</td>
<td>0.1%</td>
<td>146,091</td>
<td>12.1%</td>
<td>1,269</td>
<td>4.6%</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>10,998</td>
<td>1,062</td>
<td>97.0%</td>
<td>11,695</td>
<td>0.2%</td>
<td>99,057</td>
<td>12.6%</td>
<td>834</td>
<td>7.1%</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>28,952</td>
<td>1,906</td>
<td>97.8%</td>
<td>30,165</td>
<td>0.4%</td>
<td>204,514</td>
<td>8.7%</td>
<td>1,805</td>
<td>6.0%</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>28,415</td>
<td>1,163</td>
<td>98.8%</td>
<td>29,216</td>
<td>0.6%</td>
<td>201,827</td>
<td>9.1%</td>
<td>2,619</td>
<td>9.0%</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>35,112</td>
<td>1,522</td>
<td>99.6%</td>
<td>36,473</td>
<td>1.3%</td>
<td>237,345</td>
<td>12.5%</td>
<td>7,257</td>
<td>19.9%</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>6,886</td>
<td>153</td>
<td>100.2%</td>
<td>7,050</td>
<td>4.8%</td>
<td>45,113</td>
<td>11.1%</td>
<td>2,665</td>
<td>37.8%</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>4,043</td>
<td>92</td>
<td>100.3%</td>
<td>4,148</td>
<td>27.9%</td>
<td>28,939</td>
<td>9.8%</td>
<td>2,381</td>
<td>57.4%</td>
<td>138</td>
<td></td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>1,861</td>
<td>14</td>
<td>99.6%</td>
<td>1,867</td>
<td>100.0%</td>
<td>16,736</td>
<td>18.1%</td>
<td>1,374</td>
<td>73.6%</td>
<td>303</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>142,686</strong></td>
<td><strong>7,486</strong></td>
<td><strong>98.8%</strong></td>
<td><strong>148,396</strong></td>
<td><strong>2.8%</strong></td>
<td><strong>979,622</strong></td>
<td><strong>10.9%</strong></td>
<td><strong>20,204</strong></td>
<td><strong>13.6%</strong></td>
<td><strong>596 (390)</strong></td>
<td></td>
</tr>
</tbody>
</table>

As at 31 December 2017

<table>
<thead>
<tr>
<th>Exposure Range</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>29,236</td>
<td>2,345</td>
<td>98.8%</td>
<td>31,233</td>
<td>0.1%</td>
<td>184,624</td>
<td>11.7%</td>
<td>1,431</td>
<td>4.6%</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>18,821</td>
<td>1,772</td>
<td>90.9%</td>
<td>19,948</td>
<td>0.2%</td>
<td>151,452</td>
<td>9.5%</td>
<td>1,047</td>
<td>5.2%</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>35,280</td>
<td>3,305</td>
<td>90.9%</td>
<td>37,663</td>
<td>0.4%</td>
<td>260,722</td>
<td>10.0%</td>
<td>2,602</td>
<td>6.9%</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>20,453</td>
<td>986</td>
<td>82.9%</td>
<td>21,147</td>
<td>0.6%</td>
<td>146,938</td>
<td>10.0%</td>
<td>2,085</td>
<td>9.9%</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>22,892</td>
<td>1,132</td>
<td>74.8%</td>
<td>23,851</td>
<td>1.2%</td>
<td>161,471</td>
<td>12.5%</td>
<td>4,601</td>
<td>19.3%</td>
<td>42</td>
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<tr>
<td>2.50 to &lt; 10.00</td>
<td>8,656</td>
<td>211</td>
<td>85.4%</td>
<td>8,900</td>
<td>4.6%</td>
<td>48,759</td>
<td>14.4%</td>
<td>4,217</td>
<td>47.4%</td>
<td>63</td>
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<tr>
<td>10.00 to &lt; 100.00</td>
<td>3,912</td>
<td>112</td>
<td>98.4%</td>
<td>4,031</td>
<td>30.4%</td>
<td>29,279</td>
<td>10.1%</td>
<td>2,431</td>
<td>60.3%</td>
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<tr>
<td>100.00 (Default)</td>
<td>1,992</td>
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<td>41.3%</td>
<td>1,991</td>
<td>100.0%</td>
<td>17,337</td>
<td>18.9%</td>
<td>1,619</td>
<td>81.3%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>141,243</strong></td>
<td><strong>9,869</strong></td>
<td><strong>88.6%</strong></td>
<td><strong>148,764</strong></td>
<td><strong>2.9%</strong></td>
<td><strong>1,000,582</strong></td>
<td><strong>11.1%</strong></td>
<td><strong>20,033</strong></td>
<td><strong>13.5%</strong></td>
<td><strong>703 (415)</strong></td>
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</tr>
</tbody>
</table>

The exposure weighted average risk weight associated with advanced IRB exposure to retail secured by real estate collateral remained broadly stable at 13.6%.

The decrease in number of obligors is primarily driven by the regulatory deconsolidation of BAGL.
## Risk and capital position review

### Analysis of credit risk

#### Table 50: CR6 Credit risk exposures by exposure class and PD range for revolving retail

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>992</td>
<td>21,896</td>
<td>43.8%</td>
<td>11,338</td>
<td>0.1%</td>
<td>10,081,695</td>
<td>74.8%</td>
<td>418</td>
<td>3.7%</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>814</td>
<td>7,212</td>
<td>13.8%</td>
<td>3,548</td>
<td>0.2%</td>
<td>2,569,062</td>
<td>76.4%</td>
<td>310</td>
<td>8.7%</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>1,784</td>
<td>9,102</td>
<td>13.6%</td>
<td>5,261</td>
<td>0.4%</td>
<td>3,430,949</td>
<td>76.8%</td>
<td>805</td>
<td>15.3%</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>1,426</td>
<td>4,628</td>
<td>9.4%</td>
<td>3,021</td>
<td>0.6%</td>
<td>1,376,738</td>
<td>77.3%</td>
<td>792</td>
<td>26.2%</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>5,163</td>
<td>7,903</td>
<td>6.4%</td>
<td>8,126</td>
<td>1.4%</td>
<td>2,545,788</td>
<td>77.7%</td>
<td>3,519</td>
<td>43.3%</td>
<td>104</td>
<td></td>
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<tr>
<td>2.50 to &lt; 10.00</td>
<td>5,518</td>
<td>2,839</td>
<td>4.0%</td>
<td>7,305</td>
<td>5.0%</td>
<td>1,916,649</td>
<td>76.3%</td>
<td>7,152</td>
<td>97.9%</td>
<td>292</td>
<td></td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>1,827</td>
<td>229</td>
<td>12.0%</td>
<td>2,122</td>
<td>22.2%</td>
<td>550,443</td>
<td>75.5%</td>
<td>4,054</td>
<td>191.0%</td>
<td>367</td>
<td></td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>1,199</td>
<td>209</td>
<td>5.3%</td>
<td>1,199</td>
<td>100.0%</td>
<td>481,347</td>
<td>78.7%</td>
<td>2,817</td>
<td>234.8%</td>
<td>728</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18,723</td>
<td>54,018</td>
<td>21.1%</td>
<td>41,920</td>
<td>5.3%</td>
<td>22,952,671</td>
<td>76.3%</td>
<td>19,867</td>
<td>47.4%</td>
<td>1,544</td>
<td>(2,274)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>1,017</td>
<td>22,675</td>
<td>52.0%</td>
<td>13,949</td>
<td>0.1%</td>
<td>10,873,580</td>
<td>78.5%</td>
<td>407</td>
<td>3.4%</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>800</td>
<td>6,547</td>
<td>16.9%</td>
<td>3,226</td>
<td>0.2%</td>
<td>1,883,169</td>
<td>77.1%</td>
<td>284</td>
<td>8.8%</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>1,667</td>
<td>8,284</td>
<td>12.4%</td>
<td>4,563</td>
<td>0.4%</td>
<td>2,264,756</td>
<td>76.8%</td>
<td>660</td>
<td>15.5%</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>1,497</td>
<td>4,457</td>
<td>8.2%</td>
<td>2,955</td>
<td>0.6%</td>
<td>1,209,685</td>
<td>77.2%</td>
<td>701</td>
<td>23.7%</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>5,247</td>
<td>7,639</td>
<td>9.4%</td>
<td>8,281</td>
<td>1.4%</td>
<td>2,706,695</td>
<td>77.2%</td>
<td>3,593</td>
<td>43.4%</td>
<td>106</td>
<td></td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>5,756</td>
<td>2,861</td>
<td>33.0%</td>
<td>7,567</td>
<td>5.0%</td>
<td>1,745,275</td>
<td>75.6%</td>
<td>7,347</td>
<td>97.1%</td>
<td>301</td>
<td></td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>1,897</td>
<td>216</td>
<td>10.1%</td>
<td>2,195</td>
<td>22.8%</td>
<td>529,816</td>
<td>75.3%</td>
<td>4,191</td>
<td>190.9%</td>
<td>389</td>
<td></td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>1,220</td>
<td>218</td>
<td>0.0%</td>
<td>1,220</td>
<td>100.0%</td>
<td>341,885</td>
<td>77.8%</td>
<td>2,763</td>
<td>226.6%</td>
<td>761</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19,101</td>
<td>52,897</td>
<td>24.0%</td>
<td>43,956</td>
<td>5.2%</td>
<td>21,554,861</td>
<td>77.2%</td>
<td>20,009</td>
<td>45.5%</td>
<td>1,600</td>
<td>(1,234)</td>
</tr>
</tbody>
</table>

The exposure weighted average risk weight associated with advanced IRB exposures to qualifying revolving retail, mainly comprising credit cards and overdrafts, increased by 1.9% to 47.4%. This was primarily driven by a decrease in exposures in the highest quality default band.

Value adjustments and provisions increased £1.0bn to £2.3bn primarily driven by the implementation of IFRS 9.
### Analysis of credit risk

#### Table 51: CR6 Credit risk exposures by exposure class and PD range for other retail exposures

<table>
<thead>
<tr>
<th>Exposure Range</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Value Adjustment and Provisions £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>26</td>
<td>3</td>
<td>82.2%</td>
<td>26</td>
<td>0.0%</td>
<td>126</td>
<td>4.0%</td>
<td>19</td>
<td>72.8%</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>24</td>
<td>–</td>
<td>99.7%</td>
<td>24</td>
<td>0.2%</td>
<td>2,879</td>
<td>89.8%</td>
<td>9</td>
<td>38.8%</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>456</td>
<td>–</td>
<td>76.6%</td>
<td>456</td>
<td>0.4%</td>
<td>56,177</td>
<td>89.9%</td>
<td>261</td>
<td>57.2%</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>846</td>
<td>–</td>
<td>100.0%</td>
<td>846</td>
<td>0.6%</td>
<td>101,615</td>
<td>90.3%</td>
<td>646</td>
<td>76.4%</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>3,312</td>
<td>–</td>
<td>72.3%</td>
<td>3,313</td>
<td>1.4%</td>
<td>398,085</td>
<td>90.6%</td>
<td>3,401</td>
<td>102.7%</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>1,069</td>
<td>–</td>
<td>100.0%</td>
<td>1,069</td>
<td>4.1%</td>
<td>138,390</td>
<td>89.5%</td>
<td>1,367</td>
<td>127.9%</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>200</td>
<td>–</td>
<td>100.0%</td>
<td>200</td>
<td>45.5%</td>
<td>28,282</td>
<td>87.7%</td>
<td>357</td>
<td>178.8%</td>
<td>89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>363</td>
<td>–</td>
<td>100.0%</td>
<td>363</td>
<td>100.0%</td>
<td>55,902</td>
<td>79.6%</td>
<td>130</td>
<td>35.8%</td>
<td>330</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,296</td>
<td>3</td>
<td>86.7%</td>
<td>6,297</td>
<td>8.7%</td>
<td>781,456</td>
<td>89.2%</td>
<td>6,190</td>
<td>98.3%</td>
<td>514</td>
<td>(478)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exposure Range</th>
<th>Original on-balance sheet gross exposure £m</th>
<th>Value Adjustment and Provisions £m</th>
<th>Off-balance sheet exposures pre CCF £m</th>
<th>Average CCF %</th>
<th>EAD post CRM and post CCF £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>EL £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>3</td>
<td>1</td>
<td>112.9%</td>
<td>5</td>
<td>0.1%</td>
<td>617</td>
<td>61.7%</td>
<td>1</td>
<td>13.3%</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>29</td>
<td>10</td>
<td>117.5%</td>
<td>54</td>
<td>0.2%</td>
<td>2,904</td>
<td>46.1%</td>
<td>11</td>
<td>19.7%</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>425</td>
<td>1</td>
<td>93.7%</td>
<td>427</td>
<td>0.4%</td>
<td>53,787</td>
<td>88.1%</td>
<td>239</td>
<td>56.0%</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>826</td>
<td>–</td>
<td>99.5%</td>
<td>826</td>
<td>0.6%</td>
<td>98,315</td>
<td>88.6%</td>
<td>618</td>
<td>74.9%</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>3,416</td>
<td>1</td>
<td>95.6%</td>
<td>3,419</td>
<td>1.4%</td>
<td>387,593</td>
<td>87.8%</td>
<td>3,403</td>
<td>99.6%</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>1,534</td>
<td>6</td>
<td>57.8%</td>
<td>1,542</td>
<td>4.3%</td>
<td>144,344</td>
<td>76.0%</td>
<td>1,695</td>
<td>109.9%</td>
<td>53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>323</td>
<td>–</td>
<td>97.6%</td>
<td>323</td>
<td>37.4%</td>
<td>29,857</td>
<td>73.2%</td>
<td>485</td>
<td>150.3%</td>
<td>102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>355</td>
<td>–</td>
<td>1.0%</td>
<td>353</td>
<td>100.0%</td>
<td>46,560</td>
<td>74.3%</td>
<td>187</td>
<td>52.8%</td>
<td>256</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6,911</td>
<td>19</td>
<td>73.4%</td>
<td>6,949</td>
<td>8.6%</td>
<td>763,977</td>
<td>83.6%</td>
<td>6,639</td>
<td>95.5%</td>
<td>462</td>
<td>(393)</td>
<td></td>
</tr>
</tbody>
</table>

The exposure weighted average risk weight associated with advanced IRB exposures to other retail, primarily comprised of unsecured personal loans, increased by 2.8% to 98.3% primarily due to the regulatory deconsolidation of BAGL.
## Analysis of credit risk

### Table 52: CR1-A – Credit quality of exposures by exposure class and instrument

This table provides a comprehensive picture of the credit quality of the bank’s on balance sheet and off balance sheet exposures.

<table>
<thead>
<tr>
<th>Barclays Group</th>
<th>Defaulted exposures £m</th>
<th>Non-defaulted exposure £m</th>
<th>Specific credit risk adjustment £m</th>
<th>General credit risk adjustment £m</th>
<th>Credit risk adjustment charges in the period £m</th>
<th>Net values £m</th>
<th>Accumulated write-offs £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Central governments or central banks</td>
<td>–</td>
<td>197,935</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>197,935</td>
<td>–</td>
</tr>
<tr>
<td>2 Regional governments or local authorities</td>
<td>–</td>
<td>950</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>950</td>
<td>–</td>
</tr>
<tr>
<td>3 Multilateral development banks</td>
<td>–</td>
<td>4,091</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>4,091</td>
<td>–</td>
</tr>
<tr>
<td>4 Institutions</td>
<td>13</td>
<td>5,900</td>
<td>3</td>
<td>–</td>
<td>3</td>
<td>5,910</td>
<td>–</td>
</tr>
<tr>
<td>5 International organisations</td>
<td>–</td>
<td>920</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>920</td>
<td>–</td>
</tr>
<tr>
<td>6 Corporates</td>
<td>6</td>
<td>5,047</td>
<td>2</td>
<td>–</td>
<td>(2)</td>
<td>5,051</td>
<td>–</td>
</tr>
<tr>
<td>7 Of which: SMEs</td>
<td>1,666</td>
<td>60,792</td>
<td>385</td>
<td>–</td>
<td>128</td>
<td>62,072</td>
<td>36</td>
</tr>
<tr>
<td>8 Retail</td>
<td>2,174</td>
<td>108,402</td>
<td>3,038</td>
<td>–</td>
<td>1,283</td>
<td>107,538</td>
<td>937</td>
</tr>
<tr>
<td>9 Of which: SMEs</td>
<td>–</td>
<td>271</td>
<td>4</td>
<td>–</td>
<td>4</td>
<td>268</td>
<td>–</td>
</tr>
<tr>
<td>10 Of which: Off-balance-sheet exposures</td>
<td>4,625</td>
<td>398,928</td>
<td>3,432</td>
<td>–</td>
<td>1,227</td>
<td>400,120</td>
<td>973</td>
</tr>
<tr>
<td>11 Total</td>
<td>11,396</td>
<td>897,729</td>
<td>7,356</td>
<td>–</td>
<td>2,363</td>
<td>901,769</td>
<td>1,891</td>
</tr>
<tr>
<td>12 Of which: Loans</td>
<td>10,170</td>
<td>319,295</td>
<td>6,571</td>
<td>–</td>
<td>2,533</td>
<td>322,894</td>
<td>1,883</td>
</tr>
<tr>
<td>13 Of which: Debt securities</td>
<td>–</td>
<td>49,733</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>49,733</td>
<td>8</td>
</tr>
<tr>
<td>14 Of which: Other exposures</td>
<td>20</td>
<td>199,937</td>
<td>12</td>
<td>–</td>
<td>(111)</td>
<td>199,945</td>
<td>–</td>
</tr>
<tr>
<td>15 Total standardised approach</td>
<td>4,625</td>
<td>398,928</td>
<td>3,432</td>
<td>–</td>
<td>1,227</td>
<td>400,120</td>
<td>973</td>
</tr>
</tbody>
</table>

The table provides a detailed analysis of the credit quality of exposures, including defaulted and non-defaulted exposures, specific and general credit risk adjustments, credit risk adjustment charges in the period, net values, and accumulated write-offs. This information is crucial for understanding the bank’s capital position and risk management strategies.
## Analysis of credit risk

**Table 52: CR1-A – Credit quality of exposures by exposure class and instrument – continued**

<table>
<thead>
<tr>
<th>Barclays Group</th>
<th>As at 31 December 2017</th>
<th>Defaulted exposures £m</th>
<th>Non-defaulted exposure £m</th>
<th>Specific credit risk adjustment £m</th>
<th>General credit risk adjustment £m</th>
<th>Credit risk adjustment charges in the period £m</th>
<th>Net values £m</th>
<th>Accumulated write-offs £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Central governments or central banks</td>
<td>89,273</td>
<td>89,273</td>
<td>89,273</td>
<td>89,273</td>
<td>89,273</td>
<td>89,273</td>
<td>89,273</td>
<td></td>
</tr>
<tr>
<td>2 Institutions</td>
<td>27,057</td>
<td>27,057</td>
<td>27,057</td>
<td>27,057</td>
<td>27,057</td>
<td>27,057</td>
<td>27,057</td>
<td></td>
</tr>
<tr>
<td>3 Corporates</td>
<td>169,463</td>
<td>169,463</td>
<td>169,463</td>
<td>169,463</td>
<td>169,463</td>
<td>169,463</td>
<td>169,463</td>
<td></td>
</tr>
<tr>
<td>4 Of which Specialised lending</td>
<td>4,655</td>
<td>4,655</td>
<td>4,655</td>
<td>4,655</td>
<td>4,655</td>
<td>4,655</td>
<td>4,655</td>
<td></td>
</tr>
<tr>
<td>5 Of which SMEs</td>
<td>20,047</td>
<td>20,047</td>
<td>20,047</td>
<td>20,047</td>
<td>20,047</td>
<td>20,047</td>
<td>20,047</td>
<td></td>
</tr>
<tr>
<td>6 Retail</td>
<td>233,328</td>
<td>233,328</td>
<td>233,328</td>
<td>233,328</td>
<td>233,328</td>
<td>233,328</td>
<td>233,328</td>
<td></td>
</tr>
<tr>
<td>7 Secured by real estate property</td>
<td>149,114</td>
<td>149,114</td>
<td>149,114</td>
<td>149,114</td>
<td>149,114</td>
<td>149,114</td>
<td>149,114</td>
<td></td>
</tr>
<tr>
<td>8 SMEs</td>
<td>415</td>
<td>415</td>
<td>415</td>
<td>415</td>
<td>415</td>
<td>415</td>
<td>415</td>
<td></td>
</tr>
<tr>
<td>9 Non-SMEs</td>
<td>27,299</td>
<td>27,299</td>
<td>27,299</td>
<td>27,299</td>
<td>27,299</td>
<td>27,299</td>
<td>27,299</td>
<td></td>
</tr>
<tr>
<td>10 Qualifying revolving</td>
<td>70,560</td>
<td>70,560</td>
<td>70,560</td>
<td>70,560</td>
<td>70,560</td>
<td>70,560</td>
<td>70,560</td>
<td></td>
</tr>
<tr>
<td>11 Other retail</td>
<td>13,654</td>
<td>13,654</td>
<td>13,654</td>
<td>13,654</td>
<td>13,654</td>
<td>13,654</td>
<td>13,654</td>
<td></td>
</tr>
<tr>
<td>12 SMEs</td>
<td>7,669</td>
<td>7,669</td>
<td>7,669</td>
<td>7,669</td>
<td>7,669</td>
<td>7,669</td>
<td>7,669</td>
<td></td>
</tr>
<tr>
<td>15 Total IRB approach</td>
<td>519,122</td>
<td>519,122</td>
<td>519,122</td>
<td>519,122</td>
<td>519,122</td>
<td>519,122</td>
<td>519,122</td>
<td></td>
</tr>
<tr>
<td>16 Central governments or central banks</td>
<td>166,932</td>
<td>166,932</td>
<td>166,932</td>
<td>166,932</td>
<td>166,932</td>
<td>166,932</td>
<td>166,932</td>
<td></td>
</tr>
<tr>
<td>17 Regional governments or local authorities</td>
<td>666</td>
<td>666</td>
<td>666</td>
<td>666</td>
<td>666</td>
<td>666</td>
<td>666</td>
<td></td>
</tr>
<tr>
<td>18 Public sector entities</td>
<td>390</td>
<td>390</td>
<td>390</td>
<td>390</td>
<td>390</td>
<td>390</td>
<td>390</td>
<td></td>
</tr>
<tr>
<td>19 Multilateral development banks</td>
<td>3,863</td>
<td>3,863</td>
<td>3,863</td>
<td>3,863</td>
<td>3,863</td>
<td>3,863</td>
<td>3,863</td>
<td></td>
</tr>
<tr>
<td>20 International organisations</td>
<td>981</td>
<td>981</td>
<td>981</td>
<td>981</td>
<td>981</td>
<td>981</td>
<td>981</td>
<td></td>
</tr>
<tr>
<td>21 Institutions</td>
<td>5,099</td>
<td>5,099</td>
<td>5,099</td>
<td>5,099</td>
<td>5,099</td>
<td>5,099</td>
<td>5,099</td>
<td></td>
</tr>
<tr>
<td>22 Corporates</td>
<td>52,663</td>
<td>52,663</td>
<td>52,663</td>
<td>52,663</td>
<td>52,663</td>
<td>52,663</td>
<td>52,663</td>
<td></td>
</tr>
<tr>
<td>23 Of which: SMEs</td>
<td>5,782</td>
<td>5,782</td>
<td>5,782</td>
<td>5,782</td>
<td>5,782</td>
<td>5,782</td>
<td>5,782</td>
<td></td>
</tr>
<tr>
<td>24 Retail</td>
<td>105,938</td>
<td>105,938</td>
<td>105,938</td>
<td>105,938</td>
<td>105,938</td>
<td>105,938</td>
<td>105,938</td>
<td></td>
</tr>
<tr>
<td>26 Secured by mortgages on immovable property</td>
<td>8,924</td>
<td>8,924</td>
<td>8,924</td>
<td>8,924</td>
<td>8,924</td>
<td>8,924</td>
<td>8,924</td>
<td></td>
</tr>
<tr>
<td>27 Of which: SMEs</td>
<td>492</td>
<td>492</td>
<td>492</td>
<td>492</td>
<td>492</td>
<td>492</td>
<td>492</td>
<td></td>
</tr>
<tr>
<td>28 Exposures in default</td>
<td>1,371</td>
<td>1,371</td>
<td>1,371</td>
<td>1,371</td>
<td>1,371</td>
<td>1,371</td>
<td>1,371</td>
<td></td>
</tr>
<tr>
<td>29 Items associated with particularly high risk</td>
<td>1,814</td>
<td>1,814</td>
<td>1,814</td>
<td>1,814</td>
<td>1,814</td>
<td>1,814</td>
<td>1,814</td>
<td></td>
</tr>
<tr>
<td>30 Covered bonds</td>
<td>5,782</td>
<td>5,782</td>
<td>5,782</td>
<td>5,782</td>
<td>5,782</td>
<td>5,782</td>
<td>5,782</td>
<td></td>
</tr>
<tr>
<td>33 Equity exposures</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>34 Other exposures</td>
<td>4,284</td>
<td>4,284</td>
<td>4,284</td>
<td>4,284</td>
<td>4,284</td>
<td>4,284</td>
<td>4,284</td>
<td></td>
</tr>
<tr>
<td>35 Total standardised approach</td>
<td>353,097</td>
<td>353,097</td>
<td>353,097</td>
<td>353,097</td>
<td>353,097</td>
<td>353,097</td>
<td>353,097</td>
<td></td>
</tr>
<tr>
<td>36 Total</td>
<td>87,012</td>
<td>87,012</td>
<td>87,012</td>
<td>87,012</td>
<td>87,012</td>
<td>87,012</td>
<td>87,012</td>
<td></td>
</tr>
<tr>
<td>37 Of which: Loans</td>
<td>317,564</td>
<td>317,564</td>
<td>317,564</td>
<td>317,564</td>
<td>317,564</td>
<td>317,564</td>
<td>317,564</td>
<td></td>
</tr>
<tr>
<td>38 Of which: Debt securities</td>
<td>46,064</td>
<td>46,064</td>
<td>46,064</td>
<td>46,064</td>
<td>46,064</td>
<td>46,064</td>
<td>46,064</td>
<td></td>
</tr>
</tbody>
</table>

Non-defaulted exposures increased by £27.0bn to £897.7bn primarily driven by an increase in cash at central banks as the Group strengthened its liquidity position.

Specific credit risk adjustments and credit risk adjustment charges increased by £2.2bn and £2.4bn to £7.4bn and £2.4bn respectively, primarily driven by the implementation of IFRS9.
Risk and capital position review
Analysis of credit risk

Table 52a: CR1-A – Credit quality of exposures by exposure class and instrument for significant subsidiaries
Barclays Bank PLC

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Defaulted exposures £m</th>
<th>Non-defaulted exposure £m</th>
<th>Specific credit risk adjustment £m</th>
<th>General credit risk adjustment £m</th>
<th>Credit risk adjustment charges in the period £m</th>
<th>Net values £m</th>
<th>Accumulated write-offs £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Central governments or central banks</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2 Institutions</td>
<td>136</td>
<td>19,765</td>
<td>8</td>
<td>–</td>
<td>6</td>
<td>19,893</td>
<td>–</td>
</tr>
<tr>
<td>3 Corporate</td>
<td>1,414</td>
<td>142,091</td>
<td>509</td>
<td>–</td>
<td>(233)</td>
<td>142,996</td>
<td>130</td>
</tr>
<tr>
<td>4 Of which Specialised lending</td>
<td>287</td>
<td>6,062</td>
<td>26</td>
<td>–</td>
<td>11</td>
<td>6,322</td>
<td>24</td>
</tr>
<tr>
<td>5 Of which SMEs</td>
<td>313</td>
<td>8,331</td>
<td>140</td>
<td>–</td>
<td>(60)</td>
<td>8,504</td>
<td>7</td>
</tr>
<tr>
<td>6 Retail</td>
<td>636</td>
<td>7,679</td>
<td>322</td>
<td>–</td>
<td>(1,721)</td>
<td>7,993</td>
<td>228</td>
</tr>
<tr>
<td>7 Secured by real estate property</td>
<td>636</td>
<td>7,679</td>
<td>322</td>
<td>–</td>
<td>(64)</td>
<td>7,993</td>
<td>4</td>
</tr>
<tr>
<td>8 SMEs</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>9 Non-SMEs</td>
<td>636</td>
<td>7,679</td>
<td>322</td>
<td>–</td>
<td>(64)</td>
<td>7,993</td>
<td>4</td>
</tr>
<tr>
<td>10 Qualifying revolving</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>(1,199)</td>
<td>–</td>
<td>224</td>
</tr>
<tr>
<td>11 Other retail</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>(458)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>12 SMEs</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>(95)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>13 Non-SMEs</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>(363)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>14 Equity</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>15 Total IRB approach</td>
<td>2,186</td>
<td>237,613</td>
<td>839</td>
<td>–</td>
<td>(1,949)</td>
<td>238,961</td>
<td>359</td>
</tr>
<tr>
<td>16 Central governments or central banks</td>
<td>–</td>
<td>115,621</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>115,621</td>
<td>–</td>
</tr>
<tr>
<td>17 Regional governments or local authorities</td>
<td>–</td>
<td>845</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>845</td>
<td>–</td>
</tr>
<tr>
<td>18 Public sector entities</td>
<td>13</td>
<td>4,507</td>
<td>3</td>
<td>–</td>
<td>2</td>
<td>4,517</td>
<td>–</td>
</tr>
<tr>
<td>19 Multilateral development banks</td>
<td>–</td>
<td>3,590</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>3,590</td>
<td>–</td>
</tr>
<tr>
<td>20 International organisations</td>
<td>–</td>
<td>817</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>817</td>
<td>–</td>
</tr>
<tr>
<td>21 Institutions</td>
<td>5</td>
<td>53,034</td>
<td>2</td>
<td>–</td>
<td>(1)</td>
<td>53,037</td>
<td>1</td>
</tr>
<tr>
<td>22 Corporates</td>
<td>1,309</td>
<td>139,202</td>
<td>335</td>
<td>–</td>
<td>82</td>
<td>140,176</td>
<td>174</td>
</tr>
<tr>
<td>23 Of which: SMEs</td>
<td>4</td>
<td>4,470</td>
<td>26</td>
<td>–</td>
<td>–</td>
<td>4,444</td>
<td>–</td>
</tr>
<tr>
<td>24 Retail</td>
<td>340</td>
<td>4,698</td>
<td>204</td>
<td>–</td>
<td>(45)</td>
<td>4,835</td>
<td>31</td>
</tr>
<tr>
<td>25 Of which: SMEs</td>
<td>3</td>
<td>3,418</td>
<td>37</td>
<td>–</td>
<td>–</td>
<td>3,380</td>
<td>–</td>
</tr>
<tr>
<td>26 Secured by mortgages on immovable property</td>
<td>510</td>
<td>5,561</td>
<td>4</td>
<td>–</td>
<td>4</td>
<td>6,067</td>
<td>–</td>
</tr>
<tr>
<td>27 Of which: SMEs</td>
<td>1</td>
<td>191</td>
<td>4</td>
<td>–</td>
<td>–</td>
<td>187</td>
<td>–</td>
</tr>
<tr>
<td>28 Exposures in default</td>
<td>2,177</td>
<td>331</td>
<td>–</td>
<td>–</td>
<td>(149)</td>
<td>1,846</td>
<td>15</td>
</tr>
<tr>
<td>29 Items associated with particularly high risk</td>
<td>–</td>
<td>4,823</td>
<td>–</td>
<td>–</td>
<td>(52)</td>
<td>4,823</td>
<td>–</td>
</tr>
<tr>
<td>30 Covered bonds</td>
<td>–</td>
<td>34</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>34</td>
<td>–</td>
</tr>
<tr>
<td>31 Claims on institutions and corporates with a short-term credit assessment</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>32 Collective investments undertakings</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>33 Equity exposures</td>
<td>–</td>
<td>580</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>580</td>
<td>–</td>
</tr>
<tr>
<td>34 Other exposures</td>
<td>–</td>
<td>706</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>706</td>
<td>–</td>
</tr>
<tr>
<td>35 Total standardised approach</td>
<td>2,177</td>
<td>334,018</td>
<td>547</td>
<td>–</td>
<td>(160)</td>
<td>335,648</td>
<td>206</td>
</tr>
<tr>
<td>36 Total</td>
<td>4,362</td>
<td>571,632</td>
<td>1,385</td>
<td>–</td>
<td>(2,109)</td>
<td>574,609</td>
<td>565</td>
</tr>
<tr>
<td>37 Of which: Loans</td>
<td>3,439</td>
<td>94,500</td>
<td>1,157</td>
<td>–</td>
<td>(1,379)</td>
<td>96,782</td>
<td>565</td>
</tr>
<tr>
<td>38 Of which: Debt securities</td>
<td>–</td>
<td>42,058</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>42,058</td>
<td>–</td>
</tr>
<tr>
<td>38a Of which: Other exposures</td>
<td>20</td>
<td>221,634</td>
<td>12</td>
<td>–</td>
<td>(246)</td>
<td>221,642</td>
<td>–</td>
</tr>
<tr>
<td>39 Of which: Off-balance-sheet exposures</td>
<td>903</td>
<td>213,440</td>
<td>216</td>
<td>–</td>
<td>(484)</td>
<td>214,127</td>
<td>–</td>
</tr>
</tbody>
</table>

Note
a Credit risk adjustments charges in the period reflect the impact of assets transferred from Barclays Bank PLC to Barclays Bank UK PLC on 1 April 2018 as part of the ring-fencing transfer scheme
## Risk and capital position review

### Analysis of credit risk

#### Table 52b: CR1-A – Credit quality of exposures by exposure class and instrument for significant subsidiaries

**Barclays Bank UK PLC**

<table>
<thead>
<tr>
<th>Exposure Class</th>
<th>Defaulted exposures £m</th>
<th>Non-defaulted exposure £m</th>
<th>Specific credit risk adjustment £m</th>
<th>General credit risk adjustment £m</th>
<th>Credit risk adjustment charges in the period £m</th>
<th>Net values £m</th>
<th>Accumulated write-offs £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Central governments or central banks</td>
<td>–</td>
<td>125</td>
<td>5</td>
<td>–</td>
<td>5</td>
<td>121</td>
<td>–</td>
</tr>
<tr>
<td>2 Institutions</td>
<td>3</td>
<td>6,917</td>
<td>31</td>
<td>–</td>
<td>31</td>
<td>6,889</td>
<td>–</td>
</tr>
<tr>
<td>3 Corporates</td>
<td>728</td>
<td>18,788</td>
<td>150</td>
<td>–</td>
<td>150</td>
<td>19,367</td>
<td>–</td>
</tr>
<tr>
<td>4 Of which Specialised lending</td>
<td>82</td>
<td>902</td>
<td>3</td>
<td>–</td>
<td>3</td>
<td>981</td>
<td>–</td>
</tr>
<tr>
<td>5 Of which SMEs</td>
<td>609</td>
<td>8,496</td>
<td>114</td>
<td>–</td>
<td>114</td>
<td>8,990</td>
<td>–</td>
</tr>
<tr>
<td>6 Retail</td>
<td>3,682</td>
<td>218,766</td>
<td>2,697</td>
<td>–</td>
<td>2,697</td>
<td>219,752</td>
<td>422</td>
</tr>
<tr>
<td>7 Secured by real estate property</td>
<td>1,218</td>
<td>140,622</td>
<td>68</td>
<td>–</td>
<td>68</td>
<td>141,772</td>
<td>5</td>
</tr>
<tr>
<td>8 SMEs</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>9 Non-SMEs</td>
<td>1,218</td>
<td>140,622</td>
<td>68</td>
<td>–</td>
<td>68</td>
<td>141,772</td>
<td>5</td>
</tr>
<tr>
<td>10 Qualifying revolving</td>
<td>1,255</td>
<td>65,692</td>
<td>2,075</td>
<td>–</td>
<td>2,075</td>
<td>64,871</td>
<td>245</td>
</tr>
<tr>
<td>11 Other retail</td>
<td>1,209</td>
<td>12,453</td>
<td>554</td>
<td>–</td>
<td>554</td>
<td>13,108</td>
<td>172</td>
</tr>
<tr>
<td>12 SMEs</td>
<td>846</td>
<td>5,910</td>
<td>478</td>
<td>–</td>
<td>478</td>
<td>7,313</td>
<td>65</td>
</tr>
<tr>
<td>13 Non-SMEs</td>
<td>363</td>
<td>8,496</td>
<td>114</td>
<td>–</td>
<td>114</td>
<td>8,990</td>
<td>–</td>
</tr>
<tr>
<td>14 Equity</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>15 Total IRB approach</td>
<td>4,413</td>
<td>244,597</td>
<td>2,882</td>
<td>–</td>
<td>2,882</td>
<td>246,128</td>
<td>422</td>
</tr>
<tr>
<td>16 Central governments or central banks</td>
<td>–</td>
<td>78,120</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>78,120</td>
<td>–</td>
</tr>
<tr>
<td>17 Regional governments or local authorities</td>
<td>–</td>
<td>105</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>105</td>
<td>–</td>
</tr>
<tr>
<td>18 Public sector entities</td>
<td>–</td>
<td>618</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>618</td>
<td>–</td>
</tr>
<tr>
<td>19 Multilateral development banks</td>
<td>–</td>
<td>489</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>489</td>
<td>–</td>
</tr>
<tr>
<td>20 International organisations</td>
<td>–</td>
<td>103</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>103</td>
<td>–</td>
</tr>
<tr>
<td>21 Institutions</td>
<td>–</td>
<td>1,768</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1,768</td>
<td>–</td>
</tr>
<tr>
<td>22 Corporates</td>
<td>81</td>
<td>1,225</td>
<td>3</td>
<td>–</td>
<td>3</td>
<td>1,303</td>
<td>–</td>
</tr>
<tr>
<td>23 Of which: SMEs</td>
<td>–</td>
<td>284</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>284</td>
<td>–</td>
</tr>
<tr>
<td>24 Retail</td>
<td>220</td>
<td>6,498</td>
<td>237</td>
<td>–</td>
<td>237</td>
<td>6,480</td>
<td>12</td>
</tr>
<tr>
<td>25 Of which: SMEs</td>
<td>–</td>
<td>79</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>79</td>
<td>4</td>
</tr>
<tr>
<td>26 Secured by mortgages on immovable property</td>
<td>137</td>
<td>2,647</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>2,784</td>
<td>(1)</td>
</tr>
<tr>
<td>27 Of which: SMEs</td>
<td>–</td>
<td>81</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>81</td>
<td>–</td>
</tr>
<tr>
<td>28 Exposures in default</td>
<td>438</td>
<td>146</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>292</td>
<td>12</td>
</tr>
<tr>
<td>29 Items associated with particularly high risk</td>
<td>–</td>
<td>227</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>227</td>
<td>–</td>
</tr>
<tr>
<td>30 Covered bonds</td>
<td>–</td>
<td>88</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>88</td>
<td>–</td>
</tr>
<tr>
<td>31 Claims on institutions and corporates with a short-term credit assessment</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>32 Collective investments undertakings</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>33 Equity exposures</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>34 Other exposures</td>
<td>–</td>
<td>1,560</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1,560</td>
<td>–</td>
</tr>
<tr>
<td>35 Total standardised approach</td>
<td>438</td>
<td>93,448</td>
<td>241</td>
<td>–</td>
<td>241</td>
<td>93,646</td>
<td>11</td>
</tr>
<tr>
<td>36 Total</td>
<td>4,851</td>
<td>338,045</td>
<td>3,123</td>
<td>–</td>
<td>3,123</td>
<td>339,174</td>
<td>433</td>
</tr>
<tr>
<td>37 Of which: Loans</td>
<td>4,588</td>
<td>192,369</td>
<td>2,595</td>
<td>–</td>
<td>2,595</td>
<td>194,363</td>
<td>433</td>
</tr>
<tr>
<td>38 Of which: Debt securities</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>38a Of which: Other exposures</td>
<td>–</td>
<td>40,294</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>40,294</td>
<td>–</td>
</tr>
<tr>
<td>39 Of which: Off-balance-sheet exposures</td>
<td>263</td>
<td>95,734</td>
<td>528</td>
<td>–</td>
<td>528</td>
<td>95,469</td>
<td>–</td>
</tr>
</tbody>
</table>

**Note**

a Credit risk adjustments charges in the period reflect the impact of assets transferred from Barclays Bank PLC to Barclays Bank UK PLC on 1 April 2018 as part of the ring-fencing transfer scheme.
## Analysis of credit risk

### Table 53: CR1-B – Credit quality of exposures by industry or counterparty types

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

<table>
<thead>
<tr>
<th>Barclays Group</th>
<th>Defaulted exposures</th>
<th>Non-defaulted exposure</th>
<th>Specific credit risk adjustment</th>
<th>General credit risk adjustment</th>
<th>Credit risk adjustment charges in the period</th>
<th>Net values</th>
<th>Accumulated write-offs</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
<td>£m</td>
</tr>
<tr>
<td>1 Agriculture, forestry and fishing</td>
<td>567</td>
<td>4,446</td>
<td>87</td>
<td>–</td>
<td>75</td>
<td>4,926</td>
<td>–</td>
</tr>
<tr>
<td>2 Mining and quarrying</td>
<td>224</td>
<td>12,628</td>
<td>49</td>
<td>–</td>
<td>(27)</td>
<td>12,802</td>
<td>16</td>
</tr>
<tr>
<td>3 Manufacturing</td>
<td>343</td>
<td>40,204</td>
<td>79</td>
<td>–</td>
<td>8</td>
<td>40,467</td>
<td>10</td>
</tr>
<tr>
<td>4 Electricity, gas, steam and air conditioning supply</td>
<td>18</td>
<td>14,562</td>
<td>27</td>
<td>–</td>
<td>19</td>
<td>14,554</td>
<td>–</td>
</tr>
<tr>
<td>5 Water supply</td>
<td>–</td>
<td>2,405</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>2,404</td>
<td>–</td>
</tr>
<tr>
<td>6 Construction</td>
<td>142</td>
<td>5,549</td>
<td>33</td>
<td>–</td>
<td>12</td>
<td>5,658</td>
<td>2</td>
</tr>
<tr>
<td>7 Wholesale and retail trade</td>
<td>382</td>
<td>18,788</td>
<td>162</td>
<td>–</td>
<td>23</td>
<td>19,008</td>
<td>20</td>
</tr>
<tr>
<td>8 Transport and storage</td>
<td>83</td>
<td>10,323</td>
<td>68</td>
<td>–</td>
<td>33</td>
<td>10,356</td>
<td>–</td>
</tr>
<tr>
<td>9 Accommodation and food service activities</td>
<td>182</td>
<td>4,769</td>
<td>24</td>
<td>–</td>
<td>–</td>
<td>4,927</td>
<td>1</td>
</tr>
<tr>
<td>10 Information and communication</td>
<td>5</td>
<td>6,685</td>
<td>12</td>
<td>–</td>
<td>3</td>
<td>6,678</td>
<td>11</td>
</tr>
<tr>
<td>11 Real estate activities</td>
<td>763</td>
<td>31,094</td>
<td>117</td>
<td>–</td>
<td>69</td>
<td>31,740</td>
<td>25</td>
</tr>
<tr>
<td>12 Professional, scientific and technical activities</td>
<td>408</td>
<td>18,553</td>
<td>120</td>
<td>–</td>
<td>46</td>
<td>18,841</td>
<td>20</td>
</tr>
<tr>
<td>13 Administrative and support service activities</td>
<td>–</td>
<td>1,056</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1,056</td>
<td>–</td>
</tr>
<tr>
<td>14 Public administration and defence, compulsory social security</td>
<td>282</td>
<td>282,581</td>
<td>77</td>
<td>–</td>
<td>77</td>
<td>282,786</td>
<td>20</td>
</tr>
<tr>
<td>15 Education</td>
<td>23</td>
<td>10,420</td>
<td>24</td>
<td>–</td>
<td>(22)</td>
<td>10,420</td>
<td>–</td>
</tr>
<tr>
<td>16 Human health services and social work activities</td>
<td>218</td>
<td>11,350</td>
<td>49</td>
<td>–</td>
<td>25</td>
<td>11,519</td>
<td>25</td>
</tr>
<tr>
<td>17 Arts, entertainment and recreation</td>
<td>113</td>
<td>3,995</td>
<td>14</td>
<td>–</td>
<td>6</td>
<td>4,094</td>
<td>1</td>
</tr>
<tr>
<td>18 Other services</td>
<td>7,644</td>
<td>418,320</td>
<td>6,413</td>
<td>–</td>
<td>2,013</td>
<td>419,552</td>
<td>1,741</td>
</tr>
<tr>
<td>19 Total</td>
<td>11,396</td>
<td>897,729</td>
<td>7,356</td>
<td>–</td>
<td>2,363</td>
<td>901,769</td>
<td>1,891</td>
</tr>
</tbody>
</table>
## Analysis of credit risk

### Table 53: CR1-B – Credit quality of exposures by industry or counterparty types – continued

<table>
<thead>
<tr>
<th>Barclays Group</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Defaulted exposures £m</td>
<td>Non-defaulted exposure £m</td>
<td>Specific credit risk adjustment £m</td>
<td>General credit risk adjustment £m</td>
<td>Credit risk adjustment charges in the period £m</td>
<td>Net values £m</td>
<td>Accumulated write-offs £m</td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>421</td>
<td>5,081</td>
<td>20</td>
<td>–</td>
<td>36</td>
<td>5,482</td>
<td>3</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>309</td>
<td>12,831</td>
<td>78</td>
<td>–</td>
<td>48</td>
<td>13,062</td>
<td>40</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>217</td>
<td>41,746</td>
<td>75</td>
<td>–</td>
<td>48</td>
<td>41,888</td>
<td>12</td>
</tr>
<tr>
<td>Electricity, gas, steam and air conditioning supply</td>
<td>66</td>
<td>14,412</td>
<td>8</td>
<td>–</td>
<td>(4)</td>
<td>14,470</td>
<td>–</td>
</tr>
<tr>
<td>Water supply</td>
<td>–</td>
<td>1,935</td>
<td>1</td>
<td>–</td>
<td>1</td>
<td>1,934</td>
<td>–</td>
</tr>
<tr>
<td>Construction</td>
<td>119</td>
<td>5,978</td>
<td>25</td>
<td>–</td>
<td>(8)</td>
<td>6,070</td>
<td>14</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>431</td>
<td>19,212</td>
<td>145</td>
<td>–</td>
<td>46</td>
<td>19,498</td>
<td>5</td>
</tr>
<tr>
<td>Transport and storage</td>
<td>58</td>
<td>11,310</td>
<td>36</td>
<td>–</td>
<td>9</td>
<td>11,332</td>
<td>1</td>
</tr>
<tr>
<td>Accommodation and food service activities</td>
<td>205</td>
<td>4,583</td>
<td>27</td>
<td>–</td>
<td>(13)</td>
<td>4,761</td>
<td>47</td>
</tr>
<tr>
<td>Information and communication</td>
<td>22</td>
<td>6,614</td>
<td>9</td>
<td>–</td>
<td>5</td>
<td>6,627</td>
<td>–</td>
</tr>
<tr>
<td>Real estate activities</td>
<td>831</td>
<td>30,216</td>
<td>51</td>
<td>–</td>
<td>(101)</td>
<td>30,996</td>
<td>29</td>
</tr>
<tr>
<td>Professional, scientific and technical activities</td>
<td>369</td>
<td>16,872</td>
<td>85</td>
<td>–</td>
<td>(26)</td>
<td>17,156</td>
<td>64</td>
</tr>
<tr>
<td>Administrative and support service activities</td>
<td>17</td>
<td>1,099</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1,116</td>
<td>–</td>
</tr>
<tr>
<td>Public administration and defence, compulsory social security</td>
<td>–</td>
<td>262,093</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>262,093</td>
<td>–</td>
</tr>
<tr>
<td>Education</td>
<td>23</td>
<td>11,754</td>
<td>45</td>
<td>–</td>
<td>41</td>
<td>11,732</td>
<td>–</td>
</tr>
<tr>
<td>Human health services and social work activities</td>
<td>427</td>
<td>11,240</td>
<td>24</td>
<td>–</td>
<td>8</td>
<td>11,643</td>
<td>2</td>
</tr>
<tr>
<td>Arts, entertainment and recreation</td>
<td>51</td>
<td>3,613</td>
<td>7</td>
<td>–</td>
<td>(3)</td>
<td>3,657</td>
<td>–</td>
</tr>
<tr>
<td>Other services</td>
<td>6,881</td>
<td>410,123</td>
<td>4,512</td>
<td>–</td>
<td>132</td>
<td>412,493</td>
<td>2,266</td>
</tr>
<tr>
<td>Total</td>
<td>10,447</td>
<td>870,712</td>
<td>5,148</td>
<td>–</td>
<td>(45)</td>
<td>876,012</td>
<td>2,483</td>
</tr>
</tbody>
</table>

Key movements in total credit risk exposure by industry are shown in Table 32.

Specific credit risk adjustments and credit risk adjustment charges increased by £2.2bn and £2.4bn to £7.4bn and £2.4bn respectively, primarily driven by the implementation of IFRS9.
Risk and capital position review

Analysis of credit risk

Table 53a: CR1-B – Credit quality of exposures by industry or counterparty types for significant subsidiaries

<table>
<thead>
<tr>
<th>Barclays Bank PLC</th>
<th>As at 31 December 2018</th>
<th>Defaulted exposures £m</th>
<th>Non-defaulted exposure £m</th>
<th>Specific credit risk adjustment £m</th>
<th>General credit risk adjustment £m</th>
<th>Credit risk adjustment charges in the period£m</th>
<th>Net values £m</th>
<th>Accumulated write-offs £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Agriculture, forestry and fishing</td>
<td>1</td>
<td>140</td>
<td>1</td>
<td>(66)</td>
<td>141</td>
<td>–</td>
<td>141</td>
<td>–</td>
</tr>
<tr>
<td>2 Mining and quarrying</td>
<td>203</td>
<td>12,175</td>
<td>49</td>
<td>–</td>
<td>(27)</td>
<td>12,329</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3 Manufacturing</td>
<td>305</td>
<td>39,106</td>
<td>70</td>
<td>–</td>
<td>5</td>
<td>39,340</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>4 Electricity, gas, steam and air conditioning supply</td>
<td>15</td>
<td>14,383</td>
<td>23</td>
<td>–</td>
<td>16</td>
<td>14,375</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>5 Water supply</td>
<td>–</td>
<td>2,289</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>2,287</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>6 Construction</td>
<td>102</td>
<td>4,783</td>
<td>21</td>
<td>–</td>
<td>14</td>
<td>4,864</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>7 Wholesale and retail trade</td>
<td>220</td>
<td>16,308</td>
<td>139</td>
<td>–</td>
<td>28</td>
<td>16,389</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8 Transport and storage</td>
<td>62</td>
<td>9,864</td>
<td>63</td>
<td>–</td>
<td>32</td>
<td>9,896</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>9 Accommodation and food service activities</td>
<td>58</td>
<td>3,990</td>
<td>15</td>
<td>–</td>
<td>5</td>
<td>4,032</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10 Information and communication</td>
<td>2</td>
<td>6,385</td>
<td>10</td>
<td>–</td>
<td>3</td>
<td>6,376</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>11 Real estate activities</td>
<td>437</td>
<td>15,467</td>
<td>51</td>
<td>–</td>
<td>31</td>
<td>15,853</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>12 Professional, scientific and technical activities</td>
<td>292</td>
<td>16,924</td>
<td>100</td>
<td>–</td>
<td>41</td>
<td>17,117</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>13 Administrative and support service activities</td>
<td>–</td>
<td>952</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>952</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>14 Public administration and defence, compulsory social security</td>
<td>237</td>
<td>194,456</td>
<td>65</td>
<td>–</td>
<td>67</td>
<td>194,629</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>15 Education</td>
<td>5</td>
<td>3,584</td>
<td>2</td>
<td>–</td>
<td>2</td>
<td>3,587</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>16 Human health services and social work activities</td>
<td>127</td>
<td>10,064</td>
<td>28</td>
<td>–</td>
<td>11</td>
<td>10,163</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>17 Arts, entertainment and recreation</td>
<td>66</td>
<td>3,650</td>
<td>10</td>
<td>–</td>
<td>7</td>
<td>3,706</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>18 Other services</td>
<td>2,231</td>
<td>217,115</td>
<td>736</td>
<td>–</td>
<td>(2,278)</td>
<td>218,810</td>
<td>455</td>
<td></td>
</tr>
<tr>
<td>19 Total</td>
<td>4,362</td>
<td>571,632</td>
<td>1,385</td>
<td>–</td>
<td>(2,109)</td>
<td>574,609</td>
<td>565</td>
<td></td>
</tr>
</tbody>
</table>

Note

a Credit risk adjustments charges in the period reflect the impact of assets transferred from Barclays Bank PLC to Barclays Bank UK PLC on 1 April 2018 as part of the ring-fencing transfer scheme
### Analysis of credit risk

#### Table 53b: CR1-B – Credit quality of exposures by industry or counterparty types for significant subsidiaries

**Barclays Bank UK PLC**

<table>
<thead>
<tr>
<th>Industry Type</th>
<th>Defaulted exposures £m</th>
<th>Non-defaulted exposure £m</th>
<th>Specific credit risk adjustment £m</th>
<th>General credit risk adjustment £m</th>
<th>Credit risk adjustment charges in the period £m</th>
<th>Net values £m</th>
<th>Accumulated write-offs £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>564</td>
<td>4,294</td>
<td>86</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>21</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>24</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>35</td>
<td>499</td>
<td>6</td>
<td>-</td>
<td>6</td>
<td>528</td>
<td>3</td>
</tr>
<tr>
<td>Electricity, gas, steam and air conditioning supply</td>
<td>3</td>
<td>36</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>38</td>
<td>-</td>
</tr>
<tr>
<td>Water supply</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Construction</td>
<td>39</td>
<td>591</td>
<td>11</td>
<td>-</td>
<td>11</td>
<td>620</td>
<td>-</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>161</td>
<td>1,428</td>
<td>20</td>
<td>-</td>
<td>20</td>
<td>1,569</td>
<td>-</td>
</tr>
<tr>
<td>Transport and storage</td>
<td>19</td>
<td>214</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td>230</td>
<td>-</td>
</tr>
<tr>
<td>Accommodation and food service activities</td>
<td>124</td>
<td>693</td>
<td>8</td>
<td>-</td>
<td>8</td>
<td>809</td>
<td>-</td>
</tr>
<tr>
<td>Information and communication</td>
<td>3</td>
<td>35</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>37</td>
<td>-</td>
</tr>
<tr>
<td>Real estate activities</td>
<td>324</td>
<td>15,299</td>
<td>65</td>
<td>-</td>
<td>65</td>
<td>15,558</td>
<td>-</td>
</tr>
<tr>
<td>Professional, scientific and technical activities</td>
<td>93</td>
<td>963</td>
<td>11</td>
<td>-</td>
<td>11</td>
<td>1,045</td>
<td>-</td>
</tr>
<tr>
<td>Administrative and support service activities</td>
<td>-</td>
<td>104</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>104</td>
<td>-</td>
</tr>
<tr>
<td>Public administration and defence, compulsory social security</td>
<td>45</td>
<td>78,539</td>
<td>8</td>
<td>-</td>
<td>8</td>
<td>78,575</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td>19</td>
<td>6,783</td>
<td>22</td>
<td>-</td>
<td>22</td>
<td>6,779</td>
<td>-</td>
</tr>
<tr>
<td>Human health services and social work activities</td>
<td>91</td>
<td>1,205</td>
<td>21</td>
<td>-</td>
<td>21</td>
<td>1,275</td>
<td>12</td>
</tr>
<tr>
<td>Arts, entertainment and recreation</td>
<td>47</td>
<td>326</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>370</td>
<td>-</td>
</tr>
<tr>
<td>Other services</td>
<td>3,263</td>
<td>227,033</td>
<td>2,857</td>
<td>-</td>
<td>2,857</td>
<td>227,438</td>
<td>412</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,851</strong></td>
<td><strong>338,045</strong></td>
<td><strong>3,123</strong></td>
<td>-</td>
<td><strong>3,123</strong></td>
<td><strong>339,774</strong></td>
<td><strong>433</strong></td>
</tr>
</tbody>
</table>

**Note**

- Credit risk adjustments charges in the period reflect the impact of assets transferred from Barclays Bank PLC to Barclays Bank UK PLC on 1 April 2018 as part of the ring-fencing transfer scheme.
## Analysis of credit risk

### Table 54: CR1-C – Credit quality of exposures by geography

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

<table>
<thead>
<tr>
<th>Barclays Group</th>
<th>As at 31 December 2018</th>
<th>As at 31 December 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Defaulted exposures £m</td>
<td>Non-defaulted exposure £m</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td>7,427</td>
<td>471,819</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td>1,802</td>
<td>147,800</td>
</tr>
<tr>
<td><strong>France</strong></td>
<td>167</td>
<td>41,954</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>239</td>
<td>38,890</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
<td>782</td>
<td>12,714</td>
</tr>
<tr>
<td><strong>Switzerland</strong></td>
<td>103</td>
<td>19,113</td>
</tr>
<tr>
<td><strong>Asia</strong></td>
<td>55</td>
<td>22,998</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td>–</td>
<td>10,936</td>
</tr>
<tr>
<td><strong>Americas</strong></td>
<td>2,021</td>
<td>247,151</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td>1,765</td>
<td>234,092</td>
</tr>
<tr>
<td><strong>Africa and Middle East</strong></td>
<td>92</td>
<td>7,960</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11,396</td>
<td>897,729</td>
</tr>
</tbody>
</table>

Key movements in total credit risk exposure by geography are shown in table 31.

Specific credit risk adjustments and credit risk adjustment charges increased by £2.2bn and £2.4bn to £74bn and £2.4bn respectively, primarily driven by the implementation of IFRS9.
Analysis of credit risk

Table 54a: CR1-C – Credit quality of exposures by geography for significant subsidiaries
Barclays Bank PLC

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Defaulted exposures £m</th>
<th>Non-defaulted exposure £m</th>
<th>Specific credit risk adjustment £m</th>
<th>General credit risk adjustment £m</th>
<th>Credit risk adjustment charges in the period £m</th>
<th>Net values £m</th>
<th>Accumulated write-offs £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>2,201</td>
<td>213,564</td>
<td>598</td>
<td>–</td>
<td>(2,073)</td>
<td>215,167</td>
<td>452</td>
</tr>
<tr>
<td>Europe</td>
<td>1,376</td>
<td>123,288</td>
<td>549</td>
<td>–</td>
<td>(53)</td>
<td>124,115</td>
<td>91</td>
</tr>
<tr>
<td>France</td>
<td>118</td>
<td>41,352</td>
<td>37</td>
<td>–</td>
<td>7</td>
<td>41,434</td>
<td>–</td>
</tr>
<tr>
<td>Germany</td>
<td>39</td>
<td>9,427</td>
<td>5</td>
<td>–</td>
<td>(162)</td>
<td>9,462</td>
<td>91</td>
</tr>
<tr>
<td>Italy</td>
<td>764</td>
<td>12,703</td>
<td>379</td>
<td>–</td>
<td>32</td>
<td>13,087</td>
<td>–</td>
</tr>
<tr>
<td>Switzerland</td>
<td>32</td>
<td>20,006</td>
<td>11</td>
<td>–</td>
<td>11</td>
<td>20,027</td>
<td>–</td>
</tr>
<tr>
<td>Asia</td>
<td>54</td>
<td>25,669</td>
<td>35</td>
<td>–</td>
<td>3</td>
<td>25,689</td>
<td>–</td>
</tr>
<tr>
<td>Japan</td>
<td>–</td>
<td>12,394</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Americas</td>
<td>643</td>
<td>203,191</td>
<td>131</td>
<td>–</td>
<td>40</td>
<td>203,703</td>
<td>22</td>
</tr>
<tr>
<td>United States</td>
<td>422</td>
<td>151,121</td>
<td>89</td>
<td>–</td>
<td>62</td>
<td>151,454</td>
<td>22</td>
</tr>
<tr>
<td>Africa and Middle East</td>
<td>87</td>
<td>5,920</td>
<td>73</td>
<td>–</td>
<td>(26)</td>
<td>5,935</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>4,362</td>
<td>571,632</td>
<td>1,385</td>
<td>–</td>
<td>(2,109)</td>
<td>574,609</td>
<td>565</td>
</tr>
</tbody>
</table>

Note: Credit risk adjustments charges in the period reflect the impact of assets transferred from Barclays Bank PLC to Barclays Bank UK PLC on 1 April 2018 as part of the ring-fencing transfer scheme.

Table 54b: CR1-C – Credit quality of exposures by geography for significant subsidiaries
Barclays Bank UK PLC

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Defaulted exposures £m</th>
<th>Non-defaulted exposure £m</th>
<th>Specific credit risk adjustment £m</th>
<th>General credit risk adjustment £m</th>
<th>Credit risk adjustment charges in the period £m</th>
<th>Net values £m</th>
<th>Accumulated write-offs £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>4,836</td>
<td>317,328</td>
<td>3,120</td>
<td>–</td>
<td>3,120</td>
<td>319,044</td>
<td>433</td>
</tr>
<tr>
<td>Europe</td>
<td>6</td>
<td>17,305</td>
<td>1</td>
<td>–</td>
<td>1</td>
<td>17,309</td>
<td>–</td>
</tr>
<tr>
<td>Germany</td>
<td>1</td>
<td>16,221</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>16,221</td>
<td>–</td>
</tr>
<tr>
<td>Asia</td>
<td>–</td>
<td>34</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>34</td>
<td>–</td>
</tr>
<tr>
<td>Americas</td>
<td>4</td>
<td>3,307</td>
<td>1</td>
<td>–</td>
<td>1</td>
<td>3,311</td>
<td>–</td>
</tr>
<tr>
<td>United States</td>
<td>–</td>
<td>3,202</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>3,202</td>
<td>–</td>
</tr>
<tr>
<td>Africa and Middle East</td>
<td>5</td>
<td>72</td>
<td>1</td>
<td>–</td>
<td>1</td>
<td>76</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>4,851</td>
<td>338,045</td>
<td>3,123</td>
<td>–</td>
<td>3,123</td>
<td>339,774</td>
<td>433</td>
</tr>
</tbody>
</table>

Note: Credit risk adjustments charges in the period reflect the impact of assets transferred from Barclays Bank PLC to Barclays Bank UK PLC on 1 April 2018 as part of the ring-fencing transfer scheme.
### Table 55: CR1-D – Ageing of past-due exposures

This table provides the ageing analysis of accounting on-balance sheet past due exposures regardless of their impairment status.

<table>
<thead>
<tr>
<th>Gross carrying values</th>
<th>As at 31 December 2018</th>
<th>As at 31 December 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤ 30 days</td>
<td>&gt; 30 days</td>
</tr>
<tr>
<td>Loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>8,425</td>
<td>1,320</td>
</tr>
<tr>
<td>Debt Securities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Exposures</td>
<td>8,425</td>
<td>1,320</td>
</tr>
</tbody>
</table>

The carrying value of defaulted exposure decreased £1.1bn to £17.0bn. This includes £3.0bn decrease in loans due less than 30 days, partly offset by £1.2bn increase in loans past due more than 90 days. All balances past due more than 90 days, except for £0.2bn of mortgages, are stage 3 credit impaired.

### Table 56: CR1-E – Non-performing and forborne exposures

This table provides an overview of non-performing and forborne exposures.

<table>
<thead>
<tr>
<th>Gross carrying amount of performing and non-performing exposures</th>
<th>Accumulated impairment and provisions and negative fair value adjustments due to credit risk</th>
<th>Collaterals and financial guarantees received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total £m</td>
<td>Of which performing but past due ≤ 30 days and &gt; 30 days ≤ 90 days</td>
<td>Of which non-performing</td>
</tr>
<tr>
<td>Total £m</td>
<td>Of which defaulted £m</td>
<td>Of which impaired £m</td>
</tr>
</tbody>
</table>

As at 31 December 2018

| Debt securities | 61,145 | 3 | 3 | 11 | – | – | – | – | – |
| Loans and advances | 717,346 | 1,030 | 8,838 | 8,772 | 8,581 | 2,970 | 3,435 | 44 | 3,409 | 614 | 3,224 | 1,443 |
| Off-balance-sheet exposures | 368,335 | 419 | 685 | 266 | 24 | 249 | – | 22 | – | 31 | 22 |

As at 31 December 2017b

| Debt securities | 58,313 | 17 | 11 | 15 | – | – | – | – | – |
| Loans and advances | 691,030 | 1,750 | 6,258 | 5,192 | 5,946 | 3,118 | 1,690 | 58 | 3,021 | 815 | 2,076 | 1,952 |
| Off-balance-sheet exposures | 309,303 | 518 | 1,531 | 1,531 | 14 | 54 | – | 25 | – | 8 | 35 |

Note:
- a This includes cash at central banks and financial assets designated at fair value.
- b Prior year information has been revised to improve comparability with current year IFRS 9 based disclosures.
Risk and capital position review

Analysis of credit risk

Table 57: CR2-B – Changes in the stock of defaulted and impaired loans and debt securities

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

<table>
<thead>
<tr>
<th></th>
<th>Gross carrying value defaulted exposures£m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 1 January 2018b</td>
<td>9,231</td>
</tr>
<tr>
<td>Loans and debt securities that have defaulted or impaired since the last reporting period</td>
<td>4,023</td>
</tr>
<tr>
<td>Returned to non-defaulted status</td>
<td>(1,432)</td>
</tr>
<tr>
<td>Amounts written off</td>
<td>(1,891)</td>
</tr>
<tr>
<td>Other changesc</td>
<td>(1,156)</td>
</tr>
<tr>
<td>As at 31 December 2018</td>
<td>8,775</td>
</tr>
</tbody>
</table>

Note

a. Defaulted exposures are defined as all stage 3 impaired gross loans and debt securities under IFRS9 and any stage 1 and stage 2 gross loans and debt securities under IFRS9 more than 90 days past due.
b. The opening balance as at 01.01.18 reflects the alignment of the definition of loans and debt securities in default to that used for IFRS 9 reporting purposes.
c. Other changes include repayments and disposals, net drawdowns.

Table 58: CR2-A – Changes in the stock of general and specific credit risk adjustments

This table shows the movement in the impairment allowance between 2017 and 2018 year-end. Please refer to pages 147 to 150 of this document and Note 7 of the 2018 Annual Report for further information on impairment.

<table>
<thead>
<tr>
<th></th>
<th>Accumulated specific credit risk adjustment £m</th>
<th>Accumulated general credit risk adjustment £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 1 January 2018b</td>
<td>7,640</td>
<td>-</td>
</tr>
<tr>
<td>Increases due to amounts set aside for estimated loan losses during the periodb</td>
<td>1,259</td>
<td>-</td>
</tr>
<tr>
<td>Decreases due to amounts reversed for estimated loan losses during the periodc</td>
<td>(1,916)</td>
<td>-</td>
</tr>
<tr>
<td>Decreases due to amounts taken against accumulated credit risk adjustments</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transfers between credit risk adjustments</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Impact of exchange rate differences</td>
<td>144</td>
<td>-</td>
</tr>
<tr>
<td>Business combinations, including acquisitions and disposals of subsidiaries</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other adjustments</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>As at 31 December 2018</td>
<td>7,127</td>
<td>-</td>
</tr>
<tr>
<td>Recoveries on credit risk adjustments recorded directly to the statement of profit or loss</td>
<td>(195)</td>
<td>-</td>
</tr>
<tr>
<td>Specific credit risk adjustments directly recorded to the statement of profit or loss</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note

a. Impairments are calculated on a regulatory consolidation basis and the opening balance reflects the impact of the adoption of IFRS 9 from 01.01.18.
b. Increases due to amounts set aside for estimated loan losses during the period includes the net impact of changes made to parameters (such as probability of default, exposure at default and loss given default), changes in macro economic variables, new assets originated, repayments and drawdowns.
c. Represents amounts written off.
Analysis of credit risk

Regulatory adjustments to statutory Impairment

The IFRS impairment allowance is adjusted to reflect a regulatory view, which is used to calculate the provision misalignment adjustment to regulatory capital. The primary differences are detailed below:

- Scope of consolidation – adjustments driven by differences between the IFRS and regulatory consolidation, as highlighted on page 11. These include, but are not exclusive to associates and impairments relating to securitisation vehicles.
- Securitisation positions – expected loss is not calculated for securitisation positions. As such, impairments associated with these positions are removed from the regulatory view
- Other regulatory adjustments – adjustments driven by differences between the IFRS and regulatory requirements.

Table 59: Regulatory adjustments to statutory Impairment

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>£m</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFRS allowance for impairment</td>
<td>7,041</td>
</tr>
<tr>
<td>Regulatory adjustments</td>
<td>–</td>
</tr>
<tr>
<td>Scope of consolidation</td>
<td>87</td>
</tr>
<tr>
<td>Other regulatory adjustments</td>
<td>230</td>
</tr>
<tr>
<td>Regulatory impairment allowance</td>
<td>7,358</td>
</tr>
</tbody>
</table>
Risk and capital position review

Analysis of credit risk

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

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

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

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

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

It should be noted that Barclays’ EL models and regulatory estimations present a conservative view compared to actual loss.

**Regulatory Expected Loss**

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

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

**Actual Loss**

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

**Table 60: Analysis of expected loss versus actual losses for IRB exposures**

<table>
<thead>
<tr>
<th>IRB Exposure Class</th>
<th>EL £m</th>
<th>ELBE £m</th>
<th>Total expected loss at 31 December 2017 £m</th>
<th>Total actual loss at 31 December 2018 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central governments or central banks</td>
<td>10</td>
<td>–</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Institutions</td>
<td>32</td>
<td>15</td>
<td>48</td>
<td>7</td>
</tr>
<tr>
<td>Corporates</td>
<td>470</td>
<td>580</td>
<td>1,049</td>
<td>(122)</td>
</tr>
<tr>
<td>Retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– SME</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Secured by real estate collateral</td>
<td>178</td>
<td>103</td>
<td>283</td>
<td>18</td>
</tr>
<tr>
<td>– Qualifying revolving retail</td>
<td>377</td>
<td>326</td>
<td>703</td>
<td>15</td>
</tr>
<tr>
<td>– Other retail</td>
<td>840</td>
<td>758</td>
<td>1,600</td>
<td>910</td>
</tr>
<tr>
<td>Equity</td>
<td>205</td>
<td>257</td>
<td>462</td>
<td>113</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>4</td>
</tr>
<tr>
<td>Non-credit obligation assets</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total IRB</td>
<td>2,113</td>
<td>2,041</td>
<td>4,155</td>
<td>946</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IRB Exposure Class</th>
<th>EL £m</th>
<th>ELBE £m</th>
<th>Total expected loss at 31 December 2016 £m</th>
<th>Total actual loss at 31 December 2017 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central governments or central banks</td>
<td>13</td>
<td>–</td>
<td>13</td>
<td>–</td>
</tr>
<tr>
<td>Institutions</td>
<td>19</td>
<td>9</td>
<td>28</td>
<td>1</td>
</tr>
<tr>
<td>Corporates</td>
<td>466</td>
<td>547</td>
<td>1,012</td>
<td>167</td>
</tr>
<tr>
<td>Retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– SME</td>
<td>129</td>
<td>66</td>
<td>195</td>
<td>22</td>
</tr>
<tr>
<td>– Secured by real estate collateral</td>
<td>350</td>
<td>278</td>
<td>628</td>
<td>64</td>
</tr>
<tr>
<td>– Qualifying revolving retail</td>
<td>791</td>
<td>781</td>
<td>1,572</td>
<td>634</td>
</tr>
<tr>
<td>– Other retail</td>
<td>226</td>
<td>226</td>
<td>452</td>
<td>211</td>
</tr>
<tr>
<td>Equity</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Non-credit obligation assets</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total IRB</td>
<td>1,994</td>
<td>1,907</td>
<td>3,901</td>
<td>1,099</td>
</tr>
</tbody>
</table>

The expected loss and actual loss remained broadly stable.
Analysis of credit risk

Non-trading book equity investments
The holding of non-trading book equity positions is primarily related to the holding of investments by the Private Equity business.

Table 61: Fair value of and gains and losses on equity investments
This table shows the fair value of non trading book equity positions subject to credit risk calculations, plus associated gains and losses.

<table>
<thead>
<tr>
<th>Non trading book equity positions</th>
<th>As at 31 December 2018</th>
<th>As at 31 December 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fair Value £m</td>
<td>RWAs £m</td>
</tr>
<tr>
<td>Exchange Traded</td>
<td>1,590</td>
<td>3,510</td>
</tr>
<tr>
<td>Private Equity</td>
<td>1,138</td>
<td>1,774</td>
</tr>
<tr>
<td>Other</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>2,728</td>
<td>5,284</td>
</tr>
<tr>
<td>Realised gains/(losses) from sale and liquidations of equity investments</td>
<td>114</td>
<td>–</td>
</tr>
<tr>
<td>Unrealised gains</td>
<td>501</td>
<td>–</td>
</tr>
<tr>
<td>Unrealised gains included in PRA transitional CET1 Capital</td>
<td>501</td>
<td>512</td>
</tr>
</tbody>
</table>

PRA agreed to full deconsolidation of BAGL for regulatory reporting effective 30 June 2018. Prior to this, Barclays had been applying proportional consolidation for regulatory purposes since 30 June 2017. As at 31 December 2018, Barclays’ shareholding in BAGL of 14.9% is treated as a banking book equity with a 250% risk weight.
## Analysis of counterparty credit risk

This section details Barclays’ counterparty credit risk profile, focusing on regulatory measures such as exposure at default and risk weighted assets. The risk profile is analysed by business segment, financial contract type, approach and notional value.

- Counterparty credit risk (CCR) RWAs are primarily generated by the following IFRS account classifications: financial assets designated at fair value; derivative financial instruments; reverse repurchase agreements and other similar secured lending.
- CVaR has been included as part of the CCR RWAs disclosures.

### Risk weighted assets for counterparty credit risk decreased in the year.

<table>
<thead>
<tr>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>£9.3bn</td>
<td>Total RWA</td>
</tr>
<tr>
<td>£5.1bn</td>
<td>Driven by the extended regulatory permission to use the Internal Model Method</td>
</tr>
<tr>
<td>£1.0bn</td>
<td>Driven by change in the regulatory treatment for assets associated with high risk</td>
</tr>
</tbody>
</table>
Analysis of counterparty credit risk

Counterparty risk exposures

Counterparty credit risk (CCR) is the risk related to a counterparty defaulting before the final settlement of a transaction’s cash flows. Barclays calculates CCR using three methods: Internal Model Method (IMM), Financial Collateral Comprehensive Method (FCCM), and Mark to Market Method (MTM).

The following tables analyse counterparty credit risk exposures and risk weighted assets

Table 62: Exposure at default associated with counterparty credit risk by business

This table summarises EAD post-credit risk mitigation by business and exposure class for counterparty credit risk.

It should be noted that the disclosure below excludes CVA which is shown separately in Table 75.

<table>
<thead>
<tr>
<th>Post-CRM EAD</th>
<th>Barclays UK £m</th>
<th>Barclays International £m</th>
<th>Head Office £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counterparty credit risk exposure class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standardised approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>17</td>
<td>2,840</td>
<td>–</td>
<td>2,857</td>
</tr>
<tr>
<td>Regional governments or local authorities</td>
<td>–</td>
<td>318</td>
<td>–</td>
<td>318</td>
</tr>
<tr>
<td>Public sector entities</td>
<td>–</td>
<td>1,337</td>
<td>–</td>
<td>1,337</td>
</tr>
<tr>
<td>Multilateral development banks</td>
<td>–</td>
<td>601</td>
<td>–</td>
<td>601</td>
</tr>
<tr>
<td>International organisations</td>
<td>–</td>
<td>98</td>
<td>–</td>
<td>98</td>
</tr>
<tr>
<td>Institutions</td>
<td>45</td>
<td>264</td>
<td>–</td>
<td>309</td>
</tr>
<tr>
<td>Corporates</td>
<td>563</td>
<td>22,974</td>
<td>3</td>
<td>23,540</td>
</tr>
<tr>
<td>Retail</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Secured by mortgages</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Exposures in default</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Items associated with high risk</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Covered bonds</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Collective investment undertakings</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Equity positions</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other items</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total Standardised Approach Credit Risk Exposure</td>
<td>625</td>
<td>28,432</td>
<td>3</td>
<td>29,060</td>
</tr>
<tr>
<td>Advanced IRB approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central governments or central banks</td>
<td>–</td>
<td>6,488</td>
<td>–</td>
<td>6,488</td>
</tr>
<tr>
<td>Institutions</td>
<td>–</td>
<td>21,605</td>
<td>11</td>
<td>21,616</td>
</tr>
<tr>
<td>Corporates</td>
<td>–</td>
<td>37,271</td>
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<td>– Small and medium enterprises (SME)</td>
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<td>– Secured by real estate collateral</td>
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<tr>
<td>– Qualifying revolving retail</td>
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<tr>
<td>– Other retail</td>
<td>–</td>
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<tr>
<td>Equity</td>
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<td>Securitisation positions</td>
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<td>Non-credit obligation assets</td>
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<td>Total Advanced IRB Credit Risk Exposure</td>
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<td>Total Counterparty Credit Risk</td>
<td>719</td>
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### Risk and capital position review

#### Analysis of counterparty credit risk

Table 62: Exposure at default associated with counterparty credit risk by business continued

<table>
<thead>
<tr>
<th>Post-CRM EAD</th>
<th>Barclays UK £m</th>
<th>Barclays International £m</th>
<th>Head Office £m</th>
<th>Total £m</th>
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<td><strong>As at 31 December 2017</strong></td>
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<td><strong>Counterparty credit risk exposure class</strong></td>
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<td><strong>Standardised approach</strong></td>
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<td>28,472</td>
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<tr>
<td>Secured by mortgages</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Exposures in default</td>
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<td>Items associated with high risk</td>
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<td>Securitisation positions</td>
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<td>Collective investment undertakings</td>
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<td>Equity positions</td>
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<td>Other items</td>
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<tr>
<td><strong>Total Standardised Approach Credit Risk Exposure</strong></td>
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<td>35,972</td>
<td>151</td>
<td>36,123</td>
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<td><strong>Advanced IRB approach</strong></td>
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<tr>
<td>– Small and medium enterprises (SME)</td>
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<tr>
<td>– Secure by real estate collateral</td>
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<tr>
<td>– Qualifying revolving retail</td>
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<td>– Other retail</td>
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<tr>
<td>Equity</td>
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<td>–</td>
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<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>194</td>
<td>–</td>
<td>194</td>
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<tr>
<td>Non-credit obligation assets</td>
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<td>–</td>
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<tr>
<td><strong>Total Advanced IRB Credit Risk Exposure</strong></td>
<td>–</td>
<td>69,935</td>
<td>1,461</td>
<td>71,396</td>
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<td>Default fund contributions</td>
<td>–</td>
<td>1,881</td>
<td>79</td>
<td>1,960</td>
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<tr>
<td><strong>Total Counterparty Credit Risk</strong></td>
<td>–</td>
<td>107,788</td>
<td>1,691</td>
<td>109,479</td>
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</table>

Counterparty credit risk exposure post-CRM decreased £13.4bn to £96.1bn, primarily due to:
- Barclays International decreased £12.4bn to £95.4bn primarily driven by an extended regulatory permission to use the Internal Model Method
- Head Office decreased £1.7bn to nil primarily due to the regulatory deconsolidation of BAGL
## Risk and capital position review

### Analysis of counterparty credit risk

**Table 63: Risk weighted assets of counterparty credit risk exposures by business units**

This table summarises risk weighted assets by business and exposure class for counterparty credit risk.

The disclosure below excludes CVA which is shown separately on Table 75.

<table>
<thead>
<tr>
<th>Risk weighted assets credit exposure class</th>
<th>Barclays UK £m</th>
<th>Barclays International £m</th>
<th>Head Office £m</th>
<th>Total £m</th>
<th>Capital requirements £m</th>
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</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
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</tr>
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<td><strong>Counterparty Credit risk exposure class</strong></td>
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<td>Regional governments or local authorities</td>
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<tr>
<td>Multilateral development banks</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>International organisations</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
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<td>Institutions</td>
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<tr>
<td>Secured by mortgages</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Exposures in default</td>
<td>–</td>
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<tr>
<td>Items associated with high risks</td>
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<td>Covered bonds</td>
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<td>Securitisation positions</td>
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<td>Collective investment undertakings</td>
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<td>Equity positions</td>
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<tr>
<td>Other items</td>
<td>–</td>
<td>–</td>
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</tr>
<tr>
<td><strong>Total standardised approach credit risk exposure</strong></td>
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<td>7</td>
<td>9,338</td>
<td>747</td>
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<td>–</td>
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<td>8,905</td>
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<td>–</td>
<td>–</td>
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</tr>
<tr>
<td>– Small and medium-sized enterprises (SMEs)</td>
<td>–</td>
<td>–</td>
<td>–</td>
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</tr>
<tr>
<td>– Secured by real estate collateral</td>
<td>–</td>
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<td>–</td>
</tr>
<tr>
<td>– Qualifying revolving retail</td>
<td>–</td>
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</tr>
<tr>
<td>– Other retail</td>
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<tr>
<td>Equity</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Securitisation positions</td>
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<td><strong>Non-credit obligation assets</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>–</td>
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<tr>
<td><strong>Total advanced IRB credit risk exposure</strong></td>
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<td>15,062</td>
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<td><strong>Total Counterparty credit risk weighted assets</strong></td>
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<td>20</td>
<td>25,355</td>
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</table>
Risk and capital position review

Analysis of counterparty credit risk

Table 63: Detailed view of counterparty credit risk RWAs and Capital Requirement continued

<table>
<thead>
<tr>
<th>Risk weighted assets credit exposure class</th>
<th>Barclays UK £m</th>
<th>Barclays International £m</th>
<th>Head Office £m</th>
<th>Total £m</th>
<th>Capital requirements £m</th>
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<tr>
<td>Credit risk</td>
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<td>Standardised approach</td>
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<td>Regional governments or local authorities</td>
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<tr>
<td>Multilateral development banks</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>International organisations</td>
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<tr>
<td>Secured by mortgages</td>
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</tr>
<tr>
<td>Exposures in default</td>
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<td>Collective investment undertakings</td>
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<td>Equity positions</td>
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<tr>
<td>Other items</td>
<td>–</td>
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<td>Total standardised approach credit risk exposure</td>
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<td>1,272</td>
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<tr>
<td>– Small and medium-sized enterprises (SMEs)</td>
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<tr>
<td>– Secured by real estate collateral</td>
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</tr>
<tr>
<td>– Qualifying revolving retail</td>
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<tr>
<td>– Other retail</td>
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<tr>
<td>Equity</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisation positions</td>
<td>–</td>
<td>100</td>
<td>–</td>
<td>100</td>
<td>8</td>
</tr>
<tr>
<td>Non-credit obligation assets</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total advanced IRB credit risk exposure</td>
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<td>17,876</td>
<td>1,430</td>
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<td>1,261</td>
<td>101</td>
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<td>Total Counterparty credit risk weighted assets</td>
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<td>34,344</td>
<td>698</td>
<td>35,042</td>
<td>2,803</td>
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</tbody>
</table>

Counterparty credit risk RWAs decreased £9.7bn to £25.4bn:
- Barclays International decreased £9.2bn to £25.1 primarily driven by an extended regulatory permission to use the Internal Model Method
- Head Office decreased £0.7bn to nil primarily due to the regulatory deconsolidation of BAGL
### Risk and capital position review

#### Analysis of counterparty credit risk

**Table 63a: Detailed view of counterparty credit risk RWAs and Capital Requirement by significant subsidiaries**

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Barclays Bank PLC</th>
<th></th>
<th>Barclays Bank UK PLC</th>
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<td>RWA £m</td>
<td>Capital requirements £m</td>
<td>RWA £m</td>
<td>Capital requirements £m</td>
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<td><strong>As at 31 December 2018</strong></td>
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<td>Central governments or central banks</td>
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<td>Regional governments or local authorities</td>
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<td>Multilateral development banks</td>
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<td>International organisations</td>
<td>–</td>
<td>–</td>
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<td>Institutions</td>
<td>1,125</td>
<td>90</td>
<td>41</td>
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<tr>
<td>Corporates</td>
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<td>516</td>
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<td>Secured by mortgages</td>
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<tr>
<td>Exposures in default</td>
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<td>Items associated with high risks</td>
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<td>Covered bonds</td>
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<td>Securitisation positions</td>
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<td>Collective investment undertakings</td>
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<td>Equity positions</td>
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<td>Other items</td>
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<tr>
<td><strong>Total standardised approach credit risk exposure</strong></td>
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<td>615</td>
<td>53</td>
<td>4</td>
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<td><strong>Advanced IRB approach</strong></td>
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<td>Central governments or central banks</td>
<td>654</td>
<td>52</td>
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<tr>
<td>Institutions</td>
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<td>367</td>
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<tr>
<td>Retail</td>
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<tr>
<td>– Small and medium-sized enterprises (SMEs)</td>
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<tr>
<td>– Secured by real estate collateral</td>
<td>–</td>
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<td>–</td>
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<tr>
<td>– Qualifying revolving retail</td>
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<tr>
<td>– Other retail</td>
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<tr>
<td>Equity</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Securitisation positions</td>
<td>123</td>
<td>10</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Non-credit obligation assets</td>
<td>–</td>
<td>–</td>
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<tr>
<td><strong>Total advanced IRB credit risk exposure</strong></td>
<td>13,349</td>
<td>1,068</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Default fund contributions</td>
<td>546</td>
<td>44</td>
<td>213</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total Counterparty credit risk weighted assets</strong></td>
<td>21,590</td>
<td>1,727</td>
<td>266</td>
<td>21</td>
</tr>
</tbody>
</table>
## Analysis of counterparty credit risk

### Table 64: CCR1 – Analysis of CCR exposure by approach

This table provides the comprehensive view of the methods used by Barclays to calculate CCR regulatory requirements and the main parameters used within each method.

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Replacement cost/current market value £m</th>
<th>Potential future credit exposure £m</th>
<th>EEPE £m</th>
<th>Multiplier</th>
<th>EAD post CRM £m</th>
<th>RWAs £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mark to market</td>
<td>3,127</td>
<td>9,405</td>
<td>6,125</td>
<td></td>
<td>2,321</td>
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</tr>
<tr>
<td>2 Original exposure</td>
<td>–</td>
<td>–</td>
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<tr>
<td>3 Standardised approach</td>
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<td>–</td>
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<td></td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>4 IMM (for derivatives and SFTs)</td>
<td>54,622</td>
<td>1.4</td>
<td>76,471</td>
<td>18,792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Of which securities financing transactions</td>
<td>18,152</td>
<td>1.4</td>
<td>25,413</td>
<td>4,376</td>
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<td></td>
</tr>
<tr>
<td>6 Of which derivatives and long settlement transactions</td>
<td>36,470</td>
<td>1.4</td>
<td>51,058</td>
<td>14,416</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Of which from contractual cross-product netting</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td></td>
</tr>
<tr>
<td>8 Financial collateral simple method (for SFTs)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Financial collateral comprehensive method (for SFTs)</td>
<td>12,252</td>
<td>3,287</td>
<td>3,287</td>
<td>3,287</td>
<td></td>
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</tr>
<tr>
<td>10 VaR for SFTs</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>11 Total</td>
<td></td>
<td>24,400</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>As at 31 December 2017</th>
<th>Replacement cost/current market value £m</th>
<th>Potential future credit exposure £m</th>
<th>EEPE £m</th>
<th>Multiplier</th>
<th>EAD post CRM £m</th>
<th>RWAs £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mark to market</td>
<td>3,328</td>
<td>9,186</td>
<td>6,567</td>
<td></td>
<td>2,613</td>
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</tr>
<tr>
<td>2 Original exposure</td>
<td>–</td>
<td>–</td>
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<td>–</td>
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<tr>
<td>3 Standardised approach</td>
<td>–</td>
<td>–</td>
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<td>–</td>
<td>–</td>
</tr>
<tr>
<td>4 IMM (for derivatives and SFTs)</td>
<td>59,853</td>
<td>1.4</td>
<td>83,794</td>
<td>21,400</td>
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</tr>
<tr>
<td>5 Of which securities financing transactions</td>
<td>22,819</td>
<td>1.4</td>
<td>31,947</td>
<td>5,180</td>
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<td></td>
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<tr>
<td>6 Of which derivatives and long settlement transactions</td>
<td>37,034</td>
<td>1.4</td>
<td>51,848</td>
<td>16,220</td>
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<td></td>
</tr>
<tr>
<td>7 Of which from contractual cross-product netting</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8 Financial collateral simple method (for SFTs)</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>9 Financial collateral comprehensive method (for SFTs)</td>
<td>17,153</td>
<td>9,768</td>
<td>9,768</td>
<td>9,768</td>
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<td></td>
</tr>
<tr>
<td>10 VaR for SFTs</td>
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<td>–</td>
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<tr>
<td>11 Total</td>
<td></td>
<td>33,781</td>
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</table>

Counterparty credit risk RWAs decreased £9.4bn to £24.4bn, this was driven by:
- FCCM – SFTs RWAs decreased £6.5bn to £3.3bn primarily due to an extended regulatory permission to use the Internal Model Method
- IMM – derivative RWAs decreased £1.8bn to £1.4bn primarily driven by improved book quality and a transfer of exposures from items associated with particularly high risk to corporates
## Analysis of counterparty credit risk

**Table 65: CCR3 Counterparty credit risk exposures by exposure classes and risk weight under standardised approach**

This table shows exposure at default, broken down by exposure class and risk weight. This table includes exposures subject to the Standardised approach only.

<table>
<thead>
<tr>
<th>Exposures by regulatory portfolio and risk</th>
<th>0%</th>
<th>2%</th>
<th>4%</th>
<th>10%</th>
<th>20%</th>
<th>35%</th>
<th>50%</th>
<th>70%</th>
<th>75%</th>
<th>100%</th>
<th>150%</th>
<th>250%</th>
<th>370%</th>
<th>1250%</th>
<th>Others</th>
<th>Deducted</th>
<th>Total</th>
<th>of which: Unrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
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</tr>
<tr>
<td>1 Central governments or central banks</td>
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<td>–</td>
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<td>–</td>
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<td>–</td>
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<tr>
<td>3 Public sector entities</td>
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<td>–</td>
<td>601</td>
</tr>
<tr>
<td>5 International Organisations</td>
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<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
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<td>7 Corporates</td>
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<td>8 Retail</td>
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<tr>
<td>9 Secured by mortgages on immovable</td>
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<tr>
<td>10 Exposures in default</td>
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<td>11 Items associated with particularly</td>
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<tr>
<td>12 Covered Bonds</td>
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<tr>
<td>13 Claims on institutions and corporate</td>
<td>–</td>
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<td>with a short-term credit assessment</td>
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<tr>
<td>14 Claims in the form of CIU</td>
<td>–</td>
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</tr>
<tr>
<td>15 Equity exposures</td>
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<td>–</td>
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<tr>
<td>16 Other items</td>
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</tr>
<tr>
<td>17 Total</td>
<td>4,206</td>
<td>15,201</td>
<td>–</td>
<td>–</td>
<td>737</td>
<td>–</td>
<td>90</td>
<td>–</td>
<td>–</td>
<td>8,810</td>
<td>16</td>
<td>–</td>
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</tr>
</tbody>
</table>
## Analysis of counterparty credit risk

Table 65: CCR3 Counterparty credit risk exposures by exposure classes and risk weight under standardised approach continued

<table>
<thead>
<tr>
<th>Exposures by regulatory portfolio and risk</th>
<th>0%</th>
<th>2%</th>
<th>4%</th>
<th>10%</th>
<th>20%</th>
<th>35%</th>
<th>50%</th>
<th>70%</th>
<th>75%</th>
<th>100%</th>
<th>150%</th>
<th>250%</th>
<th>370%</th>
<th>1250%</th>
<th>Others</th>
<th>Deducted</th>
<th>Total</th>
<th>of which: Unrated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1 Central governments or central banks</td>
<td>4,594</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2 Regional governments or local authorities</td>
<td>198</td>
<td></td>
<td>5</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>3 Public sector entities</td>
<td>362</td>
<td>56</td>
<td>444</td>
<td>7</td>
<td></td>
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<td></td>
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<tr>
<td>4 Multilateral development banks</td>
<td>362</td>
<td></td>
<td></td>
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<tr>
<td>5 International Organisations</td>
<td>42</td>
<td></td>
<td></td>
<td>93</td>
<td>1</td>
<td>31</td>
<td></td>
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</tr>
<tr>
<td>6 Corporates</td>
<td>15,045</td>
<td></td>
<td>48</td>
<td>12</td>
<td>13,362</td>
<td>5</td>
<td></td>
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<td>7 Retail</td>
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<tr>
<td>8 Secured by mortgages on immovable property</td>
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<tr>
<td>9 Exposures in default</td>
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<tr>
<td>10 Items associated with particularly high risk</td>
<td></td>
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</tr>
<tr>
<td>11 Covered Bonds</td>
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</tr>
<tr>
<td>12 Claims on institutions and corporate with a short-term credit assessment</td>
<td></td>
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<tr>
<td>13 Claims in the form of CIU</td>
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<tr>
<td>14 Equity exposures</td>
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<tr>
<td>15 Other items</td>
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</tr>
<tr>
<td>17 Total</td>
<td>5,558</td>
<td>15,101</td>
<td>−</td>
<td>590</td>
<td>15</td>
<td>−</td>
<td>13,401</td>
<td>1,458</td>
<td>−</td>
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</tr>
</tbody>
</table>

Standardised counterparty credit risk exposures decreased by £7.1bn to £29.1bn, primarily driven by:

- 0% risk weighted exposures to central governments or central bank decreased £1.8bn to £2.8bn primarily driven by a decrease in SFT exposures
- 100% risk weighted exposures to Corporates decreased £4.6bn to £8.8bn primarily driven by an extended regulatory permission to use the Internal Model Method
- 150% risk weighted exposures to item associated with particularly high risk decreased £1.5bn primarily driven by a transfer of exposures from items associated with particularly high risk to corporates
**Analysis of counterparty credit risk**

**IRB obligor grade disclosure**

The following tables show counterparty credit risk exposure at default post-CRM for the advanced IRB approach for portfolios within both the trading and banking books. Separate tables are provided for the following exposure classes: central governments and central banks (Table 66), institutions (Table 67), corporates (Table 68) and corporates subject to slotting (Table 69).

**Table 66: CCR4 Counterparty credit risk exposures by portfolio and PD range for central governments and central banks**

<table>
<thead>
<tr>
<th>PD Range</th>
<th>EAD</th>
<th>Average PD</th>
<th>Number of obligors</th>
<th>Average LGD</th>
<th>Average Maturity</th>
<th>RWA</th>
<th>RWA Density</th>
<th>Expected Loss</th>
<th>Value Adjustment and Provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>6,320</td>
<td>0.0%</td>
<td>54</td>
<td>63.6%</td>
<td>–</td>
<td>601</td>
<td>9.5%</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>53</td>
<td>0.2%</td>
<td>8</td>
<td>49.5%</td>
<td>1</td>
<td>22</td>
<td>41.1%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>29</td>
<td>0.3%</td>
<td>5</td>
<td>57.6%</td>
<td>–</td>
<td>11</td>
<td>39.7%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>4</td>
<td>0.7%</td>
<td>3</td>
<td>55.5%</td>
<td>4</td>
<td>5</td>
<td>143.6%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>76</td>
<td>1.6%</td>
<td>1</td>
<td>45.0%</td>
<td>–</td>
<td>64</td>
<td>84.6%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>6</td>
<td>6.3%</td>
<td>4</td>
<td>62.8%</td>
<td>1</td>
<td>13</td>
<td>226.1%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>–</td>
<td>0.0%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>–</td>
<td>0.0%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>6,488</td>
<td>0.1%</td>
<td>75</td>
<td>63.3%</td>
<td>–</td>
<td>716</td>
<td>11.0%</td>
<td>3</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PD Range</th>
<th>EAD</th>
<th>Average PD</th>
<th>Number of obligors</th>
<th>Average LGD</th>
<th>Average Maturity</th>
<th>RWA</th>
<th>RWA Density</th>
<th>Expected Loss</th>
<th>Value Adjustment and Provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>8,201</td>
<td>0.1%</td>
<td>60</td>
<td>62.6%</td>
<td>–</td>
<td>1,100</td>
<td>13.4%</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>16</td>
<td>0.2%</td>
<td>3</td>
<td>48.0%</td>
<td>–</td>
<td>3</td>
<td>20.7%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>128</td>
<td>0.3%</td>
<td>11</td>
<td>52.9%</td>
<td>1</td>
<td>68</td>
<td>52.9%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>–</td>
<td>0.6%</td>
<td>2</td>
<td>45.0%</td>
<td>1</td>
<td>–</td>
<td>61.2%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>7</td>
<td>0.8%</td>
<td>3</td>
<td>58.1%</td>
<td>5</td>
<td>11</td>
<td>161.8%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>45</td>
<td>8.8%</td>
<td>4</td>
<td>63.0%</td>
<td>1</td>
<td>117</td>
<td>257.2%</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>–</td>
<td>0.0%</td>
<td>–</td>
<td>0.0%</td>
<td>–</td>
<td>–</td>
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<td>–</td>
<td>–</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>–</td>
<td>0.0%</td>
<td>–</td>
<td>0.0%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>8,397</td>
<td>0.1%</td>
<td>83</td>
<td>62.4%</td>
<td>1</td>
<td>1,299</td>
<td>15.5%</td>
<td>6</td>
<td>–</td>
</tr>
</tbody>
</table>

The exposure weighted average risk weight associated with advanced IRB exposures to central governments and central banks decreased by 4.5% to 11.0%, primarily driven by a decrease in SFT exposures.
Risk and capital position review

Analysis of counterparty credit risk

### Table 67: CCR4 Counterparty credit risk exposures by portfolio and PD range for institutions

<table>
<thead>
<tr>
<th>PD Range</th>
<th>EAD post CRM £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>Average Maturity</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>Expected Loss £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>19,850</td>
<td>0.1%</td>
<td>671</td>
<td>46.0%</td>
<td>2</td>
<td>4,342</td>
<td>21.9%</td>
<td>6</td>
<td>–</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>1,034</td>
<td>0.2%</td>
<td>119</td>
<td>48.4%</td>
<td>1</td>
<td>408</td>
<td>39.4%</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>449</td>
<td>0.4%</td>
<td>104</td>
<td>48.7%</td>
<td>1</td>
<td>295</td>
<td>65.6%</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>59</td>
<td>0.6%</td>
<td>27</td>
<td>45.1%</td>
<td>1</td>
<td>38</td>
<td>64.8%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>155</td>
<td>1.7%</td>
<td>83</td>
<td>47.3%</td>
<td>1</td>
<td>167</td>
<td>107.9%</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>49</td>
<td>4.1%</td>
<td>81</td>
<td>46.6%</td>
<td>1</td>
<td>62</td>
<td>125.2%</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>20</td>
<td>13.8%</td>
<td>8</td>
<td>5.9%</td>
<td>1</td>
<td>6</td>
<td>30.4%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>–</td>
<td>0.0%</td>
<td>–</td>
<td>0.0%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>21,616</td>
<td>0.1%</td>
<td>1,093</td>
<td>46.2%</td>
<td>2</td>
<td>5,318</td>
<td>24.6%</td>
<td>11</td>
<td>–</td>
</tr>
<tr>
<td>As at 31 December 2017</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>18,497</td>
<td>0.1%</td>
<td>726</td>
<td>46.3%</td>
<td>2</td>
<td>4,283</td>
<td>23.2%</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>1,076</td>
<td>0.2%</td>
<td>158</td>
<td>45.1%</td>
<td>2</td>
<td>511</td>
<td>47.5%</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>493</td>
<td>0.4%</td>
<td>135</td>
<td>50.7%</td>
<td>1</td>
<td>299</td>
<td>60.7%</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>166</td>
<td>0.6%</td>
<td>42</td>
<td>46.0%</td>
<td>1</td>
<td>100</td>
<td>60.2%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>419</td>
<td>1.6%</td>
<td>105</td>
<td>48.3%</td>
<td>1</td>
<td>435</td>
<td>103.9%</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>90</td>
<td>3.8%</td>
<td>91</td>
<td>48.5%</td>
<td>1</td>
<td>113</td>
<td>124.6%</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>45</td>
<td>15.0%</td>
<td>17</td>
<td>43.3%</td>
<td>1</td>
<td>90</td>
<td>198.3%</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>–</td>
<td>0.00%</td>
<td>–</td>
<td>0.00%</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>20,786</td>
<td>0.2%</td>
<td>1,274</td>
<td>46.4%</td>
<td>2</td>
<td>5,831</td>
<td>28.1%</td>
<td>15</td>
<td>–</td>
</tr>
</tbody>
</table>

The exposure weighted average risk weight associated with advanced IRB exposures to institutions decreased 3.5% to 24.6%. This was primarily driven by an increase in exposures in higher quality default grades.
### Risk and capital position review

#### Analysis of counterparty credit risk

**Table 68: CCR4 Counterparty credit risk exposures by portfolio and PD range for corporates**

<table>
<thead>
<tr>
<th>EAD post CRM £m</th>
<th>Average PD %</th>
<th>Number of obligors</th>
<th>Average LGD %</th>
<th>Average Maturity</th>
<th>RWA £m</th>
<th>RWA Density %</th>
<th>Expected Loss £m</th>
<th>Value Adjustment and Provisions £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>32,359</td>
<td>0.0%</td>
<td>5,798</td>
<td>44.8%</td>
<td>2</td>
<td>5,414</td>
<td>16.7%</td>
<td>7</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>1,995</td>
<td>0.2%</td>
<td>632</td>
<td>44.0%</td>
<td>2</td>
<td>856</td>
<td>42.9%</td>
<td>2</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>917</td>
<td>0.4%</td>
<td>423</td>
<td>45.9%</td>
<td>3</td>
<td>678</td>
<td>73.9%</td>
<td>1</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>292</td>
<td>0.6%</td>
<td>92</td>
<td>42.9%</td>
<td>2</td>
<td>203</td>
<td>69.3%</td>
<td>1</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>605</td>
<td>1.5%</td>
<td>233</td>
<td>37.4%</td>
<td>3</td>
<td>579</td>
<td>95.7%</td>
<td>3</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>708</td>
<td>4.5%</td>
<td>177</td>
<td>35.0%</td>
<td>3</td>
<td>829</td>
<td>117.0%</td>
<td>11</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>52</td>
<td>12.7%</td>
<td>30</td>
<td>40.7%</td>
<td>2</td>
<td>84</td>
<td>162.2%</td>
<td>2</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>8</td>
<td>100.0%</td>
<td>39</td>
<td>41.4%</td>
<td>2</td>
<td>10</td>
<td>127.2%</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>36,936</td>
<td>0.2%</td>
<td>7,424</td>
<td>44.5%</td>
<td>2</td>
<td>8,653</td>
<td>23.4%</td>
<td>27</td>
</tr>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 to &lt; 0.15</td>
<td>34,917</td>
<td>0.1%</td>
<td>5,737</td>
<td>45.0%</td>
<td>1</td>
<td>5,832</td>
<td>16.7%</td>
<td>8</td>
</tr>
<tr>
<td>0.15 to &lt; 0.25</td>
<td>3,239</td>
<td>0.2%</td>
<td>941</td>
<td>43.9%</td>
<td>2</td>
<td>1,324</td>
<td>40.9%</td>
<td>2</td>
</tr>
<tr>
<td>0.25 to &lt; 0.50</td>
<td>1,086</td>
<td>0.4%</td>
<td>587</td>
<td>49.1%</td>
<td>3</td>
<td>824</td>
<td>75.9%</td>
<td>2</td>
</tr>
<tr>
<td>0.50 to &lt; 0.75</td>
<td>344</td>
<td>0.6%</td>
<td>167</td>
<td>40.1%</td>
<td>3</td>
<td>231</td>
<td>67.1%</td>
<td>1</td>
</tr>
<tr>
<td>0.75 to &lt; 2.50</td>
<td>940</td>
<td>1.6%</td>
<td>743</td>
<td>41.7%</td>
<td>3</td>
<td>941</td>
<td>100.0%</td>
<td>5</td>
</tr>
<tr>
<td>2.50 to &lt; 10.00</td>
<td>850</td>
<td>4.7%</td>
<td>310</td>
<td>37.7%</td>
<td>3</td>
<td>990</td>
<td>116.5%</td>
<td>13</td>
</tr>
<tr>
<td>10.00 to &lt; 100.00</td>
<td>71</td>
<td>15.5%</td>
<td>70</td>
<td>36.1%</td>
<td>3</td>
<td>95</td>
<td>133.8%</td>
<td>2</td>
</tr>
<tr>
<td>100.00 (Default)</td>
<td>6</td>
<td>100.0%</td>
<td>35</td>
<td>43.4%</td>
<td>2</td>
<td>13</td>
<td>213.3%</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>41,453</td>
<td>0.2%</td>
<td>8,590</td>
<td>44.8%</td>
<td>2</td>
<td>10,250</td>
<td>24.7%</td>
<td>33</td>
</tr>
</tbody>
</table>

The exposure weighted average risk weight associated with IRB exposure to corporates decreased 1.3% to 23.4%, this was primarily driven by a decrease in SFT exposures.
### Table 69: Counterparty Credit risk – Corporates specialised lending IRB

#### Barclays Group

<table>
<thead>
<tr>
<th>Regulatory categories</th>
<th>Remaining maturity</th>
<th>On-balance sheet amount £m</th>
<th>Off-balance sheet amount £m</th>
<th>Risk weight %</th>
<th>Exposure amount £m</th>
<th>RWA £m</th>
<th>Expected losses £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 1 Strong</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>50%</td>
<td>15</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>70%</td>
<td>40</td>
<td>28</td>
<td>–</td>
</tr>
<tr>
<td>Category 2 Good</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>70%</td>
<td>280</td>
<td>196</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>90%</td>
<td>15</td>
<td>13</td>
<td>–</td>
</tr>
<tr>
<td>Category 3 Satisfactory</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>115%</td>
<td>3</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>115%</td>
<td>3</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Category 4 Weak</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>250%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>250%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Category 5 Default</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>0%</td>
<td>2</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>0%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>300</td>
<td>206</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>58</td>
<td>44</td>
<td>–</td>
</tr>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 1 Strong</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>50%</td>
<td>34</td>
<td>17</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>70%</td>
<td>443</td>
<td>310</td>
<td>2</td>
</tr>
<tr>
<td>Category 2 Good</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>70%</td>
<td>47</td>
<td>33</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>90%</td>
<td>30</td>
<td>27</td>
<td>–</td>
</tr>
<tr>
<td>Category 3 Satisfactory</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>115%</td>
<td>4</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>115%</td>
<td>4</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Category 4 Weak</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>250%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>250%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Category 5 Default</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>0%</td>
<td>4</td>
<td>–</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>0%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>89</td>
<td>54</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>477</td>
<td>342</td>
<td>2</td>
</tr>
</tbody>
</table>

The overall exposures related to specialised lending IRB approach remained broadly stable at £0.4bn (2018: £0.6bn).
Table 69a: CR10 – Corporate exposures subject to specialised lending IRB for significant subsidiaries

<table>
<thead>
<tr>
<th>Regulatory categories</th>
<th>Remaining maturity</th>
<th>On-balance sheet amount £m</th>
<th>Off-balance sheet amount £m</th>
<th>Risk weight %</th>
<th>Exposure amount £m</th>
<th>RWA £m</th>
<th>Expected losses £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td>Category 1 Strong</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>50%</td>
<td>15</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>70%</td>
<td>40</td>
<td>28</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Category 2 Good</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>70%</td>
<td>280</td>
<td>197</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>90%</td>
<td>15</td>
<td>13</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Category 3 Satisfactory</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>115%</td>
<td>3</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>115%</td>
<td>3</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Category 4 Weak</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>250%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>250%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Category 5 Default</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>0%</td>
<td>2</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>0%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>300</td>
<td>206</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>58</td>
<td>44</td>
<td>–</td>
</tr>
</tbody>
</table>

Table 69b: CR10 – Corporate exposures subject to specialised lending IRB for significant subsidiaries

<table>
<thead>
<tr>
<th>Regulatory categories</th>
<th>Remaining maturity</th>
<th>On-balance sheet amount £m</th>
<th>Off-balance sheet amount £m</th>
<th>Risk weight %</th>
<th>Exposure amount £m</th>
<th>RWA £m</th>
<th>Expected losses £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td>Category 1 Strong</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>50%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>70%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Category 2 Good</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>70%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>90%</td>
<td>–</td>
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</tr>
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<td>Category 3 Satisfactory</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>115%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>115%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Category 4 Weak</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>250%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>250%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Category 5 Default</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>0%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>0%</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Less than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Equal to or more than 2.5 years</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Risk and capital position review

Analysis of counterparty credit risk

Table 70: CCR5-A – Impact of netting and collateral held on exposure values

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

<table>
<thead>
<tr>
<th></th>
<th>Gross positive fair value or net carrying amount £m</th>
<th>Netting benefits £m</th>
<th>Netted current credit exposure £m</th>
<th>Collateral held £m</th>
<th>Net credit exposure £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td>1 Derivatives 352,870</td>
<td>293,115</td>
<td>59,755</td>
<td>79,846</td>
<td>23,851</td>
</tr>
<tr>
<td></td>
<td>2 SFTs 911,515</td>
<td>892,833</td>
<td>18,682</td>
<td>388</td>
<td>18,682</td>
</tr>
<tr>
<td></td>
<td>3 Cross-product netting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 Total 1,264,385</td>
<td>1,185,948</td>
<td>78,437</td>
<td>80,234</td>
<td>42,533</td>
</tr>
<tr>
<td>As at 31 December 2017</td>
<td>1 Derivatives 350,891</td>
<td>294,500</td>
<td>56,391</td>
<td>72,788</td>
<td>23,230</td>
</tr>
<tr>
<td></td>
<td>2 SFTs 1,079,108</td>
<td>1,057,971</td>
<td>21,137</td>
<td>1,083</td>
<td>20,876</td>
</tr>
<tr>
<td></td>
<td>3 Cross-product netting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 Total 1,429,999</td>
<td>1,352,471</td>
<td>77,528</td>
<td>73,871</td>
<td>44,106</td>
</tr>
</tbody>
</table>

Net carrying amount for SFTs decreased by £167.6bn to £911.5bn primarily due to compression of gross positions and corresponding netting benefits with limited net credit impact. Further detail relating to collateral can be found in table 71.

Table 71: CCR5-B – Composition of collateral for exposures to CCR

This table shows the types of collateral posted or received to support or reduce CCR exposures relating to derivative transactions or SFTs, including transactions cleared through a CCP.

<table>
<thead>
<tr>
<th>Collateral used in derivative transactions</th>
<th>Collateral used in SFTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of collateral received</td>
<td>Fair value of posted collateral</td>
</tr>
<tr>
<td>Segregated Unsegregated Segregated Unsegregated</td>
<td>Fair value of collateral received</td>
</tr>
<tr>
<td>£m</td>
<td>£m</td>
</tr>
<tr>
<td>As at 31 December 2018</td>
<td></td>
</tr>
<tr>
<td>1 Cash</td>
<td>–</td>
</tr>
<tr>
<td>2 Debt</td>
<td>6,703</td>
</tr>
<tr>
<td>3 Equity</td>
<td>292</td>
</tr>
<tr>
<td>4 Others</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>6,995</td>
</tr>
<tr>
<td>As at 31 December 2017</td>
<td></td>
</tr>
<tr>
<td>1 Cash</td>
<td>–</td>
</tr>
<tr>
<td>2 Debt</td>
<td>7,022</td>
</tr>
<tr>
<td>3 Equity</td>
<td>420</td>
</tr>
<tr>
<td>4 Others</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>7,442</td>
</tr>
</tbody>
</table>

- Derivative collateral received increased by £7.1bn to £79.8bn primarily due to increase in trading activity
- Derivative posted collateral decreased by £8.4bn to £56.0bn primarily due to the removal of client cleared collateral from this table as a result of improved data quality
Analysis of counterparty credit risk

Credit derivative notional

The following tables show the notional of the credit derivative transactions outstanding as at 31 December 2018.

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

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

Credit derivatives booked arising from clearing activities performed on behalf of external counterparties (for example within Barclays subsidiaries) are not reported in this table as the Group does not have any long/short exposures to the underlying reference obligations.

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

Table 72: Notional exposure associated with credit derivative contracts

<table>
<thead>
<tr>
<th>Credit derivative product type</th>
<th>As at 31 December 2018</th>
<th>As at 31 December 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Own credit portfolio</td>
<td>Intermediation activities</td>
</tr>
<tr>
<td></td>
<td>As protection purchaser</td>
<td>As protection seller</td>
</tr>
<tr>
<td>Credit default swaps</td>
<td>£m</td>
<td>£m</td>
</tr>
<tr>
<td>As at 31 December 2018</td>
<td>1,134</td>
<td>716</td>
</tr>
<tr>
<td>Total</td>
<td>1,134</td>
<td>716</td>
</tr>
<tr>
<td>Credit default swaps</td>
<td>1,455</td>
<td>476</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>Total</td>
<td>1,515</td>
<td>541</td>
</tr>
</tbody>
</table>

Notional exposure from intermediation activities, which mainly comprises derivatives used to manage the trading book, increased £40.8bn to £657.2bn primarily driven by trading activity.
Risk and capital position review
Analysis of counterparty credit risk

Table 73: CCR6 – Credit derivatives exposures
This table provides a breakdown of the Barclays’ exposures to credit derivatives products.

<table>
<thead>
<tr>
<th>Credit derivative hedges</th>
<th>Protection bought £m</th>
<th>Protection sold £m</th>
<th>Other credit derivatives £m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notionals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-name credit default swaps</td>
<td>249</td>
<td>11</td>
<td>340,309</td>
</tr>
<tr>
<td>Index credit default swaps</td>
<td>–</td>
<td>–</td>
<td>311,189</td>
</tr>
<tr>
<td>Total return swaps</td>
<td>–</td>
<td>–</td>
<td>7,208</td>
</tr>
<tr>
<td>Credit options</td>
<td>–</td>
<td>–</td>
<td>46,213</td>
</tr>
<tr>
<td>Other credit derivatives</td>
<td>–</td>
<td>–</td>
<td>94</td>
</tr>
<tr>
<td>Total notional</td>
<td>249</td>
<td>11</td>
<td>705,013</td>
</tr>
<tr>
<td>Fair values</td>
<td>(5)</td>
<td>–</td>
<td>1,022</td>
</tr>
<tr>
<td>Positive fair value (asset)</td>
<td>2</td>
<td>–</td>
<td>9,921</td>
</tr>
<tr>
<td>Negative fair value (liability)</td>
<td>(7)</td>
<td>–</td>
<td>(8,899)</td>
</tr>
<tr>
<td>As at 31 December 2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notionals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-name credit default swaps</td>
<td>475</td>
<td>40</td>
<td>359,474</td>
</tr>
<tr>
<td>Index credit default swaps</td>
<td>–</td>
<td>–</td>
<td>250,237</td>
</tr>
<tr>
<td>Total return swaps</td>
<td>60</td>
<td>65</td>
<td>7,277</td>
</tr>
<tr>
<td>Credit options</td>
<td>–</td>
<td>–</td>
<td>42,833</td>
</tr>
<tr>
<td>Other credit derivatives</td>
<td>–</td>
<td>–</td>
<td>844</td>
</tr>
<tr>
<td>Total notional</td>
<td>535</td>
<td>105</td>
<td>660,665</td>
</tr>
<tr>
<td>Fair values</td>
<td>(25)</td>
<td>5</td>
<td>994</td>
</tr>
<tr>
<td>Positive fair value (asset)</td>
<td>–</td>
<td>5</td>
<td>11,853</td>
</tr>
<tr>
<td>Negative fair value (liability)</td>
<td>(25)</td>
<td>–</td>
<td>(10,859)</td>
</tr>
</tbody>
</table>

Credit derivatives notionals increased by £44.0bn to £705.3bn primarily driven by index credit derivative trading activity.
Analysis of counterparty credit risk

### Table 74: CCR8 - Exposures to CCPs
This table provides a breakdown of the Barclays' exposures and RWAs to central counterparties (CCP)

<table>
<thead>
<tr>
<th></th>
<th>As at 31 December 2018</th>
<th>As at 31 December 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EAD post CRM</td>
<td>RWAs</td>
</tr>
<tr>
<td>1 Exposures to QCCPs (total)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 (i) OTC derivatives</td>
<td>7,629</td>
<td>153</td>
</tr>
<tr>
<td>4 (ii) Exchange-traded derivatives</td>
<td>3,049</td>
<td>61</td>
</tr>
<tr>
<td>5 (iii) SFTs</td>
<td>1,352</td>
<td>27</td>
</tr>
<tr>
<td>6 (iv) Netting sets where cross-product netting has been approved</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>7 Segregated initial margin</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>8 Non-segregated initial margin</td>
<td>7,571</td>
<td>151</td>
</tr>
<tr>
<td>9 Prefunded default fund contributions</td>
<td>1,489</td>
<td>955</td>
</tr>
<tr>
<td>10 Alternative calculation of own funds requirements for exposures</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>11 Exposures to non-QCCPs (total)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>13 (i) OTC derivatives</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>14 (ii) Exchange-traded derivatives</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>15 (iii) SFTs</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>16 (iv) Netting sets where cross-product netting has been approved</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>17 Segregated initial margin</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>18 Non-segregated initial margin</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>19 Prefunded default fund contributions</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>20 Unfunded default fund contributions</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

All exposures to CCPs are currently treated as exposures to qualifying CCPs until 15th June 2019, in line with the EBA’s extension of the transitional period related to own fund requirements for exposures to central counterparties (No 2018/815).

The information disclosed in this table is consistent with the 2% risk weight column in Table 65, except for prefunded default fund contributions which are in Table 62 and Table 63.

Initial Margin decreased £2.6bn to £7.6bn primarily driven by portfolio level changes at CCPs.
Risk and capital position review

Analysis of counterparty credit risk

Credit value adjustments

The Credit value adjustment (CVA) measures the risk from MTM losses due to deterioration in the credit quality of a counterparty to over-the-counter derivative transactions with Barclays. It is a complement to the counterparty credit risk charge, that accounts for the risk of outright default of a counterparty.

Table 75: CCR2 Credit valuation adjustment (CVA) capital charge

Two approaches can be used to calculate the adjustment:

- Standardised approach: this approach takes account of the external credit rating of each counterparty, and incorporates the effective maturity and EAD from the calculation of the CCR
- Advanced approach: this approach requires the calculation of the charge as a) a 10-day 99% Value at Risk (VaR) measure for the current one-year period and b) the same measure for a stressed period. The sum of the two VaR measures is tripled to yield the capital charge.

<table>
<thead>
<tr>
<th>Credit valuation adjustment (CVA) capital charge</th>
<th>Exposure value £m</th>
<th>RWA £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Total portfolios subject to the Advanced Method</td>
<td>17,011</td>
<td>3,270</td>
</tr>
<tr>
<td>2 (i) VaR component (including the 3x multiplier)</td>
<td>497</td>
<td>139</td>
</tr>
<tr>
<td>3 (ii) Stressed VaR component (including 3x multiplier)</td>
<td>2,773</td>
<td></td>
</tr>
<tr>
<td>4 All portfolios subject to the Standardised Method</td>
<td>195</td>
<td>139</td>
</tr>
<tr>
<td>5 Total subject to the CVA capital charge</td>
<td>17,206</td>
<td>3,409</td>
</tr>
<tr>
<td>As at 31 December 17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Total portfolios subject to the Advanced Method</td>
<td>16,241</td>
<td>2,631</td>
</tr>
<tr>
<td>2 (i) VaR component (including the 3x multiplier)</td>
<td>471</td>
<td>370</td>
</tr>
<tr>
<td>3 (ii) Stressed VaR component (including 3x multiplier)</td>
<td>2,160</td>
<td></td>
</tr>
<tr>
<td>4 All portfolios subject to the Standardised Method</td>
<td>674</td>
<td>370</td>
</tr>
<tr>
<td>5 Total subject to the CVA capital charge</td>
<td>16,915</td>
<td>3,001</td>
</tr>
</tbody>
</table>

CVA RWAs increased £0.4bn to £3.4bn driven by an increase in exposure, a reduction in hedges and a widening of credit spreads.
This section contains key disclosures describing Barclays Group’s market risk profile, highlighting regulatory as well as management measures. This includes risk weighted assets by major business line, as well as Value at Risk measures.

- Risk weighted assets increased £2.5bn to £30.8bn, primarily driven by SVaR and securitisation specific market risk positions.
- Management Value at Risk increased 11% year on year, driven by a higher volatility environment in 2018.
- Market risk RWAs are primarily generated by the following IFRS account classifications: Trading portfolio assets and liabilities; and derivative financial instruments

**Risk weighted assets for market risk increased in the year**

<table>
<thead>
<tr>
<th>Total RWAs</th>
<th>£2.5bn</th>
</tr>
</thead>
</table>
| Driven by SVaR and securitisation specific market risk partially offset by Incremental Risk Charge.

| +£540m                      |               |
| Increase in Risks not in VaR |

| 11%                         |               |
| Increase in management Value at Risk |
Risk and capital position review

Analysis of market risk

Balance sheet view of trading and banking books

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

The balance sheet split by trading book and banking book is shown on an IFRS accounting scope of consolidation. The reconciliation between the accounting and regulatory scope of consolidation is shown in table 1 on page 11.

Table 76: Balance sheet split by trading and banking books

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Banking book £m</th>
<th>Trading book £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and balances at central banks</td>
<td>177,069</td>
<td>–</td>
<td>177,069</td>
</tr>
<tr>
<td>Cash collateral and settlement balances</td>
<td>60,309</td>
<td>16,913</td>
<td>77,222</td>
</tr>
<tr>
<td>Loans and advances at amortised cost</td>
<td>326,406</td>
<td>–</td>
<td>326,406</td>
</tr>
<tr>
<td>Reverse repurchase agreements and other similar secured lending</td>
<td>2,260</td>
<td>48</td>
<td>2,308</td>
</tr>
<tr>
<td>Trading portfolio assets</td>
<td>6,479</td>
<td>97,708</td>
<td>104,187</td>
</tr>
<tr>
<td>Financial assets designated at fair value</td>
<td>12,656</td>
<td>136,992</td>
<td>149,648</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>688</td>
<td>221,850</td>
<td>222,538</td>
</tr>
<tr>
<td>Financial assets at fair value through other comprehensive income</td>
<td>52,816</td>
<td>–</td>
<td>52,816</td>
</tr>
<tr>
<td>Investments in associates and joint ventures</td>
<td>762</td>
<td>–</td>
<td>762</td>
</tr>
<tr>
<td>Goodwill and intangible assets</td>
<td>7,973</td>
<td>–</td>
<td>7,973</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>2,535</td>
<td>–</td>
<td>2,535</td>
</tr>
<tr>
<td>Current tax assets</td>
<td>798</td>
<td>–</td>
<td>798</td>
</tr>
<tr>
<td>Deferred tax assets</td>
<td>3,828</td>
<td>–</td>
<td>3,828</td>
</tr>
<tr>
<td>Retirement benefit assets</td>
<td>1,768</td>
<td>–</td>
<td>1,768</td>
</tr>
<tr>
<td>Other assets</td>
<td>3,425</td>
<td>–</td>
<td>3,425</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>659,772</strong></td>
<td><strong>473,511</strong></td>
<td><strong>1,133,283</strong></td>
</tr>
<tr>
<td>Deposits at amortised cost</td>
<td>393,492</td>
<td>1,346</td>
<td>394,838</td>
</tr>
<tr>
<td>Cash collateral and settlement balances</td>
<td>43,883</td>
<td>23,639</td>
<td>67,522</td>
</tr>
<tr>
<td>Repurchase agreements and other similar secured borrowing</td>
<td>17,009</td>
<td>1,569</td>
<td>18,578</td>
</tr>
<tr>
<td>Debt securities in issue</td>
<td>82,286</td>
<td>–</td>
<td>82,286</td>
</tr>
<tr>
<td>Subordinated liabilities</td>
<td>20,559</td>
<td>–</td>
<td>20,559</td>
</tr>
<tr>
<td>Trading portfolio liabilities</td>
<td>–</td>
<td>37,882</td>
<td>37,882</td>
</tr>
<tr>
<td>Financial liabilities designated at fair value</td>
<td>7,592</td>
<td>209,242</td>
<td>216,834</td>
</tr>
<tr>
<td>Derivative financial instruments</td>
<td>734</td>
<td>218,909</td>
<td>219,643</td>
</tr>
<tr>
<td>Current tax liabilities</td>
<td>628</td>
<td>–</td>
<td>628</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td>51</td>
<td>–</td>
<td>51</td>
</tr>
<tr>
<td>Retirement benefit liabilities</td>
<td>315</td>
<td>–</td>
<td>315</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>7,716</td>
<td>–</td>
<td>7,716</td>
</tr>
<tr>
<td>Provisions</td>
<td>2,652</td>
<td>–</td>
<td>2,652</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td><strong>576,917</strong></td>
<td><strong>492,587</strong></td>
<td><strong>1,069,504</strong></td>
</tr>
</tbody>
</table>

Note

a The primary risk factors for banking book assets and liabilities are interest rates and to a lesser extent, foreign exchange rates. Credit spreads and equity prices will also be factor where the Group holds debt and equity securities respectively, either as financial assets designated at fair value or as financial assets at fair value through other comprehensive income, shown in Note 13 and Note 17 of the Barclays PLC 2018 Annual Report.

Included within the trading book are assets and liabilities which are included in the market risk regulatory measures. For more information on these measures (VaR, SVaR, Incremental risk charge (IRC) and Comprehensive risk measure) see the risk management section on page 163.
Analysis of market risk

Traded market risk review

Review of management measures

The following disclosures provide details on management measures of market risk. See the risk management section on pages 164 to 165 for more detail on management measures and the differences when compared to regulatory measures.

The table below shows the total management VaR on a diversified basis by risk factor. Total management VaR includes all trading positions in CIB and Head Office.

Limits are applied against each risk factor VaR as well as total Management VaR, which are then cascaded further by risk managers to each business.

Table 77: The daily average, maximum and minimum values of management VaR

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th></th>
<th></th>
<th>2017</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average £m</td>
<td>High £m</td>
<td>Low £m</td>
<td>Average £m</td>
<td>High £m</td>
<td>Low £m</td>
</tr>
<tr>
<td>Credit risk</td>
<td>11</td>
<td>16</td>
<td>8</td>
<td>12</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Interest rate risk</td>
<td>8</td>
<td>19</td>
<td>3</td>
<td>8</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Equity risk</td>
<td>7</td>
<td>14</td>
<td>4</td>
<td>8</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>Basis risk</td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Spread risk</td>
<td>6</td>
<td>9</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Foreign exchange risk</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Commodity risk</td>
<td>1</td>
<td>2</td>
<td>–</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Inflation risk</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Diversification effect a</td>
<td>(24)</td>
<td>n/a</td>
<td>n/a</td>
<td>(26)</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Total management VaR</td>
<td>21</td>
<td>27</td>
<td>15</td>
<td>19</td>
<td>26</td>
<td>14</td>
</tr>
</tbody>
</table>

Notes

a Excludes BAGL from 23 July 2018.

b Diversification effects recognise that forecast losses from different assets or businesses are unlikely to occur concurrently, hence the expected aggregate loss is lower than the sum of the expected losses from each area. Historical correlations between losses are taken into account in making these assessments. The high and low VaR data points reported for each category did not necessarily occur on the same day as the high and low VaR reported as a whole. Consequently, a diversification effect balance for the high and low VaR figures would not be meaningful and is therefore omitted from the above table.

Management VaR remained relatively stable year-on-year. The marginal increase in average management VaR in 2018 was due to a higher volatility environment compared to 2017.

Barclays Group Management VaR (£m)

Note

a Excludes BAGL from 23 July 2018.

Business scenario stresses

As part of Barclays Group’s risk management framework, the performance of the trading business in hypothetical scenarios characterised by severe macroeconomic conditions is modelled on a regular basis. Up to seven global scenarios are modelled, for example, a sharp deterioration in liquidity, a slowdown in the global economy, global recession, and a sharp increase in economic growth.

In 2018, the scenario analyses showed that the largest market risk related impacts would be due to a severe deterioration in financial liquidity and global recession.

Review of regulatory measures

The following disclosures provide details on regulatory measures of market risk. Refer to pages 166 and 167 of this report for more detail on regulatory measures and the differences when compared to management measures.

Barclays Group’s market risk capital requirement comprises of two elements:

- the market risk of trading book positions booked to legal entities are measured under a PRA approved internal models approach, including Regulatory VaR, Stressed Value at Risk (SVaR), Incremental Risk Charge (IRC) and Comprehensive Risk Measure (CRM) as required
- the trading book positions that do not meet the conditions for inclusion within the approved internal models approach are calculated using standardised rules.

The table below summarises the regulatory market risk measures, under the internal models approach. Refer to Table 80 “Market Risk own funds requirements”, on page 119 of this report for a breakdown of capital requirements by approach.
Table 78: Analysis of Regulatory VaR, SVaR, IRC and CRM

<table>
<thead>
<tr>
<th></th>
<th>Year-end £m</th>
<th>Avg. £m</th>
<th>Max £m</th>
<th>Min £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory VaR (1-day)</td>
<td>24</td>
<td>27</td>
<td>41</td>
<td>19</td>
</tr>
<tr>
<td>Regulatory VaR (10-day)b</td>
<td>76</td>
<td>87</td>
<td>129</td>
<td>61</td>
</tr>
<tr>
<td>SVaR (1-day)</td>
<td>83</td>
<td>67</td>
<td>112</td>
<td>41</td>
</tr>
<tr>
<td>SVaR (10-day)b</td>
<td>262</td>
<td>211</td>
<td>355</td>
<td>130</td>
</tr>
<tr>
<td>IRC</td>
<td>146</td>
<td>126</td>
<td>219</td>
<td>52</td>
</tr>
<tr>
<td>CRM</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory VaR (1-day)</td>
<td>28</td>
<td>27</td>
<td>39</td>
<td>19</td>
</tr>
<tr>
<td>Regulatory VaR (10-day)b</td>
<td>90</td>
<td>85</td>
<td>123</td>
<td>60</td>
</tr>
<tr>
<td>SVaR (1-day)</td>
<td>59</td>
<td>63</td>
<td>105</td>
<td>41</td>
</tr>
<tr>
<td>SVaR (10-day)b</td>
<td>186</td>
<td>200</td>
<td>331</td>
<td>130</td>
</tr>
<tr>
<td>IRC</td>
<td>188</td>
<td>202</td>
<td>326</td>
<td>142</td>
</tr>
<tr>
<td>CRM</td>
<td>–</td>
<td>1</td>
<td>2</td>
<td>–</td>
</tr>
</tbody>
</table>

Notes

a Excludes BAGL from 23 July 2018
b The 10 day VaR is based on scaling of 1-day VaR model output since VaR is currently not modelled for a 10-day holding period. For more information about regulatory and stressed VaR methodology, refer to page 167

Overall, there was an increase in SVaR and a decrease in IRC in 2018, with no significant movements in other internal model components:

- Regulatory VaR: Average VaR was broadly unchanged compared to the previous year
- SVaR: Average SVaR increase was due to a change in the date range selected for the one-year stressed period
- IRC: Decrease mainly driven by decrease in Rates and Fixed Income Financing, offset by the Foreign Exchange business
- CRM: Remained at zero throughout the year

Table 79: Breakdown of the major regulatory risk measures by portfolio

<table>
<thead>
<tr>
<th></th>
<th>Macro £m</th>
<th>Equities £m</th>
<th>Credit £m</th>
<th>Barclays International Treasury £m</th>
<th>Banking £m</th>
<th>Barclays Group Treasury £m</th>
<th>Financial Resource Management £m</th>
<th>Investing and Lending £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory VaR (1-day)</td>
<td>10</td>
<td>19</td>
<td>14</td>
<td>–</td>
<td>10</td>
<td>5</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Regulatory VaR (10-day)</td>
<td>31</td>
<td>60</td>
<td>45</td>
<td>1</td>
<td>30</td>
<td>17</td>
<td>31</td>
<td>2</td>
</tr>
<tr>
<td>SVaR (1-day)</td>
<td>64</td>
<td>59</td>
<td>30</td>
<td>1</td>
<td>20</td>
<td>13</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>SVaR (10-day)</td>
<td>203</td>
<td>187</td>
<td>95</td>
<td>2</td>
<td>63</td>
<td>40</td>
<td>64</td>
<td>11</td>
</tr>
<tr>
<td>IRC</td>
<td>154</td>
<td>7</td>
<td>209</td>
<td>–</td>
<td>14</td>
<td>9</td>
<td>84</td>
<td>5</td>
</tr>
<tr>
<td>CRM</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory VaR (1-day)</td>
<td>13</td>
<td>6</td>
<td>19</td>
<td>–</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>–</td>
</tr>
<tr>
<td>Regulatory VaR (10-day)</td>
<td>42</td>
<td>20</td>
<td>59</td>
<td>–</td>
<td>16</td>
<td>18</td>
<td>25</td>
<td>–</td>
</tr>
<tr>
<td>SVaR (1-day)</td>
<td>23</td>
<td>11</td>
<td>41</td>
<td>–</td>
<td>10</td>
<td>11</td>
<td>20</td>
<td>–</td>
</tr>
<tr>
<td>SVaR (10-day)</td>
<td>72</td>
<td>35</td>
<td>130</td>
<td>1</td>
<td>30</td>
<td>35</td>
<td>64</td>
<td>–</td>
</tr>
<tr>
<td>IRC</td>
<td>203</td>
<td>5</td>
<td>270</td>
<td>–</td>
<td>1</td>
<td>10</td>
<td>65</td>
<td>–</td>
</tr>
<tr>
<td>CRM</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Notes

a Excludes BAGL.

The table above shows the primary portfolios which are driving the trading businesses’ modelled capital requirement as at 2018 year-end. The standalone portfolio results diversify at the total level and are not additive. Regulatory VaR, SVaR, IRC and CRM in the prior table show the diversified results at a Barclays Group level.
Capital requirements for market risk

The table below shows the elements of capital requirements and risk weighted assets under the market risk framework as defined in the CRR. The Group is required to hold capital for the market risk exposures arising from regulatory trading books. Inputs for the modelled components include the measures on table 78, using the higher of the end of period value or an average over the past 60 days (times a multiplier in the case of VaR and SVaR).

Table 80: Market risk own funds requirements

<table>
<thead>
<tr>
<th>Barclays Group</th>
<th>RWA As at</th>
<th>Capital requirements As at</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31 December 2018 £m</td>
<td>31 December 2017 £m</td>
<td>31 December 2018 £m</td>
</tr>
<tr>
<td>1 Internal models approach</td>
<td>16,845</td>
<td>14,912</td>
<td>1,348</td>
</tr>
<tr>
<td>2 VaR</td>
<td>3,255</td>
<td>2,823</td>
<td>260</td>
</tr>
<tr>
<td>3 SVaR</td>
<td>8,872</td>
<td>6,827</td>
<td>710</td>
</tr>
<tr>
<td>4 Incremental risk charge</td>
<td>1,878</td>
<td>2,962</td>
<td>151</td>
</tr>
<tr>
<td>5 Comprehensive risk measure</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6 Risks not in VaR</td>
<td>2,840</td>
<td>2,300</td>
<td>227</td>
</tr>
<tr>
<td>7 Standardised approach</td>
<td>13,976</td>
<td>13,401</td>
<td>1,118</td>
</tr>
<tr>
<td>8 Interest rate risk (general and specific)</td>
<td>5,568</td>
<td>5,625</td>
<td>445</td>
</tr>
<tr>
<td>9 Equity risk (general and specific)</td>
<td>5,162</td>
<td>5,608</td>
<td>413</td>
</tr>
<tr>
<td>10 Foreign exchange risk</td>
<td>585</td>
<td>220</td>
<td>47</td>
</tr>
<tr>
<td>11 Commodity risk</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>12 Specific interest rate risk of securitisation position</td>
<td>2,661</td>
<td>1,948</td>
<td>213</td>
</tr>
<tr>
<td>13 Total</td>
<td>30,821</td>
<td>28,313</td>
<td>2,466</td>
</tr>
</tbody>
</table>

Overall market risk RWAs increased £2.5bn to £30.8bn primarily driven by SVaR and Securitisation specific market risk partially offset by incremental risk charge.

Refer to tables 81 and 82 for detailed movement analysis on the standardised approach and Internal model approach.

Table 80a: Market risk own funds requirements for significant subsidiaries

<table>
<thead>
<tr>
<th>Barclays Bank PLC</th>
<th>RWA £m</th>
<th>Capital requirements £m</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Internal models approach</td>
<td>16,684</td>
<td>1,335</td>
<td>–</td>
</tr>
<tr>
<td>2 VaR</td>
<td>3,233</td>
<td>259</td>
<td>–</td>
</tr>
<tr>
<td>3 SVaR</td>
<td>9,362</td>
<td>749</td>
<td>–</td>
</tr>
<tr>
<td>4 Incremental risk charge</td>
<td>1,877</td>
<td>150</td>
<td>–</td>
</tr>
<tr>
<td>5 Comprehensive risk measure</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6 Risks not in VaR</td>
<td>2,212</td>
<td>177</td>
<td>63</td>
</tr>
<tr>
<td>7 Standardised approach</td>
<td>6,786</td>
<td>543</td>
<td>63</td>
</tr>
<tr>
<td>8 Interest rate risk (general and specific)</td>
<td>3,068</td>
<td>245</td>
<td>24</td>
</tr>
<tr>
<td>9 Equity risk (general and specific)</td>
<td>2,113</td>
<td>169</td>
<td>–</td>
</tr>
<tr>
<td>10 Foreign exchange risk</td>
<td>34</td>
<td>3</td>
<td>39</td>
</tr>
<tr>
<td>11 Commodity risk</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>12 Specific interest rate risk of securitisation position</td>
<td>1,571</td>
<td>126</td>
<td>–</td>
</tr>
<tr>
<td>13 Total</td>
<td>23,470</td>
<td>1,878</td>
<td>63</td>
</tr>
</tbody>
</table>
Analysis of market risk

Table 81: MR1 - Market risk under standardised approach
This table shows the RWAs and capital requirements for standardised market risk split between outright products, options and securitisation. This table includes exposures subject to the Standardised approach only.

<table>
<thead>
<tr>
<th>RWA</th>
<th>As at 31 December 2018 £m</th>
<th>As at 31 December 2017 £m</th>
<th>As at 31 December 2018 £m</th>
<th>As at 31 December 2017 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outright products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Interest rate risk (general and specific)</td>
<td>5,568</td>
<td>5,625</td>
<td>445</td>
<td>450</td>
</tr>
<tr>
<td>2 Equity risk (general and specific)</td>
<td>4,010</td>
<td>4,681</td>
<td>321</td>
<td>374</td>
</tr>
<tr>
<td>3 Foreign exchange risk</td>
<td>585</td>
<td>220</td>
<td>47</td>
<td>18</td>
</tr>
<tr>
<td>4 Commodity risk</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>5 Simplified approach</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6 Delta-plus method</td>
<td>982</td>
<td>690</td>
<td>78</td>
<td>55</td>
</tr>
<tr>
<td>7 Scenario approach</td>
<td>170</td>
<td>237</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>8 Securitisation (Specific Risk)</td>
<td>2,661</td>
<td>1,948</td>
<td>213</td>
<td>156</td>
</tr>
<tr>
<td>9 Total</td>
<td>13,976</td>
<td>13,401</td>
<td>1,118</td>
<td>1,072</td>
</tr>
</tbody>
</table>

Standardised market risk RWAs increased £0.6bn to £14.0bn driven by Securitisations specific market risk which increased by £0.7bn primarily due a growth in trading book positions.

Table 82: MR2-A - Market risk under internal models approach
This table shows RWAs and capital requirements under the internal models approach. The table shows the calculation of capital requirements as a function of latest and average values for each component.

<table>
<thead>
<tr>
<th>RWA</th>
<th>As at 31 December 2018 £m</th>
<th>As at 31 December 2017 £m</th>
<th>As at 31 December 2018 £m</th>
<th>As at 31 December 2017 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 VaR (higher of values a and b)</strong></td>
<td>3,255</td>
<td>2,823</td>
<td>260</td>
<td>226</td>
</tr>
<tr>
<td>(a) Previous day’s VaR (Article 365(1) (VaRt-1))</td>
<td>–</td>
<td>–</td>
<td>124</td>
<td>114</td>
</tr>
<tr>
<td>(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)</td>
<td>–</td>
<td>260</td>
<td>226</td>
<td></td>
</tr>
<tr>
<td><strong>2 SVaR (higher of values a and b)</strong></td>
<td>8,872</td>
<td>6,827</td>
<td>710</td>
<td>546</td>
</tr>
<tr>
<td>(a) Latest SVaR (Article 365(2) (sVaRt-1))</td>
<td>–</td>
<td>–</td>
<td>341</td>
<td>230</td>
</tr>
<tr>
<td>(b) Average of the SVar (Article 365(2)) during the preceding sixty business days (sVaRavg) x multiplication factor (ms) (Article 366)</td>
<td>–</td>
<td>710</td>
<td>546</td>
<td></td>
</tr>
<tr>
<td><strong>3 Incremental risk charge - IRC (higher of values a and b)</strong></td>
<td>1,878</td>
<td>2,962</td>
<td>151</td>
<td>237</td>
</tr>
<tr>
<td>(a) Most recent IRC value (incremental default and migration risks section 3 calculated in accordance with Section 3 articles 370/371)</td>
<td>–</td>
<td>–</td>
<td>151</td>
<td>188</td>
</tr>
<tr>
<td>(b) Average of the IRC number over the preceding 12 weeks</td>
<td>–</td>
<td>130</td>
<td>237</td>
<td></td>
</tr>
<tr>
<td><strong>4 Comprehensive Risk Measure – CRM (higher of values a, b and c)</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>(a) Most recent risk number for the correlation trading portfolio (article 377)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>(b) Average of the risk number for the correlation trading portfolio over the preceding 12-weeks</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>(c) 8% of the own funds requirement in SA on most recent risk number for the correlation trading portfolio (Article 338(4))</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>5 Other</strong></td>
<td>2,840</td>
<td>2,300</td>
<td>227</td>
<td>184</td>
</tr>
<tr>
<td><strong>6 Total</strong></td>
<td>16,845</td>
<td>14,912</td>
<td>1,348</td>
<td>1,193</td>
</tr>
</tbody>
</table>

Overall modelled market RWAs increased £1.9bn to £16.8bn driven by:
- Increase in SVaR primarily due to equity derivatives and increased hedging activities
- Decrease in IRC primarily due to reduced sovereign positions
This section shows the credit, counterparty credit and market risk arising from securitisation positions. These are already included in previous related sections.

Securitisation positions are subject to a distinct risk weighted assets calculation framework and are therefore disclosed separately.

- Securitisation exposures have increased by £5.0bn, primarily driven by Barclays obtaining tranchéd credit protection on £5.5bn of existing Corporate and SME loans. The transactions involved Barclays transferring a significant portion of the credit risk on the underlying assets to external counterparties.
- A marginal decrease of £0.1bn is seen in the trading book exposures.

### Banking book exposures

+£5.0bn

### Trading book exposures

−£0.1bn
Risk and capital position review

Analysis of securitisation exposures

For regulatory disclosure purposes, a securitisation is defined as a transaction or scheme where the payments are dependent upon the performance of a single exposure or pool of exposures and where the subordination of tranches determines the distribution of losses during the on-going life of the transaction or scheme. Such transactions or schemes are undertaken for a variety of reasons including the transfer of risk for Barclays or on behalf of a client.

The tables below detail exposures from securitisation transactions entered into by the Group and cover banking and trading book exposures. Only transactions that achieved significant risk transfer (SRT) are included in these tables. Where securitisations do not achieve SRT (for instance when they are entered into for funding purposes), the associated exposures are presented alongside the rest of the banking book or trading book positions in other sections of the Pillar 3 report. In line with prior year disclosures, CCR securitisation disclosures are part of banking book tables.

Please see page 172 for further details on Barclays’ approach to managing risks associated with securitisation activities.

Barclays completes the Pillar 3 disclosures in accordance with the Basel framework and CRDIV, which prescribes minimum disclosure requirements. The following quantitative disclosures are not applicable or result in a nil return for the current and prior reporting period.

- Securitised facilities subject to an early amortisation period - there were no securitisation positions backed by revolving credit exposures, where Barclays acted as the originator and capital relief was sought
- Re-securitisation exposures subject to hedging insurance or involving financial guarantors – there were no such exposures in the current or prior reporting period
- A separate table for capital deduction is no longer applicable, in line with CRD IV
- The new securitisation Regulation (EU) 2017/2402 (the Securitisation Regulation) and Regulation (EU) 2017/2401 (amendments to Capital Requirements Regulation or CRR) have taken effect on 1st January 2019

Barclays Plc Balance sheet – summary versus regulatory view for securitisation exposures

Table 1 shows a reconciliation between Barclays Plc balance sheet for statutory purposes versus a regulatory view. Specifically, for securitisation positions, the regulatory balance sheet will differ from the statutory balance sheet due to the following:

- Deconsolidation of certain securitisation entities that are consolidated for accounting purposes, but not for regulatory purposes (refer to page 174 for a summary of accounting policies for securitisation activities).
- Securitised positions are treated in accordance with the Group's accounting policies, as set out in the 2018 Annual Report. Securitisation balances will therefore be disclosed in the relevant asset classification according to their accounting treatment.
- Some securitisation positions are considered to be off balance sheet and relate to undrawn liquidity lines to securitisation vehicles, market risk derivative positions and where Barclays is a swap provider to a Special Purpose Vehicle (SPV). These balances are disclosed in table 87.

Location of securitisation risk disclosures

As securitisation exposures are subject to a distinct risk weighted asset framework, additional securitisation disclosures are provided separate to the credit, counterparty and market risk disclosures.

This table shows a reconciliation of securitisation exposures in the following section and where the balance can be found in the relevant credit, counterparty and market risk sections.

Table B3: Reconciliation of exposures and capital requirements relating to securitisations

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Table number in this document</th>
<th>Exposure value £m</th>
<th>RWAs £m</th>
<th>Capital requirement £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking book</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standardised approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit risk</td>
<td>Tables 29, 30</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total Standardised approach</td>
<td></td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Advanced IRB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit risk</td>
<td>Tables 29, 30</td>
<td>34,921</td>
<td>4,686</td>
<td>375</td>
</tr>
<tr>
<td>Counterparty credit risk</td>
<td>Tables 62, 63</td>
<td>181</td>
<td>123</td>
<td>10</td>
</tr>
<tr>
<td>Total IRB</td>
<td></td>
<td>35,102</td>
<td>4,809</td>
<td>385</td>
</tr>
<tr>
<td>Total banking book</td>
<td></td>
<td>35,102</td>
<td>4,809</td>
<td>385</td>
</tr>
<tr>
<td>Trading book</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trading book - specific interest rate market risk</td>
<td>Table 80</td>
<td>2,035</td>
<td>2,661</td>
<td>213</td>
</tr>
<tr>
<td>Total trading book</td>
<td></td>
<td>2,035</td>
<td>2,661</td>
<td>213</td>
</tr>
</tbody>
</table>
Risk and capital position review

Analysis of securitisation exposures

Table 84: Securitisation activity during the year
This table discloses a summary of the securitisation activity during 2018, including the amount of exposures securitised and recognised gain or loss on sale in the banking book and trading book. Barclays is involved in the origination of traditional and synthetic securitisations. A securitisation is considered to be synthetic where the transfer of risk is achieved through the use of credit derivatives or guarantees and the exposure remains on Barclays’ balance sheet. A securitisation is considered to be traditional where the transfer of risk is achieved through the actual transfer of exposures to a SPV.

<table>
<thead>
<tr>
<th></th>
<th>Banking book</th>
<th></th>
<th>Trading book</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traditional</td>
<td></td>
<td>Total</td>
<td>Gain/loss</td>
</tr>
<tr>
<td></td>
<td>£m</td>
<td>Synthetic</td>
<td>banking book</td>
<td>on sale £m</td>
</tr>
<tr>
<td>Originator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>8,929</td>
<td>–</td>
<td>8,929</td>
<td>34</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>3,065</td>
<td>–</td>
<td>3,065</td>
<td>31</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Leasing</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>–</td>
<td>6,062</td>
<td>6,062</td>
<td>–</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>11,994</td>
<td>6,062</td>
<td>18,056</td>
<td>65</td>
</tr>
</tbody>
</table>

As at 31 December 2017

<table>
<thead>
<tr>
<th></th>
<th>Banking book</th>
<th></th>
<th>Trading book</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Originator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>3,677</td>
<td>3,143</td>
<td>6,820</td>
<td>73</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Leasing</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>748</td>
<td>7,743</td>
<td>8,491</td>
<td>29</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>748</td>
<td>3,743</td>
<td>8,491</td>
<td>29</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>4,425</td>
<td>10,886</td>
<td>15,311</td>
<td>102</td>
</tr>
</tbody>
</table>

The value of assets securitised in the banking book has increased by £2.7bn to £18.1bn:

Traditional
- Barclays was involved in the origination and issuance of notes for two European Residential Mortgages programs aggregating to £8.9bn
- Barclays decreased its Commercial Mortgages traditional securitisation activity by £0.6bn
- The reduction of £0.7bn in Loans to Corporates or SMEs is driven by European and US CLO transactions where the nature of involvement determined that Barclays shall not be considered as originator for subsequent transactions

Synthetic
- Synthetic securitisation activity during 2018 did not involve any Commercial Mortgage assets hence the reduction of £3.1bn in 2018
- Barclays synthetically securitised £6.1bn Loans to Corporates or SMEs retaining the senior and mezzanine tranches. The transactions that were entered into in December 2018 are subject to ongoing regulatory discussion

## Risk and capital position review

### Analysis of securitisation exposures

#### Table 85: Assets awaiting securitisation

This table discloses the value of assets held on the balance sheet at year end and awaiting securitisation.

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Banking Book £m</th>
<th>Trading Book £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Originator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>938</td>
<td>–</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Leasing</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>938</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Banking Book £m</th>
<th>Trading Book £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Originator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>203</td>
<td>–</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Leasing</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>203</td>
<td>–</td>
</tr>
</tbody>
</table>

Banking book assets awaiting securitisation have increased by £0.7bn owing to increase in warehoused assets at year end.

#### Table 86: Outstanding amount of exposures securitised - Asset value and impairment charges

This table presents the asset values and impairment charges relating to securitisation programmes where Barclays is the originator or sponsor. For programmes where Barclays contributed assets to a securitisation alongside third parties, the amount represents the entire asset pool. Barclays is considered a sponsor of three multi-seller asset-backed commercial paper (ABCP) conduits Sheffield Receivables Corporation, Salisbury Receivables Corporation and Sunderland Receivables Corporation. Please note that table 86 will not reconcile to table 84, as table 86 shows outstanding amount of exposure for the positions held/retained by Barclays. Table 84 shows the total position originated by Barclays in 2018.

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Banking Book Traditional £m</th>
<th>Synthetic £m</th>
<th>Total £m</th>
<th>Of which past due £m</th>
<th>Recognised losses £m</th>
<th>Trading Book £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Originator</td>
<td>9,824</td>
<td>876</td>
<td>10,745</td>
<td>192</td>
<td>3</td>
<td>1,849</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>2,587</td>
<td>3,463</td>
<td>203</td>
<td>41</td>
<td></td>
<td>189</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Leasing</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td><strong>Total (Originator)</strong></td>
<td>10,745</td>
<td>25,094</td>
<td>35,839</td>
<td>233</td>
<td></td>
<td>10,415</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Banking Book £m</th>
<th>Trading Book £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2017</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sponsor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>1,849</td>
<td>–</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>189</td>
<td>189</td>
</tr>
<tr>
<td>Leasing</td>
<td>2,349</td>
<td>2,349</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>324</td>
<td>324</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>2,579</td>
<td>2,579</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>683</td>
<td>683</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>274</td>
<td>274</td>
</tr>
<tr>
<td><strong>Total (Sponsor)</strong></td>
<td>8,247</td>
<td>8,247</td>
</tr>
</tbody>
</table>

**Total** 18,992 25,094 44,086 283 – –
## Analysis of securitisation exposures

### Table 86: Outstanding amount of exposures securitised - Asset value and impairment charges continued

<table>
<thead>
<tr>
<th>As at 31 December 2017</th>
<th>Banking book</th>
<th>Trading Book</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traditional £m</td>
<td>Synthetic £m</td>
</tr>
<tr>
<td><strong>Originator</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>1,173</td>
<td>–</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>560</td>
<td>3,143</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Leasing</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>380</td>
<td>16,013</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>44</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total (Originator)</strong></td>
<td>2,157</td>
<td>19,156</td>
</tr>
<tr>
<td><strong>Sponsor</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>730</td>
<td>–</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Leasing</td>
<td>1,576</td>
<td>–</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>111</td>
<td>–</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>4,073</td>
<td>–</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>308</td>
<td>–</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>256</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total (Sponsor)</strong></td>
<td>7,054</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9,211</td>
<td>19,156</td>
</tr>
</tbody>
</table>

Banking book securitised assets where Barclays is considered to be the originator or sponsor has increased by £15.7bn to £44.1bn, primarily driven by:

**Originator**
- Barclays was involved in the origination of Traditional securitisation and issuance of notes with insignificant retention for two European Residential Mortgages programs aggregating to £8.9bn
- Synthetic securitisations increased £5.9bn to £25.1bn driven by the Bank synthetically securitising £6.1bn exposures under Loans to Corporates or SMEs and retaining the senior and mezzanine tranches

**Sponsor**
- The £1.2bn exposure increase was primarily driven by enhanced business activity in Salisbury Receivables Corporation
Table 87: Securitisation exposures – by exposure class
The table below discloses the aggregate amount of securitisation exposures held, which is consistent with table 88, 90, and 91.
For originated positions, the table below reflects Barclays retained exposure in the securitisation programmes also disclosed in table 86. For clarity, table 86 discloses the underlying asset value of these programmes.
For invested and sponsored positions, the table below presents the aggregate amount of positions purchased.

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Banking book&lt;sup&gt;a,b&lt;/sup&gt;</th>
<th>Trading Book&lt;sup&gt;a,b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Originator £m</td>
<td>Sponsor £m</td>
</tr>
<tr>
<td><strong>On-balance sheet</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>35</td>
<td>1</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>2,343</td>
<td>–</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Leasing</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>20,584</td>
<td>–</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total On-balance sheet</strong></td>
<td>22,962</td>
<td>1</td>
</tr>
<tr>
<td><strong>Off-balance sheet</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>75</td>
<td>1,485</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Leasing</td>
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<td>1,740</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>3</td>
<td>228</td>
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<td>Consumer Loans</td>
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<td>Trade Receivables</td>
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<tr>
<td>Securitisations/ Re-securitisations</td>
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<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>179</td>
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<td><strong>Total Off-balance sheet</strong></td>
<td>79</td>
<td>6,678</td>
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<tr>
<td><strong>Total</strong></td>
<td>23,041</td>
<td>6,679</td>
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</table>

<table>
<thead>
<tr>
<th>As at 31 December 2017</th>
<th>Banking book&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Trading Book&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Originator £m</td>
<td>Sponsor £m</td>
</tr>
<tr>
<td><strong>On-balance sheet</strong></td>
<td></td>
<td></td>
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<tr>
<td>Residential Mortgages</td>
<td>22</td>
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</tr>
<tr>
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<td>–</td>
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<tr>
<td>Credit Card Receivables</td>
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<td>–</td>
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<td>–</td>
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</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>14,599</td>
<td>–</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>149</td>
</tr>
<tr>
<td><strong>Total On-balance sheet</strong></td>
<td>17,512</td>
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</tr>
<tr>
<td><strong>Off-balance sheet</strong></td>
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<tr>
<td>Residential Mortgages</td>
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<td>502</td>
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<td>Commercial Mortgages</td>
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<td>–</td>
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<tr>
<td>Credit Card Receivables</td>
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<td>418</td>
</tr>
<tr>
<td>Leasing</td>
<td>–</td>
<td>396</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>4</td>
<td>601</td>
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<td>Consumer Loans</td>
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<td>Trade Receivables</td>
<td>–</td>
<td>72</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>148</td>
</tr>
<tr>
<td><strong>Total Off-balance sheet</strong></td>
<td>140</td>
<td>6,170</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17,652</td>
<td>6,170</td>
</tr>
</tbody>
</table>

Notes
a The exposure type is based on the asset class of underlying positions
b Off balance sheet relates to liquidity lines to securitisation vehicles, market risk derivative positions and where the Group is a swap provider to a SPV
Analysis of securitisation exposures

The total amount of securitisation positions in the banking book has increased by £5bn to £35.1bn, primarily driven by:

On-balance sheet
- Increase in originated Loans to Corporates or SMEs by £6.6bn to £21.8bn due to Barclays synthetically securitising £6.1bn and retaining £5.5bn senior and mezzanine tranches

Off-balance sheet
- A net increase of £0.6bn across sponsored Residential Mortgages, Leasing, Consumer Loans and Trade Receivables driven by business and client activities

Table 88: Securitisation exposures – by capital approach
This table discloses the total exposure value and associated capital requirement of securitisation positions held by the approach adopted in accordance with the Basel framework. Barclays has approval to use, and therefore applies the IRB approach for the calculation of its RWAs. The total population is as per tables 87, 90, and 91.

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Exposure values</th>
<th>Capital requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Originator £m</td>
<td>Sponsor £m</td>
</tr>
<tr>
<td>Banking book</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRB approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratings Based Approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;= 10%</td>
<td>20,804</td>
<td>1,694</td>
</tr>
<tr>
<td>&gt; 10% &lt;= 20%</td>
<td>1,066</td>
<td>154</td>
</tr>
<tr>
<td>&gt; 20% &lt;= 50%</td>
<td>324</td>
<td>1</td>
</tr>
<tr>
<td>&gt; 50% &lt;= 100%</td>
<td>495</td>
<td>5</td>
</tr>
<tr>
<td>&gt;100% &lt;= 650%</td>
<td>351</td>
<td>–</td>
</tr>
<tr>
<td>&gt; 650% &lt;= 1250%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>= 1250% / Look through</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Internal Assessment Approach</td>
<td>– 4,825</td>
<td>–</td>
</tr>
<tr>
<td>Supervisory Formula Method</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total IRB</td>
<td>23,041</td>
<td>6,679</td>
</tr>
<tr>
<td>Standardised approach</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total banking book</td>
<td>23,041</td>
<td>6,679</td>
</tr>
</tbody>
</table>

Trading book
IRB approach
Ratings Based Approach
<= 10% | – | – | 919 | 919 | – | – | 6 | 6
> 10% <= 20% | – | – | 319 | 319 | – | – | 4 | 4
> 20% <= 50% | – | – | 353 | 353 | – | – | 7 | 7
> 50% <= 100% | – | – | 161 | 161 | – | – | 8 | 8
>100% <= 650% | – | – | 107 | 107 | – | – | 19 | 19
> 650% <= 1250% | – | – | 16 | 16 | – | – | 9 | 9
= 1250% / Look through | – | – | 160 | 160 | – | – | 160 | 160
Total trading book | – | – | 2,035 | 2,035 | – | – | 213 | 213

---

table 88 - Securitisation exposures – by capital approach

This table discloses the total exposure value and associated capital requirement of securitisation positions held by the approach adopted in accordance with the Basel framework. Barclays has approval to use, and therefore applies the IRB approach for the calculation of its RWAs. The total population is as per tables 87, 90, and 91.

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Exposure values</th>
<th>Capital requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Originator £m</td>
<td>Sponsor £m</td>
</tr>
<tr>
<td>Banking book</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRB approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratings Based Approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;= 10%</td>
<td>20,804</td>
<td>1,694</td>
</tr>
<tr>
<td>&gt; 10% &lt;= 20%</td>
<td>1,066</td>
<td>154</td>
</tr>
<tr>
<td>&gt; 20% &lt;= 50%</td>
<td>324</td>
<td>1</td>
</tr>
<tr>
<td>&gt; 50% &lt;= 100%</td>
<td>495</td>
<td>5</td>
</tr>
<tr>
<td>&gt;100% &lt;= 650%</td>
<td>351</td>
<td>–</td>
</tr>
<tr>
<td>&gt; 650% &lt;= 1250%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>= 1250% / Look through</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>Internal Assessment Approach</td>
<td>– 4,825</td>
<td>–</td>
</tr>
<tr>
<td>Supervisory Formula Method</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total IRB</td>
<td>23,041</td>
<td>6,679</td>
</tr>
<tr>
<td>Standardised approach</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total banking book</td>
<td>23,041</td>
<td>6,679</td>
</tr>
</tbody>
</table>

Trading book
IRB approach
Ratings Based Approach
<= 10% | – | – | 919 | 919 | – | – | 6 | 6
> 10% <= 20% | – | – | 319 | 319 | – | – | 4 | 4
> 20% <= 50% | – | – | 353 | 353 | – | – | 7 | 7
> 50% <= 100% | – | – | 161 | 161 | – | – | 8 | 8
>100% <= 650% | – | – | 107 | 107 | – | – | 19 | 19
> 650% <= 1250% | – | – | 16 | 16 | – | – | 9 | 9
= 1250% / Look through | – | – | 160 | 160 | – | – | 160 | 160
Total trading book | – | – | 2,035 | 2,035 | – | – | 213 | 213
Risk and capital position review

Analysis of securitisation exposures

Table 88: Securitisation exposures – by capital approach continued

<table>
<thead>
<tr>
<th>As at 31 December 2017</th>
<th>Exposure values</th>
<th>Capital requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Originator £m</td>
<td>Sponsor £m</td>
</tr>
<tr>
<td>Banking book</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRB approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratings Based Approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;= 10%</td>
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<td>1,880</td>
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<td>752</td>
<td>443</td>
</tr>
<tr>
<td>&gt; 20% &lt;= 50%</td>
<td>282</td>
<td>56</td>
</tr>
<tr>
<td>&gt; 50% &lt;= 100%</td>
<td>336</td>
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<tr>
<td>&gt; 100% &lt;= 650%</td>
<td>245</td>
<td>–</td>
</tr>
<tr>
<td>&gt; 650% &lt;= 1250%</td>
<td>–</td>
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</tr>
<tr>
<td>= 1250% / Look through</td>
<td>23</td>
<td>–</td>
</tr>
<tr>
<td>Supervisory Formula Method</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total IRB</td>
<td>17,652</td>
<td>6,170</td>
</tr>
<tr>
<td>Standardised approach</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total banking book</td>
<td>17,652</td>
<td>6,170</td>
</tr>
<tr>
<td>Trading book</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRB approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratings Based Approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;= 10%</td>
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<td>–</td>
</tr>
<tr>
<td>&gt; 10% &lt;= 20%</td>
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<tr>
<td>&gt; 20% &lt;= 50%</td>
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<tr>
<td>&gt; 50% &lt;= 100%</td>
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<td>–</td>
</tr>
<tr>
<td>&gt; 100% &lt;= 650%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt; 650% &lt;= 1250%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>= 1250% / Look through</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total trading book</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk Weighted Band</th>
<th>IRB S&amp;P Equivalent Rating</th>
<th>STD S&amp;P Equivalent Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= 10%</td>
<td>AAA to A+ (Senior Position Only)</td>
<td>N/A</td>
</tr>
<tr>
<td>&gt; 10% &lt;= 20%</td>
<td>A to A- (Senior Position Only) / AAA to A+ (Base ase)</td>
<td>N/A</td>
</tr>
<tr>
<td>&gt; 20% &lt;= 50%</td>
<td>A to A- (Base Case)</td>
<td>AAA to AA-</td>
</tr>
<tr>
<td>&gt; 50% &lt;= 100%</td>
<td>BBB+ to BBB (Base Case)</td>
<td>A+ to A-</td>
</tr>
<tr>
<td>&gt; 100% &lt;= 650%</td>
<td>BBB- (Base Case) to BB (Base Case)</td>
<td>BBB+ to BBB-</td>
</tr>
<tr>
<td>&gt; 650% &lt;= 1250%</td>
<td>BB- (Base Case)</td>
<td>BB to BB-</td>
</tr>
<tr>
<td>= 1250% / deduction</td>
<td>Below BB-</td>
<td>Below BB-</td>
</tr>
</tbody>
</table>

The securitisation positions in the banking book have increased by £5bn to £35.1bn, primarily driven by:

- An increase of £4.8bn in the <=10% band for “Originator” positions with the Bank synthetically securitising exposures under Loans to Corporates or SMEs and retaining the senior tranches; partially offset by £0.7bn reduction in Investor positions attributable to client activities
- Residual movements across other risk weighted bands of £0.7bn due to synthetic securitisations with the Bank retaining the mezzanine tranches partially offset by £0.3bn reduction in client activity and £0.2bn owing to movement to off balance sheet conduits
Risk and capital position review

Analysis of securitisation exposures

Table 89: Re-securitisation exposures - by risk weight band
This table is a subset of table 88 and discloses Barclays exposures to re-securitisations by capital approach. For the purposes of the table below, a re-securitisation is defined as a securitisation where at least one of the underlying exposures is a securitisation position. This is in line with Basel capital requirements.

For securitisations with mixed asset pools (e.g. certain collateralised loan obligations), the exposure class disclosed in tables 87, 90 and 91 represents the exposure class of the predominant underlying asset class.

<table>
<thead>
<tr>
<th></th>
<th>Exposure values</th>
<th>Capital requirements</th>
</tr>
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<td></td>
<td>Originator £m</td>
<td>Sponsor £m</td>
</tr>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking book</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRB approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratings Based Approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;= 10%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt; 10% &lt;= 20%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt; 20% &lt;= 50%</td>
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<td>&gt; 100% &lt;= 650%</td>
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<tr>
<td>&gt; 650% &lt;= 1250%</td>
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<td>= 1250% / Look through</td>
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</tr>
<tr>
<td>Internal Assessment Approach</td>
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<td>–</td>
</tr>
<tr>
<td>Supervisory Formula Method</td>
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</tr>
<tr>
<td>Total IRB</td>
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<tr>
<td>Standardised approach</td>
<td></td>
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</tr>
<tr>
<td>Total banking book</td>
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<td>–</td>
</tr>
<tr>
<td>Trading book</td>
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<td></td>
</tr>
<tr>
<td>IRB approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratings Based Approach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;= 10%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt; 10% &lt;= 20%</td>
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<td>–</td>
</tr>
<tr>
<td>&gt; 20% &lt;= 50%</td>
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<tr>
<td>&gt; 50% &lt;= 100%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt; 100% &lt;= 650%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt; 650% &lt;= 1250%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>= 1250% / Look through</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total trading book</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Risk and capital position review

Analysis of securitisation exposures

Table 89: Re-securitisation exposures – by risk weight band continued

<table>
<thead>
<tr>
<th>Exposure values</th>
<th>Capital requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2017</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Originator £m</td>
</tr>
<tr>
<td>Banking book</td>
<td></td>
</tr>
<tr>
<td>IRB approach</td>
<td></td>
</tr>
<tr>
<td>Ratings Based Approach</td>
<td></td>
</tr>
<tr>
<td>&lt;= 10%</td>
<td>– – – – – –</td>
</tr>
<tr>
<td>&gt; 10% &lt;= 20%</td>
<td>– – – – – –</td>
</tr>
<tr>
<td>&gt; 20% &lt;= 50%</td>
<td>4 – – 4</td>
</tr>
<tr>
<td>&gt; 50% &lt;= 100%</td>
<td>– – 6 6</td>
</tr>
<tr>
<td>&gt; 100% &lt;= 650%</td>
<td>– – – –</td>
</tr>
<tr>
<td>&gt; 650% &lt; 1250%</td>
<td>– – – –</td>
</tr>
<tr>
<td>&gt;= 1250% / Look through</td>
<td>– – – –</td>
</tr>
<tr>
<td>Internal Assessment Approach</td>
<td>– – – –</td>
</tr>
<tr>
<td>Supervisory Formula Method</td>
<td>– – – –</td>
</tr>
<tr>
<td>Total IRB</td>
<td>4 – 6 10</td>
</tr>
<tr>
<td>Standardised approach</td>
<td>– – – –</td>
</tr>
<tr>
<td>Total banking book</td>
<td>4 – 6 10</td>
</tr>
<tr>
<td>Trading book</td>
<td></td>
</tr>
<tr>
<td>IRB approach</td>
<td></td>
</tr>
<tr>
<td>Ratings Based Approach</td>
<td></td>
</tr>
<tr>
<td>&lt;= 10%</td>
<td>– – – – – –</td>
</tr>
<tr>
<td>&gt; 10% &lt;= 20%</td>
<td>– – – – – –</td>
</tr>
<tr>
<td>&gt; 20% &lt;= 50%</td>
<td>– – 49 49</td>
</tr>
<tr>
<td>&gt; 50% &lt;= 100%</td>
<td>– – 44 44</td>
</tr>
<tr>
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<td>&gt; 650% &lt; 1250%</td>
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<tr>
<td>&gt;= 1250% / Look through</td>
<td>– – 5 5</td>
</tr>
<tr>
<td>Total trading book</td>
<td>– – 98 98</td>
</tr>
</tbody>
</table>

Decrease in the trading book exposures is a result of the Group not actively participating in re-securitisation transactions.

Table 90: Aggregate amount of securitised positions retained or purchased by geography – banking book

This table presents total banking book securitised exposure type by geography, based on location of the counterparty.

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>United Kingdom £m</th>
<th>Europe £m</th>
<th>Americas £m</th>
<th>Africa and Middle East £m</th>
<th>Asia £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>2,923</td>
<td>633</td>
<td>326</td>
<td>–</td>
<td>45</td>
<td>3,927</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>2,273</td>
<td>72</td>
<td>–</td>
<td>13</td>
<td>–</td>
<td>2,358</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>316</td>
<td>–</td>
<td>316</td>
</tr>
<tr>
<td>Leasing</td>
<td>–</td>
<td>98</td>
<td>1,644</td>
<td>–</td>
<td>–</td>
<td>1,742</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>7,707</td>
<td>4,680</td>
<td>9,657</td>
<td>38</td>
<td>471</td>
<td>22,553</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>393</td>
<td>389</td>
<td>2,521</td>
<td>–</td>
<td>22</td>
<td>3,325</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>136</td>
<td>353</td>
<td>203</td>
<td>–</td>
<td>–</td>
<td>692</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>186</td>
<td>–</td>
<td>186</td>
</tr>
<tr>
<td>Total</td>
<td>13,432</td>
<td>6,225</td>
<td>14,853</td>
<td>51</td>
<td>541</td>
<td>35,102</td>
</tr>
<tr>
<td>As at 31 December 2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>3,133</td>
<td>51</td>
<td>13</td>
<td>23</td>
<td>64</td>
<td>3,284</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>1,782</td>
<td>1,098</td>
<td>13</td>
<td>–</td>
<td>–</td>
<td>2,893</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>418</td>
<td>–</td>
<td>418</td>
</tr>
<tr>
<td>Leasing</td>
<td>1</td>
<td>–</td>
<td>452</td>
<td>–</td>
<td>–</td>
<td>453</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>7,654</td>
<td>3,711</td>
<td>4,283</td>
<td>–</td>
<td>144</td>
<td>15,792</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>437</td>
<td>809</td>
<td>5,410</td>
<td>–</td>
<td>35</td>
<td>6,691</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>141</td>
<td>–</td>
<td>72</td>
<td>–</td>
<td>–</td>
<td>213</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>1</td>
<td>2</td>
<td>368</td>
<td>–</td>
<td>5</td>
<td>376</td>
</tr>
<tr>
<td>Total</td>
<td>13,149</td>
<td>5,671</td>
<td>11,029</td>
<td>23</td>
<td>248</td>
<td>30,120</td>
</tr>
</tbody>
</table>
Analysis of securitisation exposures

The securitisation positions in the banking book have increased by £5bn to £35.1bn, driven by:

- The Bank synthetically securitising exposures under Loans to Corporates or SMEs of £3.7bn in Americas and £1.0bn in Europe retaining the senior and mezzanine tranches partially offset by business and client activities
- Immaterial movements across multiple counterparties in United Kingdom and Asia

Table 91: Aggregate amount of securitised positions retained or purchased by geography - trading book
This table presents total trading book securitised exposure type by geography. The country is based on the country of operation of the issuer.

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>United Kingdom £m</th>
<th>Europe £m</th>
<th>Americas £m</th>
<th>Africa and Middle East £m</th>
<th>Asia £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>As at 31 December 2018</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Mortgages</td>
<td>732</td>
<td>10</td>
<td>8</td>
<td>–</td>
<td>–</td>
<td>750</td>
</tr>
<tr>
<td>Commercial Mortgages</td>
<td>8</td>
<td>5</td>
<td>167</td>
<td>–</td>
<td>–</td>
<td>180</td>
</tr>
<tr>
<td>Credit Card Receivables</td>
<td>4</td>
<td>–</td>
<td>38</td>
<td>–</td>
<td>–</td>
<td>42</td>
</tr>
<tr>
<td>Leasing</td>
<td>–</td>
<td>–</td>
<td>16</td>
<td>–</td>
<td>–</td>
<td>16</td>
</tr>
<tr>
<td>Loans to Corporates or SMEs</td>
<td>11</td>
<td>417</td>
<td>216</td>
<td>–</td>
<td>–</td>
<td>644</td>
</tr>
<tr>
<td>Consumer Loans</td>
<td>13</td>
<td>3</td>
<td>232</td>
<td>–</td>
<td>–</td>
<td>248</td>
</tr>
<tr>
<td>Trade Receivables</td>
<td>–</td>
<td>–</td>
<td>61</td>
<td>–</td>
<td>–</td>
<td>61</td>
</tr>
<tr>
<td>Securitisations/ Re-securitisations</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other Assets</td>
<td>–</td>
<td>90</td>
<td>4</td>
<td>–</td>
<td>–</td>
<td>94</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>768</td>
<td>525</td>
<td>742</td>
<td>–</td>
<td>–</td>
<td>2,035</td>
</tr>
</tbody>
</table>

| **As at 31 December 2017**           |                   |           |             |                           |         |          |
| Residential Mortgages                | 696               | 13        | 63          | 3                         | 775     |
| Commercial Mortgages                 | 2                 | –         | 150         | –                         | 152     |
| Credit Card Receivables              | –                 | –         | 57          | –                         | 57      |
| Leasing                              | –                 | –         | –           | –                         | –       |
| Loans to Corporates or SMEs          | 3                 | 401       | 347         | –                         | 751     |
| Consumer Loans                       | –                 | 8         | 248         | –                         | 256     |
| Trade Receivables                    | –                 | –         | –           | –                         | –       |
| Securitisations/ Re-securitisations  | –                 | 89        | –           | –                         | 89      |
| Other Assets                          | –                 | –         | 9           | –                         | 9       |
| **Total**                            | 701               | 511       | 874         | 3                         | 2,089   |

The total amount of securitisation positions in the trading book remained broadly stable at £2.0bn.
This section contains details of capital requirements for operational risk, expressed as RWAs, and an analysis of the Group’s operational risk profile, including events which have had a significant impact in 2018.

Operational risk RWAs remained unchanged during the year

£56.7bn
Barclays’ operational risk RWA requirement has remained unchanged at £56.7bn.
For the purpose of risk weighted assets, conduct risk remediation provisions have been included within this operational risk section.
Conduct risk is a separate principal risk and is covered more extensively on page 182

Summary of performance in the period
During 2018, total operational risk losses decreased to £220m (2017: £291m) and the number of recorded events for 2018 decreased to 1,995 from 2,770 events recorded during the prior year. The total operational risk losses for the year were primarily driven by events falling within the Execution, Delivery and Process Management and External Fraud categories, which tend to be high volume but low impact events.

Key metrics

84% of Barclays Group’s net reportable operational risk events had a loss value of £50,000 or less

61% of events by number are due to External Fraud
Risk and capital position review

Analysis of operational risk

Operational risk - risk weighted assets
The following table details the Group’s operational risk RWAs. Following submission of an application to the PRA, Barclays Group received the PRAs approval to use the Standardised Approach (TSA) for operational risk regulatory capital purposes with effect from 1 April 2018. Barclays Group has conservatively elected to retain its previous operational risk RWA amount unchanged for 2018.

See pages 182 to 185 for information on operational risk management.

Table 92: Risk weighted assets for operational risk

<table>
<thead>
<tr>
<th>As at 31 December 2018</th>
<th>Barclays UK £m</th>
<th>Barclays International £m</th>
<th>Head Office £m</th>
<th>Total £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Indicator Approach</td>
<td>11,835</td>
<td>28,989</td>
<td>15,836</td>
<td>56,660</td>
</tr>
<tr>
<td>Standardised Approach</td>
<td>790</td>
<td>1,527</td>
<td>935</td>
<td>3,252</td>
</tr>
<tr>
<td>Advanced Measurement Approach</td>
<td>11,377</td>
<td>26,181</td>
<td>15,850</td>
<td>53,408</td>
</tr>
<tr>
<td>Total operational risk RWAs</td>
<td>12,167</td>
<td>27,708</td>
<td>16,785</td>
<td>56,660</td>
</tr>
</tbody>
</table>

Barclays Group’s operational risk RWA requirement has remained static at £56.7bn. Barclays Group currently holds sufficient operational risk capital to cover the range of potential extreme operational risks it faces.

Operational risk profile
Within operational risk, a high proportion of risk events have a low financial cost whilst a very small proportion of operational risk events will have a material impact on the financial results of Barclays Group. In 2018, 84% of Barclays Group’s reportable operational risk events by volume had a value of less than £50,000 (2017: 86%), although this type of event accounted for only 14% (2017: 16%) of Barclays Group's total net operational risk losses.

The analysis below presents Barclays Group’s operational risk events split by category, as defined by the regulation:

- **Execution, Delivery and Process Management impacts** decreased to £127m (2017: £216m) and accounted for 58% (2017: 74%) of total operational risk losses. The events in this category are typical of the banking industry as a whole where high volumes of transactions are processed on a daily basis. Whilst the overall frequency of events in this category increased in 2018 to 31% of total events by volume (2017: 24%), the decrease in total impacts was due to a lower number of events with high loss values compared to the prior year.

- **External Fraud** remains the category with the highest frequency of events at 61% of total events in 2018, although down from 72% in prior year. In this category, high volume, low value events are driven by transactional fraud often related to debit and credit card usage.

- **Business Disruption and System Failures** impacts decreased to £13m (2017: £20m), although count of events increased slightly year-on-year to 93 (73 for 2017) accounting for 4.7% of total events by volume in 2018 (2017:2.6%). The decrease in total impacts was due to a lower number of events with high loss values compared to the prior year.

- **Employment Practices and Workplace Safety** impacts show a significant increase to £35m (2017: £0.3m) accounting for 16% of total operational risk losses in 2018. This resulted from a low number of events with significant impacts (three single legacy events relating to closed businesses accounted for 91% of these impacts) although the number of events in this category also increased to 48 for 2018 (11 for 2017).

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

Investment continues to be made in improving the control environment across Barclays Group. Particular areas of focus include new and enhanced fraud prevention systems and tools to combat the increasing level of fraud attempts being made in order to minimise any disruption to genuine transactions. Fraud remains an industry wide threat and Barclays Group continues to work closely with external partners on various prevention initiatives. Technology, resilience and cyber security risks evolve rapidly so Barclays Group maintains continued focus and investment in the control environment to manage these risks, as well as actively partners with peers and relevant organisations to understand and disrupt threats originating outside Barclays Group.

Cyber threats, which are evolving and increasing in sophistication and frequency, continue to be a threat across multiple industries globally. Barclays Group recognises the potential impact of cyber security threats on all areas of its business. This extends to third party suppliers and service providers which also presents a potential source of cyber security threats, leading to the need for increased scrutiny of Barclays Group’s relationships with third parties. The potential impact of cyber security threats includes the potential for operational disruption, reputational harm, and costs associated with possible litigation, regulatory investigation, and remediation. The Regulators in Europe and the US have been increasingly focused on cyber security risk management and operational resilience for banking organisations given the complexity of the transactions they process, the number of jurisdictions in which they operate, and the quantities of sensitive data they hold and process. This has resulted in a number of proposed laws, regulations and other requirements that necessitate implementation of a variety of increased controls and enhancements for regulated Barclays Group entities. These include, among others, the adoption of cyber security policies and procedures meeting specified criteria, minimum required security measures, controls and procedures for enhanced reporting and public disclosures, compliance certification requirements, and other cyber and information risk governance measures. Further to this, Barclays Group continues to use an intelligence-driven defence approach, analysing external events for current and emerging cyber threats which allows the delivery of proactive counter measures; Barclays Group also completes cyber threat scenarios and incident playbooks to assess our security posture and business impacts and runs an internal adversarial capability which simulates hackers to proactively test controls and responses. The increased
Risk and capital position review

Analysis of operational risk

control environment has enhanced and will continue to enhance our security posture and our ability to better protect the organisation and our customers. Cyber-attacks however are increasingly sophisticated and there can be no assurance that the measures implemented will be fully effective to prevent or mitigate future attacks, the consequences of which could be significant to Barclays Group. Furthermore, such measures have resulted and will result in increased technology and other costs in connection with cyber security mitigation and compliance for Barclays Group. Barclays Group currently incurs an additional cost in mitigating its cyber risk via insurance.

For further information, refer to operational risk management section (pages 182-185).

Operational risk events by Basel event category

<table>
<thead>
<tr>
<th>Event Category</th>
<th>% of total risk events by count</th>
<th>% of total risk events by value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal fraud</td>
<td>0.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td>External fraud</td>
<td></td>
<td>1.9%</td>
</tr>
<tr>
<td>Execution, delivery and process management</td>
<td>24.3%</td>
<td>57.8%</td>
</tr>
<tr>
<td>Employment practices and workplace safety</td>
<td>4.4%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Damage to physical assets</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Clients, products and business practices</td>
<td>0.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Business disruption and system failures</td>
<td>2.6%</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Note

a The data disclosed includes operational risk losses for reportable events (excluding BAGL) having impact of > £10,000 and excludes events that are conduct or legal risk, aggregate and boundary events. A boundary event is an operational risk event that results in a credit risk impact. Due to the nature of risk events that keep evolving, prior year losses have been updated.
Barclays’ approach to managing risks

Risk management strategy, governance and risk culture

In this section we describe the approaches and strategies for managing risks at Barclays Group. It contains information on how risk management functions are organised, how they maintain their independence and foster a sound risk culture throughout the Barclays Group.

- The Enterprise Risk Management Framework (ERMF) sets out the tools, techniques and organisational arrangements to enable all material risks to be identified and understood (see page 136).
- A governance structure, encompassing the organisation of the function as well as executive and Board committees, supports the continued application of the ERMF. This is discussed in pages 136 to 138.
- A discussion of how our risk management strategy is designed to foster a strong risk culture is contained on page 139.
- Pages 139 to 142 describe group-wide risk management tools that support risk management, the Barclays Group ExCo and the Board in discharging their responsibilities, and how they are applied in the strategic planning cycle.
Barclays’ approach to managing risks
Risk management strategy, governance and risk culture

Barclays Group’s risk management strategy

Introduction
The activities of Barclays Group entail risk taking, every day, throughout its business. This section introduces these risks, and outlines arrangements for identifying and managing them. These include roles and responsibilities, frameworks, policies and standards, assurance and lessons learned processes. Barclays Group’s approach to fostering a strong risk culture is also described.

Enterprise Risk Management Framework (ERMF)
The ERMF sets the strategic direction for risk management by defining standards, objectives and responsibilities for all areas of Barclays Group. It supports senior management in effective risk management and developing a strong risk culture.
The ERMF sets out:
- Principal risks faced by Barclays Group
- Risk appetite requirements
- Roles and responsibilities for risk management
- Risk committee structure

Principal risks
The ERMF identifies eight Principal Risks (see table below) and sets out associated responsibilities and risk management standards.

Risk appetite for the principal

Financial Principal Risks
- Credit risk: The risk of loss to the firm from the failure of clients, customers or counterparties, including sovereigns, to fully honour their obligations to the firm, including the whole and timely payment of principal, interest, collateral and other receivables.
- Market risk: The risk of loss arising from potential adverse changes in the value of the firm’s assets and liabilities from fluctuation in market variables including, but not limited to, interest rates, foreign exchange, equity prices, commodity prices, credit spreads, implied volatilities and asset correlations.
- Treasury and capital risk:
  - Liquidity risk: The risk that the firm is unable to meet its contractual or contingent obligations or that it does not have the appropriate amount, tenor and composition of funding and liquidity to support its assets.
  - Capital risk: The risk that the firm has an insufficient level or composition of capital to support its normal business activities and to meet its regulatory capital requirements under normal operating environments or stressed conditions (both actual and as defined for internal planning or regulatory testing purposes). This includes the risk from the firm’s pension plans.
  - Interest rate risk in the banking book: The risk that the firm is exposed to capital or income volatility because of a mismatch between the interest rate exposures of its (non-traded) assets and liabilities.

Non-Financial Principal Risks
- Operational risk: The risk of loss to the firm from inadequate or failed processes or systems, human factors or due to external events (for example fraud) where the root cause is not due to credit or market risks.
- Model risk: The risk of the potential adverse consequences from financial assessments or decisions based on incorrect or misused model outputs and reports.
- Conduct risk: The risk of detriment to customers, clients, market integrity, effective competition or Barclays from the inappropriate supply of financial services, including instances of wilful or negligent misconduct.
- Reputation risk: The risk that an action, transaction, investment or event will reduce trust in the firm’s integrity and competence by clients, counterparties, investors, regulators, employees or the public.
- Legal risk: The risk of loss or imposition of penalties, damages or fines from the failure of the firm to meet its legal obligations including regulatory or contractual requirements.
Barclays’ approach to managing risks

Risk management strategy, governance and risk culture

Risk committees
Product/risk type committees consider risk matters relevant to their business, and escalate as required to the Group Risk Committee (GRC), whose Chairman, in turn, escalates to Barclays PLC Board Committees and the Barclays PLC Board. There are three Board-level forums which oversee the application of the ERMF and review and monitor risk across the Barclays Group. These are: the Barclays PLC Board Risk Committee, the Barclays PLC Board Audit Committee, and the Barclays PLC Board Reputation Committee. Additionally, the Barclays PLC Board Remuneration Committee oversees pay practices focusing on aligning pay to sustainable performance. Finally, the Barclays PLC Board receives regular information on the risk profile of Barclays Group, and has ultimate responsibility for risk appetite and capital plans.

The Chairman of each Committee prepares a statement each year on the committee’s activities, which is included in the Barclays PLC Annual Report 2018 on page 77.

The Barclays PLC Board
One of the Board’s responsibilities is the approval of risk appetite (see page 139). The Barclays Group CRO regularly presents a report to the Board summarising developments in the risk environment and performance trends in the key portfolios. The Board is also responsible for the ERMF. Summaries of the relevant skills, experience and background of the Directors of the Board are presented in the Board of Directors section on pages 51 to 52 of the Barclays PLC Annual Report 2018.

The Barclays PLC Board Risk Committee (BRC)
The BRC monitors Barclays Group’s risk profile against the agreed appetite. Where actual performance differs from expectations, the actions taken by management are reviewed to ascertain that the BRC is comfortable with them. After each meeting, the Chairman of the BRC prepares a report for the next meeting of the Board. All members are independent Non-Executive Directors. The Barclays Group Finance Director and the Barclays Group CRO attend each meeting as a matter of course. The BRC receives regular reports on risk methodologies, the effectiveness of the risk management framework, and Barclays Group’s risk profile, including the material issues affecting each business portfolio and forward risk trends. The committee also commissions in-depth analyses of significant risk topics, which are presented by the Barclays Group CRO or senior risk managers in the businesses. The Chairman of the BRC also sits on the BAC.

The Barclays PLC Board Audit Committee (BAC)
The BAC receives regular reports on the effectiveness of internal control systems, quarterly reports on material control issues of significance, and quarterly papers on accounting judgements (including impairment). It also receives a half-yearly review of the adequacy of impairment allowances, which it reviews relative to the risk inherent in the portfolios, the business environment and Barclays Group’s policies and methodologies. The Chairman of the BAC also sits on the BRC.

The Barclays PLC Board Reputation Committee (RepCo)
The RepCo reviews management’s recommendations on conduct and reputation risk and the effectiveness of the processes by which Barclays Group identifies and manages these risks. It also reviews and monitors the effectiveness of Barclays Group’s citizenship strategy, including the management of Barclays Group’s economic, social and environmental contribution.

The Barclays PLC Board Remuneration Committee (RemCo)
The RemCo receives a detailed report on risk management performance and risk profile, and proposals on ex-ante and ex-post risk adjustments to variable remuneration. These inputs are considered in the setting of performance incentives.

The terms of reference and additional details on membership and activities for each of the principal Board Committees are available from the Corporate Governance section of Barclays Group’s website at: home.barclays/about-barclays/barclays-corporate-governance.html.

Coverage of risk reports to executive and Board risk committees
Chairs of Risk Committees at executive and Board levels specify the information they require to discharge their duties. Advance committee calendars are agreed with the committee chairman. Topics that are regularly covered include:
- Risk profile
- Risk perspective on medium-term plans and strategy
- Risk Appetite
- Results of stress tests, including Comprehensive Capital Analysis and Review (CCAR)
- Risk and Conduct inputs into remuneration decisions
- Other technical topics, e.g. Model risk.

Board Committees
Barclays PLC Board
Barclays PLC Board Risk Committee
Barclays PLC Board Audit Committee
Barclays PLC Board Remuneration Committee
Barclays PLC Board Remuneration Review Panel
Barclays Group Risk Committee
Barclays Group Product/Risk Type Committees
Barclays Group ExCo
Barclays Group

Management Level Committees/Forums
Barclays Group ExCo

Business Level Committees/Forums
Barclays Group Product/Risk Type Committees
Barclays Group

Barclays PLC Pillar 3 Report 2018 137
Barclays’ approach to managing risks
Risk management strategy, governance and risk culture

In addition to regular topics, committees consider ad hoc papers on current risk topics, such as:
- Political events and their potential impacts on Barclays and its customers
- Economic developments in major economies or sectors
- Impacts of key market developments on the risk management of the Barclays Group.

Reports are generally presented by CROs or other accountable executives. Occasionally subject matter experts are delegated to present specific topics of interest. Report presenters are responsible for following processes for creating reports that include appropriate controls and that these controls are operated effectively.

Roles and responsibilities in the management of risk – senior management

Certain roles within Barclays carry specific responsibilities and accountabilities with respect to risk management and the ERMF.

Barclays Group Chief Executive Officer (CEO)
The Barclays Group CEO is accountable for leading the development of Barclays’ strategy and business plans that align to the Goal, Purpose and Values within the approved Risk appetite, and for managing and organising executive management to drive their execution. Managing Barclays’ financial and operational performance within the approved Risk Appetite is ultimately the CEO’s responsibility.

Specifically, a crucial role of the CEO is to appoint the most senior Risk owners at the executive level including the Barclays Group Chief Risk Officer and the Barclays Group General Counsel. He must work with them to embed a strong Risk Culture within the Barclays Group, with particular regard to the identification, escalation and management of risk matters.

Barclays Group Chief Risk Officer (CRO)
The Barclays Group CRO leads the Risk Function across Barclays. His responsibilities include developing and maintaining the ERMF and clearly articulating Risk Culture objectives. Specific accountabilities include:
- preparing and recommending the Barclays Group’s Risk Appetite to the Board Risk Committees
- developing, operating and maintaining a comprehensive risk management framework to monitor and manage the risk profile of the Barclays Group
- providing accurate, transparent and timely reporting of the actual Risk Profile of the Barclays Group relative to the set Risk Appetite to the Board
- defining the risk taxonomy (Principal Risks) and updating it as needed so that it remains relevant and comprehensive
- bringing a risk perspective to compensation decisions
- reporting to all the relevant stakeholders on Barclays’ risk positions, adherence to Risk Appetite and enterprise wide risks and controls

Barclays Group Chief Compliance Officer
The Barclays Group Chief Compliance Officer is accountable to the Barclays Group CRO for the strategic and function leadership of the Compliance Function. The Chief Compliance Officer is a member of the Barclays Group Executive Committee, enabling the Compliance Function to discharge its responsibilities properly and independently. Oversight specific accountabilities include:
- managing Barclays Group’s conduct and reputation risks and escalating to the Board where appropriate
- setting minimum standards through compliance policies applicable globally and monitoring breaches, especially for Conduct and Reputation Risks and Financial Crime
- inputting into compensation structures, objectives and performance management of employees who can expose Barclays to significant risk
- implementing a robust and effectively managed whistleblowing process on an enterprise-wide basis

Specifically, a crucial role of the CRO is to work with the General Counsel to discharge the responsibilities properly and independently. Oversight specific accountabilities include:
- bringing to the attention of line and senior management or the Board, as appropriate, any situation that is of concern from a Conduct or Reputation Risk management perspective that could materially violate the approved Risk Appetite guidelines.

Barclays Group General Counsel
The Barclays Group General Counsel is required to:
- develop and maintain the Legal Risk Framework
- define the Legal Risk Policies
- develop the Barclays Group-wide and Business Risk Appetite for Legal Risk.

Barclays Group Chief Controls Officer
The Chief Controls Officer, led by the Barclays Group Chief Controls Officer, is responsible for overseeing the practical implementation of operational, conduct and reputation risk controls and control methodologies across the Barclays Group. The Chief Controls Officer has the following key responsibilities:
- developing a control framework directing businesses to manage risk exposure within approved operational risk appetites, and monitoring its application;
- reviewing tolerances for non-financial operational risk exposures set by the business, and maintaining their appropriateness;
- maintaining the standard for the creation and maintenance of all control documentation in the Barclays Group; and
- overseeing the execution of control framework requirements consistently across the Barclays Group. Execution includes recording risk events, issues, and the completion of risk and control self-assessments.

Senior Managers Regime
A number of Members of the Board, the majority of the Barclays Group Executive Committee and a limited number of specified senior individuals are also subject to additional rules included within the Senior Managers Regime (SMR), which clarifies their accountability and responsibilities. Those designated with a Senior Manager Function under the SMR are held to four specific rules of conduct in which they must:
- take reasonable steps to establish that the business of the Barclays Group for which they are responsible is controlled effectively
- take reasonable steps to make certain that any delegation of their responsibilities is to an appropriate individual and that they oversee the discharge of the delegated responsibilities effectively
- disclose appropriately any information to the FCA or PRA, of which they would reasonably expect notice.

Frameworks, Policies and Standards
Frameworks, policies and standards set out the governance around Barclays’ activities:
- Frameworks cover the management processes for a collection of related activities and define the associated policies used to govern them
- Policies set out control objectives, principles and other core requirements for the activities of the Barclays Group. Policies describe “what” must be done
- Standards set out the key controls that must be followed for the objectives set out in the Policy to be met, and who needs to carry them out. Standards describe “how” controls should be undertaken.

Frameworks, Policies and Standards are owned by the area responsible for performing the described activity.

The Barclays Group CRO is accountable for the development and implementation of frameworks, policies and associated standards for each of the Financial Principal Risks, Operational Risk and Model Risk. These must be subject to limits, monitored, reported on and escalated as required. The Barclays Group Chief Compliance Officer is likewise accountable for Conduct Risk and Reputation Risk, and the Barclays Group General Counsel for Legal Risk. The Barclays Group CRO and Barclays Group Chief Compliance Officer have the right to require amendments to any
Frameworks, Policies or Standards in the Barclays Group, for any reason, including inconsistencies or contradictions among them.

Frameworks, Policies and Standards are subject to minimum annual review, and challenge by the Risk and/or Compliance functions, unless explicitly waived by the relevant heads of those functions. Principal Risk Frameworks are subject to approval by relevant committees of the Board.

Assurance

Assurance is undertaken to assess the control environment and to independently assess the ERMF, to provide confidence to the Board in the risk and control framework. The Controls Assurance Standard defines the requirements for Controls Assurance and Controls Testing.

Internal Audit is responsible for the independent review of risk management and the control environment. Its objective is to provide reliable, valued and timely assurance to the Board and executive management over the effectiveness of controls, mitigating current and evolving material risks and thus enhancing the control culture within the Barclays Group. The Board Audit Committee reviews and approves Internal Audit’s plans and resources, and evaluates the effectiveness of Internal Audit. An assessment by independent external advisers is also carried out periodically.

Effectiveness of risk management arrangements

The embedding of the ERMF is monitored by executive and board committees as described above. The ERMF and its component Principal Risks are subject to control testing assurance reviews to confirm its effectiveness or identify issues to be mitigated. Management and the Board are satisfied that these arrangements are appropriate given the risk profile of the Barclays Group.

Learning from our mistakes

Learning from mistakes is central to Barclays’ culture and values, demonstrating a commitment to excellence, service and stewardship and taking accountability for failure as well as success. The Barclays Group seeks to learn lessons on a continuous basis to support achievement of strategic objectives, increase operational excellence and to meet commitments to stakeholders, including colleagues, customers, shareholders and regulators.

Barclays has implemented a Barclays Group Lessons Learned process, setting out requirements for the completion of Lessons Learned assessments in response to internal and external risk events. The approach is aligned to the Three Lines of Defence model (see page 136), with businesses and functions accountable for undertaking Lessons Learned Assessments; the Second Line providing oversight and challenge; and independent review by Internal Audit.

Core components of the Lessons Learned approach include:

- Defined triggers for when Lessons Learned Assessments must be completed
- Requirements and guidance for the completion of root cause analysis to identify the causes of risk events impacting the Barclays Group
- Standardised Templates to report conclusions consistently to relevant management fora and committees
- Use of a central system to record completed Lessons Learned Assessments and to facilitate sharing across the Barclays Group.

Barclays Group’s risk culture

Risk culture can be defined as the “norms, attitudes and behaviours related to risk awareness, risk taking and risk management”. At Barclays Group this is reflected in how colleagues identify, escalate and manage risk matters.

Our Code of Conduct – the Barclays Way

Globally, all colleagues must attest to the “Barclays Way”, our Code of Conduct, and all frameworks, policies and standards applicable to their roles. The Code of Conduct outlines the purpose and values which govern our Barclays Way of working across our business globally. It constitutes a reference point covering the aspects of colleagues’ working relationships, with other Barclays Group’s employees, customers and clients, governments and regulators, business partners, suppliers, competitors and the broader community.

Embedding of a values-based, conduct culture

Conduct, culture and values remain a priority of the Barclays Group Executive Committee who receive regular, detailed information from the business lines, and clearly communicate their intentions and the Barclays Group’s progress to all colleagues. The effectiveness of the risk and control environment, for which all colleagues are responsible, depends on the continued embedment of strong values.

Colleagues must be willing to meet their risk management responsibilities, and escalate issues on a timely basis.

Barclays Group-wide risk management tools

To support Barclays Group-wide management of risks, the Board uses risk appetite, mandate and scale, and stress testing as key inputs in the annual planning cycle, including setting of Barclays Group’s strategy. The following describes in further detail Barclays Group-wide risk management tools used as part of this process.

Risk Appetite

Risk Appetite is defined as the level of risk which Barclays Group is prepared to accept in the conduct of its activities.

Risk Appetite sets the ‘tone from the top’ and provides a basis for ongoing dialogue between management and Board with respect to Barclays Group’s current and evolving risk profile, allowing strategic and financial decisions to be made on an informed basis.

The Risk Appetite setting process aims to consider the material risks Barclays is exposed to under its business plans.

The Risk Appetite of Barclays Group aims to:

- Specify the level of risk we are willing to take to enable specific risk taking activities.
- Consider all Principal Risks individually and, where appropriate, in aggregate.
- Consistently communicate the acceptable level of risk for different risk types.

Risk Appetite is approved by the Board and must be formally reviewed at least annually in conjunction with the Medium Term Planning (MTP) process.

Risk Appetite is expressed, by the Board, as the acceptable level of deterioration in a set of key financial parameters under a severe but plausible stress scenario defined as the Adverse stress test scenario. For 2019 the key financial parameters are listed below.
Barclays’ approach to managing risks

Risk management strategy, governance and risk culture

<table>
<thead>
<tr>
<th>Measure relevant to strategy and risk</th>
<th>Link between strategy and risk profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit after tax</td>
<td>Fundamental performance of Barclays Group and underpins Barclays Group’s capacity to make capital distributions.</td>
</tr>
<tr>
<td>Common Equity Tier 1 (CET1)</td>
<td>Monitors capital adequacy in relation to capital plan, targets and regulatory hurdle rates.</td>
</tr>
</tbody>
</table>

Based on the specified Risk Appetite, Barclays Group develops both stress loss and mandate & scale limits to control specific activities.

**Stress Loss**

Stress loss limits are derived from the results of the Adverse stress test scenario. Limits are a reflection of the losses absorbed by the stressed capital plans within Risk Appetite and provide a crucial link between the strategic planning process and Risk Appetite. Stress loss limits are conservatively assumed to be additive but in practice stresses may not happen at the same time. Risk management may over-allocate stress loss limits where they deem it unlikely all businesses will require full limit utilization at the same time. Aggregate utilisation across all risk types is monitored against both the aggregate of stress loss limits and losses absorbed by the stressed capital plan. It is the role of Risk to manage the over-allocation within capital constraints.

**Mandate and scale**

Mandate and scale is a risk management approach that seeks to formally review and control business activities to make sure that they are within mandate (i.e. aligned with expectations), and are of an appropriate scale (relative to the risk and reward of the underlying activities) based on an appropriately detailed system of limits. Using limits and triggers helps mitigate the risk of concentrations which would be out of line with expectations, and which may lead to unexpected losses of a scale that would be detrimental to the stability of the relevant business line or Barclays Group. For example, for leveraged finance and commercial property finance portfolios, there is a series of limits in place to control exposure within each business and geographic sector. To further align limits to the underlying risk characteristics, the mandate and scale limits differentiate between types of exposure. There are, for example, individual limits for property investment and property development.

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

The most material mandate and scale limits are designated as A-level (Board level) and B-Level (Barclays Group level). Barclays Group limits are approved by the appropriate risk committee (e.g. Wholesale Credit Risk Management Committee) and are subject to additional escalation and governance requirements.

Further limits are set by risk managers within each business, covering particular portfolios. Unapproved excesses of limits may result in performance management and disciplinary consequences. Business limits are approved by the relevant business risk team and reportable to the relevant risk committee.

Limits reflect the nature of the risk being managed and controlled and are measured by total financing limits, LGD, stress loss or other metrics as appropriate. There is explicit identification of the exposures that are captured by limits and any material exclusion must be agreed. Limits are reviewed at least annually. The factors taken into consideration when setting the limit include:
- Barclays Group Risk Appetite
- current exposure/MTP forecasts
- risk return considerations
- senior risk management judgement.

**Stress testing**

Barclays Group-wide stress tests are integrated within the MTP process and annual review of risk appetite. They aim to check that Barclays Group’s financial position and risk profile provide sufficient resilience to withstand the impact of severe economic stress, allowing Barclays to make changes to plans as necessary. Barclays Group-wide stress testing process is supported by a Capital Stress Testing Standard which sets out the minimum control requirements and defines clear roles and responsibilities across businesses and central functions. The results also feed into our internal capital adequacy assessment process (ICAAP).

The following diagram outlines the key steps in Barclays Group-wide stress testing process, which are described below.

Barclays Group-wide stress testing process begins with a detailed scenario setting process, with the CRC and BRC agreeing the range of scenarios to be tested. The scenarios are designed to be severe but plausible, and relevant to the business. A wide range of macroeconomic parameters are defined (such as GDP, unemployment, house prices, FX and interest rates), which allows the impact of the scenarios across the wide range of products and portfolios to be assessed across Barclays Group.

Businesses prepare detailed MTP business plans which form the baseline for the stress test assessment. The stress test process aims to support this level of complexity, using bottom-up analysis across all of our businesses including both on- and off-balance sheet positions, and combines running statistical models with expert judgement. An overview of the stress testing approach by
Barclays’ approach to managing risks

Risk management strategy, governance and risk culture

Principal Risk is provided in the table below. As part of their stress test assessments, businesses are also required to identify potential management actions that could be taken to mitigate the impact of stress and document these within their results. The governance process in place includes a detailed review of stress testing methodology, assumptions, judgements, results and management actions within each business.

The overall stress testing results are reviewed and signed off by the Board, following review by the Stress Testing Steering Committee, the Group Risk Committee and the Board Risk Committee.

Summary of methodologies for Barclays Group-wide stress testing by risk type

<table>
<thead>
<tr>
<th>Principal Risk</th>
<th>Stress testing approach</th>
</tr>
</thead>
</table>
| **Credit risk** | ■ Credit risk impairment: For retail portfolios businesses use statistical models to establish a relationship between IFRS9 impairment loss levels and key macroeconomic parameters such as GDP, inflation and unemployment, incorporating credit quality migration analysis to estimate stressed levels. In addition, house price reductions (for mortgages), increased customer drawdowns (for revolving facilities) and higher interest rates impacting affordability lead to higher losses which also contribute to increased impairment levels. For wholesale portfolios the stress shocks on credit risk drivers (PDs, LGDs and EADs) are primarily calibrated using historical and expected relationships with key macro-economic parameters.  
■ Counterparty credit risk losses: The scenarios include market risk shocks that are applied to determine the market value under stress of contracts that give rise to Counterparty Credit Risk (CCR). Counterparty losses, including from changes to the Credit Valuation Adjustment and from defaults, are modelled based on the impact of these shocks as well as using stressed credit risk drivers (PDs and LGDs). The same approach is used to stress the market value of assets held as available for sale or at fair value in the banking book.  
■ Credit risk weighted assets: The impact of the scenarios is calculated via a combination of business volumes and using similar factors to impairment drivers above, as well as the regulatory calculation and the level of pro-cyclicality of underlying regulatory credit risk models. |
| **Market risk** | ■ Trading book losses: Market risk factors on the balance sheet are stressed using specific market risk shocks (and are used for the CCR analysis, above). The severity of the shocks applied are dependent on the liquidity of the market under stress, e.g. illiquid positions are assumed to have a longer holding period than positions in liquid markets. |
| **Treasury and Capital Risk** | ■ Treasury and capital risk will apply scenario variables to forecast Barclays Group’s capital, liquidity and IRRBB requirements under stress and review proposed management actions to mitigate the impact of this stress.  
■ Interest rate risk in the banking book (IRRBB): IRRBB is assessed by considering:  
– Stress impact on non-interest income is primarily driven by lower projected business volumes and hence lower income from fees and commissions  
– Impact on net interest income is driven by stressed margins, which depend on the level of interest rates under stress as well as funding costs, and on stressed balance sheet volumes. This can be partly mitigated by management actions that may include repricing of variable rate products, taking into account interbank lending rates under stress  
– The impact on costs is mainly driven by business volumes and exchange rates with management actions to partly offset profit reductions (due to impairment increases and decreases in income) such as headcount reductions and lower performance costs.  
■ Capital Risk: Capital risk is assessed by taking all modelled risk impacts as part of the stress test (as listed above) into consideration when assessing Barclays Group’s ability to withstand a severe stress. The stressed results are considered against internally agreed risk appetite levels but also regulatory minima and perceived market expectations. The MTP can only be agreed by the Board if this is within the agreed risk appetite levels under stress.  
■ The IAS19 position of pension funds is also stressed as part of the capital risk assessment, taking into account key economic drivers impacting future obligations (e.g. long-term inflation and interest rates) and the impact of the scenarios on the value of fund assets.  
■ Liquidity Risk: Liquidity risk is assessed by the internal liquidity risk metric (LRA), which analyses specific liquidity risk drivers such as wholesale funding and contingent funding needs based on the below scenarios:  
– Barclays idiosyncratic liquidity scenario: Barclays faces a loss of market confidence while the market overall is not impacted  
– Market wide liquidity stress scenario: All financial institutions are impacted by a market wide loss of confidence  
– Combined liquidity stress scenario: A simultaneous Barclays idiosyncratic and market liquidity stress scenario  
– Long term liquidity stress scenario: Barclays is unable for a prolonged period of time to access the capital market on a regular basis. |
| **Operational risk** | ■ Operational risk loss projections take into account the effect of the stressed economic scenario. Operational risk is also included in the reverse stress testing framework through scenario assessment of idiosyncratic operational risk events. |
Barclays’ approach to managing risks

Risk management strategy, governance and risk culture

In 2018, the internal Barclays Group-wide stress testing exercise was run as part of the MTP process, where Barclays Group assessed the impact of an “Adverse” global recession scenario. This was used for the MTP Risk Review and risk appetite setting process. Barclays Group-wide stress testing framework also includes reverse stress testing techniques, which aim to identify the circumstances under which Barclays Group’s business model would no longer be viable, leading to a significant change in business strategy and to the identification of appropriate mitigating actions. Examples include extreme macroeconomic downturn (‘severely adverse’) scenarios, or specific idiosyncratic events, covering both operational risk and capital/liquidity events. Reverse stress testing is used to help support ongoing risk management and is an input to our Recovery Planning process.

Business and risk type specific stress tests

Stress testing techniques at portfolio and product level are also used to support risk management. For example, portfolio management in the US cards business employs stressed assumptions of loss rates to determine profitability hurdles for new accounts. In the United Kingdom mortgage business, affordability thresholds incorporate stressed estimates of interest rates. In the Corporate and Investment Bank, global scenario testing is used to gauge potential losses that could arise in conditions of a severe but plausible market stress. Stress testing is also conducted on positions in particular asset classes, including interest rates, commodities, equities, credit and foreign exchange.

Regulatory stress testing

In addition to running internal Barclays Group-wide stress tests, Barclays Group also runs regulatory stress tests. In 2018, the PRA ran its annual concurrent stress testing of the major UK banks, which was based on the Bank of England (BoE) stress scenario. The results of the stress test were published in December 2018, and support the BoE’s aim for increased transparency as part of its stress testing framework.

Barclays Group is also subject to stress testing by non-UK regulators which includes the European Banking Authority (EBA) and the US Federal Reserve CCAR process (which focuses on the US domicile legal entity). For 2018 the results of the EBA stress test were published in November 2018 with the CCAR stress test results published by the US Federal Reserve in June 2018.

Risk management in the setting of strategy

The risk appetite and (internal) stress testing processes described above form the basis of the risk review of the Medium Term Plan (MTP), performed annually. The MTP embeds Barclays Group’s objectives into detailed business plans taking into account the likely business and macroeconomic environment. The strategy is informed by the risk review process, which includes reviewing Barclays Group’s risk profile and setting of risk appetite.

The MTP risk review process includes a review of the proposed risk appetite by the business, including assessment of business plans under stress which is used to inform the MTP.

If the business’ plans entail too high a level of risk, management can challenge them. This assessment is based on a comparison of the businesses’ own risk appetite assessment reflected in their business plans (‘bottom-up’ risk appetite) with the central risk team’s view (‘top-down’ risk appetite) based on the financial constraints set by the Board for Barclays Group.

Businesses may be asked to update their business plans until the bottom-up risk appetite is within top-down appetite. There is also a detailed review of the stressed estimates and the methodology used to translate the economic scenario to these stressed estimates, as well as the management actions included in the businesses’ results to verify that these are appropriate and realistic in a stressed environment.

Risk review meetings are held with the CFO, CRO and Treasurer of each business, where they present their business plans to Barclays Group CRO and Finance Director. The findings from the risk reviews are discussed, including the risk appetite proposals and stress testing results. Businesses may be required to change their business plans as a result of these meetings.

Interim internal capital adequacy assessments inform the capital planning process and are reviewed during the Risk Review meetings. These assessments are refreshed based on year-end positions and reflected in the ICAAP.

The MTP Risk Review further reviews the Risk Register outlining the risk profile of businesses to confirm the completeness of risk appetite, capital adequacy assessments and Barclays Group-wide internal stress test.

The BRC has overall responsibility for reviewing Barclays Group’s risk profile and making appropriate recommendations to the Board. The Board is ultimately responsible for approving the MTP and Barclays Group’s risk appetite. The risk appetite process allows senior management and the Board to understand the MTP’s sensitivities by risk type, and includes a set of limits to help maintain Barclays Group stays within it risk appetite, as described above.

<table>
<thead>
<tr>
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<th>Stress testing approach</th>
</tr>
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<tbody>
<tr>
<td>Model risk</td>
<td>IVU reviews the models and assumptions used in the MTP and stress test and may request the application of overlays to address model deficiencies.</td>
</tr>
<tr>
<td>Conduct risk</td>
<td>Redress/Remediation: Businesses review existing provisions and include additional provisions in MTP if required.</td>
</tr>
<tr>
<td></td>
<td>Litigation: Irrespective of whether a provision had been recognised, stress projections of future losses for conduct risk matters managed by legal are estimated by exercising expert judgment on a case by case basis (material matters) or on a portfolio basis (non-material matters) on accordance with the methodology provided by regulators (EBA, PRA).</td>
</tr>
<tr>
<td>Reputation risk</td>
<td>Reputation risk is not quantified or stressed.</td>
</tr>
<tr>
<td>Legal risk</td>
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Principal Risk Stress testing approach

- IVU reviews the models and assumptions used in the MTP and stress test and may request the application of overlays to address model deficiencies.
- Redress/Remediation: Businesses review existing provisions and include additional provisions in MTP if required.
- Litigation: Irrespective of whether a provision had been recognised, stress projections of future losses for conduct risk matters managed by legal are estimated by exercising expert judgment on a case by case basis (material matters) or on a portfolio basis (non-material matters) on accordance with the methodology provided by regulators (EBA, PRA).
- Reputation risk is not quantified or stressed.
- Legal risk is not quantified or stressed.
Barclays’ approach to managing risks

Management of credit risk and the internal ratings-based approach

This section discusses the organisation specific to the management of credit risks, and provides details of the calculation of risk weighted assets under the Internal Ratings Based approach of the Basel framework.

- Pages 144 to 151 cover the aspects of the Group’s risk management framework specific to credit risk, including committees and Barclays Group’s reporting structure.
- As 63% of our regulatory capital is for credit risk, we devote pages 151 to 159 to detailing how we approach the internal ratings models, and how the framework supports risk differentiation and management.
Barclays’ approach to managing risks

Management of credit risk and the internal ratings-based approach

Credit risk

The risk of loss to the firm from the failure of clients, customers or counterparties, including sovereigns, to fully honour their obligations to the firm, including the whole and timely payment of principal, interest, collateral and other receivables.

Overview

The credit risk that Barclays Group faces arises from wholesale and retail loans and advances together with the counterparty credit risk arising from derivative contracts with clients; trading activities, including; debt securities, settlement balances with market counterparties, FVOCI assets and reverse repurchase loans.

Credit risk management objectives are to:

- maintain a framework of controls to oversee credit risk;
- identify, assess and measure credit risk clearly and accurately across Barclays Group and within each separate business, from the level of individual facilities up to the total portfolio;
- control and plan credit risk taking in line with external stakeholder expectations and avoiding undesirable concentrations;
- monitor credit risk and adherence to agreed controls.

Organisation and structure

Wholesale and retail portfolios are managed separately to reflect the differing nature of the assets; wholesale balances tend to be larger and are managed on an individual basis, while retail balances are greater in number but lesser in value and are, therefore, managed in aggregated segments.

The credit risk management teams in each legal entity are accountable to the relevant Legal Entity CRO, who reports to the Barclays Group CRO.

Roles and responsibilities

The responsibilities of the credit risk management teams in the businesses, the sanctioning team and other shared services include: sanctioning new credit agreements (principally wholesale); setting strategies for approval of transactions (principally retail); setting risk appetite; monitoring risk against limits and other parameters; maintaining robust processes, data gathering, quality, storage and reporting methods for effective credit risk management; performing effective turnaround and workout scenarios for wholesale portfolios via dedicated restructuring and recoveries teams; maintaining robust collections and recovery processes/units for retail portfolios; and development of credit risk measurement models.

For wholesale portfolios, credit risk approval is undertaken by experienced credit risk professionals operating within a clearly defined delegated authority framework, with only the most senior credit officers assigned the higher levels of delegated authority.

The largest credit exposures, which are outside the Risk Sanctioning Unit or Risk Distribution Committee authority, require the support of a legal entity Senior Credit Officer. For exposures in excess of the legal entity Senior Credit Officer’s authority, approval by Group Senior Credit Officer/Board Risk Committee is also required. The Barclays Group Credit Risk Committee, attended by legal entity Senior Credit Officers, provides a formal mechanism for the Barclays Group Senior Credit Officer to exercise the highest level of credit authority over the most material Barclays Group single name exposures.

In the wholesale portfolios, credit risk managers are organised in sanctioning teams by geography, industry and/or product.

The role of the Central Risk function is to provide Barclays Group-wide direction, oversight and challenge of credit risk taking. Central Risk sets the Credit Risk Control Framework, which provides the structure within which credit risk is managed, together with supporting credit risk policies and standards.

Reporting

Barclays Group dedicates considerable resources to gaining a clear and accurate understanding of credit risk across the business and maintaining that its balance sheet correctly reflects the value of the assets in accordance with applicable accounting principles. This process can be summarised in five broad stages:

- measuring exposures and concentrations
- monitoring performance and asset quality
- monitoring for weaknesses in portfolios
- raising allowances for impairment and other credit provisions
- returning assets to a performing status or writing off assets when the whole or part of a debt is considered irrecoverable.

Measuring exposures and concentrations

Loans and advances to customers provide the principal source of credit risk to the Barclays Group although it is also exposed to other forms of credit risk through, for example, loans and advances to banks, loan commitments and debt securities. Risk management policies and processes are designed to identify and analyse risk, to set appropriate risk appetite, limits and controls, and to monitor the risks and adherence to limits by means of reliable and timely data.
Barclays’ approach to managing risks

Management of credit risk and the internal ratings-based approach

Group loan loss rate – long-term trend

One area of particular review is concentration risk. A concentration of credit risk exists when a number of counterparties or customers are engaged in similar activities or geographies, and have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic and other conditions. As a result, the Barclays Group constantly reviews its concentration in a number of areas including, for example, geography, maturity and industry. Mandate and scale limits are used to maintain concentrations at appropriate levels, which are aligned with the businesses’ stated risk appetite. Limits are typically based on the nature of the lending and the amount of the portfolio meeting certain standards of underwriting criteria. Diversification, to reduce concentration risk, is achieved through setting maximum exposure limits to individual counterparties’ exposures. Excesses are reported to the BRC.

Monitoring performance and asset quality

Trends in the quality of Barclays Group’s loan portfolio are monitored in a number of ways including tracking loan loss rate and coverage ratios.

Loan loss rate

The loan loss rate (LLR) provides a way of consistently monitoring trends in loan portfolio quality at Barclays Group, business and product levels. The LLR represents the annualised impairment charges on loans and advances to customers and banks and other credit provisions as a percentage of the total, period-end loans and advances to customers and banks, gross of impairment allowances. Details of the LLR for the current period may be found in the Credit Risk Performance section on page 153 in the 2018 Annual Report.

Coverage ratios

Loans and advances total impairment coverage

Total coverage ratios will vary according to the type of product. The increase in 2017 reflects the transition to the new accounting standard IFRS9. Overall, coverage ratios would therefore be expected to remain fairly steady over a defined period of time but in principle, a number of factors may affect Barclays’ overall coverage ratios, including:

- **The mix of products**: coverage ratios will tend to be lower when there is a high proportion of secured Retail and corporate balances. This is due to the fact that the recovery outlook on these types of exposures is typically higher than Retail credit cards, unsecured and other products, with the result that they will have lower impairment requirements;

- **The stage in the economic cycle**: coverage ratios will tend to be lower in the earlier stages of deterioration in credit conditions. At this stage, Retail delinquent balances will be predominantly in the early delinquency cycles and corporate names will have only recently shown signs of deterioration;

- **Staging**: coverage ratios will tend to be higher when there is a high proportion of balances that have met the criteria for significant increase in credit loss with associated expected credit losses (ECL) moving from a 12-month to a lifetime assessment; and

- **Write-off policies**: the speed with which defaulted assets are written off will affect coverage ratios. The more quickly assets are written off, the lower the ratios will be, since stock with 100% coverage will tend to roll out of more quickly.

Details of the coverage ratios for the current period are shown in the above chart and may be found in the analysis of loans and advances and impairment section at page 155 in the 2018 Annual Report.

Monitoring weaknesses in portfolios

While the basic principles for monitoring weaknesses in Wholesale and Retail exposures are broadly similar, they reflect the differing nature of the assets. As a matter of policy, all facilities granted to corporate or Wholesale counterparties are subject to a review on, at least, an annual basis, even when they are performing satisfactorily.

Wholesale portfolios

Within the Wholesale portfolios, the Basel definitions of default are used as default indicators which have been aligned to the IFRS9. Group definitions of default used are:

- Barclays Group puts the credit obligation at a material credit-related economic loss;

- Barclays Group makes a charge-off or account specific identified impairment resulting from a significant perceived decline in credit quality;

- Barclays Group sells the credit obligation on a non-accrued status;

Notes

- a Restated to reflect the impact of IFRS10, which results in some former Exit Quadrant exposures being recorded at fair value from 2012 onwards
- b Figures from 2015 onwards exclude Africa
- c Includes certain Business Banking facilities which are recorded as Retail for management purposes.
Barclays’ approach to managing risks

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### Wholesale account status

**Performing Watchlist 1-2**
- Watchlist Committee flags client on the basis of evidence of financial difficulty.

**Workout Watchlist 3**
- Customer’s financial difficulty requires a decision on the form of future relationship.

**Default (Recovery) Watchlist 4**
- Asset is considered irrecoverable and is written off.

**Write off**: the point where it is determined that the asset is irrecoverable.

- Barclays Group triggers a petition for obligor’s bankruptcy or similar order;
- Barclays Group becomes aware of the obligor having sought or having been placed in bankruptcy or similar protection where this would avoid or delay repayment of the credit obligation to Barclays Group;
- Barclays Group becomes aware of an acceleration of an obligation by a firm;
- where the obligor is a bank – revocation of authorisation;
- where the obligor is a sovereign – trigger of default definition of an approved External Credit Assessment Institution (ECAI) such as a rating agency;
- Obligor past due more than 90 days on any material credit obligation to Barclays Group.

Wholesale accounts that are deemed to contain heightened levels of risk are recorded on graded watchlists (WL) comprising four categories graded in line with the perceived severity of the risk attached to the lending, and its probability of default. Examples of heightened levels of risk may include, for example:
- a material reduction in profits;
- a material reduction in the value of collateral held;
- a decline in net tangible assets in circumstances which are not satisfactorily explained;
- periodic waiver requests or changes to the terms of the credit agreement over an extended period of time.

These lists are updated monthly and circulated to the relevant risk control points. Once an account has been placed on WL, the exposure is monitored and, where appropriate, exposure reductions are effected.

### Retail account status

**Performing (Current) Arrears Status 0**
- Customer misses contractual payment and moves to collections function.

**Delinquent (Collections) Arrears Status 1-6**
- Customer reaches high arrears status and is moved to the recovery function where legal action is taken.

**Default (Recovery) Arrears Status 6+**
- Asset is considered irrecoverable and is written off.

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

### Returning assets to a performing status

**Wholesale portfolios**
In Wholesale portfolios, an account may only be returned to a performing status when it ceases to have any actual or perceived financial stress and no longer meets any of the watchlist criteria, or once facilities have been fully repaid or cancelled. Unless a facility is fully repaid or cancelled, the decision in Corporate Banking to return an account to performing status may only be taken by the credit risk team, while within the Investment Bank, the decision can only be taken by the BI Watch List Committee.

**Retail portfolios**
A Retail asset, pre-point of charge-off, may only be returned to a performing status in the following circumstances:

- all arrears (both capital and interest) have been cleared and payments have returned to original contractual payments;
- for revolving products, a re-age event has occurred, when the customer is returned to an up-to-date status without having cleared the requisite level of arrears;

While all counterparties, regardless of financial health, are subject to a full review of all facilities on at least an annual basis, more frequent interim reviews may be undertaken should circumstances dictate. Specialist recovery functions deal with counterparties in higher levels of WL, default, collection or insolvency. Their mandate is to maximise shareholder value, ideally via working intensively with the counterparty to help them to either return to financial health or, in the cases of insolvency, obtain the orderly and timely recovery of impaired debts. Where a counterparty’s financial health gives grounds for concern, it is immediately placed into the appropriate watchlist category.

**Retail portfolios**
Within the Retail portfolios, which tend to comprise homogeneous assets, statistical techniques more readily allow potential credit weaknesses to be monitored on a portfolio basis. Retail accounts can be classified according to specified categories of arrears status (or 30-day cycle), which reflects the level of contractual payments which are overdue. An outstanding balance is deemed to be delinquent when it is one day or “one penny” down.

Once a loan has passed through a prescribed number of cycles, normally six, it will be charged-off and enter recovery status. Charge-off refers to the point in time when collections activity changes from the collection of arrears to the recovery of the full balance. In most cases, charge-off will result in the account moving to a legal recovery function or debt sale. This will typically occur after an account has been managed by a collections function. However, in certain cases, an account may be charged off directly from a performing status, such as in the case of insolvency or death.
Barclays’ approach to managing risks
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- for amortising products, which are performing on a programme of Forbearance and meet the following criteria may be restructured.
  - no interest rate concessions must have been granted
  - restructure must remain within original product parameters (original term + extension)
  - twelve consecutive payments at the revised contractual payment amount must have been received post the restructure event.

For residential mortgages, accounts may also be considered for rehabilitation post charge-off, where customer circumstances have changed. The customer must clear all unpaid capital and interest, and confirm their ability to meet full payments going forward.

Recovery units
Recovery units are responsible for exposures where deterioration of the counterparty/customer credit profile is severe, to the extent that timely or full recovery of exposure is considered unlikely and default has occurred or is likely in the short term. Recovery teams set and implement strategies to recover Barclays Group’s exposure through realisation of assets and collateral, in co-operation with counterparties/customers and where this is not possible through insolvency and legal procedures.

In Wholesale, for a case to be transferred to a recovery unit, it must be in default and have ceased to actively trade or be in insolvency. In Retail, the timings of the charge-off points to recovery units are established based on the type of loan. See recovery information included in Analysis of Specific Portfolio and Asset Types section on page 169 in the 2018 Annual Report.

Foreclosures in process and properties in possession
Foreclosure is the process where Barclays Group initiates legal action against a customer, with the intention of terminating the loan agreement whereby Barclays Group may repossess the property subject to local law and recover amounts it is owed. This process can be initiated by Barclays Group independent of the impairment treatment.

Properties in possession include properties held as ‘loans and advances to customers’ and properties held as ‘other real estate owned’. Held as ‘loans and advances to customers’ (UK and Italy) refers to the properties where the customer continues to retain legal title but where Barclays Group has enforced the possession order as part of the foreclosure process to allow for the disposal of the asset, or the court has ordered the auction of the property.

Writing off assets
Write-off refers to the point where it is determined that the asset is irrecoverable, it is no longer considered economically viable to try and recover the asset, it is deemed immaterial, or full and final settlement is reached and a shortfall remains. In the event of write-off, the customer balance is removed from the balance sheet and the impairment reserve held against the asset is released.

The timing and extent of write-offs may involve some element of subjective judgement. Nevertheless, a write-off will often be prompted by a specific event, such as the inception of insolvency proceedings or other formal recovery action, which makes it possible to establish that some or the entire advance is beyond realistic prospect of recovery. The position of impaired loans is also reviewed at least quarterly to make sure that irrecoverable advances are being written off in a prompt and orderly manner and in compliance with any local regulations.

For Retail portfolios, the timings of the write-off points are established based on the type of loan. For unsecured, assets in the recoveries book will be written-off if the required qualifying repayments are not made within a rolling twelve-month period. For secured loans, the shortfall after the receipt of the proceeds from the disposal of the collateral is written off within three months of that date if no repayment schedule has been agreed with the borrower. Such assets are only written off once all the necessary procedures have been completed and the amount of the loss has been determined.

Subsequent recoveries of amounts previously written off are written back and hence decrease the amount of the reported loan impairment charge in the income statement.

In 2018, total write-offs of impaired financial assets decreased 19% to £1.9bn (2017: £2.3bn).

<table>
<thead>
<tr>
<th>Year</th>
<th>Total write-offs (£m)</th>
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</thead>
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<tr>
<td>2018</td>
<td>1,891</td>
</tr>
<tr>
<td>2017</td>
<td>2,329</td>
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<tr>
<td>2016</td>
<td>2,193</td>
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<td>2015</td>
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<td>2012</td>
<td>4,119</td>
</tr>
<tr>
<td>2011</td>
<td>5,165</td>
</tr>
</tbody>
</table>

a The identification and subsequent treatment of up-to-date customers who, either through an event or observed behaviour exhibit potential financial difficulty. High Risk includes customers who have suffered recent financial dislocation, i.e. prior forbearance or re-age.

Assessment of Impairment Under IFRS9
From 1 January 2018, a new accounting standard, IFRS 9, became effective which prescribes the rules for measuring impairment allowances for financial assets. Under the IFRS9 accounting standard, businesses are required to assess and recognise Expected Credit Losses (ECL) on financial assets from the point of origination or purchase, and to update said assessment at each reporting date, reflecting changes in the credit risk of the financial asset.

ECL represents present value measure of the credit losses expected to result from default events that may occur during a specified period of time. ECLs must reflect the present value of cash shortfalls, i.e. the difference between cash flows due under the contract and the cash flows that the business now expects to receive. Given ECLs take into account both the amount and the timing of payments, a credit loss may result if a contractual payment is missed or received late, even if the debt is ultimately paid in full. ECL assessments must reflect an unbiased and probability weighted assessment of a range of possible outcomes, including reasonable and supportable information about future economic conditions.

Exposures must be assessed and assigned to one of the following populations at each reporting point:

- **Stage 1: Performing risk assets.** In scope items classified as stage 1 exposure for IFRS9 purposes are those assets performing in line with expectations in place at the point of origination/acquisition. This includes new originations or purchased assets (from the point of initial origination), but excludes exposures deemed credit impaired at point of origination.

  Businesses must recognise an impairment allowance equal to 12 months expected credit losses. This allowance must be raised at point of initial reporting of an asset and the assessment updated at each subsequent reporting point.

- **Stage 2: Significantly deteriorated risk assets.** Assets classified as stage 2 exposures for IFRS9 purposes are those where credit risk has significantly increased compared with expectations at point of origination/acquisition, but which are not yet considered ‘Credit Impaired’.

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In order to maintain that individual exposures or groups of assets are correctly classified as stage 2 assets, businesses must undertake regular assessments to identify whether a significant increase in credit risk has occurred since initial recognition. This must take the form of the following:

- **Quantitative Test**
  Where the residual annualised weighted average lifetime PD for an individual exposure at the latest reporting date shows a material deterioration compared with that at the origination/acquisition point, then the assets must be classified under stage 2 as having significantly increased credit risk.

  The assessment of materiality, i.e. at what point the PD increase is deemed ‘significant’, is based upon analysis of the portfolios risk profile against a common set of defined principles and key performance metrics.

- **Qualitative Test**
  For personal banking assets managed under Retail Portfolios, accounts meeting the portfolio’s ‘high risk’ criteria, must be classified under stage 2 as having significantly increased credit risk. For Wholesale portfolios and Business Banking assets managed under Retail portfolios where accounts are managed under the Watch List framework, then customers on WL 2/3, not breachng the quantitative test must be classified under stage 2 as having significantly increased credit risk. For Wholesale portfolios and Business Banking assets managed under Retail portfolios where accounts are managed under the Watch List framework, then customers on WL 2/3, not breachng the quantitative test must be classified under stage 2 as having significantly increased credit risk.

- **Backstop Criteria**
  For Retail portfolios, adverse changes in payment status must be considered within the assessment, and accounts 1 or more contractual payment in arrears at reporting date classified under stage 2, except where:
  a. The missed payment is a result of a bank error or technical issue;
  b. The arrears can be analytically proven not to represent deterioration from risk performance expectations at point of origination/acquisition, e.g. where there is a very small period between cycle point and reporting date. Such exceptions must be approved by the GCRD or nominated delegate.

For Wholesale portfolios adverse changes in payment status must be considered within the assessment, and accounts with contractual payment 30 days or more in arrears at reporting date are included within the entry criteria for stage 2, except where the missed payment is a result of a proven bank error or administrative issue. Where 30 days is used it must be proven that this is a backstop, not a lead driver of exposure moving to stage 2.

Where the assessment of SICR is undertaken on a collective basis, assets must be grouped on the basis of similar risk characteristics, taking into account asset type, industry, geographical location, collateral type, past due status and other relevant factors.

Businesses must raise an impairment allowance equivalent to the latest assessment of lifetime expected credit losses. This increased allowance must be recognised at the first reporting point following entry to stage 2 and the assessment updated at each subsequent reporting date.

The assessment of lifetime ECLs for stage 2 (and stage 3) assets must consider the maximum contractual period over which the business is exposed to credit risk, including the impact of permitted extensions and pre-payments, i.e. those available at the option of the borrower to which the business must agree.

For loan commitments, the lifetime assessment period is normally the maximum contractual life, i.e. the period from the point the loan commitment is established to closure/full repayment of the exposure. However, where customer use of contractually available pre-payments and/or extension has a material impact on the expected life of the asset, then use of behavioural life may be justified.

For revolving credit facilities, the lifetime assessment period may extend beyond the contractual life to include the period over which the business is expected to be exposed to credit risk, based on historical experience i.e. an assessment of the average time to default, closure or withdrawal of the facility.

Assets may be removed from stage 2 and re-assigned to stage 1 once there is objective evidence that the criteria used to indicate a significant increase in credit risk are no longer met.

**Stage 3: Credit impaired risk assets.**

Assets classified as stage 3 exposures for IFRS9 purposes are those where credit risk has increased to a point where they are now considered ‘Credit Impaired’. For Retail portfolios, this incorporates all accounts in forbearance, regardless of whether classified as performing or non-performing for EBA reporting purposes. For Wholesale portfolios cases of forbearance not captured by stage 3 (i.e. those not meeting the regulatory definition of default - EBA classification of non-performing) must be classified as stage 2 until such time as the relevant forbearance probation period has been completed.

Businesses must raise an impairment allowance equivalent to the latest assessment of lifetime expected credit losses, i.e. on the same basis as for stage 2 assets.

For Single Name Wholesale Assets, a threshold approach is taken with stage 3 impairment calculated individually. A discounted cash flow is completed establishing a base estimated impairment allowance, derived from the difference between asset carrying values and the recoverable amount.

Where the base allowance is greater than GBP 10m, a bespoke assessment is performed reflecting individual work out strategies. The assessment is clearly and specifically articulated including how general economic scenarios and downside analyses have been applied.

Interest and fee income on stage 3 assets is recognised based on the net amortised value, i.e. the gross carrying amount adjusted for the loss allowance in line with IFRS9 principles.

For exposures that are considered credit-impaired on purchase or origination, lifetime ECLs must be taken into account within the estimated cash flows at point of initial recognition, and the asset classified as stage 3.

In subsequent reporting periods, businesses must recognise cumulative changes in lifetime ECLs since initial recognition as a loss allowance, i.e. the amount of change in lifetime ECLs is treated as an impairment gain or loss. Assets may only exit stage 3 and be reclassified into stage 1 or stage 2 once the original default trigger event no longer applies.

To fully embed this new standard into businesses, management requires frequent periodic reviews of ECL performance across Barclays Group both in isolation and, more importantly, in comparison to the underlying performance of portfolios and product types. Review and challenge is carried out through a hierarchy of committees confirming both the adequacy of provisions under the ECL requirements and that all policies, standards and processes have been adhered to (see below) and that appropriate controls are evidenced.
Barclays’ approach to managing risks

Management of credit risk and the internal ratings-based approach

Governance and oversight of expected credit losses
Barclays Group’s organisational structure and internal governance processes oversee the estimation of ECL across several areas, including: i) setting requirements in policy, including key assumptions and the application of key judgements; ii) the design and execution of models; and iii) review of ECL results.

i. Impairment policy requirements are set and reviewed regularly, at a minimum annually, to maintain adherence to accounting standards. Key judgements inherent in policy, including the estimated life of revolving credit facilities and the quantitative criteria for assessing the SICR, are separately supported by analytical study. In particular, the quantitative thresholds used for assessing SICR are subject to a number of internal validation criteria, particularly in retail portfolios where thresholds decrease as the origination PD of each facility increases. Key policy requirements are also typically aligned to Barclays Group’s credit risk management strategy and practices, for example, wholesale customers that are risk managed on an individual basis are assessed for ECL on an individual basis upon entering Stage 3; furthermore, key internal risk management indicators of high risk are used to set SICR policy, for example, retail customers identified as High Risk Management Accounts are automatically deemed to have met the SICR criteria.

ii. ECL is estimated in line with internal policy requirements using models which are validated by a qualified independent party to the model development area, the Independent Validation Unit (IVU), before first use and at a minimum annually thereafter. Each model is designated an owner who is responsible for:
- Monitoring the performance of the model, which includes comparing predicted ECL versus flow into stage 3 and coverage ratios; and
- Proposing post-model adjustments (PMA) to address model weaknesses or to account for situations where known or expected risk factors and information have not been considered in the modelling process. Each PMA above an absolute and relative threshold is approved by the IVU for a set time period (usually a maximum of six months) together with a plan for remediation. The most material PMAs are also approved by the Barclays Group’s Chief Risk Officer.

Models must also assess ECL across a range of future economic conditions. These economic scenarios are generated via an independent model and ultimately set by the Senior Scenario Review Committee. Economic scenarios are regenerated at a minimum annually, to align with Barclays Group’s medium term planning exercise, but also if the external consensus of the UK or US economy materially worsen. The scenario probability weights are also updated when scenarios are regenerated and reviewed by the Senior Scenario Committee. Each model used in the estimation of ECL, including key inputs, are governed by a series of internal controls, which include the validation of completeness and accuracy of data in golden source systems, documented data transformations and documented lineage of data transfers between systems.

iii. The Barclays Group’s Impairment Committee, formed of members from both Finance and Risk, is responsible for overseeing impairment policy and practice across Barclays Group and will approve impairment results. Reported results and key messages are communicated to the Barclays PLC Board Audit Committee, which has an oversight role and provides challenge of key assumptions, including the basis of the scenarios adopted.

Forbearance and other concession programmes

Forbearance programmes
Forbearance takes place when a concession is made on the contractual terms of a facility in response to an obligor’s financial difficulties. Barclays Group offers forbearance programmes to assist customers and clients in financial difficulty through agreements that may include accepting less than contractual amounts due where financial distress would otherwise prevent satisfactory repayment within the original terms and conditions of the contract. These agreements may be initiated by the customer, Barclays Group or a third party.

Forbearance programmes for Wholesale portfolios
The majority of Wholesale client relationships are individually managed, with lending decisions made with reference to specific circumstances and on bespoke terms. Forbearance measures consist of concessions made towards a debtor that is experiencing or about to experience difficulties in meeting their financial commitments.

A concession is a sanctioned action, outside of market terms that is beneficial to the debtor. The concession arises solely due to the financial distress of the debtor and the terms are more favourable than those which would be offered to a new or existing obligor with a similar risk profile. Concessions are represented by:
- A change or alteration to the previous terms and conditions of a contract,
- A total or partial refinancing of a troubled debt contract.

The following are some examples of concessions which would be deemed forbearance (where granted to debtors in financial difficulties and outside of market terms):
- A restructuring of the contractual terms of a credit facility (such as a reduction in the interest rate).
- An extension to the maturity date.
- Change to the collateral structure (typically resulting in a net reduction in collateral).
- Favourable adjustment to covenants where repayment profile changes, or non-enforcement of material covenant breach.
- Repayment in some form other than cash (e.g. equity).
- Capitalisation of accrued interest.
- Any other concession made which is designed to alleviate actual or apparent financial stress e.g. a capital repayment holiday.

Where a concession is granted that is not a result of financial difficulty and/or is within Barclays Group’s current market terms, the concession would not amount to forbearance. For example, a commercially balanced restructure within the Barclays Group’s current terms which involves the granting of concessions and receiving risk mitigation/structural enhancement of benefit to Barclays Group would not be indicative of forbearance.

Forbearance is not deemed to have occurred in the following situations:
- There is a pending maturity event anticipated at the onset of lending i.e. the loan was never structured to amortise to zero.
- A maturity extension or a temporary covenant waiver (e.g. short term standstill) is granted to support a period of negotiation, subject to Barclays Group being satisfied that:
  - the debtor is actively pursuing refinancing or the sale of an asset enabling full repayment at expiry of the extended term
  - no loss is anticipated
  - payments of interest and capital continues as originally scheduled
  - there is a high probability of a successful outcome within a “reasonable” time scale (6 months for bilateral facilities, 9 months for multi-lender).
- Immaterial amendments to lending terms are agreed, including changes to non-financial internal risk triggers that are only used for internal monitoring purposes.

Forbearance is considered evidence of a Significant Increase in Credit Risk and all forbear debtors are impaired as IFRS9 stage 2 (Lifetime Expected Credit Loss) regardless of Watch List category as a minimum for the lifetime of the forbearance. Those forbearance cases in regulatory default will attract stage 3 impairment treatment.
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Management of credit risk and the internal ratings-based approach

Debtors granted forbearance are classified on watch list (WL) for the duration of the forbearance. Counterparties placed on WL status are subject to increased levels of credit risk oversight.

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

Non-Performing debtors are defined as:
- More than 90 days past due.
- Assessed as unlikely to pay credit obligations in full without realisation of collateral, regardless of the existence of any past due amount or of the number of days past due.
- Credit impaired.
- Performing forborne debtors granted additional forbearance measures or becoming more than 30 days past-due on a facility obligation.

Performing debtors are classified as debtors that are less than 30 days past due and are without risk of non-payment.

Non-performing status remains in force for a minimum 12 months from the date of classification before the debtor can be considered for performing status. Performing debtors remain forborne for a minimum 24 months before forborne status may be reviewed. The minimum time spent in forbearance for a case that is Non-Performing at the point forbearance is granted is therefore 36 months.

A control framework exists along with regular sampling so that policies for watch list and impairment are enforced as defined and all assets have suitable levels of impairment applied. Portfolios are subject to independent assessment.

Aggregate data for Wholesale forbearance cases is reviewed by the Wholesale Credit Risk Management Committee.

Forbearance programmes for retail portfolios
Retail forbearance is available to customers experiencing financial difficulties. Forbearance solutions take a number of forms depending on individual customer circumstances. It is imperative that the solution agreed is both appropriate to that customer and sustainable, with a clear demonstration from the customer of both willingness and ability to repay. Before any permanent programme of forbearance is granted, an affordability assessment is undertaken to confirm suitability of the offer. Short-term solutions focus on temporary reductions to contractual payments and may change from capital and interest payments to interest only. For loan customers with longer-term financial difficulties, term extensions may be offered, which may include interest rate concessions. For credit card customers with longer-term financial difficulties, a switch to a fully amortising plan may be offered, which may include an interest rate concession.

When an account is placed into a programme of forbearance, the asset will be classified as such until a defined cure period has been successfully completed, incorporating a successful track record of payment in line with the revised terms, upon which it will be returned to the up-to-date book. When Barclays Group agrees a forbearance programme with a customer, impairment allowances recognise the impact on cash flows of the agreement to receive less than the original contractual payments. The Retail Impairment Policy prescribes the methodology for the impairment of forbearance assets, in line with the new IFRS9 methodology adopted in January 2018. Forborne exposures are classified as stage 3 (credit impaired) assets under IFRS9, resulting in higher impairment than for fully performing assets, reflecting the additional credit risk attached to loans subject to forbearance.

When customers exit forbearance, the accounts are ring-fenced as High Risk within the up-to-date book for a period of at least twelve months. Barclays has continued to assist customers in financial difficulty through the use of forbearance programmes. However, the extent of forbearance offered by Barclays Group to customers and clients remains small in comparison to the overall size of the loan book.

The level of forbearance extended to customers in other Retail portfolios is not material and, typically, does not currently play a significant part in the way customer relationships are managed. However, additional portfolios will be added to this disclosure should the forbearance in respect of such portfolios become material.

A Retail loan is not considered to be renegotiated where the amendment is at the request of the customer, there is no evidence of actual or imminent financial difficulty and the amendment meets with all underwriting criteria. In this case it would be treated as a new loan. In the normal course of business, customers who are not in financial difficulties frequently apply for new loan terms, for example to take advantage of a lower interest rate or to secure a further advance on a mortgage product. Where these applications meet our underwriting criteria and the loan is made at market interest rates, the loan is not classified as being in forbearance. Only in circumstances where a customer has requested a term extension, interest rate reduction or further advance and there is evidence of financial difficulty is the loan classified as forbearance and included in our disclosures on forbearance on page 171 of the 2018 Annual Report.

Please see the credit risk performance section on pages 172 to 174 of the 2018 Annual Report for details of principal Wholesale and Retail assets currently in forbearance.

Other programmes

Retail re-aging activity
Re-aging refers to the placing of an account into an up-to-date position without the requisite repayment of arrears. The re-age policy applies to revolving products that have a minimum payment requirement only. No reduction is made to the minimum due payment amounts which are calculated, as a percentage of balance, with any unpaid principal included in the calculation of the following month’s minimum due payment.

The changes in timing of cash flows following re-aging do not result in any additional cost to Barclays Group. The following are the conditions required to be met before a re-age may occur:
- the account must not have been previously charged off or written off
- the borrower cannot be bankrupt, subject to an Individual Voluntary Arrangement (a UK contractual arrangement with creditors for individuals wishing to avoid bankruptcy), or deceased
- the borrower must show a renewed willingness and ability to repay the debt. This will be achieved by the borrower making at least three consecutive contractual monthly payments or the equivalent cumulative amount. Contractual monthly payment is defined as the contractual minimum due. Funds may not be advanced for any part of this
- no account should be re-aged more than once within any twelve-month period, or more than twice in a five-year period.

Re-aged assets are included in portfolios High Risk population, and are classified as stage 2 assets (i.e. as having significantly increases credit risk) for IFRS9 impairment purposes. This results in an appropriately higher impairment allowance being recognised on the assets.

Retail small arrears capitalisation
All small arrears capitalisations are now considered a form of Forbearance, based on the European Banking Authority’s requirements for Supervisory Reporting on Forbearance and Non-Performing exposures.
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Refinancing risk

This is the risk that the borrower or group of correlated borrowers may be unable to repay bullet-repayment loans at expiry, and will therefore need refinancing.

From a large corporates perspective, refinancing risk will typically be associated with loans that have an element of bullet repayment incorporated into the repayment profile. Refinancing risk is taken into account on a case by case basis as part of the credit review and approval process for each individual loan. The review will consider factors such as the strength of the business model and sustainability of the cash flows; and for bridge loans, the certainty of the sources of repayment and any associated market risk.

Commercial real estate loans will frequently incorporate a bullet repayment element at maturity. Where this is the case, deals are sized and structured to enable Barclays Group to term out the loan if the client were unable to refinance the loan at expiry. Credit review will incorporate an examination of various factors that are central to this consideration, such as tenant quality, tenancy agreement (including break clauses), property quality and interest rate sensitivity. Loans to small and medium enterprises (SMEs) will typically be either revolving credit lines to cover working capital needs or amortising exposures, with periodic refinancing to give the opportunity to review structure, pricing, etc.

Environmental risk

Environmental risk is recognised as a mainstream credit risk issue and Barclays Group has a dedicated Environmental Risk Management team, as part of the Group Credit Risk Management function. Environmental issues are considered in credit risk assessment, and environmental risk standards are included in the Wholesale Credit Risk Control Framework.

Barclays Group’s approach to environmental credit risk management addresses risk under two categories, namely Direct risk and Indirect risk, which are covered below.

Direct risk can arise when Barclays Group takes commercial land as collateral. In many jurisdictions, enforcement of a commercial mortgage by Barclays Group, leading to possession, potentially renders Barclays Group liable for the costs of remediating a site if deemed by the regulator to be contaminated, including for pre-existing conditions. In the UK, Barclays Group’s approach requires commercial land, if being pledged as collateral, to be subject to a screening mechanism. Where required, a further assessment of the commercial history of a piece of land and its potential for environmental contamination helps reflect any potential environmental degradation in the value ascribed to that security. It also identifies potential liabilities which may be incurred by Barclays Group, if realisation of the security were to become likely.

Indirect risk can arise when environmental issues may impact the creditworthiness of the borrower. For instance, incremental costs may be incurred in upgrading a business’ operations to meet emerging environmental regulations or tightening standards. In other circumstances, failure to meet those standards may lead to fines. Environmental impacts on businesses may also include shifts in the market demand for goods or services generated by our customers, or changing supply chain pressures. Environmental considerations affecting our clients can be varied. Barclays Group has developed a series of environmental risk briefing notes, covering ten broad industry headings ranging from Agriculture and Fisheries to Oil and Gas, from Mining and Metals to Utilities and Waste Management. These briefing notes are available to colleagues in business development and credit risk functions across the organisation, outlining the nature of environmental and social risks of which to be aware, as well as the factors which mitigate those risks.

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

Barclays is a member of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD), and signed the Statement of Support for the TCFD Recommendations, which were published in June 2017. The TCFD recommendations aim to improve the disclosure of information to allow investors, regulators and other stakeholders to better assess and manage the risks and opportunities resulting from climate change; we rely on appropriate disclosures from clients to inform our own climate-related sector risk management. Clear understanding and analysis of potential financial risks and opportunities in short, medium and longer term horizons is still at an early stage. We anticipate that disclosures will continue to develop over time, supported by improved analytical tools, data and market practice. This will support Barclays as a user of climate disclosures across industry sectors and subsequently inform our own disclosures as a preparer. We provide summary disclosures on page 26 of the Barclays PLC Annual Report 2018 with additional detail, including results of pilot scenario analysis and wider activity in 2018, available in the Barclays PLC Environmental Social Governance Report 2018.

Internal ratings based (IRB) approach

The IRB approach largely relies on internal models to derive the risk parameters, components used in determining the capital requirement for a given exposure. The main risk components include measures of the probability of default (PD), loss given default (LGD) and the exposure at default (EAD). The IRB approach is divided into three alternative applications: Own-Estimates, Supervisory Estimates and Specialised Lending:

Own-Estimates IRB (OEIRB): Barclays uses its own models to estimate PD, LGD and EAD to calculate given risk exposures for various asset classes and the associated Risk Weighted Assets (RWAs).

Supervisory IRB (SIRB): Barclays uses its own PD estimates, but relies on supervisory estimates for other risk components. The SIRB approach is particularly used to floor risk parameters for wholesale credit exposures where default data scarcity may impact the robustness of the model build process.

Specialised Lending IRB: For specialised lending exposures for which PD cannot be modelled reliably, Barclays uses a set of risk weights defined in the relevant regulation, and takes into account a range of prescribed risk factors.

While in the past the industry has used the terms Advanced, ‘Foundation’ and ‘Slotting’ IRB, the current enforcing regulation (the Capital Requirements Regulation) does not use these terms.

The IRB calculation for credit risk

For both OEIRB and SIRB approaches, Barclays uses the regulatory prescribed risk-weight functions for the purposes of deriving capital requirements.

In line with regulatory requirements, Long Run Average PD and downturn LGD and CF (Conversion Factor) estimates are used for each customer/facility to determine regulatory capital for all exposures in scope.

For the purpose of pricing and existing customer management, point in time (PIT) PD, LGD and EAD are generally used as these represent the best estimates of risk given the current position in the credit cycle. Whilst Long Run Average PDs are always tested at grade/pool level, PIT PDs are also used for the calculation of capital on certain retail unsecured products, in line with regulation.
Barclays’ approach to managing risks

Management of credit risk and the internal ratings-based approach

Applications of internal ratings

The three components – PD, LGD and CF – are the building blocks used in a variety of applications that measure credit risk across the entire portfolio:

- **credit approval**: PD models are used in the approval process in both retail and wholesale portfolios. In high-volume retail portfolios, application and behaviour scorecards are frequently used as decision-making tools. In wholesale and some retail mortgage portfolios, PD models are used to direct applications to an appropriate credit-sanctioning level
- **credit grading**: this was originally introduced in the early 1990s to provide a common measure of risk across Barclays Group. Barclays now employs a 21-point scale of credit probabilities. In some applications, grades in this scale are divided further to permit more detailed analysis. These are shown in Table 42 on page 70.
- **risk-reward and pricing**: PD, LGD and CF estimates are used to assess the profitability of deals and portfolios and to facilitate risk-adjusted pricing and strategy decisions
- **risk appetite**: estimates are used to calculate the expected loss and the potential volatility of loss in Barclays Group’s risk appetite framework. See page 139.
- **impairment calculation**: under IFRS9, ECL outputs are produced based on PD, EAD and CF IRB feeder models, with scenario and weighting. See page 147.
- **collections and recoveries**: model outputs are used to identify segments of the portfolio where collection and recovery efforts should be prioritised
- **economic capital (EC) calculation**: most EC calculations use similar inputs as the regulatory capital (RC) process
- **risk management information**: Risk generate reports to inform senior management on issues such as business performance, risk appetite and EC consumption. Model outputs are used as key indicators in those reports. Risk also generates regular reports on model risk, which covers model accuracy, model use, input data integrity and regulatory compliance among other issues.

Ratings processes and models for credit exposures

**Wholesale credit**

To construct ratings for wholesale customers, including financial institutions, corporations, specialised lending, purchased corporate receivables and equity exposures, Barclays complements its internal models suite with external models and rating agencies’ information. A model hierarchy is in place requiring users/credit officers to adopt a consistent approach/model to rate each counterparty based on the asset class type and the nature of the transaction.

**Wholesale PD models**

Barclays employs a range of methods in the construction of these models:

- statistical models are used for our high volume portfolios such as small or medium enterprises (SME). The models are typically built using large amounts of internal data, combined with supplemental data from external data suppliers where available. Wherever external data is sourced to validate or enhance internally held data, similar data quality standards to those applicable to the internal data management are enforced.
- structural models incorporate, in their specification, the elements of the industry-accepted Merton framework to identify the distance to default for a counterparty. This relies upon the modeller having access to specific time series data or data proxies for the portfolio scale; data samples used to build and validate these models are typically constructed by appropriately combining data sets from internal default observations with comparable externally obtained data sets from commercial providers such as rating agencies and industry data gathering consortia.
- expert lender models are used for those parts of the portfolio where there is insufficient internal or external data to support the construction of a statistically robust model. These models utilise the knowledge and in-depth expertise of the senior credit officers dealing with the specific customer type being modelled. For all portfolios with a low number of default observations, Barclays Group adopts specific regulatory rules, methodologies and floors in its estimates so that the calibration of the model meets the current regulatory criteria for conservatism.

**Wholesale LGD models**

The LGD models typically rely on statistical analysis to derive the model drivers (including seniority of claim, collateral coverage, recovery periods, industry and costs) that best explain Barclays Group’s historical loss experience, often supplemented with other relevant and representative external information where available. The models are calibrated to downturn conditions for regulatory capital purposes and, where internal and external data is scarce, they are subject to SIRB floors so that the calibration of the model meets the current regulatory criteria for conservatism.

**Wholesale CF models**

The wholesale CF models estimate the potential utilisation of the currently available headroom based on statistical analysis of the available internal and external data and past claim behaviour. As is the case with the LGD models, the CF models are subject to downturn calibration for regulatory capital purposes and to floors where data is scarce.

**Retail credit**

Retail banking and cards operations have long and extensive experience of using credit models in assessing and managing risks. As a result, models play an integral role in customer approval and management decisions. Most retail portfolios are data rich; consequently, most models are built in-house using statistical techniques and internal data. Exceptions are some expert lender models (similar to those described in the wholesale context) where data scarcity precludes the statistically robust derivation of model parameters. In these cases, appropriately conservative assumptions are typically used, and wherever possible these models are validated/benchmarked against external data.

**Retail PD models**

Application and behavioural scorecards are most commonly used for retail PD modelling:

- application scorecards are derived from historically observed performance of new clients. They are built using customer demographic and financial information, supplemented by credit bureau information where available. Through statistical techniques, the relationship between these candidate variables and the default marker is quantified to produce output scores reflecting a PD. These scores are used primarily for new customer decisioning but are, in some cases, also used to allocate a PD to new customers for the purpose of capital calculation.
- behavioural scorecards differ from application scorecards in that they rely on the historically observed performance of existing clients. The statistically derived output scores are used for existing customer management activities as well as for the purpose of capital calculation.

**Retail LGD models**

Retail LGD models are built using bespoke methods chosen to best model the operational recovery process and practices. In a number of secured portfolios, LGD drivers are parameterised with market factors (e.g. house price indices, haircut of the property value) to capture market trends. For most unsecured portfolios, where recoveries are not based on collateral, statistical models of cash flows are used to estimate ultimate recoveries and LGDs. In all instances, cash flows are discounted to the point of default by using bespoke country and product level factors. For capital calculations, customised economic downturn adjustments, taking into account loss and default dependency, are made to adjust losses to stressed conditions.

**Retail CF models**

CF models within retail portfolios are split into two main methodological categories. The general methodology is to derive product level credit conversion factors (CCFs) from historical balance migrations, typically for amortising product, such as mortgages, consumer loans. These are frequently further segmented at a bucket level (e.g. by delinquency). The most sophisticated CF models are based on behavioural factors, determining customer likelihoods. CCFs from characteristics of the individual facility, typically for overdrafts and credit cards. For capital calculations, customised downturn adjustments, taking into account loss and default dependency, are made to adjust for stressed conditions.
Barclays’ approach to managing risks

Management of credit risk and the internal ratings-based approach

The control mechanisms for the rating system

Model risk is a risk managed under the ERMF. Consequently, Barclays Group Model Risk Policy (GMRP) and its supporting standards covering the end-to-end model life cycle are in place to support the management of risk models.

Key controls captured by the GMRP cover:

- model governance is anchored in assigning accountabilities and responsibilities to each of the main stakeholders:
  - model owner – each model must have an owner who has overall accountability for the model
  - model developers – support the model owner and drive development according to the model owner’s defined scope/purpose
  - Independent Validation Unit (IVU) – responsible for independent review, challenge and approval of all models.
- externally developed models are subject to the same governance standards as internal models
- models are classified by materiality (high/low) and complexity (complex/non-complex)
- all models must be validated and approved by IVU before initial implementation/use
- models are subject to annual review by the model owner and periodic validation and approval by IVU
- all models must be recorded in Barclays Group Models Database (GMD), which records model owners and developers
- model owners must evidence that model implementation is accurate and tested.

If a model is found to perform sub-optimally, it may be rejected and/or subjected to a Post Model Adjustment (PMA) before approval for continued use is granted.

The IVU reporting line is separate from that of the model developers. IVU is part of Model Risk Management (MRM), and the head of MRM reports to Barclays’ Chief Risk Officer (GCRO). The model development teams have separate reporting lines to the Barclays UK and Barclays International Chief Risk Officers, who in turn report to the GCRO.

Under the Three Lines of Defence approach stated in the ERMF, the actions of all parties with responsibilities under the GMRP are subject to independent review by Barclays Internal Audit.

Validation processes for credit exposures

Validation of credit models covers observed model performance but also the scope of model use, interactions between models, data use and quality, the model’s theoretical basis, regulatory compliance and any remediation to model risk that are proposed or in place. The following sections provide more detail on processes for validating the performance of each model type.

Wholesale PD models

To assess model calibration, the IVU compares the model prediction of default frequency to the realised internal default rate both over the latest year and over all observable model history. Due to the relative infrequency of default of large wholesale obligors, a long-run perspective on default risk is vital. Default rates are also compared to external benchmarks where these are relevant and available, such as default rates in rating-agency data. In practice, since financial crises have been infrequent, IVU would expect the model PD used in calculating regulatory capital to exceed the long run observed default rate.

For portfolios where few internal defaults have been observed, portfolio PD is compared to the ‘most prudent PD’ generated by the industry-standard Pluto-Tasche method. Comparisons are performed on facility-weighted rather than exposure-weighted basis, however, in line with the relevant regulations.

Wholesale CF models

To assess model calibration, the IVU compares the model prediction of default frequency to the realised internal default rate by grade/pool as required by CRR. As a minimum, IVU expects the expected default rate is at least equal or above the level of observed default rate.

To assess model discrimination performance, the IVU compares the model PD used in calculating regulatory capital to that of observed LGD and calculates the Spearman’s Rank correlation coefficient and other measures of discrimination.

Retail PD models

To assess rating philosophy, i.e. whether it is a Point-in-Time system or Through-the-Cycle system, the IVU produces migration indices to investigate relevant grade migration.

To assess model calibration, the IVU compares the model prediction of default frequency to the realised internal default rate by grade/pool as required by CRR. As a minimum, IVU expects the expected default rate is at least equal or above the level of observed default rate.

To assess model discrimination performance, the IVU compares the model prediction of default frequency to the realised internal default rate by grade/pool as required by CRR. As a minimum, IVU expects the expected default rate is at least equal or above the level of observed default rate.

To assess model discrimination, the IVU compares the rank-ordering of model predictions to that of observed LGD and calculates the Spearman’s Rank correlation coefficient and other measures of discrimination.

Wholestate CF models

To assess model calibration, the conversion factors observed in internal data are compared to model predictions, both in downturn periods as defined by the regulator, and on a long-run average basis. Comparisons are performed separately for different product types. Validation focuses on internal data, with external data used as a benchmark, because conversion factors are related to banks’ facility management practices. Particular care is used in separating cases where facility limits changed between the date of observation and default, as these can lead to measurements of conversion factors that take extreme values.

As a benchmark only, total predicted exposure at default for all defaulted facilities is compared to realised exposure at default. This comparison is done because it is relatively insensitive to extreme values for observed CF on some facilities. The primary validation tests are performed on facility-weighted rather than exposure-weighted basis, however, in line with the relevant regulations.
Barclays’ approach to managing risks

Management of credit risk and the internal ratings-based approach

Retail LGD models
LGD model components are compared to observed value respectively; this may include but not limited to probability of possession/charge off, forced sale discount, time from default to crystallisation and discount rate. Where components are similar to PD in nature, the approach stated in the PD section applies to assess the calibration, discrimination and stability of the component.

The calibration of the overall LGD is assessed through the expected against actual comparison by default flow and stock population respectively. The downturn LGD appropriateness is further assessed to test that the downturn LGD is equal to or above the long-run average of observed LGD. This exercise is performed at grade/pool level according to CRR. Particular care is used in separating cases where facility limits changed between the date of observation and default, as these can lead to measurements of conversion factors that take extreme values.

Depending on the modelling approach, the relevant measure used for PD/LGD may be used accordingly to assess calibration, discrimination and stability.

CF is floored so that the exposure at the point of default cannot be less than exposure observed at point of regulatory reporting.

The primary validation tests are performed on facility-weighted rather than exposure-weighted basis, however, in line with the relevant regulations.

Retail CF models
The calibration of the overall CF is assessed through the expected against actual comparison by default flow and stock population respectively. The downturn CF appropriateness is further assessed to test that the downturn CF is equal to or above the long-run average of observed CF. This exercise is performed at grade/pool level according to CRR. Particular care is used in separating cases where facility limits changed between the date of observation and default, as these can lead to measurements of conversion factors that take extreme values.

Depending on the modelling approach, the relevant measure used for PD/LGD may be used accordingly to assess calibration, discrimination and stability.

CF is floored so that the exposure at the point of default cannot be less than exposure observed at point of regulatory reporting.

The primary validation tests are performed on facility-weighted rather than exposure-weighted basis, however, in line with the relevant regulations.

Selected features of material models
The table below contains selected features of the Group’s AIRB credit risk models which are used to calculate RWAs. Please note that the RWAs reported in this table are based on the models in production as of Nov’18.

- PD models listed in the table account for £105bn of total AIRB approach RWAs
- LGD models listed in the table account for £106bn of total AIRB approach RWAs.

Table 92 for credit risk model characteristics shows modelled variables to calculate RWAs (PD, LGD, and EAD) at portfolio level, with number of models and their significance in terms of RWAs, model method or approach, numbers of years of data used, Basel asset class of the customer or client, and regulatory thresholds applied.
### Table 93: IRB credit risk models’ selected features

<table>
<thead>
<tr>
<th>Component modelled</th>
<th>Portfolio</th>
<th>Size of associated portfolio (RWA)</th>
<th>Model description and methodology</th>
<th>Number of years loss data</th>
<th>Basel asset classes measured</th>
<th>Applicable industry-wide regulatory thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD</td>
<td>Publicly traded corporate</td>
<td>0</td>
<td>24,811</td>
<td>Statistical model using a Merton-based methodology. It takes quantitative factors as inputs.</td>
<td>&gt; 10 Years</td>
<td>Corporate</td>
</tr>
<tr>
<td>PD</td>
<td>Customers rated by Moody’s and S&amp;P</td>
<td>0</td>
<td>29,886</td>
<td>Rating Agency Equivalent model converts agency ratings into estimated equivalent PD default rates using credit cycles based on Moody’s data.</td>
<td>&gt; 10 Years</td>
<td>Corporate, Financial Institutions and Sovereigns</td>
</tr>
<tr>
<td>PD</td>
<td>SME customers with turnover &lt; £20m</td>
<td>5,489</td>
<td>2,926</td>
<td>Statistical models that uses regression techniques to derive relationship between observed default experience and a set of behavioral variables.</td>
<td>&gt; 10 Years</td>
<td>Corporate SME, SME</td>
</tr>
<tr>
<td>PD</td>
<td>Corporate customers with turnover &gt;= £20m</td>
<td>0</td>
<td>7,171</td>
<td>Statistically derived models sourced from an external vendor (Moody’s RiskCalc)</td>
<td>&gt; 10 Years</td>
<td>Corporate</td>
</tr>
<tr>
<td>PD</td>
<td>Home Finance</td>
<td>17,280</td>
<td>–</td>
<td>Statistical scorecards estimated using regression techniques, segmented along arrears status and portfolio type.</td>
<td>&gt; 10 Years</td>
<td>Secured By Real Estate (residential and buy-to-let mortgages)</td>
</tr>
<tr>
<td>PD</td>
<td>Barclaycard UK</td>
<td>17,044</td>
<td>–</td>
<td>Statistical scorecards estimated using regression techniques, segmented along arrears status and portfolio type.</td>
<td>6 – 10 Years</td>
<td>Qualifying Revolving Retail (QRRE)</td>
</tr>
<tr>
<td>LGD</td>
<td>Corporate and Financial Institutions</td>
<td>–</td>
<td>46,318</td>
<td>Model based on a statistical regression that outputs a long run average LGD by estimating the expected value of recovery. Inputs include industry, seniority, instrument, collateral and country.</td>
<td>&gt; 10 Years</td>
<td>Corporate, Financial Institutions</td>
</tr>
<tr>
<td>LGD</td>
<td>All business customers (excluding certain specialized sectors)</td>
<td>5,080</td>
<td>16,565</td>
<td>Model is based on a function estimated using actual recoveries experience. It takes account of collateral value and an allowance for non-collateral recovery.</td>
<td>&gt; 10 Years</td>
<td>Corporate</td>
</tr>
<tr>
<td>LGD</td>
<td>UK Home Finance</td>
<td>17,280</td>
<td>–</td>
<td>Data driven estimates of loss and probability of possession</td>
<td>6 – 10 Years</td>
<td>Secured By Real Estate (residential and buy-to-let mortgages)</td>
</tr>
<tr>
<td>LGD</td>
<td>Barclaycard UK</td>
<td>17,044</td>
<td>–</td>
<td>Statistical models combining segmented regression and other forecasting techniques</td>
<td>6 – 10 Years</td>
<td>Qualifying Revolving Retail (QRRE)</td>
</tr>
</tbody>
</table>
Barclays’ approach to managing risks

Management of credit risk and the internal ratings-based approach

Credit Risk IRB models performance back testing - estimated versus actual

The following tables compare the PDs and LGDs estimated by the Group’s IRB models with the actual default and loss rates. Comparisons are based on the assets in IRB approach portfolios and are used to assess performance of the models. The estimates and actual figures represent direct outputs from the models rather than outputs used in regulatory capital calculations that may be adjusted to apply more conservative assumptions.

Back testing results are reported within each IRB exposure class at overall Bank level both for Retail and Wholesale, as the historical BUK and BI split is not available for the Wholesale obligors. We intend to report back testing results at BUK and BI level in future once adequate data history is available.

Risk models are subject to the Group Model Risk Policy which contains detailed guidance on the minimum standards for model risk management. For example, PDs must be estimated over a sufficient period, show sufficient differentiation in predictions for different customers, show conservatism where data limitations exist, and follow prescriptive techniques. These standards are achieved via an independent validation process through appropriately independent experts. Once validated and correctly implemented, models are subject to regular monitoring to ensure they can still be used. Comparing model estimates with actual default rates for PD and loss rates for LGD form part of this monitoring. Such analysis is used to assess and enhance the performance of the models.

Further detail is provided in the management of model risk on page 186.

PD measures

- The model estimated PIT PDs are compared with the actual default rates by PD ranges within each IRB exposure class. PD ranges, estimated PDs and actual default rates are based on the existing models default definitions. UK Cards, UK Home Finance, SME are the only CRD IV compliant portfolio as of the reference month (Nov’17), for the remaining portfolios CRD IV compliant models are either implemented post the reference month or under implementation or currently under development/approval as per the CRD IV roll out plan agreed with the PRA.
- The estimated PDs are forward-looking average PD by the model at the beginning of the twelve-month period, i.e. average PD of the Nov’17 non-defaulted obligors including inactive and non-borrowers. Both EAD weighted and simple average PDs have been reported.
- The estimated PDs are compared with the simple average of historical annual default rates over the past 5 years, starting Nov’13.
- The PIT PD is used as a predicted measure in internal monitoring and annual validation of the models. In contrast, the capital calculation uses TTC or Regulatory PDs (not shown below), calibrated to long-run default averages with additional adjustments where modelled outputs display evidence of risk understatement (including credit expert overrides, regulatory adjustments etc.). The PIT measure is subject to under or over prediction depending on the relative position of the portfolio to the credit cycle.
- A mapping has been provided between external ratings and internal PD ranges based on the published reports from the two rating agencies - Moody’s and S&P.
- For the wholesale models, the average default probabilities in the tables have been determined from the full scope of clients graded by the IRB model suite, which may include some clients that have either zero exposure or zero limits marked at the time of calculation.

LGD measures

- The model estimated LGDs, unadjusted for regulatory floors and for downturn adjustments, are compared with the actual LGDs within each IRB exposure class.
- The estimated LGDs are derived from a simple average of LGDs at the time of default for the set of cases closed over the previous twelve months.
- The actual LGD rate is the simple average observed loss rate for the set of cases closed over the previous twelve months, regardless of the time of default.
- The LGD measures are used as a predicted measure in internal monitoring and annual validation of the models. The capital calculation uses Downturn LGDs with additional adjustments and regulatory floors where modelled outputs display evidence of risk understatement.
Management of credit risk and the internal ratings-based approach

Table 94: Analysis of expected performance versus actual results

This table provides an overview of credit risk model performance, assessed by the analysis of average PDs and average LGDs. The table compares the raw model output to the actual experience in our portfolios. Such analysis is used to assess and enhance the adequacy and accuracy of models. The raw outputs are subject to a number of adjustments before they are used in the calculation of capital, for example to allow for the position in the credit cycle and the impact of stress on recovery rates.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>EBA PD Range (%)</th>
<th>External Ratings Equivalent</th>
<th>Weighted Average PD %</th>
<th>Arithmetic Average PD by obligors %</th>
<th>Number of obligors</th>
<th>Defaulted obligors in the year £m</th>
<th>of which: new defaulted obligors in the year £m</th>
<th>Average historical annual default %</th>
</tr>
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<tbody>
<tr>
<td>Wholesale</td>
<td></td>
<td></td>
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<tr>
<td>Central governments or central banks</td>
<td>0.00 to &lt;0.15</td>
<td>Aaa, Aa1, Aa2, Aa3, Aa+, Aa-, Aa-, BB+, Baa1, Baa2</td>
<td>0.01%</td>
<td>0.01%</td>
<td>57</td>
<td>43</td>
<td>0</td>
<td>0.00%</td>
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<tr>
<td>Institutions</td>
<td>0.00 to &lt;0.15</td>
<td>Aaa, Aa1, Aa2, Aa3, Aa+, Aa-, Aa-, Baa1, Baa2</td>
<td>0.03%</td>
<td>0.03%</td>
<td>9,156</td>
<td>8,641</td>
<td>0</td>
<td>0.00%</td>
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<tr>
<td>Corporate</td>
<td>0.00 to &lt;0.15</td>
<td>Aaa, Aa1, Aa2, Aa3, Aa+, Aa-, Aa-, Baa1, Baa2</td>
<td>0.02%</td>
<td>0.05%</td>
<td>1,430</td>
<td>1,365</td>
<td>1</td>
<td>0.06%</td>
</tr>
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</tr>
<tr>
<td>Corporate SME</td>
<td>0.00 to &lt;0.15</td>
<td>Aaa, Aa1, Aa2, Aa3, Aa+, Aa-, Aa-, Baa1, Baa2</td>
<td>0.06%</td>
<td>0.08%</td>
<td>705</td>
<td>13,346</td>
<td>3</td>
<td>2.00%</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>Specialist Lending</td>
<td>0.00 to &lt;0.15</td>
<td>Aaa, Aa1, Aa2, Aa3, Aa+, Aa-, Aa-, Baa1, Baa2</td>
<td>0.08%</td>
<td>0.08%</td>
<td>28</td>
<td>39</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>
Barclays’ approach to managing risks

Management of credit risk and the internal ratings-based approach

Table 94: Analysis of expected performance versus actual results continued

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>EBA PD Range (%)</th>
<th>External Ratings Equivalent</th>
<th>Number of obligors</th>
<th>As at Nov’17 £m</th>
<th>As at Nov’18 £m</th>
<th>Average historical annual default %</th>
<th>Predicted LGD (Simple Average) %</th>
<th>Actual LGD (Simple Average) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail SME</td>
<td>0.00 to &lt;0.15</td>
<td>Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1</td>
<td>1.2%</td>
<td>0.06%</td>
<td>515,312</td>
<td>478,321</td>
<td>315</td>
<td>306</td>
</tr>
<tr>
<td></td>
<td>0.15 to &lt;0.25</td>
<td>Baa2</td>
<td>Baa1</td>
<td>0.20%</td>
<td>0.20%</td>
<td>103,582</td>
<td>111,982</td>
<td>211</td>
</tr>
<tr>
<td></td>
<td>0.25 to &lt;0.50</td>
<td>Baa3, Baa1</td>
<td>Baa1</td>
<td>0.37%</td>
<td>0.36%</td>
<td>126,861</td>
<td>130,072</td>
<td>418</td>
</tr>
<tr>
<td></td>
<td>0.50 to &lt;0.75</td>
<td>Ba1, Ba2</td>
<td>BB+</td>
<td>0.62%</td>
<td>0.62%</td>
<td>74,978</td>
<td>76,125</td>
<td>480</td>
</tr>
<tr>
<td></td>
<td>0.75 to &lt;2.50</td>
<td>B2, B3, B1</td>
<td>BB, BB-</td>
<td>1.46%</td>
<td>1.38%</td>
<td>157,513</td>
<td>159,157</td>
<td>1,906</td>
</tr>
<tr>
<td></td>
<td>2.50 to &lt;10.00</td>
<td>B1, B2, B3</td>
<td>BB-, B, B-, B+, B+</td>
<td>5.11%</td>
<td>4.58%</td>
<td>84,305</td>
<td>74,184</td>
<td>3,588</td>
</tr>
<tr>
<td></td>
<td>10.00 to &lt;100.00</td>
<td>B3, Ca1, Ca2, Ca3, Ca, C</td>
<td>B-, CCC+, CCC, CCC-, CC+, CC, C</td>
<td>26.37%</td>
<td>25.97%</td>
<td>25,796</td>
<td>21,434</td>
<td>6,189</td>
</tr>
<tr>
<td></td>
<td>100.00 (default)</td>
<td>D</td>
<td>D</td>
<td>100%</td>
<td>100%</td>
<td>15,843</td>
<td>15,348</td>
<td>–</td>
</tr>
<tr>
<td>Secured by Real Estate</td>
<td>0.00 to &lt;0.15</td>
<td>Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1</td>
<td>0.07%</td>
<td>0.08%</td>
<td>747,100</td>
<td>657,676</td>
<td>727</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>0.15 to &lt;0.25</td>
<td>Baa2</td>
<td>BB+</td>
<td>0.19%</td>
<td>0.19%</td>
<td>105,683</td>
<td>106,014</td>
<td>356</td>
</tr>
<tr>
<td></td>
<td>0.25 to &lt;0.50</td>
<td>Baa3, Baa1</td>
<td>BB, BB-</td>
<td>0.34%</td>
<td>0.34%</td>
<td>53,679</td>
<td>72,389</td>
<td>332</td>
</tr>
<tr>
<td></td>
<td>0.50 to &lt;0.75</td>
<td>Ba1, Ba2</td>
<td>BB+</td>
<td>0.60%</td>
<td>0.61%</td>
<td>10,763</td>
<td>14,102</td>
<td>126</td>
</tr>
<tr>
<td></td>
<td>0.75 to &lt;2.50</td>
<td>B2, B3, B1</td>
<td>BB, BB-</td>
<td>1.41%</td>
<td>1.39%</td>
<td>25,084</td>
<td>24,772</td>
<td>401</td>
</tr>
<tr>
<td></td>
<td>2.50 to &lt;10.00</td>
<td>B1, B2, B3</td>
<td>BB-, B, B-, B+, B+</td>
<td>5.13%</td>
<td>5.00%</td>
<td>13,049</td>
<td>14,074</td>
<td>724</td>
</tr>
<tr>
<td></td>
<td>10.00 to &lt;100.00</td>
<td>B3, Ca1, Ca2, Ca3, Ca, C</td>
<td>B-, CCC+, CCC, CCC-, CC+, CC, C</td>
<td>30.84%</td>
<td>30.67%</td>
<td>8,544</td>
<td>8,019</td>
<td>2,715</td>
</tr>
<tr>
<td></td>
<td>100.00 (default)</td>
<td>D</td>
<td>D</td>
<td>100%</td>
<td>100%</td>
<td>15,843</td>
<td>15,348</td>
<td>–</td>
</tr>
<tr>
<td>Qualifying Revolving Retail</td>
<td>0.00 to &lt;0.15</td>
<td>Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1</td>
<td>0.07%</td>
<td>0.05%</td>
<td>10,874,865</td>
<td>11,241,723</td>
<td>3,705</td>
<td>1,083</td>
</tr>
<tr>
<td></td>
<td>0.15 to &lt;0.25</td>
<td>Baa2</td>
<td>BB+</td>
<td>0.20%</td>
<td>0.20%</td>
<td>1,814,018</td>
<td>1,888,241</td>
<td>2,918</td>
</tr>
<tr>
<td></td>
<td>0.25 to &lt;0.50</td>
<td>Baa3, Baa1</td>
<td>BB, BB-</td>
<td>0.36%</td>
<td>0.36%</td>
<td>2,143,393</td>
<td>2,190,080</td>
<td>6,255</td>
</tr>
<tr>
<td></td>
<td>0.50 to &lt;0.75</td>
<td>Ba1, Ba2</td>
<td>BB+</td>
<td>0.61%</td>
<td>0.61%</td>
<td>1,113,231</td>
<td>1,125,606</td>
<td>5,510</td>
</tr>
<tr>
<td></td>
<td>0.75 to &lt;2.50</td>
<td>B2, B3, B1</td>
<td>BB, BB-</td>
<td>1.45%</td>
<td>1.39%</td>
<td>2,633,447</td>
<td>2,628,549</td>
<td>23,655</td>
</tr>
<tr>
<td></td>
<td>2.50 to &lt;10.00</td>
<td>B1, B2, B3</td>
<td>BB-, B, B-, B+, B+</td>
<td>5.08%</td>
<td>4.93%</td>
<td>1,555,954</td>
<td>1,578,424</td>
<td>70,386</td>
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<tr>
<td></td>
<td>10.00 to &lt;100.00</td>
<td>B3, Ca1, Ca2, Ca3, Ca, C</td>
<td>B-, CCC+, CCC, CCC-, CC+, CC, C</td>
<td>24.11%</td>
<td>26.81%</td>
<td>507,976</td>
<td>501,280</td>
<td>135,770</td>
</tr>
<tr>
<td></td>
<td>100.00 (default)</td>
<td>D</td>
<td>D</td>
<td>100%</td>
<td>100%</td>
<td>412,355</td>
<td>379,893</td>
<td>–</td>
</tr>
<tr>
<td>Other Retail</td>
<td>0.00 to &lt;0.15</td>
<td>Aaa, Aa1, Aa2, Aa3, A1, A2, A3, Baa1</td>
<td>0.13%</td>
<td>0.13%</td>
<td>65</td>
<td>98</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>0.15 to &lt;0.25</td>
<td>Baa2</td>
<td>BB+</td>
<td>0.22%</td>
<td>0.22%</td>
<td>2,429</td>
<td>3,289</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>0.25 to &lt;0.50</td>
<td>Baa3, Baa1</td>
<td>BB, BB-</td>
<td>0.40%</td>
<td>0.40%</td>
<td>51,697</td>
<td>60,623</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>0.50 to &lt;0.75</td>
<td>Ba1, Ba2</td>
<td>BB+</td>
<td>0.63%</td>
<td>0.63%</td>
<td>92,866</td>
<td>101,324</td>
<td>322</td>
</tr>
<tr>
<td></td>
<td>0.75 to &lt;2.50</td>
<td>B2, B3, B1</td>
<td>BB, BB-</td>
<td>1.39%</td>
<td>1.39%</td>
<td>347,877</td>
<td>352,788</td>
<td>4,408</td>
</tr>
<tr>
<td></td>
<td>2.50 to &lt;10.00</td>
<td>B1, B2, B3</td>
<td>BB-, B, B-, B+, B+</td>
<td>4.26%</td>
<td>4.36%</td>
<td>118,375</td>
<td>102,064</td>
<td>6,160</td>
</tr>
<tr>
<td></td>
<td>10.00 to &lt;100.00</td>
<td>B3, Ca1, Ca2, Ca3, Ca, C</td>
<td>B-, CCC+, CCC, CCC-, CC+, CC, C</td>
<td>44.57%</td>
<td>39.64%</td>
<td>26,496</td>
<td>25,236</td>
<td>11,802</td>
</tr>
<tr>
<td></td>
<td>100.00 (default)</td>
<td>D</td>
<td>D</td>
<td>100%</td>
<td>100%</td>
<td>41,964</td>
<td>48,818</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Number of resolved cases over last one year (Dec’17 to Nov’18) £m</th>
<th>Predicted LGD (Simple Average) %</th>
<th>Actual LGD (Simple Average) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment Bank</td>
<td>49</td>
<td>34%</td>
<td>23%</td>
</tr>
<tr>
<td>Corporate Bank</td>
<td>39</td>
<td>67%</td>
<td>57%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Retail</th>
<th>Number of resolved cases over last one year (Dec’17 to Nov’18) £m</th>
<th>Predicted LGD (Simple Average) %</th>
<th>Actual LGD (Simple Average) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>SME</td>
<td>6,636</td>
<td>80%</td>
<td>84%</td>
</tr>
<tr>
<td>Secured by Real Estate</td>
<td>1,943</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>Qualifying Revolving Retail</td>
<td>317,499</td>
<td>73%</td>
<td>68%</td>
</tr>
<tr>
<td>Other Retail</td>
<td>18,836</td>
<td>78%</td>
<td>79%</td>
</tr>
</tbody>
</table>
Barclays’ approach to managing risks
Management of credit risk and the internal ratings-based approach

2018 AIRB models back testing summary
Section below provides AIRB model performance summary based on the above back testing results, along with the remediation plans.

Wholesale
- The Wholesale book continues to maintain low default rates across IRB exposure classes, with no defaults observed for ‘Central Governments or Central Banks’. The estimated PDs are higher (conservative) compared to actual default rates for most PD ranges within each exposure class.
- There are the two key LCD models used for the Wholesale IRB exposures. Both the LCD models overestimate (conservative) on a PIT basis.
- New PD and LCD models have been developed to comply with CRD IV requirements for the material portfolios and have been submitted to the PRA. Interim Post Model Adjustments (PMAs) are in place to address existing models’ deficiencies.

For Wholesale - Investment Bank portfolio, the LGD analysis has been performed on latest one year of data available for the closed cases in period Nov’16-Nov’17, due to data unavailability in the more recent months.

The change in the Corporate SME population reflects the net impact of the movement of customers between BI and BUK. A change in model methodology that increases the number of graded customers and reporting of BUK customers that also have product exposures in BI.

For Specialist Lending, the reduction in number of obligors is largely attributable to the movement of obligors between BI and BUK.

Retail SME
- For SME, a new set of CRD IV compliant models approved by the PRA were implemented in Sep’17. The models were later split based on legal entities (BUK and BI) spanning SME and Corporate SME respectively. The split into BUK and BI prior to Structural Reform Program (SRP) is based on a proxy of Sales Turnover < 6.5m and updated post SRP implementation in Apr’18, leading to an increase in obligors for Corporate SME. Oct’18 data has been used instead of Nov’18, due to data unavailability. Historical average has been calculated using 4 years of data i.e. Oct’14,Oct’15,Oct’16 and Oct’17.
- The estimated PDs rank order the historical default experience for both the SME and Corporate SME book (except the first PD range, i.e. higher PDs implying higher actual default rates. LCD model underestimates for SME on a PIT basis primarily due to few operational issues affecting underlying data.

Secured by Real Estate
- This covers the Mortgage portfolios for UK and Italy. Rank ordering is maintained across PD ranges.
- For UK Mortgages, current back testing report is based on the latest CRD IV complaint models. The PD model underestimates shows non-conservatism at an overall level (0.43% expected vs. 0.49% actual). This is due to the data issue identified in Aug’18, which caused arrear inflation. The portfolio maintains low LCD and the LGD model underestimates (0.96% estimated vs.1.68% actual). LCD underestimation is caused by increasing Forced Sale Discount for the current year and lower expected Probability of Possession given Default (PPD), which is a major component in the expected LGD calculation for the new to default book on which numbers have been reported.
- 5 year averages of actual defaults are taken from 5 snapshot months of which Nov’13, Nov’14 are based on older generation of models and Nov’15, Nov’16 & Nov’17 are based on CRD IV complaint models (G4).
- For accounts where actual sale cost was not available, an average sale cost is used while calculating Actual LGD.
- G4 PPD model was developed on the total default population base whereas this analysis is done at the point of collaterals entering into default. The total default base contains a mixed set of collaterals, ranging from recent defaults to the ones in default for a longer time. We expect the predicted PPD (and hence LGD as well) for collaterals defaulting at any month to be lower compared to the total default base.
- For Italy Mortgages, both the PIT PD and LCD models are underestimates primarily due to a decrease in the House Price Index (HPI). A new set of CRD IV compliant models is due for regulatory submission in Q4’19. Interim Post Model Adjustments (PMAs) are in place to address existing models’ deficiencies. Oct’18 data has been used instead of Nov’18 due to data challenges.

Qualifying Revolving Retail
- This constitutes UK Cards, Germany Cards and UK Current Account portfolios. The estimated PDs rank order well across all 3 portfolios and at an overall level.
- For UK Cards, a slight underestimation is observed in the PD model driven by the high risk bands; 2.27% estimated vs. 2.35% actual at an overall level. However an additional layer of conservatism is applied through Regulatory PD buffers in the capital calculation, so overall PD is still conservative. The LCD model is conservative with an overestimation (71.1% estimated vs.65.4% actual). The existing CRD IV model suite has been re-calibrated to further improve its accuracy and submitted for PRA approval in Q2’17.

For Germany Cards, the PD model overestimates (1.23% estimated vs. 1.14% actual) at an overall level. The overestimation in the LCD model (84% estimated vs. 69% actual) is primarily driven by debt sale at a better price. A new set of CRD IV compliant models is currently under development and is due for regulatory submission by Dec’19. Interim Post Model Adjustments (PMAs) are in place to address existing models’ deficiencies.

For Current Account, a new set of CRD IV compliant models has been approved by the PRA and implemented in Jul’18. However, the current back testing report is based on the models which were in production as of Nov’17. PD model overestimates primarily due to a decrease in actual default rates over the last year (0.67% estimated vs. 0.45% actual). The LGD model marginally overestimates (81.54% estimated vs. 79.21% actual).

Other Retail
- This covers UK Barclayloans portfolio. A new CRD IV compliant capital suite was approved by PRA in Sep’18. The new models will go live when additional work to align the forbearance definitions with the EBAs new definitions is complete. This backtesting report is based on the models currently in production.
- The PD rank ordering does not hold true for a few bands, and the model underestimates (3.33% estimated vs. 3.56% actual) at an overall level. The LGD model also marginally underestimates (77.80% expected vs. 78.85% actual) at an overall level.
Barclays’ approach to managing risks

Management of credit risk mitigation techniques and counterparty credit risk

Counterparty credit risk arises from derivatives and similar contracts. This section details the specific aspects of the risk framework related to this type of credit risk. As credit risk mitigation is one of the principal uses of derivative contracts by banks, this is also discussed in this section.

- On page 161, a high level description of the types of exposures incurred in the course of Barclays’ activity supplements the analytical tables in pages 96 to 114.
- Mitigation techniques specific to counterparty credit risk are also discussed.
Barclays’ approach to managing risks
Management of credit risk mitigation techniques and counterparty credit risk

Credit risk mitigation
Barclays Group employs a range of techniques and strategies to actively mitigate credit risks. These can broadly be divided into three types:

- netting and set-off
- collateral
- risk transfer.

Barclays Group has detailed policies in place to maintain that credit risk mitigation is appropriately recognised and recorded. The recognition of credit risk mitigation is subject to a number of considerations including legal certainty of enforceability and effectiveness, that the valuation and liquidity of the collateral is adequately monitored, and that the value of the collateral is not materially correlated with the credit quality of the counterparty.

All three types of credit risk mitigation may be used by different areas of Barclays Group for exposures with a full range of counterparties. For instance, businesses may take property, cash or other physical assets as collateral for exposures to retailers, property companies or other client types.

Netting and set-off
In most jurisdictions and within legal entities in which Barclays Group operates, credit risk exposures can be reduced by applying netting and set-off. In exposure terms, this credit risk mitigation technique has the largest overall impact on net exposure to derivative transactions, compared with other risk mitigation techniques.

For derivative transactions, Barclays Group’s normal practice is, on a legal entity basis, to enter into standard master agreements with counterparties (e.g. ISDAs). These master agreements typically allow for netting of credit risk exposure to a counterparty resulting from derivative transactions against the obligations to the counterparty in the event of default, and so produce a lower net credit exposure. These agreements may also reduce settlement exposure (e.g. for foreign exchange transactions) by allowing payments on the same day in the same currency to be set-off against one another.

Under IFRS, netting is permitted only if both of the following criteria are satisfied:

- the entity currently has a legally enforceable right to set-off the recognised amounts
- the entity intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Under US GAAP, netting is also permitted, regardless of a currently legally enforceable right of set-off and/or the intention to settle on a net basis, where there is a counterparty master agreement that would be enforceable in the event of bankruptcy.

Collateral
Barclays Group has the ability to call on collateral in the event of default of the counterparty, comprising:

- home loans: a fixed charge over residential property in the form of houses, flats and other dwellings. The value of collateral is impacted by property market conditions which drive demand and therefore value of the property. Other regulatory interventions on ability to repossess, longer period to repossess and granting of forbearance may also affect the collateral value.
- wholesale lending: a fixed charge over commercial property and other physical assets, in various forms.
- other retail lending: includes charges over motor vehicle and other physical assets; second lien charges over residential property, which are subordinate to first charges held either by Barclays Group or another party; and finance lease receivables, for which typically Barclays Group retains legal title to the leased asset and has the right to repossess the asset on the default of the borrower.
- derivatives: Barclays Group also often seeks to enter into a margin agreement (e.g. Credit Support Annex) with counterparties with which Barclays Group has master netting agreements in place. These annexes to master agreements provide a mechanism for further reducing credit risk, whereby collateral (margin) is posted on a regular basis (typically daily) to collateralise the mark to market exposure of a derivative portfolio measured on a net basis. Barclays Group may additionally negotiate the receipt of an independent amount further mitigating risk by collateralising potential mark to market exposure moves.
- reverse repurchase agreements: collateral typically comprises highly liquid securities which have been legally transferred to Barclays Group subject to an agreement to return them for a fixed price.
- financial guarantees and similar off-balance sheet commitments: cash collateral may be held against these arrangements.

Risk transfer
A range of instruments including guarantees, credit insurance, credit derivatives and securitisation can be used to transfer credit risk from one counterparty to another. These mitigate credit risk in two main ways:

- if the risk is transferred to a counterparty which is more creditworthy than the original counterparty, then overall credit risk is reduced
- where recourse to the first counterparty remains, both counterparties must default before a loss materialises. This is less likely than the default of either counterparty individually so credit risk is reduced.

Risk transfer can also be used to reduce risk concentrations within portfolios lowering the impact of stress events.

Risk transfer transactions are undertaken with consideration to whether the collateral provider is correlated with the exposure, the credit worthiness of the collateral provider and legal certainty of enforceability and effectiveness. Where credit risk mitigation is deemed to transfer credit risk, this exposure is appropriately recorded against the credit risk mitigation provider.

In exposure terms, risk transfer is used most extensively as a credit risk mitigation technique for wholesale loans and derivative financial instruments.

Off-balance sheet risk mitigation
Barclays Group applies fundamentally the same risk management policies for off-balance sheet risks as it does for its on-balance sheet risks. In the case of commitments to lend, counterparties/customers will be subject to the same credit management policies as for loans and advances. Collateral may be sought depending on the strength of the counterparty and the nature of the transaction.

Recognition of credit risk mitigation in capital calculations
Credit risk mitigation is used to reduce credit risk associated with an exposure, which may reduce potential losses in the event of obligor default or other specified credit events.

Credit risk mitigation that meets certain regulatory criteria may be used to improve risk parameters and reduce RWA consumption against a given obligor. Collateral that meets these regulatory conditions is referred to as eligible collateral. Eligibility criteria are specified in articles 195 to 204 of the Capital Regulations Requirement (CRR).

Barclays Group’s policies and standards set out criteria for the recognition of collateral as eligible credit risk mitigation and are designed to be fully consistent with all applicable local regulations and regulatory permissions.

Where regulatory capital is calculated under AIRM regulations, the benefit of collateral is generally taken by adjusting LGDs. For standardised portfolios, the benefit of collateral is taken using the financial collateral comprehensive method: supervisory volatility adjustments approach.

For instruments that are deemed to transfer credit risk, in AIRB portfolios the protection is generally recognised by using the PD and LCD of the protection provider.

For exposures treated under the standardised approach, the impact of eligible credit risk mitigation is primarily recognised by reducing the EAD associated with the exposure that benefits from the mitigation.
Barclays’ approach to managing risks
Management of credit risk mitigation techniques and counterparty credit risk

Managing concentrations within credit risk mitigation
Credit risk mitigation taken by Barclays Group to reduce credit risk may result in credit or market risk concentrations. Guarantees that are treated as eligible credit risk mitigation are marked as an exposure against the guarantor and aggregated with other credit exposure to the guarantor. Limit monitoring at the counterparty level is then used for monitoring of concentrations in line with Barclays Group policy.

Commercial real estate lending is another potential source of concentration risk arising from the use of credit risk mitigation. The portfolio is regularly reviewed to assess whether a concentration in a particular region, industry or property type exists, and portfolio limits are in place to control the level of exposure to commercial, residential, investment and development activity. See page 161 for more information on collateral, valuation and monitoring of concentrations.

Counterparty credit risk

Derivative counterparty credit exposures
Barclays Group enters into financial instruments that are traded or cleared on an exchange, including interest rate swaps, futures and options on futures. Holders of exchange traded instruments provide daily margins with cash or other securities at the exchange, to which the holders look for ultimate settlement.

Barclays Group also enters into financial instruments that are traded over the counter, rather than on a recognised exchange. These instruments range from standardised transactions in derivative markets, to trades where the specific terms are tailored to the requirements of Barclays Group’s counterparties. In most cases, industry standard documentation is used, most commonly in the form of a master agreement, with individual transaction confirmations. The existence of a signed master agreement is intended to give Barclays Group protection in situations where Barclays Group’s counterparty is in default.

Counterparty credit exposure arises from the risk that parties are unable to meet their payment obligations under certain financial contracts such as derivatives, securities financing transactions (e.g. repurchase agreements), or long settlement transactions.

A Monte Carlo simulation engine is used to estimate the Potential Future Exposure (PFE) to derivative and securities financing counterparties. The exposure simulation model simulates future market states and the MTM of the derivative transactions under those states. Simulated exposures including the effect of credit mitigants such as netting, collateral and mandatory break clauses can then be generated.

Credit limits for CCR are assessed and allocated using the PFE measure. A number of factors are taken into account when setting credit limits for individual counterparties, including but not limited to the credit quality and nature of the counterparty, the rationale for the trading activity entered into and any wrong-way risk considerations.

The expected exposures generated by this engine are also used as an input into both internal and regulatory capital calculations covering CCR.

‘Wrong-way risk’ in a trading exposure arises when there is significant correlation between the underlying asset and the counterparty, which in the event of default would lead to a significant MTM loss to the counterparty. Specific wrong-way risk trades, which are self-referencing or reference to other entities within the same counterparty group, require approval by a senior credit officer. The exposure to the counterparty will reflect the additional risk generated by these transactions.

Derivative CCR (credit value adjustments)
As Barclays Group participates in derivative transactions it is exposed to CCR, which is the risk that a counterparty will fail to make the future payments agreed in the derivative contract. This is considered as a separate risk to the volatility of the MTM payment flows. Modelling this counterparty risk is an important part of managing credit risk on derivative transactions.

The counterparty risk arising under derivative transactions is taken into account when reporting the fair value of derivative positions. The adjustment to the value is known as credit value adjustment (CVA). It is the difference between the value of a derivative contract with a risk-free counterparty and that of a contract with the actual counterparty. This is equivalent to the cost of hedging the counterparty risk in the Credit Default Swap (CDS) market.

CVAs for derivative positions are calculated as a function of the expected exposure, which is the average of future hypothetical exposure values for a single transaction or group of transactions with the same counterparty, the credit spread for a given horizon and the LGD.

The expected exposure is calculated using Monte Carlo simulations of risk factors that may affect the valuation of the derivative transactions in order to simulate the exposure to the counterparty through time. These simulated exposures include the effect of credit mitigants such as netting, collateral and mandatory break clauses. Counterparties with appropriate credit mitigants will generate a lower expected exposure profile compared to counterparties without credit mitigants in place for the same derivative transactions.

Derivative netting and collateral arrangements
Credit risk from derivatives is mitigated where possible through netting agreements whereby derivative assets and liabilities with the same counterparty can be offset. Barclays Group policy requires all netting arrangements to be legally documented. The ISDA Master Agreement is Barclays Group’s preferred agreement for documenting OTC derivatives. It provides the contractual framework within which dealing activities across a full range of OTC products are conducted, and contractually binds both parties to apply close-out netting across all outstanding transactions covered by an agreement if either party defaults or other predetermined events occur. The majority of Barclays Group’s OTC derivative exposures are covered by ISDA master netting and ISDA CSA collateral agreements.

Collateral is obtained against derivative assets, depending on the creditworthiness of the counterparty and/or nature of the transaction. Any collateral taken in respect of OTC trading exposures will be subject to a ‘haircut’, which is negotiated at the time of signing the collateral agreement. A haircut is the valuation percentage applicable to each type of collateral and will be largely based on liquidity and price volatility of the underlying security. The collateral obtained for derivatives is predominantly either cash, direct debt obligation government (G14+) bonds or letters of credit issued by an institution with an A+/A3 or better. Where Barclays Group has ISDA master agreements, the collateral document will be the ISDA CSA. The collateral document must give Barclays the power to realise any collateral placed with it in the event of the failure of the counterparty.
This section describes the governance structure specific to the management of market risks, as well as a discussion of measurement techniques.

- Market risks are varied, and a range of techniques must be used to manage them. From page 164 we provide an overview of the market risks we incur across Barclays Group.
- The governance structure specific to market risks is discussed on page 164.

The rest of the section consists of traded and other risks:

- Market risk, the risk of Barclays Group being impacted by changes in the level or volatility of positions in the trading book, is covered on pages 165 to 170. Measurement techniques such as VaR are discussed, as well as techniques applied when statistical techniques are not appropriate.
Barclays’ approach to managing risks
Management of market risk

Market risk
The risk of loss arising from potential adverse changes in the value of the firm’s assets and liabilities from fluctuation in market variables including, but not limited to, interest rates, foreign exchange, equity prices, commodity prices, credit spreads, implied volatilities and asset correlations.

Overview
Market risk arises primarily as a result of client facilitation in wholesale markets, involving market making activities, risk management solutions and execution of syndications. Upon execution of a trade with a client, Barclays Group will look to hedge against the risk of the trade moving in an adverse direction. Mismatches between client transactions and hedges result in market risk due to changes in asset prices, volatility or correlations.

Organisation and structure
Market risk in the businesses resides primarily in Barclays International and Barclays Group Treasury. These businesses have the mandate to assume market risk. Market risk oversight and challenge is provided by business Committees and Group Committees, including the Market Risk Committee.

Risk management in the setting of strategy
Appetite for market risk is recommended by the risk function to BRC for agreement by the Board. Mandate and scales are set to control levels of market risk and maintain Barclays Group remains within the BRC approved risk appetite. Barclays Group runs an annual Group-wide stress testing exercise which aims to simulate the dynamics of exposures across Barclays Group and cover all risk factors. The exercise is also designed to measure the impact to Barclays Group’s fundamental business plan, and is used to manage the wider Group’s strategy.

Management of market risk, mitigation and hedging policies
The governance structure helps maintain all market risks that Barclays Group is exposed to are well managed and understood. Traded market risk is generated primarily as a result of market making activities, syndications and providing risk management solutions to clients. Group Treasury supports the businesses in managing their interest rate risk. Positions will contribute both to market risk limits and regulatory capital if relevant. As part of the continuous monitoring of the risk profile, Market Risk meets with the businesses to discuss the risk profile on a regular basis. The outcome of these reviews includes further detailed assessments of event risk via stress testing, risk mitigation and risk reduction.

Market risk culture
Market risk managers are independent from the businesses they cover, and their line management reports into the CRO. This embeds a risk culture with strong adherence to limits that support Group-wide risk appetite.

Market risk measurement – management view
Market risk management measures
A range of complementary approaches to measure market risk are used which aim to capture the level of losses that Barclays Group is exposed to due to unfavourable changes in asset prices. The primary tools to control Barclays Group’s exposures are:

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Value at Risk (VaR)</td>
<td>An estimate of the potential loss arising from unfavourable market movements, if the current positions were to be held unchanged for one business day.</td>
</tr>
<tr>
<td>Primary stress tests</td>
<td>An estimate of potential losses that might arise from severe market moves or scenarios impacting key liquid market risk exposures.</td>
</tr>
<tr>
<td>Secondary stress tests</td>
<td>Modelled losses from unfavourable market movements to illiquid market risk exposures.</td>
</tr>
<tr>
<td>Business scenario stresses</td>
<td>Multi asset scenario analysis of severe, but plausible events that may impact the market risk exposures of the investment bank.</td>
</tr>
</tbody>
</table>

The use of Management VaR for traded market risk is broader than the application for use of VaR for regulatory capital, and captures standardised, advanced and certain banking books where market risks are deemed to exist. The wider scope of Management VaR is what Barclays Group deems as material market risk exposures which may have a detrimental impact on the performance of the trading business. The scope used in Regulatory VaR (see page 13) is narrower as it applies only to trading book positions as approved by the PRA.

Barclays PLC Board Risk Committee
- Reviews and recommends Barclays Group’s risk appetite for market risk to the Barclays PLC Board
- Reviews material events impacting market risk

Barclays Group Risk Committee
- Monitors risk profile with respect to financial risk appetite
- Debates and agrees actions on the financial risk profile and risk strategy across Barclays Group
- Considers issues escalated by risk type heads and business risk directors

Barclays Group Market Risk Committee
- Reviews market risk appetite proposals from the business
- Oversees the management of Barclays Group’s market risk profile
- Reviews arising market or regulatory issues
- Reviews state of the implementation of the risk frameworks in the businesses
Barclays’ approach to managing risks
Management of market risk

Stress testing and scenario analysis are also an important part of the risk management framework, to capture potential risk that may arise in severe but plausible events.

Management VaR

- estimates the potential loss arising from unfavourable market movements, over one day for a given confidence level:
- differs from the Regulatory VaR used for capital purposes in scope, confidence level and horizon
- back testing is performed to evaluate that the model is fit for purpose.

VaR is an estimate of the potential loss arising from unfavourable market movements if the current positions were to be held unchanged for one business day. For internal market risk management purposes, a historical simulation methodology with a two-year equally weighted historical period, at the 95% confidence level is used for all trading books and some banking books. Risk factors driving VaR are grouped into key risk types as summarised below:

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate</td>
<td>Changes in the level or shape of interest rate expectations that can impact prices of interest rate sensitive assets, such as bonds and derivatives instruments, such as interest rate swaps.</td>
</tr>
<tr>
<td>Spread</td>
<td>Difference between bond yields and swaps rates that arises when a business has positions in both bonds and interest rate/inflation derivatives instruments. Both assets may trade at different levels but are fundamentally exposed to similar risk.</td>
</tr>
<tr>
<td>Foreign exchange</td>
<td>The impact of changes in foreign exchange rates and volatilities.</td>
</tr>
<tr>
<td>Equity</td>
<td>Risk due to changes in equity prices, volatilities and dividend yields, for example as part of market making activities, syndication or underwriting of initial public offerings.</td>
</tr>
<tr>
<td>Commodity</td>
<td>Arises primarily from providing hedging solutions to clients and access to financial investors via financially-settled energy derivatives exposed to changes in the level of energy spot or forward prices and their volatilities.</td>
</tr>
</tbody>
</table>

VaR is based on positions as at close of business and consequently, it is not an appropriate measure for intra-day risk arising from a position bought and sold on the same day.

VaR does not indicate the potential loss beyond the VaR confidence level. Limits are applied at the total level as well as by risk factor type, which are then cascaded down to particular trading desks and businesses by the market risk management function.

The output of the Management VaR model can be readily tested through back testing. This checks instances where actual losses exceed the predicted potential loss estimated by the VaR model. If the number of instances is higher than expected, where actual losses exceed the predicted potential loss estimated by the VaR model, this may indicate limitations with the VaR calculation, for example, a risk factor that would not be adequately captured by the model.

The Management VaR model in some instances may not appropriately measure some market risk exposures, especially for market moves that are not directly observable via prices. Market risk managers are required to identify risks which are not adequately captured in VaR (‘risks not in VaR’ or ‘RNIVs’, discussed below).

When reviewing VaR estimates, the following considerations are taken into account:

- the historical simulation uses the most recent two years of past data to generate possible future market moves, but the past may not be a good indicator of the future
- the one-day time horizon may not fully capture the market risk of positions that cannot be closed out or hedged within one day

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

The Management VaR model is not a complete historical data set because it cannot include instances where actual losses exceed the predicted potential loss estimated from unfavourable market movements or scenarios.

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Barclays’ approach to managing risks

Management of market risk

aggregated to a single stress loss which allows the business to manage its liquid and illiquid risk factors. Limits against secondary stress losses are also applied, which allows Barclays Group to manage and control the level of illiquid risk factors.

Stresses are specific to the exposure held and are calibrated on both observed extreme moves and some forward-looking elements as appropriate.

Business scenario stresses

Business scenario stresses are key tools used by management to measure aggregated losses across the entire trading book as a result of extreme forward-looking scenarios encompassing simultaneous shocks to multiple asset classes.

Business scenario stresses apply simultaneous shocks to all risk factors assessed by applying changes to foreign exchange rates, interest rates, credit spreads, commodities and equities to the entire portfolio, for example, the impact of a rapid and extreme slowdown in the global economy. The measure shows results on a multi-asset basis across all trading exposures. Business scenarios are used for risk appetite monitoring purposes and are useful in identifying concentrations of exposures and highlighting areas that may provide some diversification.

The estimated impacts on market risk exposures are calculated and reported by the market risk management function on a frequent and regular basis. The stress scenario and the calibration on the shocks are also reviewed by market risk managers periodically for its relevance considering any market environment.

Scenarios focusing on adverse global recession, deterioration in the availability of liquidity, contagion effects of a slowdown in one of the major economies, easing of global growth concerns, and a historical event scenario are examples of business scenarios. If necessary, market event-specific scenarios are also calculated, such as:

- a unilateral decision to exit the Eurozone by a member country
- the impact of a large financial institution collapse, or
- a disorderly exit of quantitative easing programmes, including unexpected rapid and continuous interest rate rises as a result.

See page 117 for a review of business scenario stresses in 2018.

Market risk measurement – regulatory view

Regulatory view of traded positions

For regulatory purposes, the trading book is defined as one that consists of all positions in CRD financial instruments and commodities held either with trading intent, or in order to hedge other elements of trading, and which are either free of any restrictive covenants on their tradability, or able to be hedged. A CRD financial instrument is defined as a contract that gives rise to both a financial asset of one party and a financial liability or equity instrument of another party.

All of the below regulatory measures, including the standardised approach, generate market risk capital requirements, in line with the regulatory requirements set out in the Capital Requirements Directive (‘CRD IV’) and Regulation. Positions which cannot be included in the trading book are included within the banking book and generate risk capital requirements in line with this treatment.

Inclusion of exposures in the regulatory trading book

Barclays Group maintains a Trading Book Policy, which defines the minimum requirements a business must meet to run trading positions and the process by which positions are allocated to trading or banking books. Trading intent is a key element in deciding whether a position should be treated as a trading or banking book exposure.

Positions in the trading book are subject to market risk capital, computed using models where regulatory approval has been granted, otherwise the market risk capital requirement is calculated using standard rules as defined in the Capital Requirement Regulation (CRR), part of the CRD IV package. If any of the criteria specified in the policy are not met for a position, then that position must be allocated to the banking book.

Most of Barclays Group’s market risk regulatory models are assigned the highest model materiality rating. Consequently, the Regulatory VaR model is subject to annual re-approval by the Independent Validation Unit. The Independent Validation Unit makes an assessment of model assumptions and considers evidence of model suitability provided by the model owner. The following table summarises the models used for market risk regulatory purposes and the applicable regulatory thresholds.

Valuation standards

CRR article 105 defines regulatory principles which need to be applied to fair value assets and liabilities, in order to determine a prudent valuation.

The Prudent Valuation Adjustment (PVA) is applied to accounting fair values where there are a range of plausible alternative valuations. It is calculated in accordance with Article 105 of the CRR, and includes (where relevant) adjustments for the following factors: unearned credit spreads, close-out costs, operational risk, market price uncertainty, early termination, investing and funding costs, and administrative costs and model risk. The PVA includes adjustment for all fair valued financial instruments and commodities, irrespective of whether they are in the trading or banking book.

Page 291 of the annual report sets out the valuation control framework for accounting valuations and the related responsibilities of the Finance-product control valuations function and the Valuation Committee. This function and committee are also responsible for the oversight of the PVA and maintaining compliance with article 105 of the CRR.

Regulatory measures for Market risk

There are a number of regulatory measures which Barclays Group has permission to use in calculating regulatory capital (internal models approval):

<table>
<thead>
<tr>
<th>Measure</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory Value at Risk (VaR)</td>
<td>An estimate of the potential loss arising from unfavourable market movements calibrated to 99% confidence interval 10-day holding period.</td>
</tr>
<tr>
<td>Stressed Value at Risk (SVaR)</td>
<td>An estimate of the potential loss arising from a twelve-month period of significant financial stress calibrated to 99% confidence interval 10-day holding period.</td>
</tr>
<tr>
<td>Incremental Risk Charge (IRC)</td>
<td>An estimate of the incremental risk arising from rating migrations and defaults, beyond what is already captured in specific market risk VaR for the non-correlation trading portfolio. Uses a 99.9% confidence level and a one-year horizon.</td>
</tr>
<tr>
<td>Comprehensive Risk Measure (CRM)</td>
<td>An estimate of all the material market risk, including rating migration and default for the correlation trading portfolio.</td>
</tr>
</tbody>
</table>

The legal entities for which the PRA has given permission to use internal models for market risk regulatory capital are: BBPlc Trading and BCSL (consolidated), BBPlc Trading and BCSL. The legal entity for which the FRBNY has given permission to use internal models is IHC.
Barclays’ approach to managing risks

Management of market risk

Regulatory VaR
- Estimates the potential loss arising from unfavourable market movements.
- Regulatory VaR differs from the management approach in the following respects.

<table>
<thead>
<tr>
<th>VaR Variable</th>
<th>Regulatory</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence interval</td>
<td>99%</td>
<td>95%</td>
</tr>
<tr>
<td>Scope</td>
<td>As approved by the regulator (PRA or FRBNY)</td>
<td>Management view of market risk exposures. Includes trading books and banking books exposed to price risk</td>
</tr>
<tr>
<td>Look-back period</td>
<td>2 years</td>
<td>2 years</td>
</tr>
<tr>
<td>Liquidity Horizon (holding period)</td>
<td>10 days</td>
<td>1 day</td>
</tr>
</tbody>
</table>

Regulatory VaR allows oversight of the total potential losses, at a given confidence level, of those trading books which received approval from the regulator to be covered via an internal model. Barclays Group uses a Regulatory VaR model that diversifies general and specific market risk for regulatory capital. Market risks are captured in the Regulatory VaR model using either full revaluation or an approximate revaluation approach depending on the type of product. When simulating potential movements in risk factors, returns are modelled using a combination of absolute changes, proportional changes or a blended mix of these two approaches.

Management VaR allows Barclays Group to supervise the total market risk across Barclays Group, including all trading books and some banking books. Management VaR is also utilised for the internal capital model (economic capital).

Regulatory VaR is fundamentally the same as the Management VaR (see page 165), with the key differences listed above. The model is complemented with RNIVs, as described on pages 169-170.

Stressed Value at Risk (SVaR)
- Estimates the potential loss arising from unfavourable market movements in a stressed environment.
- Identical to Regulatory VaR, but calibrated over a one-year stressed period.
- Regulatory capital is allocated to individual businesses. For regulatory capital calculation purposes Barclays Group computes a market risk capital requirement based on a one-day scaled to ten-day, 99% VaR metric calibrated to a period of significant financial stress. This SVaR capital requirement is added to the market risk capital requirement arising from regulatory VaR, the Incremental Risk Charge and the All Price Risk on an undiversified basis.

The SVaR model must be identical to the VaR model used by Barclays Group, with the exception that the SVaR model must be calibrated to a one-year period of significant financial stress (the SVaR period). Barclays Group selects the SVaR period to be a one-year period that maximises the sum of general market risk Regulatory VaR and specific market risk Regulatory VaR for positions in scope of regulatory approval. The SVaR period is reviewed on a monthly basis or when required by material changes in market conditions or the trading portfolio.

SVaR cannot be meaningfully backtested as it is not sensitive to current market conditions. Many market risk factors with complete historical data over a two-year period may not have complete data covering the SVaR period and consequently, more proxies may be required for SVaR than for VaR. The SVaR metric itself has the same strengths and weaknesses as Barclays Group’s VaR model.

Incremental Risk Charge (IRC)
- Captures risk arising from rating migrations and defaults for traded debt instruments incremental to that already captured by Regulatory VaR and SVaR.
- IRC captures the risk arising from ratings migrations or defaults in the traded credit portfolio. IRC measures this risk at a 99.9% confidence level with a one-year holding period and applies to all positions in scope for specific risk including sovereign exposure.
- Barclays Group’s IRC model simulates default and ratings transition events for individual names. The behaviour of names is correlated with one another to simulate a systemic factor to model the possibility of multiple downgrades or defaults. The correlations between non-sovereign names are based on the Basel-defined correlations stipulated in the IRB approach to measuring credit risk capital, with a fixed correlation between sovereign names.
- Barclays Group’s IRC model simulates the impact of a ratings transition by estimating the improvement or deterioration in credit spreads resulting from the transition and assumes that the historically observed average change in credit spreads (measured in relative terms) resulting from ratings transitions provides an accurate estimate of likely widening or tightening of credit spreads in future transitions. For each position, the model computes the impact of spread moves up or down at pre-specified relative changes in credit risk capital and the actual impact is obtained by interpolating or extrapolating the actual spread move from these pre-computed values.

Barclays Group’s IRC model assumes that ratings transitions, defaults and any spread increases occur on an instantaneous basis.

Comprehensive Risk Measure (CRM)
- Captures all market risks affecting the correlation trading portfolio.
- CRM covers the correlation trading portfolio and is intended to adequately capture all risk factors relevant to corporate Nth-to-default (on a basket of referenced names) and tranching credit derivatives. The capital requirement is based on a 99.9% confidence interval over a one-year holding period. The model generates a scenario based on a Monte Carlo simulation and revalues the portfolio under the simulated market scenario.

The model captures the following risk factors in the correlation trading portfolio:
- default and ratings migration over a one-year time horizon
- credit spread volatility
- recovery risk: uncertainty of the recoverable value under default
- correlation risk
- basis risk: basis between credit indices and its underlying constituents
- hedge slippage: portfolio rebalancing assumption.

Barclays Group’s CRM model is based on the IRC model but also captures market risks not related to transition or default events, such as movements in credit spreads or correlations. These risk factors are included as part of the Monte Carlo simulation using distributions calibrated to historically observed moves.

Barclays Group’s CRM model assumes that ratings transitions, defaults and any spread increases occur on an instantaneous basis.
Barclays Group applies stress tests to the modelling parameters based on combinations of changes in credit spreads, correlations and default events.

See page 118 for a review of regulatory measures in 2018.
Management of market risk

Table 95: Market risk models selected features

<table>
<thead>
<tr>
<th>Component modelled</th>
<th>Number of significant models and size of associated portfolio (RWAs)</th>
<th>Model description and methodology</th>
<th>Applicable regulatory thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory VaR</td>
<td>1 model; £3.3bn</td>
<td>Equally-weighted historical simulation of potential daily P&amp;L arising from market moves</td>
<td>Regulatory VaR is computed with ten-day holding period and 99% confidence level</td>
</tr>
<tr>
<td>SVaR</td>
<td>1 model; £8.9bn</td>
<td>Same methodology as used for VaR model, but using a different time series</td>
<td>Regulatory SVaR is computed with ten-day holding period and 99% confidence level</td>
</tr>
<tr>
<td>IRC</td>
<td>1 model; £1.9bn</td>
<td>Monte Carlo simulation of P&amp;L arising from ratings migrations and defaults</td>
<td>IRC is computed with one-year holding period and 99.9% confidence level</td>
</tr>
<tr>
<td>CRM</td>
<td>1 model; £0.0bn</td>
<td>Same approach as IRC, but it incorporates market-driven movements in spreads and correlations for application to correlation trading portfolios.</td>
<td>CRM is computed with one-year holding period and 99.9% confidence level. As required in CRD IV, the CRM charge is subject to a floor set with reference to standard rules charge</td>
</tr>
</tbody>
</table>

Regulatory back testing

Back testing is the method by which Barclays Group checks and affirms that its procedures for estimating VaR are reasonable and serve its purpose of estimating the potential loss arising from unfavourable market movements. The back testing process is a regulatory requirement and seeks to estimate the performance of the regulatory VaR model. Performance is measured by the number of exceptions to the model i.e. actual or hypothetical P&L loss in one trading day is greater than the estimated VaR for the same trading day. Barclays Group’s procedures could be underestimating VaR if exceptions occur more frequently than expected (a 99% confidence interval indicates that one exception will occur in 100 days).

Back testing is performed at a legal entity level, sub-portfolio levels and business-aligned portfolios (shown in the table below and in the charts on the next page) on Barclays Group’s regulatory VaR model. Regulatory back testing compares Regulatory VaR at 99% confidence level (one-day holding period equivalent) to actual and hypothetical changes in portfolio value as defined in CRR Article 366. The consolidated Barclays Bank PLC and Barclays Capital Securities Ltd is the highest level of consolidation for the VaR model that is used in the calculation of regulatory capital.

A back testing exception is generated when a loss is greater than the daily VaR for any given day. As defined by the PRA, a green status is consistent with a good working VaR model and is achieved for models that have four or fewer back testing exceptions in a 250-day period. Back testing counts the number of days when a loss exceeds the corresponding VaR estimate, measured at the 99% regulatory confidence level. For the Investment Bank’s regulatory DVaR model at the consolidated legal entity level, green model status was maintained for 2018 apart from the period May to October 2018 when the model status was amber.

Back testing is also performed on management VaR to validate it remains reasonable and fit for purpose. The table below shows the VaR back testing exceptions on legal entities aligned to Barclays Group’s business as at 31 December 2018. Model performance at a legal entity level determines regulatory capital within those entities. Legal entity disclosure is also relevant from a management perspective as Barclays’ VaR and model performance of VaR for a legal entity across asset class are key metrics in addition to asset class metrics across legal entity.

For the Investment Bank’s regulatory DVaR model at the consolidated legal entity level, green model status was maintained for 2018 apart from the period May to October. The IHC backtesting process compares IHC 99% Regulatory VAR against Hypothetical P&L. The definition of Hypothetical P&L and the scope of Regulatory VaR for the IHC are consistent with the Federal Reserve’s Market Risk Rule.

<table>
<thead>
<tr>
<th>Legal Entity</th>
<th>Actual P&amp;L</th>
<th>Hypo P&amp;L</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Status*</td>
</tr>
<tr>
<td></td>
<td>Exceptions</td>
<td></td>
</tr>
<tr>
<td>BBPlc Trading and BCSL</td>
<td>1</td>
<td>G</td>
</tr>
<tr>
<td>BBPlc Trading</td>
<td>2</td>
<td>G</td>
</tr>
<tr>
<td>BCSL</td>
<td>3</td>
<td>G</td>
</tr>
<tr>
<td>IHC</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Note

a RAG status is accurate as of year-end.
Barclays’ approach to managing risks

Management of market risk

The charts below show VaR for Barclays Group’s regulatory portfolios aligned by legal entity. The dark blue and grey points on the charts indicate losses on the small number of days on which actual and hypo P&L respectively exceeded the VaR amount.

In addition to being driven by market moves in excess of the 99% confidence level, back testing exceptions can be caused by risks that impact P&L not captured directly in the VaR itself but separately captured as non-VaR-type, namely Risks Not in VaR (RNIVs).

Exceptions are reported to internal management and regulators on a regular basis and investigated to evaluate the model performs as expected. Overall back testing for the consolidated legal entity remains in the green zone, suggesting that the VaR remains fit for purpose.

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

Barclays Group’s risk identification process captures risks that either have been observed to, or have the capacity to, produce material losses in normal and stressed market conditions. To maintain risk coverage, the range of core risks is identified following either market convention, regulatory guidance, or the specific historical experience of Barclays Group and is considered as part of the new product processes.

In some instances, the Management and Regulatory VaR model may not appropriately measure some market risks, especially where market moves are not directly observable via prices. Barclays Group has policies to apply add-ons where risks are not captured by the model. RNIVs refer to those core risks that are not captured, or not adequately captured, in VaR and S VaR. RNIVs can include:

- risks not fully captured elsewhere and/or illiquid risk factors such as cross-risks;
- basis risks;
- higher-order risks;
- calibration parameters, for instance to model parameter uncertainty; and
- potential losses in excess of fair valuation adjustments taken in line with the Valuation Control Framework. Please see Note 17 in the Barclays PLC Annual Report 2018 ‘Fair value of assets and liabilities’ for more details on fair value adjustments.

The treatment of RNIVs follows whether the risks are considered VaR type or non-VaR type, which depends on, and can change with, the evolving state of financial markets:

- **VaR-type RNIVs**: Typically represent risks that are not well captured in VaR, mainly because of infrastructure limitations or methodology limitations. In this instance two metrics are calculated, a VaR RNIV and a S VaR RNIV, using the same confidence level, capital horizon and observation period as VaR and S VaR respectively and are capitalised using the same multipliers as VaR and S VaR.

- **Non VaR-type RNIVs**: Typically represent risks which would not be well captured by any VaR model either because it represents an event not historically observed in the VaR time series (e.g., currency peg break) or a market risk factor which is not seen to move frequently (e.g., correlation). These are typically estimated using stress scenarios. The stress methodology is calibrated equivalently to at least 99% confidence level and a capital horizon of at least 10 days over an appropriate observation period, depending on the liquidity of the risk. For the purpose of regulatory capital, the capital charge is equal to the loss arising from the stress test except when these risks are already adequately captured elsewhere e.g. via the IRC or CRM models, which are intended to capture certain risks not adequately covered by VaR.

For regulatory capital these RNIVs are aggregated without any offsetting or diversification benefit.
Barclays’ approach to managing risks

Management of market risk

**Market risk control**
The metrics that are used to measure market risk are controlled through the implementation of appropriate limit frameworks. Limits are set at the total Barclays Group level, asset class level, for example, interest rate risk, and at business level, for example, rates trading. Stress limits and many book limits, such as foreign exchange and interest rate sensitivity limits, are also used to control risk appetite.

Barclays Group-wide limits are reported to the BRC and are termed A-level limits for total management VaR, primary stress and secondary stresses and business scenarios. These are then cascaded down by risk managers in order to meet the Barclays Group-wide risk appetite.

Each A-level limit is set after consideration is given to revenue generation opportunities and overall risk appetite approved by the Board. Compliance with limits is monitored by the independent risk functions in the trading businesses with oversight provided by Barclays Group Market Risk.

Throughout 2018, Barclays Group Market Risk continued its ongoing programme of control testing and conformance testing on the trading businesses’ market risk management practices. These reviews are intended to verify the business’s conformance with the Market Risk Control Framework and best practices.

**Market risk reporting**
Trading businesses market risk managers produce a number of detailed and summary market risk reports daily, weekly, fortnightly and monthly for business and risk managers. Where relevant on a Barclays Group-wide basis, these are sent to Barclays Group Market Risk for review and a risk summary is presented at Barclays Group Market Risk Committee and the trading businesses’ various market risk committees. The overall market risk profile is also presented to BRC on a regular basis.
Securitisations give rise to credit, market and other risks. This section discusses the types of business activities and exposures that we incur in the course of activities related to securitisations.

- The objectives pursued in securitisation activities and the types of activities undertaken are discussed on page 188
- A description of the risks incurred in the course of securitisation activities, and how we manage them, is contained on page 189
Barclays’ approach to managing risks
Management of securitisation exposures

This section discloses information about Barclays Group’s securitisation activities distinguishing between the various functions performed in supporting its customers and managing its risks. It includes traditional securitisations as well as synthetic transactions effected through the use of derivatives or guarantees.

For the purposes of Pillar 3 disclosures on pages 121 to 131, a securitisation is defined as a transaction or scheme where the payments are dependent upon the performance of a single exposure or pool of exposures and where the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme. Such transactions are ordinarily undertaken to transfer risk for Barclays Group or on behalf of a client.

Certain transactions undertaken by Barclays Group are not disclosed in the quantitative section (pages 121 to 131) as they do not fall under the regulatory securitisation framework (defined under Part Three, Title II, Chapter 5 of the CRR, part of the CRD IV package). These include funding transactions for the purposes of generating term liquidity, and certain government guaranteed transactions.

Objectives of securitisation activities

In the course of its business, Barclays Group has undertaken securitisations of its own originated assets as well as the securitisation of third party assets via special purpose vehicles, sponsored conduit vehicles and shelf programmes.

Barclays Group has securitised its own originated assets in order to manage Barclays Group’s credit risk position and to generate term funding for Barclays Group balance sheet. Barclays Group also participates in primary securitisations and distributes bonds to the market to facilitate term liquidity for its clients.

Barclays Group also purchases asset backed loans and securities for the purpose of supporting client franchise, and purchases asset backed securities (ABS) for the purpose of investing its liquidity pool.

Further, Barclays Group makes a secondary market for a range of securitised products globally, including residential mortgage backed securities (RMBS), commercial mortgage backed securities (CMBS) and ABS.

The role and involvement of Barclays Group in securitisations in 2018

Barclays Group adopts the following roles in the securitisation processes in which it is involved:

Originator of assets prior to securitisation
Barclays Group originates or purchases commercial mortgage loans for the purpose of securitisation. The securities are then sold to investors through a broker-dealer subsidiary.

Barclays Group securitisates assets otherwise originated in the ordinary course of business including corporate loans, consumer loans and commercial mortgage loans. Barclays Group also provides derivative transactions to securitisations sponsored by itself and third parties. These transactions carry counterparty credit risk and are included in Barclays Group trading book.

Providing warehousing facilities collateralised by third party assets prior to securitisation or exit via whole-loan sale
Barclays Group provides warehouse financing to third party loan originators, including for agency eligible loans that can be securitised by the Federal National Mortgage Association (‘Fannie Mae’), the Federal Home Loan Mortgage Corporation (‘Freddie Mac’), or the Government National Mortgage Association (‘Ginnie Mae’) and for corporate loans that can be securitised via collateralised loan obligations (CLO).

Executor of securitisation trades including bond marketing and syndication
Barclays Group transacts primarily as a principal in RMBS, ABS, CLO and CMBS with institutional investors and other broker-dealers. Agency backed residential and commercial mortgage securitisations include Credit Risk Transfer securities (Fannie Mae-sponsored CAS and Freddie Mac-sponsored STACR bonds). ABS securitisations include consumer ABS (e.g. credit card, student loan and auto) and non-traditional ABS (e.g. timeshares, wireless towers and whole business securitisations). Non-agency commercial mortgage securitisations include CMBS and commercial real estate collateralised loan obligations (CRE CLO). Barclays Group makes secondary market in CLOs and acts as arranger on behalf of clients to structure and place arbitrage CLOs. In certain limited instances, Barclays Group may also hold a portion of securitisations, which are required for risk retention purposes.

Purchaser of third party securitisations to support client franchise
Barclays Group may purchase third party securitisations. Barclays Group also funds on its own balance sheet securitisations similar to the ones funded via its sponsored conduits (see below).

Sponsoring conduit vehicles
Barclays Group acts as managing agent and administrative agent of three multi-seller asset backed commercial paper (ABCP) conduits, Sheffield Receivables Corporation, LLC (Sheffield), Salisbury Receivables Corporation, LLC (Salisbury), and Sunderland Receivables Corporation (Sunderland) through which interests in securitisations of third party originated assets are funded via a variety of funding mechanics including the issuance of ABCP.

From a regulatory perspective, Barclays acts as a sponsor of Sheffield, Salisbury and Sunderland. In relation to such conduit activity, Barclays Group provides all or a portion of the backstop liquidity to the commercial paper and, as appropriate, interest rate and foreign currency hedging facilities. Barclays Group receives fees for the provision of these services.

Sheffield, Salisbury and Sunderland hold securitised assets classified as available for sale, measured at fair value with changes in fair value recognised through other comprehensive income (OCI) and non-securitised assets classified as loans and receivables, measured at amortised cost on its standalone financial statements. It funds the assets through the issuance of ABCP. Note that Sheffield, Salisbury and Sunderland are consolidated for accounting but not regulatory purposes.

Funding transactions to generate term liquidity
Secured funding forms one of the key components of Barclays Group’s diversified funding sources providing access to the secured wholesale market and complementing the diversification of funding by maturity, currency and geography. Barclays Group issues ABS and covered bonds secured primarily by customer loans and advances.

Barclays Group currently manages four key, on-balance sheet asset backed funding programmes to obtain term financing for mortgage loans and credit card receivables. These programmes also support retained issuances for Barclays Group to access central bank liquidity and funding. The UK regulated covered bond and the residential mortgage master trust securitisation programmes both utilise assets originated by Barclays Group’s UK residential mortgage business. The third programme is a credit card master trust securitisation and uses receivables from Barclays Group’s UK credit card business. The fourth programme is a SEC registered securitisation programme backed by US domiciled credit card receivables.

Risk transfer transactions
Barclays Group has entered into synthetic and cash securitisations of corporate and commercial loans (originated in the ordinary course of business) for the purposes of the transfer of credit risk to third party investors. The regulatory capital requirements of these transactions fall under CRD IV.
Securitisation risks, monitoring and hedging policies

Capital requirements against securitisation exposures are subject to a separate framework under CRD IV (see CRR article 449) to account for the particular characteristics of this asset class. For risk management purposes, however, a securitisation is aligned to the risk type to which it gives rise.

Credit risks

In a securitisation structure, the payments are dependent upon the performance of a single exposure or pool of exposures. As these underlying exposures are usually credit instruments, the performance of the securitisation is exposed to credit risk.

Securitisation exposures are subject to Barclays Group Credit Risk policies and standards and business level procedures. This includes the requirement to review in detail each transaction at a minimum on an annual basis. As collateral risk is the primary driver of the analysis places a particular focus on the underlying collateral performance, key risk drivers, servicer due diligence and cash flows, and the impact of these risks on the securitisation notes. The risk is addressed through the transaction structure and by setting an appropriate modelled tolerance level. Structural features incorporate wind-down triggers set against factors including, but not limited to, defaults/charge-offs, delinquencies, excess spread, dilution, payment rates and yield, all of which help to mitigate potential credit deterioration. Qualitative aspects such as counterparty risk and ancillary issues (operational and legal risk) are also considered. Changes to the credit risk profile of securitisation exposures will also be identified through ongoing transaction performance monitoring. In addition, periodic stress tests of the portfolio as part of ongoing risk management are conducted as well as in response to Barclays Group-wide or regulatory requests.

The principal committee responsible for the monitoring of the credit risk arising from securitisations is Wholesale Credit Risk Management Committee (WCRMC).

Market and liquidity risks

Market risk for securitised products is measured, controlled and limited through a suite of VaR, non-VAR and stress metrics in accordance with Barclays Group’s Market Risk Policies and Procedures. The key risks of securitisation structures are interest rate, credit, spread, prepayment and liquidity risk. Interest rate and spread risk are hedged with standard liquid interest rate instruments (including interest rate swaps, US Treasuries and US Treasury futures). The universe of hedging instruments for credit and prepayment risk is limited and relatively illiquid, resulting in basis risks. In providing warehouse financing, Barclays Group is exposed to mark to market (if counterparty defaults on related margin call).

Hedging

Securitisation and re-securitisation exposures benefit from the relative seniority of the exposure in the capital structure. Due to lack of availability in the credit default swap market for individual asset backed securities, there are no material CDS hedge counterparties relating to the securitisation and re-securitisation population.

Operational risks

Operational risks are incurred in all of Barclays Group’s operations. In particular, all securitised (and re-securitised) assets are subject to a degree of risk associated with documentation and the collection of cash flows.

In providing warehouse financing, Barclays Group incurs potential contingent operational risks related to representations and warranties should there be a need to foreclose on the line and it later be discovered that the underlying loans were not underwritten to agency agreed criteria. Such risks are mitigated by daily collateral margining and ready agency bids. Market risk is also mitigated by employing forward trades.

The Operational Risk Review Forum oversees the management of operational risks for the entire range of Barclays Group’s activities.

Rating methodologies, ECAs and RWA calculations

RWAs reported for securitised and re-securitised banking book and trading book assets at 31 December 2018 are calculated in line with CRR and UK PRA rules and guidance. Barclays Group has approval to use, and therefore applies, the internal ratings based approach for the calculation of RWAs where appropriate, and the Standardised Approach elsewhere.

Barclays Group employs eligible ratings issued by nominated External Credit Assessment Institutions (ECAs) to risk weight its securitisation and re-securitisation exposure where their use is permitted. Ratings are considered eligible for use based on their conformance with the internal rating standard which is compliant with both CRR and European Credit Rating Agency regulation. The ECAs nominated by Barclays Group for this purpose are Standard & Poor’s, Moody’s, Fitch, DBRS and Kroll.

As required by CRR, Barclays Group uses credit ratings issued by these ECAs consistently for all exposures within the securitisation exposure class. For that reason, there is no systematic assignment of particular agencies to types of transactions within the securitisation exposure class.

For Sheffield, Salisbury and Sunderland, the Internal Assessment Approach (IAA) framework mirrors the ECAI methodology, which also includes Moody’s, Standard & Poor’s and Fitch, who rate the Sheffield, Salisbury and Sunderland programmes. Under the IAA framework, the securitisation exposure must be internally rated, and Barclays Group internal assessment process must meet certain requirements in order to map its own internal rating to an ECAI. Cash flow stress analysis on a securitisation structure is performed as prescribed by an ECAI methodology for the relevant ratings level, and it is at least as conservative as the published methodology. Stress factors may include, among other factors, asset yields, principal payment rates, losses, delinquency rates and interest rates.

In determining an internal rating, collateral risks are the primary driver and are addressed through the transaction structure and modelled statistical confidence. The analysis reflects Barclays Group’s view on the transaction, including dilution risk, concentration and tenor limits, as well as qualitative aspects such as counterparty risk and important ancillary issues (operational and legal risks). The adequacy and integrity of the servicer’s systems and processes for underwriting, collections policies and procedures are also reviewed. Barclays Group conducts a full due diligence review of the servicer for each transaction. Each transaction is reviewed on, at least, an annual basis with a focus on the performance of underlying assets. The results of any due diligence review and the financial strength of the seller/servicer, are also factored into the analysis. Ratings of the transaction are reaffirmed with the most up to date ECAI methodologies. Any transaction which deviates from the current methodology is amended accordingly.

Summary of the accounting policies for securitisation activities

Certain Group-sponsored entities have issued debt securities or have entered into funding arrangements with lenders in order to finance specific assets. An entity is consolidated by Barclays Group when Barclays Group has control over the entity. Barclays Group controls an entity if it has all of the three elements of control which are i) power over the entity; and ii) exposure, or rights, to variable returns from its involvement with the entity; iii) the ability to use its power over the entity to affect the amount of Barclays Group returns.

The consolidation treatment must be initially assessed at inception and is reassessed if facts and circumstances indicate that there are changes to one or more of the three elements of control.
Barclays’ approach to managing risks

Management of securitisation exposures

Typically, assets that are awaiting securitisation on Barclays Group balance sheet are measured at fair value through P&L, using the appropriate method for the asset class as they are classified as held for trading or are designated at fair value through profit and loss, under the IFRS 9 fair value option. However, some non-derivative assets held prior to securitisation may qualify to be measured at amortised cost. When securitised assets have been included on Barclays Group balance sheet it is necessary to consider whether those assets may be removed from Barclays Group balance sheet. Assets which have been transferred to third parties (i.e. an unconsolidated Barclays Group entity), will remain on Barclays Group balance sheet, and treated as financings, unless the following criteria apply:

- substantially all the risks and rewards associated with the assets have been transferred, in which case, they are derecognised in full
- if a significant portion, but not all, of the risks and rewards have been transferred, the asset is derecognised entirely if the transferee has the ability to sell the financial asset, otherwise the asset continues to be recognised only to the extent of Barclays Group’s continuing involvement.

Any financial support or contractual arrangements provided to unconsolidated entities, over securitised assets, would be recognised as a liability on balance sheet if it met the relevant IFRS criteria, or gave rise to a provision under IAS 37, and have to be disclosed (see Note 37 in the Barclays PLC Annual Report 2018). Note, however, that Barclays Group has a Significant Risk Transfer policy that does not allow for any support to be provided to any transactions that fall under the securitisation framework.

Assets may be transferred to a third party through a legal sale or an arrangement that meets the ‘pass-through’ criteria where the substance of the arrangement is principally that Barclays Group is acting solely as a cash collection agent on behalf of the eventual recipients.

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

When the above criteria support the case that the securitisation should not be accounted for as financing, the transaction will result in sale treatment or partial continued recognition of the assets to the extent of Barclays Group’s continuing involvement in those assets. Gains are recognised to the extent that proceeds that can be measured using observable market data exceed the assets derecognised.

Any retained interests, which will consist of loans and/or securities depending on the nature of the transaction, are valued in accordance with Barclays Group’s Accounting Policies, as set out in the Barclays PLC Annual Report 2018. To the extent that these interests are measured at fair value, they will be included within the fair value disclosures in the financial statements in the Annual Report. As outlined in these disclosures, key valuation assumptions for retained interests of this nature will include spreads to discount rates, default and recovery rates and prepayment rates that may be observable or unobservable.

In a synthetic securitisation transaction, the underlying assets are not sold into the relevant special purpose entity (SPE). Instead, their performance is transferred into the vehicle through a synthetic instrument such as a CDS, a credit linked note or a financial guarantee. The accounting policies outlined above will apply to synthetic securitisations.
Barclays’ approach to managing risks

Management of treasury and capital risk

This section provides an overview of the management of liquidity risk, capital risk and interest rate risk in the banking book.

- Liquidity risk, with a focus on how it is managed so that highly quality liquid assets are adequate at all times including under stress, is discussed on pages 176 to 178
- Capital risk, including how the risk of insufficient capital and leverage ratios and pension risk are managed, is discussed on pages 178 to 180
- The management of Interest rate risk in the banking book is discussed on pages 180 to 181
Barclays’ approach to managing risks

Management of treasury and capital risk

**Treasury and capital risk**

**Liquidity risk:** The risk that the firm is unable to meet its contractual or contingent obligations or that it does not have the appropriate amount, tenor and composition of funding and liquidity to support its assets.

**Capital risk:** The risk that the firm has an insufficient level or composition of capital to support its normal business activities and to meet its regulatory capital requirements under normal operating environments or stressed conditions (both actual and as defined for internal planning or regulatory testing purposes). This includes the risk from the firm’s pension plans.

**Interest rate risk in the banking book:** The risk that the firm is exposed to capital or income volatility because of a mismatch between the interest rate exposures of its (non-traded) assets and liabilities.

**Overview**

Barclays Group Treasury manages treasury and capital risk exposure on a day-to-day basis with the Treasury Committee acting as the principal management body. To enforce effective oversight and segregation of duties and in line with the ERMF, the Treasury and Capital Risk function is responsible for oversight of key capital, liquidity, interest rate risk in the banking book (IRRBB) and pension risk management activities. The following describes the structure and governance associated with the risk types within the Treasury and Capital Risk function.

**Liquidity risk management**

**Overview**

The efficient management of liquidity is essential to Barclays Group in retaining the confidence of the financial markets and maintaining the sustainability of the business. There is a control framework in place for managing liquidity risk and this is designed to maintain liquidity resources that are sufficient in amount and quality and funding tenor profile that is adequate to meet the liquidity risk appetite as expressed by the Barclays PLC Board based on internal and regulatory liquidity metrics. This is achieved via a combination of policy formation, review and governance, analysis, stress testing, limit setting and monitoring. Together, these meet internal and regulatory requirements.

**Roles and responsibilities**

The Treasury and Capital Risk function is responsible for the management and governance of the liquidity risk mandate defined by the Board and the production of ILAAPs. Treasury has the primary responsibility for managing liquidity risk within the set risk appetite.

Barclays Group’s comprehensive control framework for managing Barclays Group’s liquidity risk is designed to deliver the appropriate term and structure of funding, consistent with the liquidity risk appetite set by the Board.

The control framework incorporates a range of ongoing business management tools to monitor, limit and stress test Barclays Group’s balance sheet and contingent liabilities and the Recovery Plan. Limit setting and transfer pricing are tools that are designed to control the level of liquidity risk taken and drive the appropriate mix of funds. Together, these tools reduce the likelihood that a liquidity stress event could lead to an inability to meet Barclays Group’s obligations as they fall due.

The control framework is subject to internal conformance testing and internal audit review.

**Organisation and structure**

**Barclays PLC Board Risk Committee**

- Reviews and recommends Barclays Group’s risk appetite for treasury and capital risk to the Barclays PLC Board
- Reviews material issues impacting treasury and capital risk
- Recommends the approval of ICAAP and ILAAP to the Barclays PLC Board

**Barclays Group Risk Committee**

- Reviews and recommends risk appetite to the Barclays PLC Board Risk Committee
- Escalates material issues impacting treasury and capital risk to the Barclays PLC Board Risk Committee
- Reviews and recommends the ICAAP and ILAAP to the Barclays PLC Board Risk Committee for approval

**Barclays Group Treasury and Capital Risk Committee**

- Manages treasury and capital risk appetite
- Monitors the treasury and capital risk profile
- Monitors the treasury and capital risk control environment
- Recommends risk appetite to the Barclays Group Risk Committee and Barclays PLC Board Risk Committee
- Escalates material issues impacting treasury and capital risk to the Barclays Group Risk Committee and Barclays PLC Board Risk Committee
Barclays’ approach to managing risks
Management of treasury and capital risk

The Board approves the Barclays Group funding plan, internal stress tests and results of regulatory stress tests, and the Barclays Group recovery plan. The Treasury Committee is responsible for monitoring and managing liquidity risk in line with Barclays Group’s funding management objectives, funding plan and risk frameworks. The Treasury and Capital Risk Committee monitors and reviews the liquidity risk profile and control environment, providing Second Line oversight of the management of liquidity risk. The BRC reviews the risk profile, and annually reviews risk appetite and the impact of stress scenarios on the Barclays Group funding plan/forecast in order to agree Barclays Group’s projected funding abilities.

Barclays Group maintains a range of management actions for use in a liquidity stress, these are documented in the Barclays Group Recovery Plan. Since the precise nature of any stress event cannot be known in advance, the actions are designed to be flexible to the nature and severity of the stress event and provide a menu of options that can be drawn upon as required. The Barclays Group Recovery Plan also contains more severe recovery options to generate additional liquidity in order to facilitate recovery in a severe stress. Any stress event would be regularly monitored and reviewed using key management information by Treasury, Risk and business representatives.

Risk Appetite and planning
Barclays has established an LRA over Group stress tests to represent the level of liquidity risk Barclays Group chooses to take in pursuit of its business objectives and in meeting its regulatory obligations.

The key expression of the liquidity risk is through stress tests. It is measured with reference to the liquidity pool compared to anticipated net stressed outflows for each of five stress scenarios. Barclays has defined both internal short term and long term LRA stress test metrics.

The LRA for internal stress tests is approved by the Board. The LRA is reviewed on a continuous basis and is subject to formal review at least annually as part of the Internal Liquidity Adequacy Assessment Process (ILAAP).

The stress outflows are used to determine the size of Barclays Group Liquidity Pool, which represents those resources immediately available to meet outflows in a stress. In addition to the liquidity pool, the control framework and policy provides for other management actions, including generating liquidity from other liquid assets on Barclays Group’s balance sheet in order to meet additional stress outflows, or to preserve or restore the Liquidity Pool in the event of a liquidity stress.

Liquidity limits
Barclays manages limits on a variety of on and off-balance sheet exposures, a sample of which is shown in the table below. These limits serve to control the overall extent and composition of liquidity risk taken by managing exposure to the cash outflows.

Early warning indicators
Barclays Treasury FLM monitors a range of market indicators for early signs of liquidity risk either in the market or specific to Barclays, a sample of which are shown in the table below. These are designed to immediately identify the emergence of increased liquidity risk to maximise the time available to execute appropriate mitigating actions. Early warning indicators are used as part of the assessment of whether to invoke Barclays Group Recovery Plan, which provides a framework for how the liquidity stress would be managed.

Recovery & resolution planning
Barclays maintains a Group Recovery Plan (GRP) which is designed to provide a framework to effectively manage a severe financial stress. The GRP is proportionate to the nature, scale and complexity of the business and is tested to evaluate that it is operationally robust. The GRP details the escalation and invocation process for the plan, including integration with i) BAU monitoring of capital and liquidity Early Warning Indicators (EWI) to detect signs of approaching financial stress, ii) existing processes within Barclays Treasury and Risk to respond to mild/moderate stress and iii) a governance process for formally invoking the GRP. The Plan would be formally invoked by Barclays Group Board.

Examples of liquidity limits

<table>
<thead>
<tr>
<th>Gross Repo limits</th>
<th>FX Cashflow limits</th>
<th>Concentration limits</th>
<th>Minimum Cash Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secured Mismatch limits</td>
<td>Debt Buyback limits</td>
<td>Off-Balance Sheet commitment limits</td>
<td>Ratings Downgrade limits</td>
</tr>
</tbody>
</table>

Examples of early warning indicators

<table>
<thead>
<tr>
<th>Change in composition of deposits</th>
<th>Deterioration in stress test surplus</th>
<th>Rising funding costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widening CDS spreads</td>
<td>Change in maturity profile</td>
<td>Stress in financial markets</td>
</tr>
</tbody>
</table>
and would be overseen and executed by the Barclays Crisis Leadership Team (BCLT), a flexible committee of senior management for responding to all types of stress events. In invoking and executing the plan, the BCLT (in consultation with Barclays Group Board) would assess the likely impact of the stress event on Barclays Group and its subsidiaries and determine the appropriate response for the nature and severity of the stress. The GRP includes a range of recovery options to respond to financial stresses of varying severity and includes detailed information on financial and non-financial impacts of options and a communications plan.

**Liquidity risk management**

A control framework is in place for Liquidity Risk under which the Treasury function operates. The control framework describes liquidity risk management processes, associated policies and controls that Barclays Group has implemented to manage liquidity risk within the Liquidity Risk Appetite and is subject to annual review. Internal architecture is in place to record and measure our group wide liquidity metrics reporting.

The Board sets the Liquidity Risk Appetite based on the internal liquidity risk stress test model (LRA) and external regulatory requirements namely the Liquidity Coverage Ratio (LCR). The Liquidity Risk Appetite is represented as the level of risk Barclays Group chooses to take in pursuit of its business objectives and in meeting its regulatory obligations. The approved Liquidity Risk Appetite is implemented in line with the control framework and policy for liquidity risk.

**Capital risk management**

**Overview**

Capital risk is managed through ongoing monitoring and management of the capital position, regular stress testing and a robust capital governance framework.

**Roles and responsibilities**

The management of capital risk is integral to Barclays Group’s approach to financial stability and sustainability management, and is embedded in the way businesses and legal entities operate.

Capital risk management is underpinned by a control framework and policy. The capital management strategy, outlined in Barclays Group and legal entity capital plans, is developed in alignment with the control framework and policy for capital risk, and is implemented consistently in order to deliver on Barclays Group’s objectives.

The Board approves the Barclays Group capital plan, internal stress tests and results of regulatory stress tests, and the Barclays Group recovery plan. The Barclays Group Treasury Committee is responsible for monitoring and managing capital risk in line with Barclays Group’s capital management objectives, capital plan and risk frameworks. The Barclays Group Treasury and Capital Risk Committee monitors and reviews the capital risk profile and control environment, providing Second Line oversight of the management of capital risk. The Barclays PLC BRC reviews the risk profile, and annually reviews risk appetite and the impact of stress scenarios on the Barclays Group capital plan/forecast in order to agree Barclays Group’s projected capital adequacy.

Local management assures compliance with an entity’s minimum regulatory capital requirements by reporting to local Asset and Liability Committees with oversight by Barclays Group Treasury Committee, as required.

Treasury has the primary responsibility for managing and monitoring capital and reports to the Barclays Group Finance Director. The Barclays Group Treasury and Capital Risk function provides oversight of capital risk and is an independent risk function that reports to the Barclays Group CRO. Production of the Barclays PLC ICAAP is the joint responsibility of Barclays Group Risk and Barclays Group Finance.

**Capital risk management**

Barclays Group’s capital management strategy is driven by the strategic aims of Barclays Group and the risk appetite set by the Board. Barclays Group’s objectives are achieved through well embedded capital management practices.

**Capital planning and allocation**

Barclays Group assesses its capital requirements on multiple bases, with Barclays Group’s capital plan set in consideration of Barclays Group’s risk profile and appetite, strategic and performance objectives, regulatory requirements, international financial reporting standards (including IFRS 9), and market and internal factors, including the results of stress testing. The capital plan is managed on a top-down and bottom-up basis through both short-term and medium-term financial planning cycles, and is developed with the objective that Barclays Group maintains an adequate level of capital to support its capital requirements. The planning process captures the impact of IFRS 9 to the capital plan, both including and excluding the impacts of transitional regulatory adjustments.

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### Primary objectives

- Maintain adequate capital for Barclays Group and its legal entities to withstand the impact of the risks that may arise under normal and stressed conditions.

- Maintain adequate capital to cover Barclays Group’s current and forecast business needs and associated risks in order to provide a viable and sustainable business offering.

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### Core practices

- Meet minimum regulatory requirements in all jurisdictions

- Maintain capital buffers over regulatory minimums

- Perform Barclays Group-wide internal and regulatory stress tests

- Develop contingency plans for severe and extreme stresses, which include stress management actions and recovery actions.

- Maintain capital ratios aligned with rating agency expectations.

- Maintain a capital plan on a short-term and medium-term basis aligned with Barclays Group’s strategic objectives, balancing capital generation of the business with business growth and shareholder distributions.
Barclays’ approach to managing risks
Management of treasury and capital risk

The PRA determines the regulatory capital requirements for the consolidated Barclays Group. Under these regulatory frameworks, capital requirements are set in consideration of the level of risk that Barclays Group is exposed to and the factors above, and are measured through both risk-based Risk Weighted Assets (RWAs) and leverage-based metrics. An internal assessment of Barclays Group’s capital adequacy is undertaken through the Internal Capital Adequacy Assessment Process (ICAAP) and is used to inform the capital requirements of Barclays Group.

Barclays Group expects to meet the minimum requirements for capital and leverage at all times and also holds an internal buffer sized according to Barclays Group’s assessment of capital risk.

In 2018, Barclays Group complied with all regulatory minimum capital requirements. Through the capital planning process, capital allocations are approved by Barclays Group Executive committee, taking into consideration the risk appetite and strategic aims of Barclays Group. Regulated legal entities are, at a minimum, capitalised to meet their current and forecast regulatory and business requirements.

**Monitoring and reporting**
Capital is managed and monitored to maintain that Barclays’ capital plans remain appropriate and that risks to the plans are considered. Limits are set by Risk to control the level of capital risk within Barclays Group. Treasury are responsible for complying with these limits as the first line of defence for the management of capital risk. Limits are monitored through appropriately governed forums in the first and second line of defence.

To support compliance with risk limits, Treasury monitor capital risks against firm-specific and macroeconomic early warning indicators and report on these to the Barclays Group Treasury Committee and entity ALCOs. This enables a consistent and objective approach to monitoring the capital outlook against the capital plan, and supports the early identification when outlooks deteriorate.

Capital management information is readily available to support Senior Management’s strategic and day-to-day business decision making.

**Stress testing and risk mitigation**
Internal group-wide stress testing is undertaken to quantify and understand the impact of sensitivities on the capital plan and capital ratios arising from stressed macroeconomic conditions. Recent economic, market and peer institution stresses are used to inform the assumptions developed for internal stress tests and to assess the effectiveness of mitigation strategies.

Barclays Group also undertakes stress tests prescribed by the BoE and EBA, and legal entities undertake stress tests prescribed by their local regulators. These stress tests inform decisions on the size and quality of the internal capital buffer required and the results are incorporated into Barclays Group capital plan to maintain adequacy of capital under normal and severe, but plausible stressed conditions.

Actions are identified as part of the stress tests that can be taken to mitigate the risks that may arise in the event of material adverse changes in the current economic and business outlook. As an additional layer of protection, Barclays Group Recovery Plan defines the actions and implementation strategies available to Barclays Group to increase or preserve capital resources in the situation that a stress occurs that is more severe than anticipated.

**Capitalisation of legal entities**
Barclays as a group comprises legal entities across multiple jurisdictions. Barclays Group and regulated legal entities are subject to prudential requirements from the PRA and/or local regulators. Sufficient capital needs to be available to meet these requirements both at a consolidated Group and individual legal entity level.

Where aggregate requirements for individual entities in Barclays Group are higher than the consolidated requirement, Barclays Group may use debt or capital other than CET1 to meet these incremental requirements (so called ‘double leverage’). There are regulatory and rating agency expectations that constrain the amount of double leverage that can be used. This might increase the overall level of capital Barclays Group is required to hold.

The capitalisation of legal entities is reviewed annually as part of the capital planning process and monitored on an ongoing basis.

**Transferability of capital**
Surplus capital held in Group entities is required to be repatriated to the immediate parent in the form of dividends and/or capital repatriation, subject to local regulatory requirements, exchange controls and tax implications. This approach provides optimal flexibility on the re-deployment of capital across legal entities. Capital is managed for Barclays Group as a whole as well as for its operating subsidiaries to allow fungibility and redeployment of capital while meeting relevant internal and regulatory targets at entity levels.

**Foreign exchange risk**
Barclays Group has capital resources and risk weighted assets denominated in foreign currencies. Changes in foreign exchange rates result in changes in the Sterling equivalent value of foreign currency denominated capital resources and RWAs. As a result, Barclays Group’s CET1 ratio is sensitive to foreign currency movements.

Barclays Group seeks to minimise the volatility of the CET1 ratio caused by foreign exchange rate movements by maintaining that the CET1 capital movements broadly match the revaluation of Barclays Group’s foreign currency RWA exposures. This is achieved by seeking to align the ratio of CET1 sensitive to foreign exchange rate movements to foreign currency RWAs with Barclays Group CET1 ratio.

**Pension risk**
Barclays Group maintains a number of defined benefit pension schemes for past and current employees. The ability of the pension fund to meet pension payments is maintained through investments and contributions. Pension risk arises because the estimated mark-to-value of the pension liability might increase. Barclays Group monitors the pension risks arising from its defined benefit pension schemes and works with Trustees to address shortfalls. In these circumstances Barclays Group could be required or might choose to make extra contributions to the pension fund. Barclays Group’s main defined benefit scheme was closed to new entrants in 2012.

**Management of pension risk**

Many of Barclays Group’s defined benefit (DB) pension funds are established as trusts in order to keep the fund’s assets separate from the sponsor (Barclays). As such the Trustees are responsible for:

- The investment strategy including asset allocation and performance.
- Assessing the level of technical provision required.
- Monitoring progress against funding objectives.
- Complying with local legislation.

The legal structure of Barclays’ DB pension funds and the role of the Trustees mean that Pension Risk is not part of Barclays Group’s risk appetite assessment used to manage other key risks.

**Pension Forums**
The Pension Executive Board (PEB) has accountability for the effective operation of pensions across Barclays Group. It is the most senior executive body for pensions in Barclays. The Pension Management Group (PMG) is accountable for the oversight and management of Barclays Group’s responsibilities relating to its pension arrangements. The PMG is accountable to the PEB.

The PEB and PMG are not created or mandated under the ERMF. However, these forums provide Risk the opportunity to discuss and comment on pension risk in a wider context with other relevant stakeholders from HR, Legal, Treasury and Finance.
 Barclays’ approach to managing risks

Management of treasury and capital risk

Key Pension Risk controls and governance include:
- Annual review, challenge and proposal of the IAS19 market-driven assumptions used for the calculation of the pension scheme liabilities used in Barclays disclosures.
- Representation and input at key pension forums.
- Input into Barclays Group’s ICAAP for pension risk.
- Input into Barclays Group’s strategic planning and stress test exercises.
- Provide independent oversight of the pension risk profiles from Barclays Group’s perspective.
- Coordinates response to regulatory initiatives, developments and proposals on pensions, which may include inputs from material overseas schemes.

Interest rate risk in the banking book management

Overview
Banking book operations generate non-traded market risk, primarily through the mismatch between the duration of assets and liabilities and where interest rates on products reset at different dates. As per Barclays Group’s policy to remain within the defined risk appetite, interest rate and FX risks residing in the banking books of the businesses are transferred to Treasury where they are centrally managed. Currently these risks are transferred to Treasury via funding arrangements and interest rate or FX swaps. However, the businesses remain susceptible to non-traded market risk from seven key sources:
- Repricing/residual risk: the impact from the mismatch between the run-off of product balances and the associated interest rate hedges or from un-hedged liquidity buffer investments.
- Structural risk: the change to the net interest income on rolling structural hedge replenishment due to adverse movements in interest rates, assuming that the balance sheet remains constant.
- Prepayment risk: the potential loss in value if actual prepayment or early withdrawal behaviour from customers deviates from the expected or contractually agreed behaviour, which may result in a hedge or funding adjustment at a cost to Barclays Group. Exposures are typically considered (where appropriate) net of any applicable offsetting early repayment charges. This risk principally relates to early repayment of fixed rate loans or withdrawal from fixed rate savings products.
- Recruitment risk: the potential loss in value if the actual completion or drawdown behaviour from customers deviates from the expected behaviour, which may result in a hedge or funding adjustment at a cost to Barclays Group. This risk principally relates to the completion timing around Barclays Group’s fixed rate mortgage pipeline process.
- Margin compression risk: the effect of internal or market forces on the Barclays Group’s net margin where, for example, in a low rate environment a fall in interest rates may further decrease interest income earned on the assets whereas funding costs may not be reduced given the already minimum level of interest rates.
- Lag risk: arises from the delay in repricing customer rates for certain variable/managed rate products, following an underlying change to market interest rates. This is typically driven by either regulatory constraints around customer notification on pricing changes, processing time for Barclays Group’s notification systems or contractual agreements within a product’s terms and conditions.
- Asset swap spread risk: the spread between LIBOR and sovereign bond yields that arises from the management of the liquidity buffer investments and its associated hedges.

Furthermore, liquidity pool investments are generally subject to fair value through other comprehensive income (FVOCI) accounting solution and hedging of net associated hedges.

Roles and responsibilities
The non-traded market risk team provides risk management oversight and monitoring of all traded and non-traded market risk in Treasury and Customer Banking Books, which specifically includes:
- Interest rate risk assessment in the customer banking books.
- Review and challenge the behavioural assumptions used in hedging and transfer pricing.
- Risk management of the liquidity buffer investments and funding activities.
- Oversight of balance sheet hedging.
- Review of residual risk in the hedge accounting solution and hedging of net investments.
- Proposal and monitoring of risk limits to manage traded and non-traded market risk within the agreed risk appetite.

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

Management of IRRBB
Barclays seeks to minimise interest rate risk in the banking book and maintain it is within the agreed risk appetite, whilst actively managing the associated risks which could reduce the value of liquidity buffer investments. Therefore, the primary control for IRRBB is calculating the risk measures described below and monitoring risk exposure vs. defined limits. Limits are set at an aggregate business level and then cascaded down.
Barclays uses a range of complementary technical approaches to measure IRRBB as described below. The risk is measured and controlled using both an income based metric (EaR) and value based metrics (EVE, EC and VaR).

Summary of measures for non-traded market risk

<table>
<thead>
<tr>
<th>Measure</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings at risk (EaR)</td>
<td>A measure of the potential change in Net Interest Income (NII) due to an adverse interest rate movement over a predefined time horizon.</td>
</tr>
<tr>
<td>Economic value of equity (EVE)</td>
<td>A measure of the potential change in value of expected future cash flows due to adverse interest rate movement, based on the existing balance sheet run-off profile.</td>
</tr>
<tr>
<td>Economic capital (EC)</td>
<td>A measure of the potential loss from a severe stress scenario over a predefined time horizon at a particular confidence level.</td>
</tr>
<tr>
<td>Value at risk (VaR)</td>
<td>A measure of the potential loss arising from unfavourable market movements at a specific confidence level, if current positions were to be held unchanged for the predefined holding period.</td>
</tr>
<tr>
<td>Stress testing</td>
<td>A measure to assess risk exposures under severely adverse market scenarios.</td>
</tr>
</tbody>
</table>

Annual Earnings at Risk (AaER)
AaER measures the sensitivity of net interest income over a one-year period. It is calculated as the difference between the estimated income using the expected rate forecast and the lowest estimated income following a parallel increase or decrease in interest rates.

The main model assumptions are:
- The balance sheet is kept at the current level, i.e. no growth is assumed, and run-off balances are reinvested to maintain a constant balance sheet.
Barclays’ approach to managing risks
Management of treasury and capital risk

Contractual positions are adjusted for an assumed behavioural profile, more closely matching the expected product life-cycle.

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

See page 38 for a review of AEaR in 2018.

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

The EVE measure is applied to the entire banking book, that is, the same coverage as AEaR, and covers the full life of transactions and hedges allowing the risk over the whole life of positions to be considered. It does not capture the impact of business growth or management actions, and is based on the expected balance sheet run-off profile.

Economic Capital (EC, for recruitment, prepayment and residual risk)
EC consistent models, based on VaR methodologies, are used to measure unexpected losses to a 99% confidence interval over a one-year period. Within non-traded market risk, this measure aims to capture recruitment, prepayment and residual risks for banking book products (see definitions on page 180). EC metrics typically measure variations in economic value from specific sources of risk, for example, prepayment risk EC for fixed rate mortgages predicts the cost of hedging in order to reduce any mismatch exposure resulting from the impact of unexpected customer prepayment levels.

Limits are set against EC metrics and breaches trigger mitigating actions to reduce exposure to appropriate levels. EC modelling is typically applied only to contractually fixed rate products, with the majority of variable and administered rate portfolios not subject to an EC measure.

Advantages of EC are that it can calculate unexpected losses to an appropriate degree of confidence given the nature of the risks, and that it covers sources of loss beyond the scope of other models (one-year period for AEaR, only existing business being considered for EVE, etc). However, as with any statistical model, the choice of the distribution may drive under-prediction of very extreme events, i.e. the real distribution may be fat-tailed. To mitigate this, Barclays Group continues to improve its models using longer time series of historical data to capture extreme moves.

Value at Risk (VaR)
VaR is an estimate of the potential loss arising from unfavourable market movements if the current position were to be held unchanged for a set period. For internal market risk management purposes, a historical simulation methodology is used with a two-year equally weighted historical period, at a 95% confidence level.

Daily VaR is used to measure residual interest and foreign exchange risks within certain banking book portfolios.

Quarterly scaled VaR is used to measure risk in the liquidity pool investments. The calculation uses a two-year historical period, a 95% confidence level and is scaled from daily to quarterly using a constant factor.

Stress testing
All non-traded market risk positions are subject to Barclays Group’s annual stress testing exercise, where scenarios based on adverse economic parameters are used to determine the potential impact of the positions on results and the balance sheet.
Barclays’ approach to managing risks

Management of operational risk

The sources of operational risks, and how those risks are managed, are detailed in this section.

- The types of risks that are classified as operational risks are described on pages 183-184.
- Governance, management and measurement techniques are covered on pages 183 to 185.
Barclays’ approach to managing risks
Management of operational risk

Operational risk

The risk of loss to the firm from inadequate or failed processes, systems, human factors or due to external events (for example, fraud) where the root cause is not due to credit or market risks.

Overview

The management of operational risk has three key objectives:

- Deliver an operational risk capability owned and used by business leaders which is pragmatic, relevant, and enables business leaders to make sound risk decisions over the long term.
- Provide the frameworks and policies to enable management to meet their risk management responsibilities while the second line of defence provides robust, independent, and effective oversight and challenge.
- Deliver a consistent and aggregated measurement of operational risk that will provide clear and relevant insights, so that the right management actions can be taken to keep the operational risk profile consistent with Barclays Group’s strategy, the stated risk tolerance and stakeholder needs.

Following submission of an application to the PRA relating to Barclays Group Advanced Measurement Approach (AMA) permission, Barclays Group received the PRA’s approval to use the Standardised Approach (TSA) for operational risk regulatory capital purposes with effect from 1 April 2018. Barclays Group has conservatively elected to retain its previous operational risk RWA amount unchanged for 2018.

Barclays Group operates within a strong system of internal controls that enables business to be transacted and risk taken without exposing Barclays Group to unacceptable potential losses or reputational damages. Barclays Group has an overarching Enterprise Risk Management Framework (ERMF) that sets out the approach to internal governance.

Organisation and structure

Operational risk comprises a number of specific risk categories defined as follow:

- **Data Management & Information Risk**: The risk that Barclays Group information is not captured, retained, used or protected in accordance with its value and legal and regulatory requirements.
- **Financial Reporting Risk**: The risk of a material misstatement or omission within Barclays Group’s external financial reporting, regulatory reporting or internal financial management reporting.
- **Fraud Risk**: The risk of financial loss when an internal or external party acts dishonestly with the intent to obtain an undue benefit, cause a loss to, or to expose either Barclays Group or its customers and clients to a risk of loss.
- **Payments Process Risk**: The risk of payments being processed inaccurately, with delays or without appropriate authentication and authorisation. It includes payments processes from initiation through to external settlement, including any repairs or amendments.
- **People Risk**: The set of risks associated with employing and managing people, including compliance with regulations, appropriate resourcing for requirements, recruitment and development risks (excluding health and safety related risk).
- **Premises Risk**: The risk of business detriment or harm to people due to premises and infrastructure issues.
- **Physical Security Risk**: The risk of business detriment, financial loss or harm to people as a result of any physical security incident impacting Barclays Group or a Barclays Group’s employee - relating to harm to people, unauthorised access, intentional damage to premises or theft or intentional damage to moveable assets.
- **Supplier Risk**: The risk that is introduced to Barclays Group or a Barclays Group’s entity as a consequence of obtaining services or goods from another legal entity, or entities, whether external or internal as a result of inadequate selection, inadequate management or inadequate exit management.
- **Tax Risk**: The risk of unexpected tax cost in relation to any tax for which Barclays Group is liable, or of reputational damage on tax matters with key stakeholders such as tax authorities, regulators, shareholders or the public. Tax cost includes tax, interest or penalties levied by a taxing authority.
- **Technology Risk**: The risk of dependency on technological solutions and failure to develop, deploy and maintain technology solutions that are stable, reliable and deliver business need.

Barclays PLC Board Risk Committee

- Approves operational risk framework
- Oversees operational risk capital
- Recommends and monitors operational risk appetite and the residual risk position, supported by feedback from the Barclays PLC Board Audit Committee/Chief Controls Office

Barclays PLC Board Audit Committee

- Oversees the operating effectiveness of the control environment
- Oversees remediation of control issues
- Gives feedback to the Barclays PLC Board Risk Committee where concerns exist over the impact of residual risk through either the design or operating effectiveness of the control environment

Barclays Group Risk Committee

- Reviews and recommends risk appetite and risk limit across operational risk to the Barclays PLC Board
- Monitors the Barclays Group risk profile and the utilisation of risk appetite
- Reviews appetite, limit usage and risk management within tolerance agreed to the Barclays PLC Board
- Reviews deep dives of specific risks as requested
- Reviews the impact of any material acquisitions and disposals on the risk profile
- Reviews remediation plans and actions taken, and agrees any further actions required
- Escalates to Barclays PLC Board level

Barclays Group Controls Committee

- Oversees the effectiveness of the control environment
- Reviews and recommends the control framework
- Oversees control remediation activities
- Oversees the execution of the Operational Risk Management Framework consistently across Barclays Group
- Oversees risk and internal control matters including significant issues
- Escalates to Barclays PLC Board level

Business Risk Committees

- Manage and oversee risk at the business/function level
- Escalate to Barclays Group level

Business Controls Committees

- Manage and oversee the control environment at the business/function level
- Escalate to Barclays Group level
Barclays’ approach to managing risks
Management of operational risk

- **Transaction Operations Risk**: The risk of customer/client or Barclays Group detriment due to unintentional error and/or failure in the end-to-end process of initiation, processing and fulfillment of an interaction between a customer/client and Barclays Group with an underlying financial instrument (e.g. mortgage, derivative product, trade product etc.) in consideration.

In addition to the above, operational risk encompasses risks associated with prudential regulation. This includes the risk of failing to: adhere to prudential regulatory requirements, including capital adequacy requirements; provide regulatory submissions; or monitor and manage adherence to new prudential regulatory requirements.

These risks may result in financial and/or non-financial impacts including legal/ regulatory breaches or reputational damage. Barclays Group also recognises that there are certain threats-risk drivers that are more thematic and have the potential to impact Barclays Group’s strategic objectives. These are Enterprise Risk Themes which require an overarching and integrated risk management approach. Including:

- **Cyber**: The potential loss or detriment to Barclays caused by individuals or groups (threat actors) with the capabilities and intention to cause harm or to profit from attacks committed via network information systems against us, our suppliers, or customers/clients.

- **Data**: Aligned to the data strategy of Barclays Group and encompassing data risks to Barclays Group from multiple risk categories, including data management, data architecture, data security & protection, data resilience, data retention and data privacy.

- **Execution**: The risk of failing to deliver and implement the agreed initiatives, priorities and business outcomes required to deliver Barclays Group’s strategy within agreed timelines.

- **Resilience**: The risk of the organisation’s ability to survive and prosper in its commercial endeavours in the presence of adverse events, shocks and chronic or incremental changes.

### Roles and responsibilities

The prime responsibility for the management of operational risk and the compliance with control requirements rests with the legal entities, business and functional units where the risk arises. The operational risk profile and control environment is reviewed by business management through specific meetings which cover these items. Legal entities, businesses and functions are required to report their operational risks on both a regular and an event-driven basis. The reports include a profile of the material risks that may threaten the achievement of their objectives and the effectiveness of key controls, operational risk events and a review of scenarios.

The Barclays Group Head of Operational Risk is responsible for establishing, owning and maintaining an appropriate Barclays Group-wide Operational Risk Management Framework and for overseeing the portfolio of operational risk across Barclays Group.

Operational Risk Management (ORM) acts in a Second Line of Defence capacity, and is responsible for defining and overseeing the implementation of the framework and monitoring Barclays Group’s operational risk profile. ORM alerts management when risk levels exceed acceptable tolerances in order to drive timely decision making and actions by the first line of defence. Operational risk issues escalated from these meetings are considered through the second line of defence review meetings. Depending on their nature, the outputs of these meetings are presented to the operational risk profile Forum, the Barclays PLC Board Risk Committee or the Barclays PLC Board Audit Committee.

Specific reports are prepared by Operational Risk on a regular basis for the Barclays Group Risk Committee, and the Barclays PLC Board Risk Committee.

Specific reports are prepared by legal entity and Barclays Group Operational Risk on a regular basis for BRC and BAC.

### Operational risk framework

The Operational Risk Framework comprises a number of elements which allow Barclays Group to manage and measure its operational risk profile and to calculate the amount of operational risk capital that Barclays Group needs to hold to absorb potential losses. The minimum, mandatory requirements for each of these elements are set out in the Operational Risk Framework and supporting policies. This framework is implemented across Barclays Group with all legal entities, businesses and functions required to implement and operate an Operational Risk Framework that meets, as a minimum, the requirements detailed in the operational risk policies.

The Operational Risk Framework is a key component of the ERMF and has been designed to improve risk management and meet a number of external governance requirements including the Basel Capital Accord, the Capital Requirements Directive and Turnbull guidance as an evaluation framework for the purposes of Section 404(a) of the Sarbanes-Oxley Act. It also supports the Sarbanes-Oxley requirements.

The Operational Risk Framework includes the following elements:

- **Risk and control self-assessments**

  Risk and control self-assessments (RCSAs) are the way in which Barclays Group identifies and assesses the risks which are inherent in the material processes operated by Barclays Group. Managers in the business use the RCSA approach to evaluate the key controls in place to mitigate those risks and assess the residual risk exposure to Barclays Group. The businesses / functions are then able to make decisions on what action, if any, is required to reduce the level of residual risk to Barclays Group. These risk assessments are monitored on a regular basis to maintain that each business understands the risks it faces.

- **Risk events**

  An operational risk event is any circumstance where, through the lack or failure of a control, Barclays Group has actually, or could have, made a loss. The definition includes situations in which Barclays Group could have made a loss, but in fact made a gain, as well as incidents resulting in reputational damage or regulatory impact only.

  A standard threshold is used across Barclays Group for reporting risk events and part of the analysis includes the identification of improvements to processes or controls, to reduce the recurrence and/or magnitude of risk events. For significant events, both financial and non-financial, this analysis includes the completion of a formal lessons learnt report.

  Barclays Group also maintains a record of external risk events which are publicly available and is a member of the Operational Riskdata eXchange (ORX), a not-for-profit association of international banks formed to share anonymous loss data information. This external loss information is used to support and inform risk identification, assessment and measurement.
Barclays’ approach to managing risks

Management of operational risk

Operational Risk Tolerance
The Board approves an Operational Risk Tolerance Statement on an annual basis, establishing the level of operational risk that is acceptable in pursuit of Barclays Group’s strategic objectives.

Operational risks are assessed and monitored against the Board approved Operational Risk Tolerance, with Risk Reduction Plans established for any risks that are above the acceptable level.

The Operational Risk Profile is monitored through Risk Committees at legal entity, Barclays Group and Board level in the context of Operational Risk Tolerance.

Key indicators
Key indicators (KIs) are metrics which allow the Operational Risk Profile to be measured and monitored against Management’s Risk Tolerance. KIs include defined thresholds and performance is reported regularly to Management to drive action when risk exceeds acceptable limits.

Risk scenarios
Risk scenarios are a summary of the extreme potential risk exposures for Barclays Group covering the complete range of risks. The scenarios include an assessment of the key drivers for the exposure, occurrence and impact of the scenario and a review of the corresponding control environment. The risk scenario assessments are a key input to the calculation and benchmarking of economic capital requirements (see following section on operational risk measurement). The assessment considers analysis of internal and external loss experience, Key Risk Indicators, Risk and Control Self-Assessments and other relevant information. The businesses and functions analyse potential extreme scenarios, considering the:

- circumstances and contributing factors that could lead to an extreme event;
- potential financial impacts;
- controls that seek to limit the likelihood of such an event occurring; and
- the mitigating actions that would be taken if the event were to occur (for example crisis management procedures, business continuity or disaster recovery plans).

Management then determine whether the potential risk exposure is acceptable or whether changes in risk management control or business strategy are required.

The risk scenarios are regularly re-assessed, taking into account trends in risk factors.

Reporting
The ongoing monitoring and reporting of operational risk is a key component of the Operational Risk Framework. Reports and management information are used by the Operational Risk function and by legal entity and business management to understand, monitor, manage and control operational risks and losses.

The operational risk profile is reviewed by senior management at legal entity Risk Committee meetings as well as the Operational Risk Profile Forum and BRC, BAC and the Board.

Operational risk measurement
Barclays Group assesses its Operational Risk Capital requirements using the Standardised Approach (TSA). Barclays Group also maintains a voluntary floor for the Regulatory Capital. The floor is based on the Capital calculated by Barclays Group under the previous AMA regime.

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

Management of model risk

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

- The types of risks that are classified as model risk are described on page 187.
- Governance, management and measurement techniques are covered on page 187.
Barclays’ approach to managing risks

Management of model risk

Model risk

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

Overview

Barclays Group uses models to support a broad range of activities, including informing business decisions and strategies, measuring and limiting risk, valuing exposures, conducting stress testing, assessing capital adequacy, managing client assets, and meeting reporting requirements.

Since models are imperfect and incomplete representations of reality, they may be subject to errors affecting the accuracy of their output. Model errors can result in inappropriate business decisions being made, financial loss, regulatory risk, reputational risk and/or inadequate capital reporting. Models may also be misused, for instance applied to products that they were not intended for, or not adjusted, where fundamental changes to their environment would justify re-evaluating their core assumptions. Errors and misuse are the primary sources of model risk.

Robust model risk management is crucial to assessing and managing model risk within a defined risk appetite. Strong model risk culture, appropriate technology environment, and adequate focus on understanding and resolving model limitations are crucial components.

Organisation and structure

Barclays Group allocates substantial resources to identify and record models and their usage, document and monitor the performance of models, validate models and adequately address model limitations. Barclays Group manages model risk as an enterprise level risk similar to other principal risks.

Barclays Group has a dedicated Model Risk Management (MRM) function that consists of the Independent Validation Unit (IVU), responsible for model validation and approval, and Model Governance and Controls (MGC), covering model risk governance, controls and reporting, including ownership of model risk policy and the model inventory.

The model risk management framework consists of the model risk policy and standards. The policy prescribes group-wide, end-to-end requirements for the identification, measurement and management of model risk, covering model documentation, development, implementation, monitoring, annual review, independent validation and approval, change and reporting processes. The policy is supported by global standards covering model inventory, documentation, validation, complexity and materiality, testing and monitoring, overlays, risk appetite, as well as vendor models and stress testing challenger models.

Barclays Group is continuously enhancing model risk management. The function reports to the Barclays Group CRO and operates a global framework. Implementation of best practice standards is a central objective of Barclays Group. Model risk reporting flows to senior management as depicted below.

Roles and responsibilities

The key model risk management activities include:

- correctly identifying models across all relevant areas of Barclays Group, and recording models in the Barclays Group Models Database (GMD), the Barclays Group-wide model inventory. The heads of the relevant model ownership areas annually attest to the completeness and accuracy of the model inventory. MGC undertakes regular conformance reviews on the model inventory.
- enforcing that every model has a model owner who is accountable for the model. The model owner must sign off models prior to submission to IVU for validation. The model owner works with the relevant technical teams (model developers, implementation, monitoring, data services, regulatory) to maintain that the model presented to IVU is and remains fit for purpose.
- overseeing that every model is subject to validation and approval by IVU, prior to being implemented and on a continual basis. While all models are reviewed and re-approved for continued use each year, the validation frequency and the level of review and challenge applied by IVU is tailored to the materiality and complexity of each model. Validation includes a review of the model assumptions, conceptual soundness, data, design, performance testing, compliance with external requirements if applicable, as well as any limitations, proposed remediation and overlays with supporting rationale. Material model changes are subject to prioritised validation and approval.
- defining model risk appetite in terms of risk tolerance, and qualitative metrics which are used to track and report model risk.
- maintaining specific standards that cover model risk management activities relating to stress testing challenger models, model overlays, vendor models, and model complexity and materiality.

Barclays PLC Board Risk Committee

- Reviews and recommends Barclays Group’s risk appetite for model risk to the Barclays PLC Board
- Reviews the effectiveness of the processes and policies by which Barclays Group identifies and manages model risk
- Assesses performance relative to model risk appetite

Barclays Group Risk Committee

- Reviews risk appetite across model risk
- Monitors the Barclays Group risk profile for model risk, including emerging risks, against expected trends, and the utilisation of risk appetite

Business Risk Committees

- Review critical updates on model risk e.g. updates on Barclays Group-wide remediation plans
- Review targeted updates on progress towards meeting regulatory deliverables
- Review identified policy breaches
Barclays’ approach to managing risks

Management of conduct risk

This section provides an overview of the management of conduct risk.

- Conduct risk is the risk that detriment is caused to our customers, clients, counterparties or Barclays Group and its employees because of inappropriate judgement in the execution of our business activities (see page 189).
Barclays’ approach to managing risks

Management of conduct risk

Conduct risk

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

Overview

Barclays Group defines, manages and mitigates conduct risk with the goal of providing positive customer and client outcomes, protecting market integrity and promoting effective competition. This includes taking reasonable steps to assure that Barclays Group’s culture and strategy are appropriately aligned to these goals; its products and services are reasonably designed and delivered to meet the needs of customers and clients; promoting the fair and orderly operation of the markets in which Barclays Group does business; and that Barclays Group does not commit or facilitate money laundering, terrorist financing, bribery and corruption or breaches of economic sanctions.

Product Lifecycle, Culture and Strategy and Financial Crime are the risk categories within the Barclays Group definition of conduct risk.

Organisation and structure

The governance of conduct risk within Barclays Group is fulfilled through management committees and forums operated by the First and Second Lines of Defence with clear escalation and reporting lines to the Board.

The Barclays Group Risk Committee is the most senior executive body responsible for reviewing and monitoring the effectiveness of Barclays Group’s management of conduct risk.

Roles and responsibilities

The Conduct Risk Management Framework (CRMF) outlines how Barclays Group manages and measures its conduct risk profile.

Senior managers have accountability for managing conduct risk in their areas of responsibility. This is expressed in their Statements of Responsibilities. The primary responsibility for managing conduct risk and compliance with control requirements sits with the business where the risk arises. The First Line Business Control Committees provide oversight of controls relating to conduct risk.

The Barclays Group Chief Compliance Officer is responsible for owning and maintaining an appropriate Barclays Group-wide CRMF. This includes defining and owning the relevant conduct risk policies and oversight of the implementation of controls to manage and escalate the risk.

Businesses are required to report their conduct risks on both a quarterly and an event-driven basis to their respective trading entity risk committees. The quarterly reports detail conduct risks inherent within the business strategy and include forward looking horizon scanning analysis as well as backward looking evidence-based indicators from both internal and external sources.

The Barclays Bank Group and the Barclays Bank UK Group Trading Entity Risk Committees are the primary Second Line governance forums for oversight of conduct risk profile and implementation of the CRMF. The responsibilities of the Business Unit Risk Committees include approval of the conduct risk tolerance and the business defined key indicators. Additional responsibilities include the identification and discussion of any emerging conduct risks exposures which have been identified.
Barclays’ approach to managing risks

Management of reputation risk

This section provides an overview of the management of reputation risk.

- Reputation risk is the risk of damage to the Barclays brand arising from association, action or inaction which is perceived by stakeholders to be inappropriate or unethical (see page 191).
Barclays’ approach to managing risks
Management of reputation risk

**Reputation risk**
The risk that an action, transaction, investment or event will reduce trust in the firm’s integrity and competence by clients, counterparties, investors, regulators, employees or the public.

**Overview**
A reduction of trust in Barclays Group’s integrity and competence may reduce the attractiveness of Barclays Group to stakeholders and could lead to negative publicity, loss of revenue, regulatory or legislative action, loss of existing and potential client business, reduced workforce morale and difficulties in recruiting talent. Ultimately it may destroy shareholder value.

**Organisation and structure**
The Barclays Group Risk Committee is the most senior executive body responsible for reviewing and monitoring the effectiveness of Barclays Group’s management of reputation risk.

**Roles and responsibilities**
The Barclays Group Chief Compliance Officer is accountable for developing a reputation risk framework, policies and standards, including limits against which data is monitored, reported on and escalated, as required.

Reputation risk is by nature pervasive and can be difficult to quantify, requiring more subjective judgement than many other risks. The Reputation Risk Framework sets out what is required to manage reputation risk effectively and consistently across Barclays Group. During 2018, the Framework was updated to include a new reputation risk policy and supporting standards.

The primary responsibility for identifying and managing reputation risk and adherence to the control requirements sits with the business and support functions where the risk arises.

**Barclays PLC Board Reputation Committee**
- Reviews the effectiveness of the processes and policies by which Barclays Group identifies and manages reputation risk.
- Considers and evaluates regular reports on Barclays Group’s reputation risk issues and exposures.
- Considers whether significant business decisions will compromise Barclays Group’s ethical policies or core business beliefs and values.

**Barclays Group Risk Committee**
- Reviews the monitoring processes utilised by Compliance and Corporate Relations to ensure they are proportionate given the level of risk identified in the businesses.
- Reports reputation issues in accordance with Barclays Group’s Reputation Risk Management Framework for all material issues which may have the potential to incur reputation risk for Barclays Group.

**Business Risk Committees**
- Review and escalate reputation risks in accordance with Barclays Group’s Reputation Risk Management Framework.
Barclays’ approach to managing risks

Management of legal risk

This section provides an overview of the management of legal risk.

- Legal risk is the risk of loss or imposition of penalties, damages or fines from the failure of the firm to meet its legal obligations including regulatory or contractual requirements (see page 193).
Management of legal risk

Overview
Overall, Barclays Group has limited tolerance for legal risk, however the multitude of laws and regulations across the globe are highly dynamic and their application to particular circumstances is often unclear. This results in a degree of legal risk. The Barclays Group-wide Legal Risk Management Framework (LRMF) comprises a number of integrated components that allows Barclays Group to identify, manage and measure its legal risk profile, supported by legal risk policies and associated standards aligned to the following legal risks:

- **contractual arrangements** – failure to engage Barclays Group Legal Function in relation to contractual arrangements
- **litigation management** – litigation not being managed by or with the support of Barclays Group Legal Function
- **intellectual property (IP)** – failure to protect Barclays Group’s IP assets or infringement of third party IP rights
- **competition/anti-trust** – failure to identify and escalate competition/anti-trust issues to Barclays Group Legal Function or inappropriate interactions with competition/anti-trust authorities
- **use of law firms** – inappropriate instruction of external legal advisors
- **contact with regulators** – inappropriate interactions with regulators or inappropriate handling of confidential supervisory information from regulatory or government agencies
- **legal engagement** – failure to appropriately engage Barclays Group Legal Function in relation to key business decisions.

Roles and responsibilities
The LRMF requires Barclays Group’s businesses and functions to integrate the management of legal risk within their strategic planning and business decision making including managing adherence to minimum control requirements. Barclays Group’s businesses and functions are accountable and have primary responsibility for identifying legal risk in their area as well as responsibility for adherence to minimum control requirements and compliance with the LRMF and legal risk policies.

Organisation and structure
The Legal Executive Committee oversees, monitors and challenges legal risk across Barclays Group. The Barclays Group Risk Committee is the most senior executive body responsible for reviewing and monitoring the effectiveness of management of risk across Barclays Group. Escalation paths from this committee exist to the Barclays PLC Board Risk Committee.

Legal risk
The risk of loss or imposition of penalties, damages or fines from the failure of the firm to meet its legal obligations including regulatory or contractual requirements.

Barclays PLC Board Risk Committee
- Approves risk tolerances
- Reviews risk profile and material risk issues
- Commissions, receives and considers reports on key risk issues

Barclays Group Risk and Controls Committees
- Monitor risk profile with respect to non-financial risk tolerances
- Debates and agrees actions on the non-financial risk profile and risk strategy across Barclays Group

Legal Executive Committee
- Oversees, monitors and challenges legal risk across Barclays Group
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The following tables show IRB data for countries in which Barclays is active where the IRB RWA amount is more than 1% of the Group total for any asset class. The countries are shown in descending order of aggregated total RWAs for all asset classes.

### Table 96: PD, LGD, RWA and exposure values by country for IRB – all asset classes

<table>
<thead>
<tr>
<th>Country</th>
<th>PD</th>
<th>LGD</th>
<th>RWA</th>
<th>Exposure</th>
<th>Country</th>
<th>PD</th>
<th>LGD</th>
<th>RWA</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
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<td>29.7</td>
<td>84,004</td>
<td>269,573</td>
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<td>0.02</td>
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<td>18,567</td>
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<td>India</td>
<td>0.34</td>
<td>49.9</td>
<td>562</td>
<td>825</td>
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<td>9,028</td>
<td>Spain</td>
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<td>46.5</td>
<td>495</td>
<td>1,051</td>
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<td>48.7</td>
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<td>165</td>
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<td>1,002</td>
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</table>

### Table 96a: PD, LGD, RWA and exposure values by country for IRB – central governments and central banks

<table>
<thead>
<tr>
<th>Country</th>
<th>PD</th>
<th>LGD</th>
<th>RWA</th>
<th>Exposure</th>
<th>Country</th>
<th>PD</th>
<th>LGD</th>
<th>RWA</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
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<td>41,070</td>
<td>India</td>
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<td>45.0</td>
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<td>Spain</td>
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<td>45.0</td>
<td>4</td>
<td>8</td>
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<td>140</td>
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<td>Saudi Arabia</td>
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<td>95.5</td>
<td>404</td>
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<td>45.0</td>
<td>886</td>
<td>8,749</td>
<td>Australia</td>
<td>0.01</td>
<td>45.0</td>
<td>59</td>
<td>411</td>
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<td>7</td>
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<td>France</td>
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<td>–</td>
<td>Hong Kong</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>Brazil</td>
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<td>64</td>
<td>76</td>
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<tr>
<td>Luxembourg</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<td>0.01</td>
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</table>

### Table 96b: PD, LGD, RWA and exposure values by country for IRB – institutions

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<th>Country</th>
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<th>LGD</th>
<th>RWA</th>
<th>Exposure</th>
<th>Country</th>
<th>PD</th>
<th>LGD</th>
<th>RWA</th>
<th>Exposure</th>
</tr>
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### Table 96c: PD, LGD, RWA and exposure values by country for IRB – corporates

<table>
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<th>Country</th>
<th>PD</th>
<th>LGD</th>
<th>RWA</th>
<th>Exposure</th>
<th>Country</th>
<th>PD</th>
<th>LGD</th>
<th>RWA</th>
<th>Exposure</th>
</tr>
</thead>
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<tr>
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<td>46</td>
<td>70</td>
</tr>
</tbody>
</table>
## Appendix A – PD, LGD, RWA and Exposures by country

### Table 96d: PD, LGD, RWA and exposure values by country for IRB – SME retail

<table>
<thead>
<tr>
<th>Country</th>
<th>PD %</th>
<th>LGD %</th>
<th>RWA £m</th>
<th>Exposure £m</th>
<th>Country</th>
<th>PD %</th>
<th>LGD %</th>
<th>RWA £m</th>
<th>Exposure £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>14.02%</td>
<td>38.1%</td>
<td>3,929</td>
<td>8,894</td>
<td>Switzerland</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>United States</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>India</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Italy</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Spain</td>
<td>0.70%</td>
<td>18.1%</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>Germany</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Saudi Arabia</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Japan</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Australia</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Ireland</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>South Africa</td>
<td>37.56%</td>
<td>30.8%</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Canada</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Turkey</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>France</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Hong Kong</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Netherlands</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Brazil</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Singapore</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

### Table 96e: PD, LGD, RWA and exposure values by country for IRB – secured retail

<table>
<thead>
<tr>
<th>Country</th>
<th>PD %</th>
<th>LGD %</th>
<th>RWA £m</th>
<th>Exposure £m</th>
<th>Country</th>
<th>PD %</th>
<th>LGD %</th>
<th>RWA £m</th>
<th>Exposure £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>2.46%</td>
<td>10.2%</td>
<td>17,699</td>
<td>139,992</td>
<td>Switzerland</td>
<td>5.81%</td>
<td>24.0%</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>United States</td>
<td>23.81%</td>
<td>28.3%</td>
<td>1</td>
<td>4</td>
<td>India</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Italy</td>
<td>8.61%</td>
<td>22.9%</td>
<td>2,501</td>
<td>8,382</td>
<td>Saudi Arabia</td>
<td>0.12%</td>
<td>15.1%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Japan</td>
<td>0.86%</td>
<td>21.7%</td>
<td>–</td>
<td>2</td>
<td>Australia</td>
<td>0.84%</td>
<td>17.1%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Ireland</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>2</td>
<td>South Africa</td>
<td>0.09%</td>
<td>13.9%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Canada</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Turkey</td>
<td>0.56%</td>
<td>24.7%</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>1.73%</td>
<td>20.3%</td>
<td>–</td>
<td>2</td>
<td>Hong Kong</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Netherlands</td>
<td>10.32%</td>
<td>25.6%</td>
<td>–</td>
<td>1</td>
<td>Brazil</td>
<td>0.35%</td>
<td>16.9%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>0.12%</td>
<td>21.3%</td>
<td>–</td>
<td>1</td>
<td>Singapore</td>
<td>0.19%</td>
<td>13.3%</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

### Table 96f: PD, LGD, RWA and exposure values by country for IRB – revolving retail

<table>
<thead>
<tr>
<th>Country</th>
<th>PD %</th>
<th>LGD %</th>
<th>RWA £m</th>
<th>Exposure £m</th>
<th>Country</th>
<th>PD %</th>
<th>LGD %</th>
<th>RWA £m</th>
<th>Exposure £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>5.42%</td>
<td>76.0%</td>
<td>18,347</td>
<td>37,977</td>
<td>Switzerland</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>United States</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>India</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Italy</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Spain</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Germany</td>
<td>3.78%</td>
<td>79.4%</td>
<td>1,520</td>
<td>3,944</td>
<td>Saudi Arabia</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Japan</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Australia</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Ireland</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>South Africa</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Canada</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Turkey</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Hong Kong</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Brazil</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Singapore</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
</tbody>
</table>

### Table 96g: PD, LGD, RWA and exposure values by country for IRB – other retail exposures

<table>
<thead>
<tr>
<th>Country</th>
<th>PD %</th>
<th>LGD %</th>
<th>RWA £m</th>
<th>Exposure £m</th>
<th>Country</th>
<th>PD %</th>
<th>LGD %</th>
<th>RWA £m</th>
<th>Exposure £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>8.78%</td>
<td>89.6%</td>
<td>6,172</td>
<td>6,271</td>
<td>Switzerland</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>United States</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>India</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Italy</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Spain</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Germany</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Saudi Arabia</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Japan</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Australia</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Ireland</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>South Africa</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Canada</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Turkey</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Hong Kong</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Brazil</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Luxembourg</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Singapore</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
</tbody>
</table>
## IFRS Impairment

The following tables are presented using the IFRS consolidation rather than the regulatory consolidation basis. See pages 147-148 for background on impairment, and page 10 explaining the scope of regulatory consolidation.

### Table 97: Analysis of impaired and past due exposures and allowance for impairment by exposure type

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

<table>
<thead>
<tr>
<th>Not past due £m</th>
<th>Past due £m</th>
<th>Total £m</th>
<th>Gross exposure for impairment £m</th>
<th>Allowance for Impairment £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traded loans</td>
<td>7,078</td>
<td>156</td>
<td>7,234</td>
<td>–</td>
</tr>
<tr>
<td>Financial assets designated at fair value through the income statement</td>
<td>19,494</td>
<td>30</td>
<td>19,524</td>
<td>–</td>
</tr>
<tr>
<td>Financial assets designated at fair value through other comprehensive income</td>
<td>668</td>
<td>–</td>
<td>668</td>
<td>668</td>
</tr>
<tr>
<td>Cash collateral and settlement balances</td>
<td>75,448</td>
<td>1,777</td>
<td>77,225</td>
<td>77,225</td>
</tr>
<tr>
<td><strong>Total Gross loans and advances at amortised cost</strong></td>
<td>318,107</td>
<td>15,069</td>
<td>333,176</td>
<td>333,176</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>420,795</td>
<td>17,032</td>
<td>437,827</td>
<td>411,069</td>
</tr>
</tbody>
</table>

### Table 98: Geographic analysis of impaired and past due exposures and allowance for impairment

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

<table>
<thead>
<tr>
<th>Not past due £m</th>
<th>Past due £m</th>
<th>Total £m</th>
<th>Gross exposure assessed for impairment £m</th>
<th>Allowance for Impairment £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>As at 31 December 2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>273,846</td>
<td>11,582</td>
<td>285,428</td>
<td>275,622</td>
</tr>
<tr>
<td>Europe</td>
<td>51,679</td>
<td>1,980</td>
<td>53,659</td>
<td>49,540</td>
</tr>
<tr>
<td>Americas</td>
<td>82,423</td>
<td>3,242</td>
<td>85,665</td>
<td>73,467</td>
</tr>
<tr>
<td>Africa and Middle East</td>
<td>3,641</td>
<td>123</td>
<td>3,764</td>
<td>3,724</td>
</tr>
<tr>
<td>Asia</td>
<td>9,206</td>
<td>105</td>
<td>9,311</td>
<td>8,716</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>420,795</td>
<td>17,032</td>
<td>437,827</td>
<td>411,069</td>
</tr>
</tbody>
</table>
### Appendix C – Countercyclical Capital Buffer

#### Table 99: Countercyclical capital buffer

The below table shows the geographical distribution of credit exposures relevant to the calculation of the countercyclical buffer in line with CRR Article 440.

Note that exposures in the below table are prepared in accordance with CRD, Article 140. Hence exclude exposures to central governments/banks, regional governments, local authorities, public sector entities, multilateral development banks, international organisations and institutions and as such the exposure values differ to those found in the Analysis of credit risk section.

<table>
<thead>
<tr>
<th>Barclays Group</th>
<th>General Credit Exposures</th>
<th>Trading book exposures</th>
<th>Securitisation exposures</th>
<th>Own Funds requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure Value for SA £m</td>
<td>Exposure Value for IRB £m</td>
<td>Value of trading book exposures for internal models £m</td>
<td>Of which: General credit exposures £m</td>
</tr>
<tr>
<td>Breakdown by Country</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithuania (LT)</td>
<td>15</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Czech Republic (CZ)</td>
<td>13</td>
<td>96</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>United Kingdom (GB)</td>
<td>30,847</td>
<td>254,801</td>
<td>1,322</td>
<td>739</td>
</tr>
<tr>
<td>Iceland (IC)</td>
<td>–</td>
<td>–</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td>Slovakia (SK)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Hong Kong (HK)</td>
<td>640</td>
<td>113</td>
<td>39</td>
<td>64</td>
</tr>
<tr>
<td>Norway (NO)</td>
<td>518</td>
<td>445</td>
<td>31</td>
<td>23</td>
</tr>
<tr>
<td>Sweden (SE)</td>
<td>840</td>
<td>416</td>
<td>37</td>
<td>123</td>
</tr>
<tr>
<td>Total (countries with existing CCyB rate)</td>
<td>32,872</td>
<td>255,871</td>
<td>1,431</td>
<td>959</td>
</tr>
<tr>
<td>United States (US)</td>
<td>39,428</td>
<td>52,917</td>
<td>10,374</td>
<td>267</td>
</tr>
<tr>
<td>Germany (DE)</td>
<td>3,296</td>
<td>6,593</td>
<td>259</td>
<td>431</td>
</tr>
<tr>
<td>Italy (IT)</td>
<td>889</td>
<td>8,863</td>
<td>51</td>
<td>194</td>
</tr>
<tr>
<td>France (FR)</td>
<td>3,953</td>
<td>3,104</td>
<td>454</td>
<td>843</td>
</tr>
<tr>
<td>South Africa (ZA)</td>
<td>1,174</td>
<td>130</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>Ireland (IE)</td>
<td>1,067</td>
<td>3,375</td>
<td>45</td>
<td>6</td>
</tr>
<tr>
<td>Total (countries with own funds requirements weights 1% or above)</td>
<td>49,808</td>
<td>74,982</td>
<td>11,202</td>
<td>1,749</td>
</tr>
<tr>
<td>Total (rest of the world less than 1% requirement)</td>
<td>15,291</td>
<td>17,602</td>
<td>1,604</td>
<td>1,599</td>
</tr>
<tr>
<td>Total</td>
<td>97,971</td>
<td>348,455</td>
<td>14,238</td>
<td>4,306</td>
</tr>
</tbody>
</table>

#### Amount of institution-specific countercyclical capital buffer

- **Total risk exposure amount**: £311,926m
- **Institution specific countercyclical buffer rate**: 0.53%
- **Institution specific countercyclical buffer requirement**: £1,661m
## Appendix C – Countercyclical Capital Buffer

### Table 99a: Countercyclical capital buffer for significant subsidiaries

<table>
<thead>
<tr>
<th>Breakdown by Country</th>
<th>Exposure Value for SA £m</th>
<th>Exposure Value for IRB £m</th>
<th>Sum of long and short positions for trading book exposures for SA £m</th>
<th>Value of trading book exposures for internal models £m</th>
<th>Exposure Value for SA £m</th>
<th>Exposure Value for IRB £m</th>
<th>Of which: General credit exposures £m</th>
<th>Of which: Trading book exposures £m</th>
<th>Of which: Securitisation exposures £m</th>
<th>Own Funds Requirements weights %</th>
<th>Counter-cyclical capital buffer rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithuania (LT)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Czech Republic (CZ)</td>
<td>13</td>
<td>96</td>
<td>1</td>
<td>4</td>
<td>–</td>
<td>–</td>
<td>4</td>
<td>–</td>
<td>–</td>
<td>0.05%</td>
<td>1.00%</td>
</tr>
<tr>
<td>United Kingdom (GB)</td>
<td>62,591</td>
<td>42,456</td>
<td>1,168</td>
<td>739</td>
<td>–</td>
<td>14,612</td>
<td>3,564</td>
<td>33</td>
<td>142</td>
<td>3,739</td>
<td>41.09%</td>
</tr>
<tr>
<td>Slovakia (SK)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1.25%</td>
</tr>
<tr>
<td>Iceland (IC)</td>
<td>–</td>
<td>–</td>
<td>7</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Hong Kong (HK)</td>
<td>405</td>
<td>111</td>
<td>36</td>
<td>64</td>
<td>–</td>
<td>–</td>
<td>35</td>
<td>5</td>
<td>–</td>
<td>40</td>
<td>0.44%</td>
</tr>
<tr>
<td>Norway (NO)</td>
<td>96</td>
<td>438</td>
<td>13</td>
<td>18</td>
<td>–</td>
<td>–</td>
<td>24</td>
<td>2</td>
<td>–</td>
<td>27</td>
<td>0.29%</td>
</tr>
<tr>
<td>Sweden (SE)</td>
<td>57</td>
<td>357</td>
<td>19</td>
<td>123</td>
<td>–</td>
<td>478</td>
<td>13</td>
<td>2</td>
<td>4</td>
<td>18</td>
<td>0.20%</td>
</tr>
<tr>
<td>Total (countries with existing CCyB rate)</td>
<td>63,162</td>
<td>43,458</td>
<td>1,237</td>
<td>955</td>
<td>–</td>
<td>15,090</td>
<td>3,640</td>
<td>42</td>
<td>146</td>
<td>3,828</td>
<td>42.07%</td>
</tr>
<tr>
<td>United States (US)</td>
<td>13,282</td>
<td>49,311</td>
<td>4,106</td>
<td>267</td>
<td>–</td>
<td>17,035</td>
<td>2,313</td>
<td>220</td>
<td>191</td>
<td>2,723</td>
<td>29.92%</td>
</tr>
<tr>
<td>Italy (IT)</td>
<td>879</td>
<td>8,845</td>
<td>31</td>
<td>194</td>
<td>–</td>
<td>709</td>
<td>287</td>
<td>8</td>
<td>106</td>
<td>401</td>
<td>4.40%</td>
</tr>
<tr>
<td>France (FR)</td>
<td>3,700</td>
<td>3,038</td>
<td>356</td>
<td>833</td>
<td>–</td>
<td>353</td>
<td>178</td>
<td>56</td>
<td>2</td>
<td>237</td>
<td>2.60%</td>
</tr>
<tr>
<td>Luxembourg (LU)</td>
<td>1,383</td>
<td>1,646</td>
<td>126</td>
<td>48</td>
<td>–</td>
<td>436</td>
<td>176</td>
<td>13</td>
<td>4</td>
<td>193</td>
<td>2.12%</td>
</tr>
<tr>
<td>India (IN)</td>
<td>1,533</td>
<td>399</td>
<td>2</td>
<td>31</td>
<td>–</td>
<td>22</td>
<td>148</td>
<td>4</td>
<td>1</td>
<td>153</td>
<td>1.68%</td>
</tr>
<tr>
<td>Netherlands (NL)</td>
<td>694</td>
<td>2,751</td>
<td>72</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>133</td>
<td>12</td>
<td>–</td>
<td>145</td>
<td>1.59%</td>
</tr>
<tr>
<td>Canada (CA)</td>
<td>132</td>
<td>2,725</td>
<td>148</td>
<td>38</td>
<td>–</td>
<td>12</td>
<td>103</td>
<td>16</td>
<td>–</td>
<td>120</td>
<td>1.32%</td>
</tr>
<tr>
<td>Germany (DE)</td>
<td>1,761</td>
<td>2,304</td>
<td>162</td>
<td>431</td>
<td>–</td>
<td>–</td>
<td>94</td>
<td>20</td>
<td>–</td>
<td>114</td>
<td>1.26%</td>
</tr>
<tr>
<td>Ireland (IE)</td>
<td>717</td>
<td>1,899</td>
<td>24</td>
<td>6</td>
<td>–</td>
<td>321</td>
<td>100</td>
<td>4</td>
<td>6</td>
<td>109</td>
<td>1.20%</td>
</tr>
<tr>
<td>Spain (ES)</td>
<td>885</td>
<td>468</td>
<td>55</td>
<td>184</td>
<td>–</td>
<td>2</td>
<td>88</td>
<td>7</td>
<td>–</td>
<td>95</td>
<td>1.04%</td>
</tr>
<tr>
<td>Bermuda (BM)</td>
<td>1,079</td>
<td>126</td>
<td>27</td>
<td>22</td>
<td>–</td>
<td>–</td>
<td>87</td>
<td>4</td>
<td>–</td>
<td>91</td>
<td>1.00%</td>
</tr>
<tr>
<td>Total (countries with own funds requirements weights 1% or above)</td>
<td>26,055</td>
<td>73,512</td>
<td>5,109</td>
<td>2,057</td>
<td>–</td>
<td>18,890</td>
<td>3,707</td>
<td>364</td>
<td>310</td>
<td>4,381</td>
<td>48.13%</td>
</tr>
<tr>
<td>Total (rest of the world less than 1% requirement)</td>
<td>7,660</td>
<td>7,496</td>
<td>554</td>
<td>1,281</td>
<td>–</td>
<td>334</td>
<td>758</td>
<td>112</td>
<td>22</td>
<td>892</td>
<td>9.79%</td>
</tr>
<tr>
<td>Total</td>
<td>96,877</td>
<td>124,465</td>
<td>6,900</td>
<td>4,293</td>
<td>–</td>
<td>34,314</td>
<td>8,105</td>
<td>518</td>
<td>478</td>
<td>9,101</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Amount of institution-specific countercyclical capital buffer

- **Total risk exposure amount**: £173,200m
- **Institution specific countercyclical buffer rate** : 0.43%
- **Institution specific countercyclical buffer requirement**: £744m
### Appendix C – Countercyclical Capital Buffer

#### Table 99b: Countercyclical capital buffer for significant subsidiaries

<table>
<thead>
<tr>
<th>Breakdown by Country</th>
<th>General Credit Exposures</th>
<th>Trading book exposures</th>
<th>Securitisation exposures</th>
<th>Own Funds requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sum of long and short positions for trading book exposures for internal models £m</td>
<td>Value of trading book exposures for SA £m</td>
<td>Of which: General credit exposures £m</td>
<td>Of which: Trading book exposures £m</td>
</tr>
<tr>
<td>Lithuania (LT)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Czech Republic (CZ)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>United Kingdom (GB)</td>
<td>7,287</td>
<td>211,518</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Slovakia (SK)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Iceland (IC)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Hong Kong (HK)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Norway (NO)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Sweden (SE)</td>
<td>83</td>
<td>–</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>Total (countries with existing CCyB rate)</td>
<td>7,370</td>
<td>211,518</td>
<td>–</td>
<td>1,494</td>
</tr>
<tr>
<td>Total (rest of the world less than 1% requirement)</td>
<td>57</td>
<td>81</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>7,427</td>
<td>211,599</td>
<td>–</td>
<td>1,494</td>
</tr>
</tbody>
</table>

#### Amount of institution-specific countercyclical capital buffer

- **Total risk exposure amount**: £75,327m
- **Institution specific countercyclical buffer rate**: 1.00%
- **Institution specific countercyclical buffer requirement**: £752m
Appendices

Appendix D – Disclosure on asset encumbrance

Asset encumbrance arises from collateral pledged against secured funding and other collateralised obligations. Barclays funds a portion of trading portfolio assets and other securities via repurchase agreements and other similar borrowing and pledges a portion of customer loans and advances as collateral in securitisation, covered bond and other similar structures. Barclays monitors the mix of secured and unsecured funding sources within the Group’s funding plan and seeks to efficiently utilise available collateral to raise secured funding and meet other collateral requirements. The encumbered assets below will not agree to those disclosed in the Annual Report (page 189). The reported values represent the median of the values reported to the regulator via supervisory returns over the period 31 December 2017 to 31 December 2018. The Annual Report disclosure is reported as at year end. There is a difference due to the differences in consolidation between the Annual Report (IFRS consolidation) and the Pillar 3 (regulatory consolidation).

Template A – Assets

<table>
<thead>
<tr>
<th></th>
<th>Carrying amount of encumbered assets £bn</th>
<th>Fair value of encumbered assets £bn</th>
<th>Carrying amount of non-encumbered assets £bn</th>
<th>Fair value of non-encumbered assets £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>010 Assets of the institution</td>
<td>193.0</td>
<td>–</td>
<td>950.3</td>
<td>–</td>
</tr>
<tr>
<td>030 Equity instruments</td>
<td>30.2</td>
<td>30.2</td>
<td>25.2</td>
<td>25.2</td>
</tr>
<tr>
<td>040 Debt securities</td>
<td>62.7</td>
<td>62.7</td>
<td>61.1</td>
<td>61.1</td>
</tr>
<tr>
<td>120 Other assets</td>
<td>–</td>
<td>–</td>
<td>244.1</td>
<td>–</td>
</tr>
</tbody>
</table>

Template B – Collateral received

<table>
<thead>
<tr>
<th></th>
<th>Fair value of collateral received or own debt securities issued £bn</th>
<th>Fair value of collateral received or own debt securities issued available for encumbrance £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>130 Collateral received by the institution</td>
<td>531.2</td>
<td>61.5</td>
</tr>
<tr>
<td>150 Equity instruments</td>
<td>89.8</td>
<td>19.1</td>
</tr>
<tr>
<td>160 Debt securities</td>
<td>451.9</td>
<td>42.5</td>
</tr>
<tr>
<td>230 Other collateral received</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>240 Own debt securities issued other than own covered bonds or ABSs</td>
<td>–</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Template C – Encumbered assets/collateral received and associated liabilities

<table>
<thead>
<tr>
<th></th>
<th>Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered £bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>010 Carrying amount of selected financial liabilities</td>
<td>242.7                                                                                     462.5</td>
</tr>
</tbody>
</table>

The Group’s median asset encumbrance for 2018 was £193.0bn, which primarily related to firm financing of trading portfolio assets and other securities, cash collateral and secured funding against loans and advances to customers. Encumbered assets have been identified in a manner consistent with the Group’s reporting requirements under CRR. Securities and commodity assets are considered encumbered when they have been pledged or used to secure, collateralise or credit enhance a transaction which impacts their transferability and free use.
Appendix E – Disclosures on remuneration

Barclays PLC remuneration

The following disclosures are made in accordance with Article 450 of the Capital Requirements Regulation, the Basel Committee on Banking Supervision (BCBS) Pillar 3 disclosure requirements standard (March 2017) and the EBA Guidelines on sound remuneration policies.

Information on decision-making policies for remuneration and the links between pay and performance and Barclays’ remuneration policy and process (including information on remuneration design, performance measurement and risk adjustment, deferral and vesting, fixed to variable remuneration ratio and variable remuneration and benefits policy) and details of Barclays PLC Directors’ remuneration for 2018 is contained in the Remuneration report, which can be found on pages 99 to 126 of the 2018 Annual Report.

### Total remuneration for the financial year

<table>
<thead>
<tr>
<th></th>
<th>All employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individuals</td>
<td>90,441</td>
</tr>
<tr>
<td>Fixed remuneration (£m)</td>
<td>5,232</td>
</tr>
<tr>
<td>Variable remuneration (£m)</td>
<td>1,649</td>
</tr>
<tr>
<td>Total remuneration (£m)</td>
<td>6,881</td>
</tr>
</tbody>
</table>

### Barclays PLC Material Risk Takers (MRTs)

MRTs are the members of the Barclays PLC Board, the Barclays Bank UK PLC Board and the Barclays Bank PLC Board and Barclays’ Group employees whose professional activities could have a material impact on the Group’s risk profile. A total of 1,590 individuals were MRTs in 2018 (2017: 1,642 or 1,570 excluding Barclays Africa Group Limited). ‘Senior management’ means members of the Barclays PLC Board (executive Directors and non-executive Directors) and members of the Barclays Group Executive Committee in accordance with Article 3(9) of CRDIV.

Senior management have a minimum shareholding requirement which for the executive Directors is Barclays’ shares worth two times Total Fixed Pay (Fixed Pay plus Pension) within 5 years of date of appointment, for non-executive Directors is to retain all Barclays’ shares bought with £30,000 (£100,000 for the Chairman) of their basic fees each year until they retire from the Board and for Group Executive Committee is Barclays’ shares worth two times salary within 5 years of date of appointment. Other MRTs do not have a minimum shareholding requirement.

Barclays’ major business areas are Barclays UK (which encompasses personal and business banking in the UK) and Barclays International (which encompasses corporate and investment banking and consumer, cards and payments). ‘Barclays Other’ includes internal control functions and corporate functions.

### Remuneration for the financial year

#### Fixed remuneration

<table>
<thead>
<tr>
<th></th>
<th>Senior management</th>
<th>Barclays International</th>
<th>Barclays UK</th>
<th>Barclays Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individuals</td>
<td>22</td>
<td>992</td>
<td>56</td>
<td>520</td>
</tr>
<tr>
<td>Total fixed remuneration (£m)</td>
<td>26</td>
<td>493</td>
<td>17</td>
<td>167</td>
</tr>
<tr>
<td>Fixed cash remuneration (£m)</td>
<td>17</td>
<td>488</td>
<td>17</td>
<td>167</td>
</tr>
<tr>
<td>Fixed remuneration in shares (£m)</td>
<td>9</td>
<td>5</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>of which subject to holding period (£m)</td>
<td>9</td>
<td>5</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

#### Variable remuneration

<table>
<thead>
<tr>
<th></th>
<th>Senior management</th>
<th>Barclays International</th>
<th>Barclays UK</th>
<th>Barclays Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individuals</td>
<td>9</td>
<td>868</td>
<td>47</td>
<td>444</td>
</tr>
<tr>
<td>Total variable remuneration (£m)</td>
<td>30</td>
<td>552</td>
<td>13</td>
<td>103</td>
</tr>
<tr>
<td>Total cash bonus (£m)</td>
<td>12</td>
<td>278</td>
<td>7</td>
<td>57</td>
</tr>
<tr>
<td>of which deferred (£m)</td>
<td>10</td>
<td>168</td>
<td>3</td>
<td>24</td>
</tr>
<tr>
<td>Total share bonus (£m)</td>
<td>13</td>
<td>274</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>of which deferred or subject to holding period (£m)</td>
<td>13</td>
<td>274</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>Long-term incentive award (£m)</td>
<td>5</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total remuneration (£m)</td>
<td>56</td>
<td>1,045</td>
<td>30</td>
<td>270</td>
</tr>
</tbody>
</table>

#### Notes

- As senior management are comprised of members of the Barclays PLC Board and members of the Barclays Group Executive Committee, it is not appropriate to separate by business area.
- Fixed remuneration takes the form of cash and/or shares and pensions and benefits in line with policy. Variable remuneration takes the form of cash and/or shares and there are no other forms of variable remuneration.
- Fixed cash remuneration includes an estimate for pensions and benefits during the year. Fixed cash remuneration is not subject to holding periods.
- Face value at grant. Outcome contingent on future performance.
## Deferred remuneration – Senior management

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at 1 January 2018</td>
<td>64</td>
<td>12</td>
<td>52</td>
</tr>
<tr>
<td>Awarded in year</td>
<td>32</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>Adjusted through</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments</td>
<td>(1)</td>
<td>–</td>
<td>(1)</td>
</tr>
<tr>
<td>ex post implicit adjustments</td>
<td>(12)</td>
<td>–</td>
<td>(12)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Paid in year</td>
<td>(27)</td>
<td>(2)</td>
<td>(25)</td>
</tr>
<tr>
<td><strong>Balance as at 31 December 2018</strong></td>
<td><strong>56</strong></td>
<td><strong>17</strong></td>
<td><strong>39</strong></td>
</tr>
<tr>
<td>of which vested</td>
<td>9</td>
<td>–</td>
<td>9</td>
</tr>
<tr>
<td>of which unvested</td>
<td>47</td>
<td>17</td>
<td>30</td>
</tr>
</tbody>
</table>

## Deferred Remuneration – Other MRTs

### Barclays International

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at 1 January 2018</td>
<td>772</td>
<td>400</td>
<td>372</td>
</tr>
<tr>
<td>Awarded in year</td>
<td>412</td>
<td>144</td>
<td>268</td>
</tr>
<tr>
<td>Adjusted through</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>ex post implicit adjustments</td>
<td>(108)</td>
<td>–</td>
<td>(108)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(36)</td>
<td>(19)</td>
<td>(17)</td>
</tr>
<tr>
<td>Paid in year</td>
<td>(414)</td>
<td>(197)</td>
<td>(217)</td>
</tr>
<tr>
<td><strong>Balance as at 31 December 2018</strong></td>
<td><strong>626</strong></td>
<td><strong>328</strong></td>
<td><strong>298</strong></td>
</tr>
<tr>
<td>of which vested</td>
<td>42</td>
<td>–</td>
<td>42</td>
</tr>
<tr>
<td>of which unvested</td>
<td>584</td>
<td>328</td>
<td>256</td>
</tr>
</tbody>
</table>

### Barclays UK

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at 1 January 2018</td>
<td>11</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Awarded in year</td>
<td>8</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Adjusted through</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>ex post implicit adjustments</td>
<td>(2)</td>
<td>–</td>
<td>(2)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(1)</td>
<td>(1)</td>
<td>–</td>
</tr>
<tr>
<td>Paid in year</td>
<td>(5)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td><strong>Balance as at 31 December 2018</strong></td>
<td><strong>11</strong></td>
<td><strong>6</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td>of which vested</td>
<td>1</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>of which unvested</td>
<td>10</td>
<td>6</td>
<td>4</td>
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</table>

### Barclays Other

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at 1 January 2018</td>
<td>89</td>
<td>43</td>
<td>46</td>
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<tr>
<td>Awarded in year</td>
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<td>23</td>
<td>50</td>
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<tr>
<td>Adjusted through</td>
<td></td>
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</tr>
<tr>
<td>ex post explicit adjustments</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>ex post implicit adjustments</td>
<td>(17)</td>
<td>–</td>
<td>(17)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(3)</td>
<td>(2)</td>
<td>(1)</td>
</tr>
<tr>
<td>Paid in year</td>
<td>(50)</td>
<td>(19)</td>
<td>(31)</td>
</tr>
<tr>
<td><strong>Balance as at 31 December 2018</strong></td>
<td><strong>92</strong></td>
<td><strong>45</strong></td>
<td><strong>47</strong></td>
</tr>
<tr>
<td>of which vested</td>
<td>8</td>
<td>–</td>
<td>8</td>
</tr>
<tr>
<td>of which unvested</td>
<td>84</td>
<td>45</td>
<td>39</td>
</tr>
</tbody>
</table>

**Notes**

a. Total reduction due to direct adjustments such as malus and clawback or non-achievement of LTIP performance conditions.

b. Total change in remuneration due to movements in share price or exchange rate during the year.

c. All outstanding awards are exposed to ex post explicit and/or implicit adjustment.
Appendices

Appendix E – Disclosures on remuneration

Joining and Severance Payments

<table>
<thead>
<tr>
<th></th>
<th>Senior management</th>
<th>Barclays International</th>
<th>Barclays UK</th>
<th>Barclays Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sign-on awards</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Number of beneficiaries</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Made during the year (£m)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Buy-out awards</td>
<td>–</td>
<td>37</td>
<td>10</td>
<td>–</td>
</tr>
<tr>
<td>Number of beneficiaries</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Made during the year (£m)</td>
<td>–</td>
<td>38</td>
<td>5</td>
<td>–</td>
</tr>
<tr>
<td>Severance awards*</td>
<td>–</td>
<td>32</td>
<td>21</td>
<td>–</td>
</tr>
<tr>
<td>Number of beneficiaries</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Made during the year (£m)</td>
<td>–</td>
<td>5</td>
<td>6</td>
<td>–</td>
</tr>
<tr>
<td>of which paid during the year (£m)</td>
<td>–</td>
<td>5</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>of which deferred (£m)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Highest individual award (£m)</td>
<td>–</td>
<td>1</td>
<td>3</td>
<td>–</td>
</tr>
</tbody>
</table>

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

Number of MRTs by band*

<table>
<thead>
<tr>
<th>Remuneration band</th>
<th>2018 Number of MRTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>€1,000,001 to €1,500,000</td>
<td>246</td>
</tr>
<tr>
<td>€1,500,001 to €2,000,000</td>
<td>131</td>
</tr>
<tr>
<td>€2,000,001 to €2,500,000</td>
<td>62</td>
</tr>
<tr>
<td>€2,500,001 to €3,000,000</td>
<td>40</td>
</tr>
<tr>
<td>€3,000,001 to €3,500,000</td>
<td>18</td>
</tr>
<tr>
<td>€3,500,001 to €4,000,000</td>
<td>10</td>
</tr>
<tr>
<td>€4,000,001 to €4,500,000</td>
<td>9</td>
</tr>
<tr>
<td>€4,500,001 to €5,000,000</td>
<td>5</td>
</tr>
<tr>
<td>€5,000,001 to €6,000,000</td>
<td>6</td>
</tr>
<tr>
<td>€6,000,001 to €7,000,000</td>
<td>7</td>
</tr>
<tr>
<td>€7,000,001 to €8,000,000</td>
<td>5</td>
</tr>
<tr>
<td>€8,000,001 to €9,000,000</td>
<td>2</td>
</tr>
<tr>
<td>€9,000,001 to €10,000,000</td>
<td>–</td>
</tr>
<tr>
<td>€10,000,001 to €11,000,000</td>
<td>–</td>
</tr>
<tr>
<td>€11,000,001 to €12,000,000</td>
<td>–</td>
</tr>
<tr>
<td>€12,000,001 to €13,000,000</td>
<td>1</td>
</tr>
</tbody>
</table>

Note
a The table is prepared in Euros in accordance with Article 450 of the Capital Requirements Regulation. Data has been converted into euros using the rates published by the European Commission for financial programming and budget for December of the reported year.
Appendices

Appendix E – Disclosures on remuneration

Barclays Bank PLC remuneration

The following disclosures are made in accordance with Article 450 of the Capital Requirements Regulation, the Basel Committee on Banking Supervision (BCBS) Pillar 3 disclosure requirements standard (March 2017) and the EBA Guidelines on sound remuneration policies.

Information on decision-making policies for remuneration and the links between pay and performance and Barclays’ remuneration policy and process (including information on remuneration design, performance measurement and risk adjustment, deferral and vesting, fixed to variable remuneration ratio and variable remuneration and benefits policy) is contained in the Barclays PLC Remuneration report, which can be found on pages 99 to 126 of the Barclays PLC 2018 Annual Report. Details of Barclays Bank PLC Directors’ remuneration for 2018 can be found in the ‘Related party transactions and Directors’ remuneration’ note to the financial statements in the Barclays Bank PLC Annual Report 2018.

<table>
<thead>
<tr>
<th>Total remuneration for the financial year</th>
<th>All employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individuals</td>
<td>23,533</td>
</tr>
<tr>
<td>Fixed remuneration (£m)</td>
<td>2,817</td>
</tr>
<tr>
<td>Variable remuneration (£m)</td>
<td>1,243</td>
</tr>
<tr>
<td>Total remuneration (£m)</td>
<td>4,060</td>
</tr>
</tbody>
</table>

Barclays Bank PLC Material Risk Takers (MRTs)

MRTs are the members of the Barclays Bank PLC Board and Barclays Bank PLC employees whose professional activities could have a material impact on Barclays Bank PLC’s risk profile. A total of 1,208 individuals were MRTs in 2018. ‘Senior management’ means members of the Barclays Bank PLC Board (executive Directors and non-executive Directors) and members of the Barclays Bank PLC Executive Committee in accordance with Article 3(9) of CRDIV.

Barclays Bank PLC’s major business areas are Corporate and Investment Banking (“CIB”) and Consumer, Cards and Payments (“CCP”). ‘BBPLC Other’ includes internal control functions and corporate functions.

<table>
<thead>
<tr>
<th>Remuneration for the financial year</th>
<th>Senior management</th>
<th>CIB</th>
<th>CCP</th>
<th>BBPLC Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed remunerationb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of individuals</td>
<td>35</td>
<td>910</td>
<td>35</td>
<td>226</td>
</tr>
<tr>
<td>Total fixed remuneration (£m)</td>
<td>50</td>
<td>446</td>
<td>14</td>
<td>72</td>
</tr>
<tr>
<td>Fixed remuneration (£m)c</td>
<td>42</td>
<td>444</td>
<td>14</td>
<td>72</td>
</tr>
<tr>
<td>Fixed remuneration in shares (£m)</td>
<td>8</td>
<td>2</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>of which subject to holding period (£m)</td>
<td>8</td>
<td>2</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Variable remunerationb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of individuals</td>
<td>25</td>
<td>809</td>
<td>35</td>
<td>204</td>
</tr>
<tr>
<td>Total variable remuneration (£m)</td>
<td>54</td>
<td>506</td>
<td>14</td>
<td>45</td>
</tr>
<tr>
<td>Total cash bonus (£m)</td>
<td>24</td>
<td>255</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>of which deferred (£m)</td>
<td>19</td>
<td>152</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Total share bonus (£m)</td>
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<td>251</td>
<td>7</td>
<td>20</td>
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<tr>
<td>of which deferred or subject to holding period (£m)</td>
<td>25</td>
<td>251</td>
<td>7</td>
<td>20</td>
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<tr>
<td>Long-term incentive award (£m)d</td>
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<td>–</td>
<td>–</td>
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<tr>
<td>Total remuneration (£m)</td>
<td>104</td>
<td>952</td>
<td>28</td>
<td>117</td>
</tr>
</tbody>
</table>

Notes

a As senior management are comprised of members of the Barclays Bank PLC Board and members of the Barclays Bank PLC Executive Committee, it is not appropriate to separate by business area.

b Fixed remuneration takes the form of cash and/or shares and pensions and benefits in line with policy. Variable remuneration takes the form of cash and/or shares and there are no other forms of variable remuneration.

c Fixed cash remuneration includes an estimate for pensions and benefits during the year. Fixed cash remuneration is not subject to holding periods.

d Face value at grant. Outcome contingent on future performance.
### Appendix E – Disclosures on remuneration

#### Deferred remuneration – Senior management

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance as at 1 January 2018</strong></td>
<td>90</td>
<td>28</td>
<td>62</td>
</tr>
<tr>
<td><strong>Awarded in year</strong></td>
<td>56</td>
<td>14</td>
<td>42</td>
</tr>
<tr>
<td><strong>Adjusted through</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments</td>
<td>(1)</td>
<td>–</td>
<td>(1)</td>
</tr>
<tr>
<td>ex post implicit adjustments</td>
<td>(17)</td>
<td>–</td>
<td>(17)</td>
</tr>
<tr>
<td><strong>Forfeited</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Paid in year</strong></td>
<td>(41)</td>
<td>(11)</td>
<td>(30)</td>
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<tr>
<td><strong>Balance as at 31 December 2018</strong></td>
<td>87</td>
<td>31</td>
<td>56</td>
</tr>
<tr>
<td>of which vested</td>
<td>9</td>
<td>–</td>
<td>9</td>
</tr>
<tr>
<td>of which unvested</td>
<td>78</td>
<td>31</td>
<td>47</td>
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</table>

#### Deferred Remuneration – Other MRTs

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>CIB</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
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</thead>
<tbody>
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<td>368</td>
<td>338</td>
<td></td>
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<tr>
<td><strong>Awarded in year</strong></td>
<td>369</td>
<td>132</td>
<td>237</td>
<td></td>
</tr>
<tr>
<td><strong>Adjusted through</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>ex post implicit adjustments</td>
<td>(97)</td>
<td>–</td>
<td>(97)</td>
<td></td>
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<td><strong>Forfeited</strong></td>
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<td>(15)</td>
<td></td>
</tr>
<tr>
<td><strong>Paid in year</strong></td>
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<td>(198)</td>
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<td><strong>Balance as at 31 December 2018</strong></td>
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<td>301</td>
<td>265</td>
<td></td>
</tr>
<tr>
<td>of which vested</td>
<td>37</td>
<td>–</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>of which unvested</td>
<td>529</td>
<td>301</td>
<td>228</td>
<td></td>
</tr>
</tbody>
</table>

#### Deferred Remuneration – Other MRTs

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>CCP</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance as at 1 January 2018</strong></td>
<td>11</td>
<td>6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Awarded in year</strong></td>
<td>10</td>
<td>3</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td><strong>Adjusted through</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
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<tr>
<td>ex post implicit adjustments</td>
<td>(2)</td>
<td>–</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td><strong>Forfeited</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td><strong>Paid in year</strong></td>
<td>(6)</td>
<td>(3)</td>
<td>(3)</td>
<td></td>
</tr>
<tr>
<td><strong>Balance as at 31 December 2018</strong></td>
<td>13</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>of which vested</td>
<td>1</td>
<td>–</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>of which unvested</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

#### Deferred Remuneration – Other MRTs

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>BBPLC Other</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance as at 1 January 2018</strong></td>
<td>39</td>
<td>18</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td><strong>Awarded in year</strong></td>
<td>31</td>
<td>11</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td><strong>Adjusted through</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>ex post implicit adjustments</td>
<td>(7)</td>
<td>–</td>
<td>(7)</td>
<td></td>
</tr>
<tr>
<td><strong>Forfeited</strong></td>
<td>(1)</td>
<td>(1)</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td><strong>Paid in year</strong></td>
<td>(22)</td>
<td>(9)</td>
<td>(13)</td>
<td></td>
</tr>
<tr>
<td><strong>Balance as at 31 December 2018</strong></td>
<td>40</td>
<td>19</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>of which vested</td>
<td>4</td>
<td>–</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>of which unvested</td>
<td>36</td>
<td>19</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

a Total reduction due to direct adjustments such as malus and clawback or non-achievement of LTIP performance conditions.
b Total change in remuneration due to movements in share price or exchange rate during the year.
c All outstanding awards are exposed to ex post explicit and/or implicit adjustment.
## Appendix E – Disclosures on remuneration

### Joining and Severance Payments

<table>
<thead>
<tr>
<th></th>
<th>Senior management</th>
<th>Other MRTs</th>
<th>BBPLC</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sign-on awards</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of beneficiaries</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Made during the year (£m)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Buy-out awards</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of beneficiaries</td>
<td>1</td>
<td>34</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Made during the year (£m)</td>
<td>0.5</td>
<td>35.5</td>
<td>2.4</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Severance awards</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of beneficiaries</td>
<td>3</td>
<td>20</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Made during the year (£m)</td>
<td>3.2</td>
<td>3.3</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>of which paid during the year (£m)</td>
<td>3.2</td>
<td>3.3</td>
<td>0.3</td>
<td>0.6</td>
</tr>
<tr>
<td>of which deferred (£m)</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Highest individual award (£m)</td>
<td>3.0</td>
<td>1.0</td>
<td>0.3</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Note

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

### Number of MRTs by band

<table>
<thead>
<tr>
<th>Remuneration band</th>
<th>2018</th>
<th>Number of MRTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>€1,000,001 to €1,500,000</td>
<td>216</td>
<td></td>
</tr>
<tr>
<td>€1,500,001 to €2,000,000</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>€2,000,001 to €2,500,000</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>€2,500,001 to €3,000,000</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>€3,000,001 to €3,500,000</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>€3,500,001 to €4,000,000</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>€4,000,001 to €4,500,000</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>€4,500,001 to €5,000,000</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>€5,000,001 to €6,000,000</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>€6,000,001 to €7,000,000</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>€7,000,001 to €8,000,000</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>€8,000,001 to €9,000,000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>€9,000,001 to €10,000,000</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>€10,000,001 to €11,000,000</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>€11,000,001 to €12,000,000</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>€12,000,001 to €13,000,000</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Note

a The table is prepared in Euros in accordance with Article 450 of the Capital Requirements Regulation. Data has been converted into euros using the rates published by the European Commission for financial programming and budget for December of the reported year.
Appendices

Appendix E – Disclosures on remuneration

Barclays Bank UK PLC remuneration

The following disclosures are made in accordance with Article 450 of the Capital Requirements Regulation, the Basel Committee on Banking Supervision (BCBS) Pillar 3 disclosure requirements standard (March 2017) and the EBA Guidelines on sound remuneration policies.

Information on decision-making policies for remuneration and the links between pay and performance and Barclays’ remuneration policy and process (including information on remuneration design, performance measurement and risk adjustment, deferral and vesting, fixed to variable remuneration ratio and variable remuneration and benefits policy) is contained in the Barclays PLC Remuneration report, which can be found on pages 99 to 126 of the Barclays PLC 2018 Annual Report. Details of Barclays Bank UK PLC Directors’ remuneration for 2018 can be found in the ‘Related party transactions and Directors’ remuneration’ note to the financial statements in the Barclays Bank UK PLC Annual Report 2018.

<table>
<thead>
<tr>
<th>Total remuneration for the financial year</th>
<th>All employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individuals</td>
<td>26,917</td>
</tr>
<tr>
<td>Fixed remuneration (£m)</td>
<td>715</td>
</tr>
<tr>
<td>Variable remuneration (£m)</td>
<td>142</td>
</tr>
<tr>
<td>Total remuneration (£m)</td>
<td>857</td>
</tr>
</tbody>
</table>

Barclays Bank UK PLC Material Risk Takers (MRTs)

MRTs are the members of the Barclays Bank UK PLC Board and Barclays Bank UK PLC’s employees whose professional activities could have a material impact on Barclays Bank UK PLC’s risk profile. A total of 118 individuals were MRTs in 2018. ‘Senior management’ means members of the Barclays Bank UK PLC Board (executive Directors and non-executive Directors) and members of the Barclays Bank UK PLC Executive Committee in accordance with Article 3(9) of CRDIV.

Barclays Bank UK PLC’s major business areas are Personal Banking and Business Banking. ‘BBUKPLC Other’ includes internal control functions and corporate functions.

### Remuneration for the financial year

<table>
<thead>
<tr>
<th></th>
<th>Senior management</th>
<th>Other MRTs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Personal Banking</td>
<td>Business Banking</td>
</tr>
<tr>
<td>Fixed remunerationb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of individuals</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>Total fixed remuneration (£m)</td>
<td>13.8</td>
<td>8.4</td>
</tr>
<tr>
<td>Fixed cash remuneration (£m)c</td>
<td>13.1</td>
<td>8.4</td>
</tr>
<tr>
<td>Fixed remuneration in shares (£m)</td>
<td>0.7</td>
<td>–</td>
</tr>
<tr>
<td>of which subject to holding period (£m)</td>
<td>0.7</td>
<td>–</td>
</tr>
<tr>
<td>Variable remunerationb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of individuals</td>
<td>17</td>
<td>27</td>
</tr>
<tr>
<td>Total variable remuneration (£m)</td>
<td>12.2</td>
<td>5.9</td>
</tr>
<tr>
<td>Total cash bonus (£m)</td>
<td>6.1</td>
<td>3.2</td>
</tr>
<tr>
<td>of which deferred (£m)</td>
<td>3.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Total share bonus (£m)</td>
<td>6.1</td>
<td>2.7</td>
</tr>
<tr>
<td>of which deferred or subject to holding period (£m)</td>
<td>6.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Long-term incentive award(£m)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total remuneration (£m)</td>
<td>26.0</td>
<td>14.3</td>
</tr>
</tbody>
</table>

Notes

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

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at 1 January 2018</td>
<td>13.7</td>
<td>6.6</td>
<td>7.1</td>
</tr>
<tr>
<td>Awarded in year</td>
<td>9.6</td>
<td>3.0</td>
<td>6.6</td>
</tr>
<tr>
<td>Adjusted through</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments(a)</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>ex post implicit adjustments(b)</td>
<td>(2.3)</td>
<td>–</td>
<td>(2.3)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Paid in year</td>
<td>(6.6)</td>
<td>(2.4)</td>
<td>(4.2)</td>
</tr>
<tr>
<td>Balance as at 31 December 2018(c)</td>
<td>14.4</td>
<td>7.2</td>
<td>7.2</td>
</tr>
<tr>
<td>of which vested</td>
<td>1.6</td>
<td>–</td>
<td>1.6</td>
</tr>
<tr>
<td>of which unvested</td>
<td>12.8</td>
<td>7.2</td>
<td>5.6</td>
</tr>
</tbody>
</table>

### Deferred Remuneration – Other MRTs

#### Personal Banking

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at 1 January 2018</td>
<td>4.2</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Awarded in year</td>
<td>3.8</td>
<td>1.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Adjusted through</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments(a)</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>ex post implicit adjustments(b)</td>
<td>(0.8)</td>
<td>–</td>
<td>(0.8)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(0.4)</td>
<td>(0.2)</td>
<td>(0.2)</td>
</tr>
<tr>
<td>Paid in year</td>
<td>(2.6)</td>
<td>(1.0)</td>
<td>(1.6)</td>
</tr>
<tr>
<td>Balance as at 31 December 2018(c)</td>
<td>4.2</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>of which vested</td>
<td>0.5</td>
<td>–</td>
<td>0.5</td>
</tr>
<tr>
<td>of which unvested</td>
<td>3.7</td>
<td>2.1</td>
<td>1.6</td>
</tr>
</tbody>
</table>

#### Business Banking

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at 1 January 2018</td>
<td>0.5</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Awarded in year</td>
<td>0.3</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Adjusted through</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments(a)</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>ex post implicit adjustments(b)</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Forfeited</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Paid in year</td>
<td>(0.3)</td>
<td>(0.1)</td>
<td>(0.2)</td>
</tr>
<tr>
<td>Balance as at 31 December 2018(c)</td>
<td>0.5</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>of which vested</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>of which unvested</td>
<td>0.5</td>
<td>0.3</td>
<td>0.2</td>
</tr>
</tbody>
</table>

#### BBUK PLC Other

<table>
<thead>
<tr>
<th>All figures in £m</th>
<th>Total</th>
<th>Cash</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at 1 January 2018</td>
<td>3.1</td>
<td>1.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Awarded in year</td>
<td>1.8</td>
<td>0.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Adjusted through</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ex post explicit adjustments(a)</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>ex post implicit adjustments(b)</td>
<td>(0.5)</td>
<td>–</td>
<td>(0.5)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Paid in year</td>
<td>(1.7)</td>
<td>(0.7)</td>
<td>(1.0)</td>
</tr>
<tr>
<td>Balance as at 31 December 2018(c)</td>
<td>2.7</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>of which vested</td>
<td>0.2</td>
<td>–</td>
<td>0.2</td>
</tr>
<tr>
<td>of which unvested</td>
<td>2.5</td>
<td>1.3</td>
<td>1.2</td>
</tr>
</tbody>
</table>

### Notes

\(a\) Total reduction due to direct adjustments such as malus and clawback.

\(b\) Total change in remuneration due to movements in share price or exchange rate during the year.

\(c\) All outstanding awards are exposed to ex post explicit and/or implicit adjustment.
### Number of MRTs by band

<table>
<thead>
<tr>
<th>Remuneration band</th>
<th>Number of MRTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>€1,000,001 to €1,500,000</td>
<td>12</td>
</tr>
<tr>
<td>€1,500,001 to €2,000,000</td>
<td>3</td>
</tr>
<tr>
<td>€2,000,001 to €2,500,000</td>
<td>–</td>
</tr>
<tr>
<td>€2,500,001 to €3,000,000</td>
<td>1</td>
</tr>
<tr>
<td>€3,000,001 to €3,500,000</td>
<td>–</td>
</tr>
<tr>
<td>€3,500,001 to €4,000,000</td>
<td>–</td>
</tr>
<tr>
<td>€4,000,001 to €4,500,000</td>
<td>–</td>
</tr>
<tr>
<td>€4,500,001 to €5,000,000</td>
<td>–</td>
</tr>
<tr>
<td>€5,000,001 to €6,000,000</td>
<td>1</td>
</tr>
</tbody>
</table>

**Notes**

a. The table is prepared in Euros in accordance with Article 450 of the Capital Requirements Regulation. Data has been converted into euros using the rates published by the European Commission for financial programming and budget for December of the reported year.

b. No Barclays Bank UK PLC MRTs were awarded any sign-on awards, buyout awards or severance awards in 2018.
### Appendices

## Appendix F – CRD IV reference

### Table 100: CRD IV reference

<table>
<thead>
<tr>
<th>CRR ref.</th>
<th>High-level summary</th>
<th>Compliance reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>431 (1)</td>
<td>Requirement to publish Pillar 3 disclosures</td>
<td>Barclays publishes Pillar 3 disclosures</td>
</tr>
<tr>
<td>431 (2)</td>
<td>Firms with permission to use specific operational risk methodologies must disclose operational risk information.</td>
<td>The Operational Risk section on page 182 contains a description of the operational risk framework, and required Pillar 3 disclosures.</td>
</tr>
<tr>
<td>431 (3)</td>
<td>Institution must have a policy covering frequency of disclosures. Their verification, comprehensiveness and overall appropriateness.</td>
<td>Barclays has a dedicated Pillar 3 policy.</td>
</tr>
<tr>
<td>431 (4)</td>
<td>Explanation of ratings decision upon request</td>
<td>Barclays provides explanations of rating decisions to SMEs whose loan applications were declined in writing, and suggests alternative sources of finance. Barclays participates in a formal appeals process, one of the successful initiatives implemented as part of Business Finance Taskforce, with a government-appointed overseer. In the case of larger corporates, written explanations are not usually requested as direct discussions with relationship managers take place.</td>
</tr>
</tbody>
</table>

### Non-material, proprietary or confidential information

| 432 (1)  | Institutions may omit information that is not material if certain conditions are respected. | Compliance with this provision is covered by Barclays’ policy. |
| 432 (2)  | Institutions may omit information that is proprietary or confidential if certain conditions are respected. | Compliance with this provision is covered by Barclays’ policy. |
| 432 (3)  | Where 432 (1) and (2) apply this must be stated in the disclosures, and more general information must be disclosed. | This table specifies where disclosures are omitted. |
| 432 (4)  | Use of 432 (1) or (2) is without prejudice to scope of liability for failure to disclose material information | |

### Frequency of disclosure

| 433      | Disclosures must be published once a year at a minimum, and more frequently if necessary. | Compliance with this provision is covered by Barclays’ policy. See under “Basis of preparation” (page 6). |

### Means of disclosures

| 434 (1)  | To include of disclosures in one appropriate medium, or provide clear cross-references. | Most disclosures are contained within this document. Signposting directs the reader to other publications where appropriate. Note that remuneration disclosures are contained in a dedicated publication. |
| 434 (2)  | Disclosures made under other requirements (e.g. accounting) can be used to satisfy Pillar 3 if appropriate. | Any cross-references to accounting or other disclosures are clearly signposted in this document. In particular, see page 221 for “Location of Risk Disclosures”. |

### Risk management objectives and policies

| 435 (1) (a) | Disclose information on strategies and processes; organisational structure, reporting systems and risk mitigation/hedging. | Risk management strategy: pp 135-142 |
| 435 (1) (b) | | Credit Risk: pp 143-159 |
| 435 (1) (c) | | Counterparty Credit Risk: pp 160-162 |
| 435 (1) (d) | | Market Risk: pp 163-170 |
| 435 (1) (e) | | Securitisation Exposures: pp 171-174 |
| 435 (1) (f) | | Treasury and Capital Risk: pp 175-181 |
| 435 (1) (g) | | Operational Risk: pp 182-185 |
| 435 (1) (h) | | Model Risk: pp 186-187 |
| 435 (1) (i) | | Conduct Risk: pp 188-189 |
| 435 (1) (j) | | Reputation risk: pp 190-191 |
| 435 (1) (k) | | Legal Risk: pp 192-193 |
| 435 (2) (a) | Inclusion of a declaration approved by the Board on adequacy of risk management arrangements. | See page 139 of the 2018 Pillar 3 Report. This statement covers all Principal Risks. |
| 435 (2) (b) | Inclusion of a concise risk statement approved by the Board. | See page 140 of the 2018 Pillar 3 Report. This statement covers all Principal Risks. |
| 435 (2) (c) | Information on governance arrangements, including information on Board composition and recruitment, and risk committees. | See page 137 for a description of the risk committees. Pages 49-53 of the Annual Report contains information on Board composition, experience and recruitment. |
| 435 (2) (d) | Number of directorships held by directors. | Please see Page 49-53 of the 2018 Annual Report. |
| 435 (2) (e) | Recruitment policy of Board members, their experience and expertise. | Please see Page 49-53 of the 2018 Annual Report. |
| 435 (2) (f) | Policy on diversity of Board membership and results against targets. | Please see Page 49-53 of the 2018 Annual Report. |
| 435 (2) (g) | Disclosure of whether a dedicated risk committee is in place, and number of meetings in the year. | Please see Page 77-82 of the 2018 Annual Report. |
| 435 (2) (h) | Description of information flow on risk to Board. | Figure on page 137 in the risk management strategy section illustrates the reporting structure to Board committees. |

### Scope of application
### Appendix F – CRD IV reference

#### Table 100: CRD IV reference continued

<table>
<thead>
<tr>
<th>CRR ref.</th>
<th>High-level summary</th>
<th>Compliance reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>436 (a)</td>
<td>Name of institution</td>
<td>See under “Scope of consolidation” (page 10).</td>
</tr>
<tr>
<td>436 (b)</td>
<td>Difference in basis of consolidation for accounting and prudential purposes, naming entities that are:</td>
<td>Figure 1: Summary of regulatory scope of consolidation as at 31.12.18 Page 15 / table 6 : L13 Outline of the differences in the scopes of consolidation (entity by entity)</td>
</tr>
<tr>
<td>436 (b) (i)</td>
<td>Fully consolidated;</td>
<td></td>
</tr>
<tr>
<td>436 (b) (ii)</td>
<td>Proportionally consolidated;</td>
<td></td>
</tr>
<tr>
<td>436 (b) (iii)</td>
<td>Deducted from own funds;</td>
<td></td>
</tr>
<tr>
<td>436 (b) (iv)</td>
<td>Neither consolidated nor deducted.</td>
<td></td>
</tr>
<tr>
<td>436 (c)</td>
<td>Impediments to transfer of funds between parent and subsidiaries</td>
<td>See page 176</td>
</tr>
<tr>
<td>436 (d)</td>
<td>Capital shortfalls in any subsidiaries outside of scope of consolidation</td>
<td>Entities outside the scope of consolidation are appropriately capitalised</td>
</tr>
<tr>
<td>436 (e)</td>
<td>Making use of articles on derogations from a) prudential requirements or b) liquidity requirements for individual subsidiaries/entities</td>
<td>Barclays makes use of these provisions according to its waiver from PRA</td>
</tr>
</tbody>
</table>

#### Own funds

| 437 (1) | Requirements regarding capital resources table | Page 19 / Table 8: Capital resources Page 20 / Table 9: Summary of movements in capital resources Standalone document: Summary of terms and conditions of capital resources |
| 437 (1) (a) | | |
| 437 (1) (b) | | |
| 437 (1) (c) | | |
| 437 (1) (d) (i) | | |
| 437 (1) (d) (ii) | | |
| 437 (1) (d) (iii) | | |
| 437 (1) (e) | | |
| 437 (1) (f) | | |
| 437 (2) | EBA to publish implementation standards for points above. | Barclays follows the implementation standards. |

#### Capital requirements

| 438 (a) | Summary of institution’s approach to assessing adequacy of capital levels. | Discussions of capital calculations are contained in each risk type management section (credit, market and operational). General discussion on capital planning is on pages 181-182 of the 2018 Annual Report. |
| 438 (b) | Result of ICAAP on demand from authorities. | Barclays has not received this request from its regulator. |
| 438 (c) | Capital requirement amounts for credit risk for each Standardised Approach exposure class. | Pages 47-48 and pages 99-100 / Table 30, 63: Minimum capital requirements for credit risk. Various other tables contain capital requirements throughout the report. |
| 438 (d) | Capital requirements amounts for credit risk for each Internal Ratings Based Approach exposure class . | Pages 47-48 and pages 99-100 / Table 30, 63: Minimum capital requirements for credit risk. Page 42 : Barclays shows a nil return for equity investments |
| 438 (d) (i) | | |
| 438 (d) (ii) | | |
| 438 (d) (iii) | | |
| 438 (d) (iv) | | |
| 438 (e) | Capital requirements amounts for market risk or settlement risk, or large exposures where they exceed limits . | Capital requirements for market risk are disclosed in Page 119 / Table 92: Risk weighted assets for operational risk |
| 438 (f) | Capital requirement amounts for operational risk, separately for the basic indicator approach, the standardised approach, and the advanced measurement approaches as applicable. | Page 133 / Table 92: Risk weighted assets for operational risk |
| 438 (endnote) | Requirement to disclose specialised lending exposures and equity exposures in the banking book falling under the simple risk weight approach. | Specialised lending exposures: Page 75 / Table 47: Corporate exposures subject to the slotting approach |

#### Exposure to counterparty credit risk (CCR)

| 439 (a) | Description of process to assign internal capital and credit limits to CCR exposures. | Page 160-162; must link to general credit risk section as we do not address assigning limits |
| 439 (b) | Discussion of process to secure collateral and establishing reserves. | Pages 160-162 |
| 439 (c) | Discussion of management of wrong-way exposures. | Pages 162 |
| 439 (d) | Disclosure of collateral to be provided (outflows) in the event of a ratings downgrade. | See the liquidity risk management section, Appendix pages 176-178 |
| 439 (e) | Derivation of net derivative credit exposure. | Page 110 / Table 70: Counterparty credit exposure by approach |
| 439 (f) | Exposure values for mark-to-market, original exposure, standardised and internal model methods. | Page 102 / Table 64: Impact of netting and collateral held on exposure value |
| 439 (g) | Notional value of credit derivative hedges and current credit exposure by type of exposure. | Page 112 / Table 73: Notional value of credit derivative contracts held for hedging purposes |
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## Remuneration disclosures

450 Remuneration

Appendix E contains the remuneration awards made to Barclays’ Material Risk Takers. See the Directors’ remuneration report (DRR) of the 2018 Annual Report for other remuneration disclosures.

## Leverage

451 (1) (a) Leverage ratio, and breakdown of total exposure measure, including reconciliation to financial statements, and derecognised fiduciary items

Page 32 / Table 19: Leverage ratio common disclosure

451 (1) (b) Description of the risk management approach to mitigate excessive leverage, and factors that impacted the leverage ratio during the year.

See page 178, management of capital risk.

## Use of the IRB approach to credit risk

452 (a) Permission for use of the IRB approach from authority

Pages 12-13, Table 2

452 (b) Internal rating scales, mapped to external ratings;

Page 70 / Table 42: Internal default grade probabilities and mapping to external ratings

452 (b) (ii) Use of internal ratings for purposes other than capital requirement calculations;

Page 151 “Applications of internal ratings”

452 (b) (iii) Management and recognition of credit risk mitigation;

Pages 160-162

452 (b) (iv) Controls around ratings systems.

Pages 152-153 “Management of model risk within Barclays – the control mechanisms for the rating system”

452 (c) Description of ratings processes for each IRB asset class, provided separately

Pages 152. Separate descriptions apply to retail and wholesale classes collectively; hence this is not repeated for each separate class.

Pages 153-155 / Table 93: IRB credit risk models selected features.

452 (d) Exposure values by IRB exposure class, separately for Advanced and Foundation IRB.

This is shown throughout the report.

452 (e) For wholesale exposure classes, disclosed separately by obligor grade:

452 (e) (i) Total exposure, separating loans and undrawn exposures where applicable;

Pages 71 / Table 43: IRB wholesale obligor grade disclosure for central governments & central banks Pages 72 / Table 44: IRB wholesale obligor grade disclosure for institutions Pages 73 / Table 45: IRB wholesale obligor grade disclosure for corporates

452 (e) (ii) Exposure-weighted average risk weight;

Pages 71 / Table 43: IRB wholesale obligor grade disclosure for central governments & central banks Pages 72 / Table 44: IRB wholesale obligor grade disclosure for institutions Pages 73 / Table 45: IRB wholesale obligor grade disclosure for corporates
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## Appendix G – EBA and BCBS reference

This table shows the tables included in the 2018 Pillar 3 report, adopted under guidance received from the EBA.

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<td>Flow statement explaining variations in the market risk-weighted assets (RWA) under the IMA approach and the corresponding capital requirements</td>
<td>Template EU MR2-B Present a flow statement explaining variations in the market RWAs (as specified in Article 92(4)(b)) determined under an Part Three, Title IV, Chapter 5 of the CRR (IMA)</td>
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<td>Table 18</td>
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<td>Summary reconciliation of accounting assets and leverage ratio exposures</td>
<td>Template LRSum Reconciliation of the total leverage exposure and comprises of total IFRS assets used for statutory purposes, regulatory consolidation and other leverage adjustments (as per Commission implementing regulation-EU 2016/200)</td>
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<td>Leverage ratio common disclosure</td>
<td>Template LRCom Leverage ratio calculation and includes additional breakdowns for the leverage exposure measure (as per Commission implementing regulation-EU 2016/200)</td>
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<td>Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)</td>
<td>Template LRSPl Breakdown of the on-balance sheet exposures excluding derivatives, SFTs and exempted exposures, by asset class as per row 1 on LRCom (as per Commission implementing regulation-EU 2016/200)</td>
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<td>Table 21</td>
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<td>Present the breakdown of a bank’s cash outflows and cash inflows, as well as its available high-quality liquid assets (HQLA)</td>
<td>Template LIQ1 Liquidity Coverage Ratio Present the breakdown of a bank’s cash outflows and cash inflows, as well as its available high-quality liquid assets (HQLA), as measured and defined according to the LCR standard (BCBS Pillar 3 disclosure requirements – consolidated and enhanced framework)</td>
</tr>
<tr>
<td>Table 26</td>
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<td>Present the breakdown of PVA for all assets measured at fair value (marked to market or marked to model) and for which PVA are required</td>
<td>PV1 Prudent valuation adjustments (PVA) Present a breakdown of the constituent elements of the bank’s PVA according to the requirements of BCBS Pillar 3 disclosure requirements – consolidated and enhanced framework</td>
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## Appendix G – EBA and BCBS reference

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| Table 28 | 44   | Total and average net amount of exposures | Template EU CRB-B  
Provide the total and the average amount of net exposures over the period by exposure class in accordance with Article 442(c) |
| Table 31 | 50   | Geographical breakdown of exposures Purpose: Provide a breakdown of exposures by geographical areas and exposure classes in accordance with Article 442(d) | |
| Table 32 | 54   | Concentration of exposures by industry or counterparty types | Template EU CRB-D  
Provide a breakdown of exposures by industry or counterparty types and exposure classes in accordance with Article 442(e) |
| Table 33 | 58   | Maturity of exposures | Template EU CRB-E  
Provide a breakdown of net exposures by residual maturity and exposure classes in accordance with Article 442(f) |
| Table 35 | 64   | Disclose the extent of the use of CRM techniques | Template EU CR3  
Present information on exposure value covered by financial collateral, other collateral, guarantees and credit derivatives and the outstanding secured exposures and the secured amount within those exposures in accordance with Article 453(f) and (g). |
| Table 36 | 65   | Credit risk exposure and CRM effects | Template EU CR4  
Paragraph 99 of the guidelines requires institutions to show the effect of all CRM techniques applied in accordance with Part Three, Title II, Chapter 4 of the CRR, including the financial collateral simple method and the financial collateral comprehensive method in the application of Article 221 and Article 22 of the same regulation on standardised approach capital requirements’ calculations. |
| Table 37 | 66   | This table provides the effect on the RWAs of credit derivatives used as CRM techniques | Template EU CR7  
The template applies to all institutions using one of the approaches included in the template in accordance with Article 153(5) or Article 155(2) |
| Table 40 | 68   | Analysis of credit risk exposures by asset classes and risk weight before the application of CCF and CRM under the standardised approach | Template EU CRS5A  
Regulatory exposure values broken down by risk weights. Institutions should disclose exposures pre conversion factor and pre risk mitigation techniques. The risk weight used for the breakdown corresponds to the different credit quality steps applicable in accordance with Article 113 to Article 134 in Part Three, Title II, Chapter 2 of the CRR |
| Table 41 | 69   | Analysis of credit risk exposures by asset classes and risk weight after the application of CCF and CRM under the standardised approach | Template EU CRS5B  
Regulatory exposure values broken down by risk weights. Institutions should disclose exposures post conversion factor and post risk mitigation techniques. The risk weight used for the breakdown corresponds to the different credit quality steps applicable in accordance with Article 113 to Article 134 in Part Three, Title II, Chapter 2 of the CRR |
| Table 43-51 | 71-80 | Analysis of credit risk exposures by exposure classes and PD grades | Template EU CR6  
In the application of Article 452(e) and (g), this template applies to institutions included in paragraph 7 of these guidelines using either the FIRB approach or the AIRB approach for some or all of their exposures in accordance with Part Three, Title II, Chapter 3 of the CRR |
| Table 52 | 81   | This table provides Credit quality of exposures by exposure class and instrument | Template EU CR1-A  
The effect of credit derivatives on the IRB approach capital requirements’ calculations. The pre-credit derivative RWAs before taking account of the credit derivatives mitigation effect has been selected to assess the impact of credit derivatives on RWAs in accordance Article 453(g) |
| Table 53 | 86   | This table present credit quality of exposures by industry or counterparty types | Template EU CR1-B  
Provide a comprehensive picture of the credit quality of an institution’s on-balance-sheet and off-balance sheet exposures by industry in accordance with Article 442(g) |
| Table 54 | 89   | Credit quality of exposures by geography | Template EU CR1-C  
Provide a comprehensive picture of the credit quality of an institution’s on-balance-sheet and off-balance sheet exposures by geography in accordance with Article 442(h) |
| Table 55 | 91   | Table present the ageing of past-due exposures | Template EU CR1-D  
Provide an ageing analysis of accounting on-balance-sheet past-due exposures regardless of their impairment status |
## Appendix G – EBA and BCBS reference

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| Table 56 | 91   | Table presents the analysis of non-performing and forborne exposures | Template EU CR1-E  
Provide an overview of non-performing and forborne exposures as per the Commission Implementing Regulation (EU) No 680/2014 |
| Table 57 | 92   | Table presents changes in the stock of defaulted and impaired loans and debt securities | Template EU CR2-B  
This table present the changes in an institution’s stock of defaulted loans and debt securities in accordance to Article 442(i) of the CRR |
| Table 58 | 92   | Table presents changes in the stock of general and specific credit risk adjustments | Template EU CR2-A  
This table present the changes in an institution’s stock of defaulted loans and debt securities in accordance to Article 442(i) of the CRR |
| Table 64 | 102  | Analysis of counterparty credit risk exposures by approach | Template EU CCR1  
Template present a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method in accordance with Article 439(e), (f) and (i) of the CRR |
| Table 65 | 103  | Analysis of counterparty credit risk exposures by regulatory portfolio and risk weight under standardised approach | Template EU CCR3  
This applies to institutions using the credit risk standardised approach to compute RWAs for CCR exposures in accordance with Article 107 in the CRR, irrespective of the approach used to determine EAD in accordance with Part Three, Title II, Chapter 6 of the same regulation. |
| Table 66-68 | 105-107 | Analysis of counterparty credit risk exposures by exposure classes and PD grades | Template EU CCR4  
Template present a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method in accordance with Article 439(e), (f) and (i) of the CRR |
| Table 69 | 108  | This table provides a quantitative disclosure of counterparty credit risk specialised lending and equity exposures using the simple risk weight approach. | Template EU CCR5A  
Template present a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method in accordance with Article 439(e), (f) and (i) of the CRR |
| Table 70 | 110  | This table shows the impact of netting and collateral held on exposure values | Template EU CCR5B  
Template present a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method in accordance with Article 439(e), (f) and (i) of the CRR |
| Table 71 | 110  | This table shows the composition of collateral for exposures to CCR | Template EU CCR6  
Template present a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method in accordance with Article 439(e), (f) and (i) of the CRR |
| Table 73 | 112  | This table shows credit derivatives exposures | Template EU CCR7  
Template present a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method in accordance with Article 439(e), (f) and (i) of the CRR |
| Table 74 | 113  | This table shows the EAD and RWAs corresponding to exposures to central counterparties | Template EU CCR2  
Template present a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method in accordance with Article 439(e), (f) and (i) of the CRR |
| Table 75 | 114  | This table provides CVA regulatory calculations (with a breakdown by standardised and advanced approaches) | Template EU CCR8  
Template present a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method in accordance with Article 439(e), (f) and (i) of the CRR |
| Table NA | 169  | Presents a comparison of the results of estimates from the regulatory VaR model | Template EU MR4  
Template present a comprehensive view of the methods used to calculate CCR regulatory requirements and the main parameters used within each method in accordance with Article 439(e), (f) and (i) of the CRR |
| Table 78 | 118  | This template displays the values (maximum, minimum, average and the ending for the reporting period) resulting from the different types of models approved to be used for computing the market risk regulatory capital charge at the group level before any additional capital charge is applied | Template EU MR3  
Outputs of internal models approved for use in accordance with Part Three, Title IV, Chapter 5 of the CRR for regulatory capital purposes at the group level (according to the scope of regulatory consolidation as per Part One, Title II of the same regulation). |
# Appendix G – EBA and BCBS reference

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<td>Template MR1-B Capital requirements and RWAs (as specified in Article 92(4)(b) in the CRR).</td>
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<td>Market risk under internal models approach</td>
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<td>Table 94</td>
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<td>This table provides backtesting data to validate the reliability of PD calculations</td>
<td>Template EU CR9 The template applies to all institutions included in paragraph 7 of these guidelines using the AIRB approach and/or the FIRB approach. Where an institution makes use of an FIRB approach for certain exposures and an AIRB approach for others, it must disclose two separate sets of portfolio breakdowns in separate templates.</td>
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<tr>
<td>Table 99</td>
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<td>This table provide a geographical distribution of credit exposures by country</td>
<td>CCyB Template requires institutions to disclose the geographical distribution by country of credit exposures of an institution that are relevant for the calculation of its CCyB in accordance with Article 140(4) of the CRD and Article 440 of the CRR</td>
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Appendices

Location of risk disclosures

Barclays’ Risk disclosures are located across the Annual Report and Pillar 3 Report.

### Risk management

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<tr>
<td>Overview of Barclays’ approach to risk management. A detailed overview together with more specific information on policies that Barclays Group determines to be of particular significance in the current operating environment can be found in Barclays PLC Pillar 3 Report 2018 or at Barclays.com.</td>
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<td>Insight into the level of risk across our business and portfolios, the material existing and emerging risks and uncertainties we face and the key areas of management focus.</td>
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<td>Barclays’ approach to risk management for each principal risk with focus on organisation and structure and roles and responsibilities.</td>
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<td><strong>Credit risk:</strong> The risk of loss to the firm from the failure of clients, customers or counterparties, including sovereigns, to fully honour their obligations to the firm, including the whole and timely payment of principal, interest, collateral and other receivables.</td>
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<td>Credit risk overview and summary of performance</td>
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<td>The risk that the firm has an insufficient level or composition of capital to support its normal business activities and to meet its regulatory capital requirements under normal operating environments or stressed conditions (both actual and as defined for internal planning or regulatory testing purposes). This includes the risk from the firm’s pension plans.</td>
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<td>The risk of loss to the firm from inadequate or failed processes or systems, human factors or due to external events (for example fraud) where the root cause is not due to credit or market risks.</td>
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<td>The risk of the potential adverse consequences from financial assessments or decisions based on incorrect or misused model outputs and reports.</td>
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<td>The risk of detriment to customers, clients, market integrity, competition or Barclays from the inappropriate supply of financial services, including instances of wilful or negligent misconduct.</td>
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<td>The risk that an action, transaction, investment or event will reduce trust in the firm’s integrity and competence by clients, counterparties, investors, regulators, employees or the public.</td>
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Supervision and regulation

Barclays Group’s operations, including its overseas offices, subsidiaries and associates, are subject to a significant body of rules and regulations.

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Pillar 3 Report

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Risk and capital position review: Provides a detailed breakdown of Barclays’ regulatory capital adequacy and how this relates to Barclays’ risk management.

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**Note:** Pages 99 to 126 of the Annual Report (which is available at www.barclays.com/annualreport) include information required to be disclosed on remuneration in accordance with CRR article 450.
Forward-looking statements

This document contains certain forward-looking statements within the meaning of Section 21E of the US Securities Exchange Act of 1934, as amended, and Section 27A of the US Securities Act of 1933, as amended, with respect to the Barclays Group. Barclays cautions readers that no forward-looking statement is a guarantee of future performance and that actual results or other financial condition or performance measures could differ materially from those contained in the forward-looking statements. These forward-looking statements can be identified by the fact that they do not relate only to historical or current facts. Forward-looking statements sometimes use words such as ‘may’, ‘will’, ‘seek’, ‘continue’, ‘aim’, ‘anticipate’, ‘target’, ‘projected’, ‘expect’, ‘estimate’, ‘intend’, ‘plan’, ‘goal’, ‘believe’, ‘achieve’ or other words of similar meaning. Examples of forward-looking statements include, among others, statements or guidance regarding or relating to the Barclays Group’s future financial position, income growth, assets, impairment charges, provisions, business strategy, capital, leverage and other regulatory ratios, payment of dividends (including dividend payout ratios and expected payment strategies), projected levels of growth in the banking and financial markets, projected costs or savings, any commitments and targets, estimates of capital expenditures, plans and objectives for future operations, projected employee numbers, IFRS 9 impacts and other statements that are not historical fact. By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances. These may be affected by changes in legislation, the development of standards and interpretations under International Financial Reporting Standards including the continuing impact of IFRS 9 implementation, evolving practices with regard to the interpretation and application of accounting and regulatory standards, the outcome of current and future legal proceedings and regulatory investigations, future levels of conduct provisions, the policies and actions of governmental and regulatory authorities, geopolitical risks and the impact of competition. In addition, factors including (but not limited to) the following may have an effect: capital, leverage and other regulatory rules applicable to past, current and future periods; UK, US, Eurozone and global macroeconomic and business conditions; the effects of any volatility in credit markets; market related risks such as changes in interest rates and foreign exchange rates; effects of changes in valuation of credit market exposures; changes in valuation of issued securities; volatility in capital markets; changes in credit ratings of any entities within the Barclays Group or any securities issued by such entities; the potential for one or more countries exiting the Eurozone; instability as a result of the exit by the United Kingdom from the European Union and the disruption that may subsequently result in the UK and globally; and the success of future acquisitions, disposals and other strategic transactions. A number of these influences and factors are beyond the Barclays Group’s control. As a result, the Barclays Group’s actual future results, dividend payments, and capital and leverage ratios may differ materially from the plans, goals, expectations and guidance set forth in the Barclays Group’s forward-looking statements. Additional risks and factors which may impact the Barclays Group’s future financial condition and performance are identified in our filings with the SEC (including, without limitation, our Annual Report on form 20-F for the fiscal year ended 31 December 2018), which are available on the SEC’s website at www.sec.gov.

Subject to our obligations under the applicable laws and regulations of the United Kingdom and the United States in relation to disclosure and ongoing information, we undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise.